

BOSTON

MIAMI SAN DIEGO

MEKETA INVESTMENT GROUP

PROPOSAL TO PROVIDE **INVESTMENT CONSULTING SERVICES** FOR THE CITY OF FRESNO RETIREMENT SYSTEMS

> Submitted by Meketa Investment Group September 10, 2012

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LETTER OF TRANSMITTAL



BOSTON MIAMI SAN DIEGO

September 7, 2012

Mr. Stanley L. McDivitt Retirement Administrator City of Fresno Retirement Systems 2828 Fresno Street, Suite 201 Fresno, CA 93721-1327

RE: REQUEST FOR PROPOSAL - INVESTMENT CONSULTANT SERVICES

Dear Mr. McDivitt:

Meketa Investment Group respectfully submits the enclosed proposal to provide Investment Consultant Services to the City of Fresno Retirement Systems. Meketa Investment Group is a full-service investment consulting firm advising on over \$80 billion in assets for 78 clients, representing over 150 funds, who have aggregate assets of over \$470 billion. We advise clients throughout the United States from our offices in Carlsbad, CA, Westwood, MA, and Miami, FL.

1. The Firm's name, address, and telephone and fax number.

Meketa Investment Group, Inc.

Headquarters West Coast Office (Servicing Office)

100 Lowder Brook Drive, Suite 1100 5796 Armada Drive, Suite 110

Westwood, MA 02090 Carlsbad, CA 92008

Telephone Number: (781) 471-3500 Telephone Number: (760) 795-3450 Fax Number: (781) 471-3411 Fax Number: (760) 795-3445

The Systems would be serviced from our office in Carlsbad, California.

2. The name, title or position, telephone number and email address of the individual signing the cover letter.

Name, Title: Stephen P. McCourt, CFA, Managing Principal

Telephone Number: (760) 795-3450

Email Address: smccourt@meketagroup.com

3. A statement that the signatory is authorized to bind the Firm contractually.

Stephen P. McCourt, the undersigned, is authorized to bind Meketa Investment Group contractually.

4. The name, title or position, and telephone number of the primary contact for the proposal, if different from the individual signing the cover letter.

Mika Buffington Malone, Principal/Consultant is the primary contact for the proposal. Her telephone number is (760) 795-3450.

- 5. A statement that the Proposal is a firm and irrevocable offer good for six (6) months from the deadline of submission of the Proposal
 - The enclosed proposal is a firm and irrevocable offer good for six (6) months from the deadline of the submission of this proposal.
- 6. A statement that the Firm has the ability in terms of staff, expertise and resources required to perform all of the services and provide all of the deliverables specified in this Request for Proposal.
 - Meketa Investment Group has the staff, expertise and other required resources available for performing all services and providing all deliverables specified within.
- 7. A statement to the effect that the Proposer meets the Minimum Qualifications for Proposal set out in this Request for Proposal.
 - Meketa Investment Group meets all the Minimum Qualifications for Proposal set forth in this Request for Proposal.
- 8. A statement accepting the terms and conditions of the Draft Agreement provided in Appendix 1 to this Request for Proposal, subject to written objections, if any, which should be specifically identified by the Proposer in the Letter of Transmittal.
 - While Meketa Investment Group does not take major exception to any particular provision contained in the draft form agreement provided, we would like to reserve the right to request some modification and clarifications (i.e., customization to our scope of services, modification to insurance language, termination clause).
- 9. A statement that the firm acknowledges that all documents submitted pursuant to this Request for Proposal will become a matter of public record.
 - Meketa Investment Group acknowledges that all documents submitted with this Proposal will become a matter of public record. We would like to mark our Financial Statements contained as part of the Additional Materials and Documents section contained within the attached proposal as confidential and not for public disclosure.

We are excited about the opportunity to present our capabilities, and look forward to the prospect of working with you in the future. If you have any questions, please do not hesitate to call me or Mika Malone at (781) 471-3500. Thank you for your consideration.

Sincerely,

Stehn Wall

Stephen P. McCourt, CFA Managing Principal, Consultant Mika Buffington Malone Principal, Consultant

Mila Malare

RESPONSE TO QUESTIONNAIRE

PROPOSAL TO PROVIDE INVESTMENT CONSULTING SERVICES

CITY OF FRESNO RETIREMENT SYSTEMS

PART B: QUESTIONNAIRE

NAME AND CONTACT INFORMATION

1. Please provide the following information on the Firm:

	Information of the Firm
Name of the Firm	Meketa Investment Group
Address of Head Office	100 Lowder Brook Drive, Suite 1100 Westwood, MA 02090
Telephone Number	(781) 471-3500
Website	www.meketagroup.com

2. Please provide the following information on the primary RFP contact for the Firm:

	Primary RFP Contact
Name	Mika Buffington Malone
Title	Principal, Consultant
Telephone Number	(760) 795-3450
Fax Number	(760) 795-3445
E-mail Address	mmalone@meketagroup.com

HISTORY, OWNERSHIP AND ORGANIZATION

3. When was the firm founded or established?

- (a) Who were the founders?
- (b) Please provide the names of any predecessor companies or other organizations with which the founders were previously associated.
- (c) If the Firm was subsequently acquired by another company, when did this take place? What is the name of the parent company?

Meketa Investment Group was founded by James Meketa in 1974 as an investment partnership. In 1978, the firm was incorporated under Massachusetts law and became registered with the Securities and Exchange Commission as an investment advisor. We have been in business continuously for over thirty-four years.

The firm originated by providing investment strategy and systems advice to the Harvard Management Company (The Harvard University Endowment). The firm was hired by its first pension fund client in 1978, a relationship which continues to this day. Since 1978, Meketa Investment Group has grown steadily, and today consults on over \$80 billion in assets for 77 clients with aggregate assets of approximately \$470 billion.

Meketa Investment Group is an independent corporation, owned by fourteen of its senior professionals. We have no parent company and have not been acquired by another company.

4. Please provide the names of the owners of the Firm and indicate their percentage of ownership.

Please refer to the table below for Meketa Investment Group's current owners.

Firm Owner	Ownership Percentage (%)	Firm Owner	Ownership Percentage (%)
James Meketa	59.6%	Kellie Coonan	0.5%
Alan Spatrick	9.8	Mitch Dynan	0.5
Peter Woolley	9.8	Leandro Festino	0.5
Stephen McCourt	9.8	John Manley	0.5
John Haggerty	4.9	W. Fran Peters	0.5
Frank Benham	2.5	Kunal Shah	0.5
Ted Benedict	0.5	Mika Buffington Malone	0.1

5. Please provide a brief description of the ownership and organizational structure of the Firm. Indicate the names of any subsidiary or affiliated companies and briefly describe the nature of their business, and the relationship between the Firm and these other companies.

Meketa Investment Group is an independently-owned corporation. We have no subsidiaries or affiliated companies.

6. What significant changes, if any, have there been in the Firm's ownership, structure or organization over the past three years? Do you anticipate any significant changes (including any proposed sale or merger of the firm) in the future?

In the past three years, ownership of the firm was extended to Leandro Festino, Fran Peters, John Manley, Kellie Coonan, Ted Benedict, Mitch Dynan, Kunal Shah, and Mika Buffington Malone. Additionally, Meketa Investment Group opened an office in Miami, Florida in August of 2011.

At this time, we have no planned changes to our ownership structure or resources. We do intend to expand ownership to other senior professionals in the future.

7. Please provide the locations of all offices and the total number of employees in each office. Indicate the office that would service this account.

Office	Number of Professionals
100 Lowder Brook Drive, Suite 1100 Westwood, MA 02090	74
5796 Armada Drive, Suite 110 Carlsbad, CA 92008	26
1001 Brickell Bay Drive, Suite 2000 Miami, FL 33131	3

The City of Fresno Retirement Systems would be serviced from our West Coast office in Carlsbad, CA.

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8. Is the Firm registered as an investment advisor under the Investment Advisor Act of 1940? Does the Firm acknowledge that it has fiduciary status as an investment advisor in providing investment consulting services to pension plans?

Yes. Meketa Investment Group is registered as an investment advisor under the Investment Advisor Act of 1940. Furthermore, Meketa Investment Group acknowledges that it has a fiduciary status as an investment advisor in providing investment consulting services to pension plans.

SERVICES AND REVENUES

- 9. Please confirm whether or not the Firm can provide all of the services listed in Section I of the RFP under "Nature and Scope of Services."
 - (a) Are there any services that the Firm cannot or will not provide?
 - (b) List any additional services that the firm would provide and which are included in the fee proposal in Section IV.
 - (c) Indicate any other products or services that may be of interest to a plan sponsor and which would be available at additional cost.

Meketa Investment Group can provide all of the services outlined in the "Purpose and Scope of Services" listed in Section I of the RFP.

10. When did the firm begin providing investment consulting services to pension plans?

Meketa Investment Group began providing investment consulting services to pension plans in 1978 when the firm was hired by its first pension fund client, a relationship which continues to this day.

11. Please indicate the percentage of the Firm's investment consulting revenue received during the most recent fiscal year from full service consulting relationships (where a full service relationship is defined to include advice on asset allocation, investment manager selection and performance measurement), as well as non-full service consulting relationships.

Source of Investment Consulting Revenue	Percent of Revenue
Full Service Consulting Relationships	98%
Non-Full Service Consulting Relationships*	2

^{*} Includes projects that fall outside of the firm's full-retainer services

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PROPOSAL TO PROVIDE **INVESTMENT CONSULTING SERVICES**

- 12. Does the Firm or any affiliate of the firm (including any subsidiary companies or parent company) provide any services in addition to investment consulting?
 - (a) If so, please indicate the percentage of total revenue received by the Firm (including any subsidiary companies) from investment consulting and other services listed below during the most recent fiscal year.

Source of Total Firm Revenue	Percent of Revenue
Investment Consulting	74%
Human Resources, Actuarial and Benefits Consulting	
Investment Management Services (excluding Fund-of-Funds)*	26
Fund-of-Funds Services	
Broker/Dealer Services	
Other (please specify):	

^{*} Includes revenues from clients for which Meketa Investment Group provides Discretionary Private Markets services

(b) If the Firm has a parent company, please indicate the percentage of total revenue received by the parent company from the following sources during the most recent fiscal year?

Source of Parent Company Revenue	Percent of Revenue
Plan Sponsor Clients	NA
Investment Manager Clients	NA
Brokerage Clients	NA
Other (please specify):	NA

Meketa Investment Group has no parent company.

INDEPENDENCE, OBJECTIVITY AND CONFLICT OF INTEREST

13. Does the Firm or any affiliate provide any services to, or receive any compensation from, investment managers, including but not limited to: (i) charges for inclusion in the Firm's database, (ii) conference fees, (iii) brokerage commissions, (iv) purchase of software, (v) consulting services, etc.?

No.

No.

- (a) If so, please describe briefly the nature of these services and compensation. Not Applicable.
- (b) Does the Firm or any affiliate provide any services or conduct any business with the retirement systems' current investment managers?

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14. Does the Firm have any arrangements with broker-dealers under which it, or any affiliated company, will benefit if investment managers place trades for their clients with such broker-dealers?

No.

15. Does the Firm accept a pension plan's brokerage commissions as payment for its services? If so, please explain briefly how it ensures that the plan receives best execution in securities transactions.

No.

16. Please disclose any potential conflicts of interest that may arise from the Firm's representation of the Retirement Systems, including the activities of any affiliated companies.

To our knowledge, Meketa Investment Group does not have any potential conflicts of interest with the retirement system.

17. Has the Firm or anyone in the firm provided any gifts or other remuneration, or paid any expenses for travel, hotels, meals or entertainment for or on behalf of a Board member or staff of the Retirement Systems during the past twelve months. If so, please indicate the amount and purpose of the payments.

No.

18. Has the Firm or anyone in the Firm had any professional relationship with the Retirement Systems' plan sponsors or legislative bodies during the past three years? If so, please describe the nature of the relationship.

Meketa Investment Group has not had any professional relationship with the Retirement Systems' plan sponsors or legislative bodies during the last three years.

INSTITUTIONAL CLIENTS

19. How many institutional clients on a full service consulting basis does the Firm currently have? What are the total assets under advisement?

Meketa Investment Group serves 78 full-retainer institutional clients. As of March 31, 2012, Meketa Investment Group has approximately \$84.3 billion in assets under advisement.

20. Please indicate the number of full service consulting clients that the Firm currently has by size of assets and type of client:

Type of Client	Under \$1 billion	\$1-10 billion	\$10-25 billion	Over \$25 billion
Public Pension Plans	12	5	0	3
Corporate Plans	5	0	0	0
Union/Taft-Hartley Plans	28	12	0	0
Endowments, Foundations & Hospitals	13	0	0	0
Other	0	0	0	0
Total Number of Full Service Clients	58	17	0	3

21. Please indicate the number of full service <u>public pension plan</u> consulting clients that the Firm currently has by length of service with the firm:

Length of Service	Number of Clients
Less than 1 year	3
1-5 years	11
5-10 years	4
Over 10 years	2

22. How many client relationships were terminated, or the firm resigned, over the last three years ending June 30, 2012? What were the reasons for termination or resignation and what was the total value of assets involved?

Reasons for Termination	Number of Cases	Value of Assets
Firm Dismissed Outright		
Contract Rebid - Firm Not Retained	2	\$564 m
Firm Asked Not to Bid		
Firm Resigned Client Relationship		
Plan Merger or Consolidation	1	\$27 m
Fund Management Outsourced		
Other (please specify): Fund liquidation	1	<\$1 m
Total Terminations/Resignations	4	\$582 m

PROFESSIONAL STAFF

23. Please indicate the number of professional staff (not administrative or clerical staff) that the Firm currently employ in each of the following categories. (Each person should be assigned to only one category.)

Category of Professional Staff	Number of Staff
Senior Consultants*	26
Consultants	NA
Analysts (including Research, Economics, etc.)**	34
Firm Management	5
Marketing	1
Technical/Systems	1
Total Professional Staff	67

^{*} All consultants serve in both "lead" and "support" capacities

Please refer to Appendix A for Meketa Investment Group's Organizational Chart.

24. Please indicate the turnover in professional staff (including consultants, analysts, firm management and key executives) during the last three years.

	Number of Staff			
			Firm	
Staff Turnover	Consultants	Analysts	Management	Other
Hired	4	9	0	1
Terminated	1	1	0	0
Resigned	0	4	0	0
Retired	0	0	0	0
Other (please specify):	0	0	0	0

25. Please provide the average number of clients per consultant, both lead and support consultant. Indicate the maximum limit, if any, on the number of clients assigned per consultant.

Role as Consultant	Average No. of Clients	Maximum Limit per Consultant
Lead Consultant	5	See note below
Support Consultant	5	See note below

Meketa Investment Group does not have a formal limit of the maximum number of clients that will be assigned to a consultant. We accept new assignments only if we believe we can offer client services of the highest caliber. We will never compromise the quality of our work in order to grow.

^{**} Analysts include data analysts and investment analysts

26. How many staff have acquired professional designations such as the CFA, CAIA, FSA, etc.? How many are currently enrolled in these programs?

Professional Designation	Acquired	Enrolled
Chartered Financial Analyst (CFA)	18	7
Chartered Alternative Investment Analyst (CAIA)	13	5
Fellow of the Society of Actuaries (FSA)	0	0
Other (please specify):	0	0

27. Which of the following types of compensation are provided to professional staff? Please indicate whether the compensation applies to all staff, senior staff, key employees, or principals only.

Type of Compensation	All/Senior/Key/Principals
Salary	All
Bonus	All
Profit Sharing	All
Stock Ownership	Senior Staff
Stock Options	Senior Staff
Equity Participation	Senior Staff
401 (k) or Other Deferred	All
Other (please specify):	NA

28. How many professional staff will be assigned to this account?

If hired by the Retirement Systems, the account will be serviced by Mika Buffington Malone as the Primary Consultant and Laura Wirick and Stephen McCourt as the Secondary Consultants. In addition, a dedicated investment analyst and data analyst would also be assigned to the account. In total, five people would be assigned to the account, supported by many other team members, who are intimately involved in the day to day business of the client and discuss strategy with consultants.

29. Please provide the following information on the lead consultant and, if applicable, the support consultant to be assigned to this account:

		Lead Consultant	Support Consultant	Support Consultant
Name		Mika Buffington Malone	Laura B. Wirick	Stephen P. McCourt
Title		Principal, Consultant	Senior Vice President, Consultant	Managing Principal, Consultant
Role and/or I	unction			
Number of Years of	Institutional Investments	11	10	17
Experience	Investment Consulting	9	10	17
	With the Firm	9	4	17
Educational (including N	ame of	University of San Diego, MBA	American University, BSBA	Harvard University, ALM
College/Univ	ersity)	University of Maryland, BA		University of Vermont, BA
Number of A Lead Consult		6	3	5
Names of the Accounts	Three Largest	Santa Barbara County Employees Retirement System, Rady Children's Hospital and Health Center, Western States Insulators and Allied Workers Trust Funds	San Jose Federated City Employees' Retirement System, California Value Trust, Group Health Cooperative of Puget Sound	CalPERS, Arizona State Retirement System, IAM National Pension Fund
Number of A Support Cons		4	2	6

30. Please provide the name and title and/or role of any other members of the team to be assigned to this account.

In addition to the proposed consulting team mentioned above, a dedicated investment analyst and a data analyst would also be assigned to the Retirement Systems and a number of support staff who are intimately involved in the day-to-day business of the client and who meet regularly with the consultants on issues of strategy.

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ASSET ALLOCATION

31. When did the Firm begin conducting asset allocation studies for pension plans? How many studies (formal comprehensive studies rather than informal reviews or updates) has the Firm conducted over the past three years?

Meketa Investment Group has been conducting asset allocation studies for pension plans since our inception thirty-four years ago. Over the past three years, the firm has conducted asset allocation studies for approximately 100 funds on behalf of our clients.

Meketa Investment Group generally recommends a formal review of asset allocation policy for clients at least every three years. However, for the majority of our clients, we review asset allocation formally on an annual basis.

- 32. Please describe the Firm's asset allocation methodology by responding to the following questions:
 - (a) Is the asset allocation process based on analysis of both assets and liabilities of the pension plan, or assets only?

Meketa Investment Group conducts asset allocation studies based on analysis of both assets and liabilities of a pension plan.

(b) Is the asset allocation process stochastic or deterministic with respect to (i) assets and (ii) liabilities?

Meketa Investment Group analyzes assets and liabilities using both stochastic and deterministic analysis. While stochastic analysis provides information on a broad spectrum of asset/liability outcomes, it tends to underestimate the frequency and severity of large negative and positive events. Consequently, relying solely on stochastic analysis can cause decision-makers to underestimate the risk associated with various asset allocation policies.

(c) Please explain briefly how the modeling of the assets is linked to or integrated with the modeling of the liabilities.

Matching investments (assets) with liabilities has long been a strength of our firm, and an area in which we have produced pioneering work. For example, for a number of clients we have created highly specialized Safety Reserve® portfolios designed to guarantee that benefit payments can be made even in a worst-case economic and market scenarios. The purpose of the Safety Reserve® portfolio is to ensure that all operating expenses and benefits will be paid on time regardless of market environments. The creation of a Safety Reserve® portfolio involves the very precise matching of assets and liabilities, and demonstrates our firm's great strength in this area.

When performing an asset liability study, we work with a fund's Board members and actuary to obtain and understand the fund's liability structure. Liability estimates include both most likely expectations and one or more worst-case liability scenarios. Meketa Investment Group's asset-liability study consists of

five components that are necessary to reach an optimal asset allocation recommendation.

1. Developing Economic and Capital Market Scenarios

We develop five economic and capital market scenarios that could potentially unfold over the next twenty years. These scenarios range from very optimistic to very pessimistic. Note that none of the five scenarios are worse or better than any economic and capital market environment actually experienced over the past century. The five scenarios are based on actual historical relationships.

2. Developing Asset Allocation Policies

We develop five potential asset allocation policies for the fund, ranging from very conservative to very aggressive. The goal of developing the policies was not to find the exact one that is optimal for the fund but, rather, to view a mix of policies to give us and the Board a sense of how different asset allocation policies would react to different economic and capital market environments.

3. Determining Impact of Scenarios on the Various Asset Allocation Policies

After developing the economic and capital market scenarios, and the asset allocation policies, we model how the five asset allocation policies will behave in each of these scenarios. In essence, we create twenty-five combinations of asset allocation policies and economic environments, providing the Board with a broad array of information on potential fund outcomes.

4. Determining the Impact of Scenarios on Fund Liabilities

The complexion of the fund can change, as existing members age and retire, and new members join. The fund's demographics will likely change as a result of varying economic environments. For example, a stagnant economy with high unemployment could result in declining new entrants and increased retirements, placing a higher cash flow burden on the fund.

5. Developing Outputs of the Asset-Liability Study

Meketa Investment Group will collaborate with the fund's actuary in developing the outputs of the asset-liability study. We identify important elements of the fund, and then evaluate how each element would behave under the various economic scenarios and asset allocation policies. Each of the elements will be evaluated under twenty-five pre-defined conditions (five economic scenarios and five asset allocation policies). This broad perspective provides much clearer insight into the true risk inherent in the fund at the time of the study, and over the next twenty years.

Meketa Investment Group continuously monitors a client's asset allocation, and addresses asset allocation explicitly each quarter in our quarterly reports. When necessary, such reviews may result in a rebalancing of asset allocations. In general,

it is our intention that the fund will adhere to its long-term target allocations, and that major changes to these targets will be made rarely and only in response to significant developments in the circumstances of the fund, or in response to material changes in the fundamental nature or appropriateness of the asset classes themselves. However, we do believe that there are opportunities for a more tactical approach to asset allocation, at the margins, for those clients who wish to employ this type of methodology.

(d) Does the process incorporate analysis of different economic scenarios?

Yes. Meketa Investment Group uses two types of deterministic analysis: scenario analysis and Economic Regime Analysis. Scenario analysis allows us to "stress test" asset/liability outcomes for severe market events. Economic regime analysis allows us to view the performance of assets and liabilities within the context of discrete economic environments.

Meketa Investment Group has developed a new tool to be used by asset allocators that allows for a more comprehensive and realistic approach to the asset allocation process. Economic Regime Management® (ERM) starts with the base assumption that the return of a Fund over the long term will be influenced more by the economic regime under which the fund exists, than the specific asset allocation policy adopted. For example, in the 1990s, virtually any asset allocation policy would have succeeded in producing an 8% annualized rate of return. In the 2000s, virtually any asset allocation policy would have failed to produce an 8% annualized return. Consequently, the economic environment proved much more important in determining the success of an investment program than any specific asset allocation policy.

ERM allows the Board to test how different investment strategies will behave under various economic regimes. For example, does the current asset allocation have a high likelihood of success in a high inflation, low growth environment? What about a low inflation, high growth environment? By testing different asset allocation policies across various economic regimes, Board members can not only create asset allocation policies diversified by asset, but also diversified by economic regime, a more influential factor over the long term.

In addition, ERM can be extended for use in asset-liability studies. It is well known that liabilities are similarly sensitive to future economic environments, as discount rates, contributions, and payments are often tied to economic performance and inflation. Through ERM, we are able to model liabilities and assets simultaneously, providing a complete picture of funded status depending on the future environment we experience. As in the case of an asset-only study, the full results will provide the plan sponsor with recommendations that better acknowledge the impact of less likely—but no less impactful—economic environments than a standard MVO-type analysis.

33. Does the firm analyze the impact of asset allocation over different future time periods? If so, what future time periods and why?

Yes. Meketa Investment Group conducts an annual Asset Allocation Study in which we set expected returns, volatility, and correlations for various asset classes for the next three, five, and twenty years and stress-test our projections. Each year, the asset class expectations are revised and are then used as one of the bases for long-term strategic investment planning. While we do calculate three and five year expectations, we rely more on ten-year and twenty-year projections. Ten-year expectations are primarily used internally for occasional medium-term tactical recommendations, but they also serve as the primary foundation for our longer-term, twenty-year expectations. We form our twenty-year annualized return expectations by systematically considering historical performance on an asset class by asset class level.

34. How does the Firm analyze the trade-off between risk and reward of alternative asset allocation policies for a defined benefit pension plan? How does it define and measure reward? How does it define and measure risk?

We develop five economic and capital market scenarios that could potentially unfold over the next twenty years. We base our analysis on twenty-years because we plan for the long-term horizon.

Our asset allocation model measures reward through expected returns of the various asset classes over a ten- and twenty-year period. We use nominal expected returns using twenty-five different scenarios.

Within each of these three classifications of methods, there are numerous models that are used to project asset class returns. It is important to reconcile the projections of all types of models. This reconciliation highlights implications and assumptions inherent in each of the models, and leads to a more intellectually sound forecast.

Meketa Investment Group estimates future asset class returns using a variety of methods. For bonds and cash, we utilize current market yields and the implied forward yield curve to calculate the market's return expectations. For equity asset classes, a modified risk-premium model is used. However, our investment expectations include aspects of all three forecasting methods to assure a full understanding of the implications of the outputs from the models.

All return expectations are quantified with appropriate measures of return uncertainty (i.e., volatility) and with reasonable estimates of return correlations with other asset classes.

Meketa Investment Group views risk within a far broader context than the traditional risk measures, and works to educate clients on all potential sources of risk within a portfolio. While risk budgets generally perform well in quantifying interim "volatility," many of our clients perceive risk differently. In general, we view the primary risk of operating a defined benefit plan as "mission failure." The "mission" is to pay all promised benefits when due. This risk management philosophy is different from a more simplistic approach based on standard deviation or volatility. Based only on volatility as a measure of risk, one may determine that cash is the least risky asset class, when, in

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fact, it is the least likely to produce the returns necessary to pay all promised benefits over the long term.

The financial markets are intrinsically risky and volatile. Meketa Investment Group monitors and calculates quantitative risk measures such as Beta and standard deviation on portfolios and funds. We include in our reports standard deviation, Beta, correlation, Sharpe measure and information ratio at both the aggregate asset class and the individual manager level (given sufficient available data points). However, our advice also incorporates a much broader and longer-term definition of risk, as the traditional risk measures are purely retrospective, and do not represent a clear picture of the Retirement Systems' risk profile going forward.

To determine future risk profiles, we evaluate the actual investments of all investment managers, as well as the structure of the asset allocation determined by the System. Equity manager portfolios are analyzed from the perspective of company size, fundamental characteristics (price-earnings ratio, price-book value ratio, dividend yield, historical and projected earnings growth rates), industry concentration, and individual stock concentration. Fixed income manager portfolios are analyzed from the perspective of interest-rate sensitivity (duration), credit quality, and sector diversification, among other measures. In addition, the Retirement Systems' risk will be viewed at a total portfolio and aggregate asset class level. For example, for equity portfolios these metrics include arithmetic mean return, standard deviation, best monthly return, worst monthly return, beta, correlation to index, correlation to total fund return, Sharpe measure, information ratio, and active share calculations.

Our multi-faceted analysis represents a very sophisticated form of return attribution. For example, we are able to determine accurately whether a manager's superior results are the result of bottom-up security selection, top-down macro judgments, or the assumption of high levels of risk. This process helps us to ensure that our clients' funds are never subjected to excessive or unnecessary risk levels.

Meketa Investment Group has developed a new tool to be used by asset allocators that allows for a more comprehensive and realistic approach to the asset allocation process. Economic Regime Management® (ERM) starts with the base assumption that the return of a Fund over the long term will be influenced more by the economic regime under which the fund exists, than the specific asset allocation policy adopted. For example, in the 1990s, virtually any asset allocation policy would have succeeded in producing an 8% annualized rate of return. In the 2000s, virtually any asset allocation policy would have failed to produce an 8% annualized return. Consequently, the economic environment proved much more important in determining the success of an investment program than any specific asset allocation policy.

ERM allows the Board to test how different investment strategies will behave under various economic regimes. For example, does the current asset allocation have a high likelihood of success in a high inflation, low growth environment? What about a low inflation, high growth environment? By testing different asset allocation policies across various economic regimes, Board members can not only create asset allocation policies diversified by asset, but also diversified by economic regime, a more influential factor over the long term.

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35. Please list the various steps or components of the asset allocation model (e.g. meanvariance optimization, projection of liabilities, multi-period simulation, etc.).

Meketa Investment Group uses a combination of proprietary and third party software to model and analyze our clients' assets and liabilities. To complement our proprietary internal research, we use a third-party software package, EnCorr Optimizer, to run mean variance optimizations, Monte Carlo simulations, and risk budgeting. Combining our capital market assumptions into this tool, we produce an initial round of candidate portfolios. We then further refine these portfolios by conducting scenario analysis, liquidity analysis, and liability analysis, as appropriate. We then present these portfolios to the Board and incorporate any feedback they provide.

In recommending target asset allocations for our clients, we rely on a combination of resources. We use Ibbotson's Optimizer software to develop our efficient frontier based on the outputs from our Asset Study. Further, we utilize analytical software to examine historical asset class behavior and to evaluate optimum portfolios under various scenarios and constraints. However, we believe our value added does not stem from our ability to use computerized analytical tools, but from our ability to use qualitative research, experience, and common sense to evaluate quantitative data and apply realworld solutions. For example, the optimization output does not consider all the risks with investments and often calls for excessive investments in risky asset classes. We recognize these short-comings of asset allocation models and make appropriate adjustments.

(a) Which components of the asset allocation model were internally developed, and which, if any, are licensed from one or more third-party vendors?

For asset allocation modeling we use Ibbotson Encorr Analyzer, which provides information on historical capital market returns, and Ibbotson Optimizer, a mean variance optimization tool for an asset allocation analytical tools. The Ibbotson database includes 700 distinct investment benchmarks, including historical capital market returns and widely used indices (e.g., S&P, Russell, MSCI, Barclays).

We also utilize PerTrac, a leading asset allocation and investment analysis software program. The program integrates portfolio simulation, optimization, correlation, peer and style analysis on a returns based (backward looking) platform. This software program provides analytical support allowing the firm to produce customized reporting and in depth statistical and scenario analysis. Finally, through our proprietary ERM, we are able to model liabilities and assets simultaneously, providing a complete picture of funded status depending on the future environment we experience. We are experienced at working with the liabilities calculated by actuaries and clients.

(b) Please provide the names of the third-party vendors if any.

For asset allocation modeling, we use the following third-party vendors: Ibbotson Encorr Anlayzer, Ibbotson Optimizer, and PerTrac.

- 36. How are investment assumptions with respect to returns, volatility and correlations i.e. the inputs to the asset allocation model developed?
 - (a) To what extent are these assumptions derived from historical data or trends, or reflect current market conditions, or are based on future expectations of inflation, real yields, risk premiums, etc.? Please explain briefly.

Our process relies on both quantitative and qualitative methodologies. First, we employ a large set of quantitative models to arrive at a set of baseline expected ten-year annualized returns for major asset classes. These models attempt to forecast a gross "beta" return for each asset class-that is, we explicitly do not model "alpha," nor do we apply an estimate for management fees or other operational expenses. Our models may be econometrically derived (that is, based on a historical return relationship with current observable factors), factor-based (that is, based on a historical return relationship with predicted factors), or fundamentally based (that is, based on some theoretically defined return relationship with current observable factors). Some of these models are more predictive than others: for example, the model for U.S. investment grade bonds, which relies on yields, is much more accurate than the model for U.S. equities, which relies on fundamental valuation metrics. For this reason, we overlay a qualitative analysis, which takes the form of a data-driven deliberation among the asset allocation team. We ask: Why are different models within the same asset class leading to different conclusions? Are the assumptions consistent across asset classes? What are our models missing about the possible evolution of the next ten years? Naturally, return assumptions for hard-to-predict asset classes will be influenced more heavily by our qualitative analysis.

Our ten-year expectations are primarily used internally for occasional mediumterm tactical recommendations, but they also serve as the primary foundation for our longer-term, twenty-year expectations. We form our twenty-year annualized return expectations by systematically considering historical performance on an asset class by asset class level. We do this by performing a weighted average of our ten-year expectations with average historical returns in each asset class, with the weights determined by a qualitative assessment of the value of the long-term historical data. Generally, if we have little confidence that the historical average return is representative¹, we will weight our ten-year forecasts more heavily. If we have great confidence in the historical average, we will weight the ten-year forecasts and historical average equally. Therefore, the weight on our ten-year forecasts ranges from 0.5 to 0.9 (with an average of 0.7). Generally, the weights are similar within broad asset class categories, such as public equities, fixed income or hedge funds. Finally, we discuss the results with the wider consultant community at the firm, who question the asset allocation team about their models and assumptions.

We develop our twenty-year volatility and correlation expectations slightly differently. For these parameters, we do not first develop separate ten-year

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¹ For example, we have less confidence in historical data that do not capture many possible market scenarios or are overly polluted by survivorship bias.

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expectations. Instead, we rely solely on various historical averages – qualitative adjustments, when applied, usually serve to increase the correlations and volatility over and above the historical estimates (e.g., using the higher correlations usually observed during a volatile market). In the case of private markets and other illiquid assets, where historical volatility and correlations have been artificially dampened, we seek public market equivalents on which to base our estimates before applying any qualitative adjustments. These volatility and correlation expectations are then combined with our twenty-year return expectations to assist us in subsequent asset allocation work, including mean-variance optimization and scenario analyses.

Throughout the process, we remind ourselves of our overarching goals:

- Consistency of results with historical experience and fundamentals
- Consistency of results with macroeconomic reality
- Consistency of results across asset classes
- Recognition of forecasting error and its implications

(b) Who in the firm is involved in developing the assumptions?

The Asset Allocation Committee is comprised of four of the firm's senior professionals, including Frank Benham, investment Research/Managing Principal, and three of the firm's other Managing Principals and most experienced investment professionals.

(c) How often are these assumptions updated or revised?

Meketa Investment Group conducts the Asset Allocation Study annually. In some cases, our annual Asset Allocation Study may be revised. The most recent significant adjustment to our Asset Study and Model Portfolio occurred in the third quarter of 2009, as a result of the tremendous gain in asset values during the second and third quarter of that year. As a result, we significantly revised our 2009 capital market assumptions. We felt that it was prudent to adjust our numbers downward prior to the January 2010 annual revision because our models indicated significantly lower long-term returns as a result of the large market gains. In general, we believe that intra-year revisions should only be made when our return forecasts differ substantially from the initial estimates.

37. If the asset allocation model includes pension liabilities, how are liability projections developed? Please explain briefly.

When performing an asset liability study, we work with a fund's Board members and actuary to obtain and understand the fund's liability structure. Liability estimates include both most likely expectations and one or more worst-case liability scenarios. Please refer to our response in Question 32.c for a thorough description of our asset-liability study.

(a) Does the firm use its own actuarial assumptions and methodology or does it rely on the benefit projections of the retirement system's actuary?

Meketa Investment Group works with clients' individual actuaries on asset liability studies and other projects that depend on actuarial data.

(b) Does the Firm have any actuarial staff and expertise of its own?

No. Meketa Investment Group does not have a dedicated actuarial staff. However, some of our employees have worked in actuarial capacities in the past and provide their insight into projects when necessary.

38. Are there any asset classes or market segments that are NOT included in the asset allocation model?

No. We do not exclude any asset class from our model. We incorporate asset classes suitable for institutional investors into our asset allocation model.

The following asset classes are included in the firm's asset allocation model.

Asset Class		
Equities	Fixed Income	
Public Domestic Equity	Cash Equivalents	
Public Domestic Equity (Micro)	Short-Term Investment Grade Bonds	
Public Foreign Equity (Developed)	Investment Grade Bonds	
Public Foreign Equity (Large)	TIPS	
Public Foreign Equity (Small)	High Yield Bonds	
Public Foreign Equity (Emerging)	Bank Loans	
Public Foreign Equity (Frontier)	Foreign Bonds (unhedged)	
	Emerging Market Bonds	
Private Equity	Real Assets	
Buyouts	Real Estate	
Venture Capital	REITs	
Mezzanine Debt	Core Private Real Estate	
Hedge Funds	Value Added Real Estate	
Other	Opportunistic Real Estate	
Portable Alpha (Core Bonds)	Natural Resources (Public)	
Portable Alpha (Equities)	Natural Resources (Private)	
	Commodities	
	Infrastructure (Public)	
	Infrastructure (Private)	

(a) If so, how is the allocation to these asset classes determined in the asset allocation study?

Not applicable. We do not exclude any asset class from our asset allocation study.

(b) If alternative or non-traditional asset classes (such as real estate, private equity, hedge funds, etc.) are included, how does the model deal with non-market valuations and/or non-normal distribution of returns for these asset classes?

For private markets and other illiquid assets, where historical volatility and correlations have been artificially dampened, we seek public market equivalents on which to base our estimates before applying any qualitative adjustments. These volatility and correlation expectations are then combined with our twenty-year return expectations to assist us in subsequent asset allocation work, including mean-variance optimization and scenario analyses.

- 39. How frequently would the Firm conduct a formal comprehensive asset allocation study within the flat fee proposed in Part C?
 - (a) What type of follow-up analysis or review of asset allocation would the Firm perform in between comprehensive asset allocation studies?
 - (b) How frequently would such follow-up reviews be conducted?

We would be prepared to conduct a formal asset allocation study for the Retirement Systems annually. Meketa Investment Group generally recommends a formal review of asset allocation policy for clients at least every three years or earlier if requested by the client. However, for the majority of our clients, we review their asset allocation on an annual basis and continuously monitor a client's asset allocation, and address asset allocation explicitly each quarter in our quarterly reports. When necessary, such reviews may result in a rebalancing of assets. In general, it is our intention that the fund will adhere to its long-term target allocations, and that major changes to these targets will be made rarely and only in response to significant developments in the circumstances of the fund, or in response to material changes in the fundamental nature or appropriateness of the asset classes themselves. Importantly, we believe that asset allocation is the core of our job as a general consultant. We do not charge our clients any additional fees for conducting more frequent asset allocation reviews/studies.

40. What approach does the Firm recommend toward rebalancing the asset allocation of the Fund? Please explain briefly.

Asset allocations will drift gradually over time, and may change more abruptly in certain circumstances. Meketa Investment Group works with clients to implement cost-effective, non-disruptive methods for restoring or adjusting fund asset allocations. In all cases, the specific plan for rebalancing will identify those assets that can be shifted at the lowest possible risk and cost, if the rebalancing cannot be accomplished solely by allocating contributions and withdrawals.

To avoid hasty judgments and expensive tactical reversals, we recommend that all investment decisions be made within the framework of the investment policy. A disciplined approach reduces the tendency to "time the markets," adopt investment fads, or terminate managers after a short interval of poor performance. Meketa Investment Group continuously monitors client asset allocations, and addresses asset allocation explicitly each quarter in our written fund reviews. We also have successfully implemented more "tactical" rebalancing policies and approaches for those clients who

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wish to use Meketa Investment Group's considerable expertise in evaluating dislocations in the condition of the marketplace to implement over or under-weight positions at the margin.

In our judgment, external cash flows (i.e., external contributions or withdrawals from investment assets (index funds) should always be used as a rebalancing tool. In this way, a necessary event (i.e., the cash flow) is made to serve two purposes at no additional cost. Cash should be used to return assets to an allocation target even if the assets remain within the target range. The cost of making this type of rebalancing is essentially zero. Meketa Investment Group works closely with our clients to make these recommendations to improve the efficiency and performance of the pension plan.

Outside of cash flow rebalancing, Meketa Investment Group recommends that clients put into place a rebalancing policy that requires rebalancing when assets fall outside of target ranges, or at least annually. We have developed a methodology for where within a target range it is appropriate to rebalance, based on significant research on rebalancing conducted both by Meketa, and others in our industry.

41. Does the Firm advocate short-term or tactical changes in asset allocation in response to changing market conditions? If so, what approach does it recommend toward making such changes?

As part of our regular dialogue with clients, we will make tactical recommendations when appropriate. However, we are always mindful of the difficulty associated with market timing when making such recommendations. In many cases, we make recommendations (if working on a non-discretionary basis) or implement (discretionarily) tactical over and underweights to specific pieces of an asset allocation structure, in order to take advantage of opportunities in the markets. As an example, during the extreme market events such as in late 2008 and early 2009, we recommended and implemented traditional rebalancing decisions, as well as tactical decisions. The tactical investments were made in distressed debt, high yield bonds, and small/microcap stocks. A smaller allocation recommendation was made toward emerging markets. These actions have been very rewarding for our clients.

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INVESTMENT MANAGER SEARCH AND SELECTION

42. What is the Firm's approach towards investment manager search and selection? Does it undertake every manager search starting from scratch? Or does it develop and maintain a list of preferred managers for various asset classes and investment mandates and recommend managers from that list?

Our manager search philosophy is based on the tenet that history is not a perfect guide. Over time, markets and firms change and it is important to use forward thinking analysis. Our manager search process begins with defining a client's needs and then casting a wide net. It is a collaborative process, wherein we listen to suggestions from our clients. We often have up to six investment professionals working internally on a search. All resulting finalist recommendations are only made when they are considered appropriate for a client, and often represent a broad spectrum of potential candidates.

Meketa Investment Group's research process is a comprehensive approach focused on constant diligence of our clients' current managers, evaluation, and selection of new manager opportunities and on-going sourcing of new ideas. Meketa Investment Group has specific, strict criteria to identify manager candidates for our clients. We ensure that the most appropriate managers have been identified for each client for each search, by utilizing our tools and resources.

Every "search" we do for a client is customized. However, we do have a "bullpen" of public market managers in each asset class who have gone through our multi-stage research process. These managers have been fully researched and vetted by our senior investment professionals. If appropriate, they will usually be considered in new searches. Despite the existence of this bullpen, each search is conducted in an open, competitive manner, consistent with our role as a fiduciary.

- 43. Do you undertake a self-evaluation of your success in recommending investment managers that outperform their benchmark over the first capital market cycle for new client mandates?
 - (a) If so, what changes, if any, have you made to your manager search and selection process based on those self-evaluations?
 - (b) What results based on these changes have you achieved?

Yes. Meketa Investment Group monitors the success of our manager selection. Currently, we utilize a proprietary internal manager ranking system. This allows us to monitor our ability to identify best-in-class managers, as well as monitor our ability to identify and avoid inferior managers. Our success in selecting managers that add value is reflected in our low client turnover which has averaged less than 3% historically. Manager selection and monitoring, along with our intensive level of service, have contributed to a high degree of client satisfaction.

44. How many investment manager searches has the firm conducted over the past three years ending June 30, 2012 for the following asset classes and investment strategies? What was the total value of assets involved in each type of search?

Please refer to the table below for completed investment manager searches for the past three years. The number of manager changes per year largely depends on the client, and a typical plan may change two to four managers per year.

			Value of Assets
Manager Searches		Number	(\$ mm)
Domestic Equities - all styles & marke	t caps	31	621
Domestic Fixed Income - inc. high-yie	ld bonds, mortgages, etc.	66	1,330
International and Global Equities - inc	c. emerging & frontier markets	38	1,187
International and Global Bonds - inc.	emerging & frontier markets	35	816
Alternative Investments - real estate,	Individual funds or managers	*	*
private equity & hedge funds	Fund of funds	*	*
Real Assets – commodities,	Individual funds or managers	*	*
timberland, infrastructure, etc.	Fund of funds	*	*
Synthetic Strategies - TAA, currency o	verlay, alpha transport,		
managed futures, etc.		-	-
Other (please specify):		-	-
Total Manager Searches		170	\$3,954

^{*} Clients that receive our specialized Private Markets Consulting Service benefit from continuous sourcing activities that result in a constantly refreshed set of opportunities. As a result, specific manager searches are less common and typically taken on as part of a specific mandate or special project. Over the past three years, we have invested between in 15-20 partnerships per year alternative investments and 5-8 investments in real assets.

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45. Is there a specific unit or group within the Firm dedicated to (i.e. spends 100% of its time on) manager research, including for both public market (traditional) assets and private market (alternative non-traditional) investments? If so, please provide the following information for that group:

Yes. Meketa Investment Group has two specific groups dedicated to manager research. Our Marketable Securities Group consists of 10 professionals and is responsible for due diligence and research on public markets managers. Our private markets manager research group consists of 23 professionals who are responsible for the due diligence of alternative non-traditional investments. Within these groups, several of our professionals are solely dedicated (90-100% of their time) to manager research. However, all of Meketa Investment Group's investment professionals conduct research on investment management firms and their products.

Name of Database	Consultants	Analysts
Dedicated Staff for Traditional Investment Managers	5	5
Dedicated Staff for Alternative Investment Managers/Funds	4	11
Other Staff Involved in Manager Research & Due Diligence	5	3
Percent of Time (on Average) Spent on Such Activities	Dedicated Staff 90-100%	Dedicated Staff 90-100%
	Other Staff 5-20%	Other Staff 5-20%

- 46. Please list the databases used for manager research for both traditional and alternative assets. Provide the following information for each database. Enter the information or an 'X' as required in the appropriate cell or cells of the table below.
 - (a) The type of database whether it is internal/proprietary, purchased or licensed from a third party, or part of a consultants' network or cooperative;

	Type of Database		
Name of Database	Internal/ Proprietary	Third Party	Network or Cooperative
Internal Meketa Database	X		
Morningstar		X	
eVestment Alliance		X	
Thomson Reuters		X	
Preqin		Χ	

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(b) The type of information in the database - investment performance, manager profiles, portfolio holdings or product characteristics, or other (meeting notes, new items, recent changes, etc.);

	Type of Information			
Name of Database	Investment Performance	Manager Profiles	Portfolio Holdings or Characteristics	Meeting Notes, News, etc.
Internal Meketa Database	X	X	X	X
Morningstar	X	X	X	
eVestment Alliance	X	X	X	
Thomson Reuters	X	X	X	
Preqin	X	Χ	X	

(c) The number of investment managers, funds, portfolios, and/or products/strategies covered by the database;

	Number of Managers, Funds, etc.		
Name of Database	Investment Managers	Funds/ Partnerships	Products/ Portfolios
Internal Meketa Database	2,000		3,500
Morningstar	6,000		10,000
eVestment Alliance	1,270		6,700
Thomson Reuters		3,745	
Preqin		6,100	

(d) How information is entered and updated, by whom, whether the information is verified and how any discrepancies are resolved. Please explain briefly.

Our firm's proprietary database is updated continuously as consultants and analysts meet with managers. In addition, every quarter we send a detailed questionnaire to all of our clients' managers. The purpose of this questionnaire is to determine for each manager if any significant changes have occurred in their firm or among their investment personnel. Monthly, we collect client information from a variety of sources including custody banks, investment managers, and database providers. We collect performance from a client's investment managers as well, and compare performance figures for consistency. When discrepancies are discovered, Meketa Investment Group works with the investment manager and the custodian to determine the source of the differential and to make any necessary adjustments.

Our third-party databases (Morningstar and eVestment Alliance) are updated continuously by the managers and verified by the vendors for accuracy.

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47. Please indicate how many times a year the Firm formally met with investment managers (or general partners) on average over the past three years ending [date].

Meetings with Investment Managers	Number of Meetings a Year
On-Site at the Investment Manager's Premises	207
In the Consulting Firm's Offices	513
By Conference Call (lasting at least ½ hour)	100

With how many different investment management organizations did the firm meet over this period?

In total, Meketa Investment Group typically performs approximately 1,000 manager meetings per year which include meeting with managers who currently invest on behalf of our clients as well as prospective opportunities. On average, we meet with approximately 200 to 300 investment managers annually on-site at their offices.

PERFORMANCE EVALUATION AND COMPLIANCE

48. What benchmarks does the Firm use to evaluate the investment performance of a retirement system at the total fund level?

Total Fund Benchmarks	Yes/No
Asset Mix Policy or Target Return	Yes
Return Based on Actual Allocation	Yes
Assumed Actuarial Return or Discount Rate	No
Inflation plus x%	Yes
Return on Pension Liabilities	No
Rank versus Peer Group Funds	Yes
Other (please specify):	No

49. What benchmarks does the Firm use to evaluate the performance of individual asset classes, investment managers and portfolios?

Asset Class & Investment Manager Benchmarks	Yes/No
Broad Market Indices	Yes
Style-Based Indices	Yes
Blend of Publicly Available Indices	Yes
Normal Portfolio to Reflect a Unique Investment Strategy or Process	Yes
Rank versus Peer Group Managers or Portfolios	Yes
Other (please specify):	

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(a) Are there any asset classes, market segments, or investment styles or strategies e.g., private markets, hedge funds or real assets - for which the Firm CANNOT provide benchmarks to measure performance?

No. Meketa Investment Group has access to benchmarks across investment styles and market segments. However, in some cases, certain strategies may not lend themselves to a "canned" benchmark, and may require customization. Meketa Investment Group clients employ a number of strategies that are not "benchmark-oriented," or take strategic bets relative to the market in which they invest. For those portfolios, it is important to separate the effects of these strategic bets (e.g., dividend yield emphasis, avoidance of utility stocks, micro-cap emphasis) from the effects of stock selection. For example, a small capitalization value strategy that does not invest in financial stocks has been compared to the Russell 2000 Value index, excluding financial stocks. This has allowed for a far more straightforward assessment of the manager's stock picking ability.

(b) What types of customized benchmarks - such as blended indices, normal portfolios, etc. - can the Firm provide for specialized investment strategies?

We are capable of developing custom benchmarks for managers and total funds, including appropriate peer group comparisons.

Custom benchmarks may include static blended indices, dynamic blended indices (shadow benchmarks), uniquely defined manager universes, and liability-driven indices. Meketa Investment Group can create a dynamic blended index based on the fund's actual allocation to real estate, venture capital, and other asset classes/strategies. Meketa Investment Group can also create a static blended index based on the fund's target allocation to various asset classes.

50. What performance measurement databases or systems does the Firm use to measure the performance of the Fund and individual asset classes, investment managers and portfolios against peer groups?

Meketa Investment Group utilizes seven performance measurement databases. purchase data from FactSet, Ibbotson, eVestment Alliance, Bloomberg and Morningstar, we have access to an institutional plan sponsor universe and we maintain our own internal database.

Manager and Asset Class Benchmarks

To evaluate investment manager and asset class performance, Meketa Investment Group generally compares performance to three types of benchmarks. The first benchmark is a broad market index (e.g., the S&P 500 index for equity managers). This comparison gives information about the broad market conditions under which the manager was operating. Our second comparison is to a style-specific benchmark matched to the portfolio's investment style. For example, a small capitalization value manager would be compared to the Russell 2000 Value index. This comparison refines the analysis provided by the broad market index by focusing more exclusively on the area of the manager's expertise. Finally, we compare managers to carefully crafted benchmarks of their peers. Each of the three types of benchmarks is described in more detail below.

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Broad Market Benchmarks

Broad market benchmarks (e.g., the S&P 500 index, Wilshire 5000 index) purport to measure the return of the market as a whole, or at least a substantial fraction of the While broad market benchmarks are widely quoted, they pose several difficulties when used to evaluate managers. First, most market indices are capitalization weighted, meaning that the index is dominated by the returns of the largest stocks. For example, approximately 80% of the S&P 500 index's return is determined by the fifty largest stocks, leaving only a small role for the remaining 450 stocks.

Second, market indices are intended to be style-neutral, placing no special emphasis on value stocks versus growth stocks. However, if the largest company shares are predominantly growth companies, as was the case in the late 1990s, then the index acquires a growth stock bias.

And finally, the stocks listed in a broad market index are selected to be representative of all industry groups, regardless of their financial strength or return prospects. Just because a stock is selected for inclusion in an index in no way implies that it is a good investment.

Meketa Investment Group uses broad market indices to evaluate how much of a manager's return can be attributed to the market as a whole. For example, a manager's return of +20% in one year is less impressive if the market, as measured by broad market indices, also returned +20%.

Style-Specific Benchmarks

Some vendors create style-specific benchmarks. Meketa Investment Group uses style-specific benchmarks in much the same way we use broad market indices, to assess how much of a manager's performance is attributable to features of the market as a whole. For example, we would expect a growth stock manager to outperform a value stock manager in a period in which growth stocks as a whole outperform value stocks (based on style-specific indices).

Peer Group Benchmarks

Often, it is useful to compare managers directly to other managers with similar styles and goals. A direct peer to peer comparison, if performed correctly, eliminates any bias due to market trends. For example, it would not be useful to compare a value manager to a growth stock manager in periods when either growth stocks or value stocks are outperforming. However, whether growth or value stocks are leading the market, it is useful to compare growth stock managers to other growth stock managers, and value stock managers to like value stock managers.

Meketa Investment Group uses peer group benchmarks to make like comparisons among managers. We create our own peer group benchmarks internally using public mutual funds to ensure that they are accurate and representative.

Public mutual funds are rigorously audited, and SEC rules require that mutual funds adhere to the specific investment strategy specified in the fund's prospectus. Thus,

mutual fund managers cannot operate as a growth stock fund one day and as a value fund the next.

All of the managers in a peer benchmark are subjected to the same market forces, and all have the same opportunities to prosper. If a manager outperforms his or her peers, then we can be confident that their performance is superior.

(a) How many pension funds are covered in those databases? How many of them are public funds?

Please refer to response to Question 50.

(b) How many investment managers and portfolios/products are included?

	Nu	Number of Pension Funds, Managers, etc.			
Name of Database	Pension Funds	Public Funds	Investment Managers	Portfolios or Products	
Third-party Institutional Plan Sponsor Universe	1,348	295			
Internal Meketa Database			2,000	3,500	
eVestment Alliance			1,270	6,700	
Morningstar			6,000	10,000	

(c) For each database, please indicate where the data comes from, how it is verified, who calculates the investment returns, and how any errors or discrepancies are resolved.

For both our clients' managers and prospective managers, Meketa Investment Group uses various third-party sources to verify the accuracy of a manager's performance history. Specifically, when conducting investment manager searches, Meketa Investment Group requires that firms submit performance that is CFA Institute GIPS compliant. We carefully scrutinize the performance records that are provided to us by investment managers, including the performance calculation methodology they use.

We look closely at the integrity of the composite that a manager presents to ensure that it is representative of the strategy we are evaluating. This includes looking for dispersion of account returns within the composite, significant deviations in performance from the benchmark, and any considerable changes in the structure of the composite. Lastly, where appropriate, we will call a manager's clients to inquire about the returns that they have achieved with the strategy under consideration.

Our third-party databases are updated continuously by the managers and verified by the vendors for accuracy.

51. Does the Firm provide performance attribution analysis at the total fund level as well as for individual asset classes or portfolios?

Performance Attribution	Yes/No
Total Fund	Yes
Domestic Equities	Yes
International and/or Global Equities	Yes
Domestic Fixed Income	Yes
International and/or Global Fixed Income	Yes
Other (please specify): Alternatives	Yes

52. How does the Firm monitor or track the investment style of portfolios? What style analysis systems or models does it use?

		Asset Classes (Yes/No)			
Style Analysis Model	Returns or Holdings-Based	Domestic Equities	Global Equities	Fixed Income	Other (specify)
Factset	Holdings-Based	Yes	Yes	Yes	NA
Morningstar	Returns-Based	Yes	Yes	Yes	NA

Utilizing a third-party database of equity fundamentals, we calculate each portfolio's fundamental characteristics (price-earnings, price-book value, dividend yield, historical earnings growth, and projected earnings growth) to determine the actual investment style of the manager. We segregate the portfolio by capitalization to determine any tendency toward larger or smaller stocks. We divide the portfolio into industries to see if the manager is placing hidden industry bets, or exposing the fund to undue industry-specific risks.

One of these third-party databases is FactSet, which is a leading provider of global financial and economical information, including fundamental financial data on tens of thousands of companies worldwide. Combining more than 250 databases into a dedicated service, FactSet provides tools to download, combine, and manipulate financial data for investment analysis. In addition, we use Morningstar for returns based analysis.

53. Does the Firm monitor or track the compliance of the client's portfolios with:

If so, how and to what extent?

(a) Investment policies and guidelines of the fund?

Meketa Investment Group monitors compliance with our clients' policies on an ongoing basis, to ensure that the pension plan is meeting its investment objectives and operating as planned. Meketa Investment Group undertakes a comprehensive Initial Fund Review of each new client. The Initial Fund Review includes an examination of the client's existing Investment Policy Statement, asset allocation policy and asset allocation structure; a review of actuarial reports; interviews with the client's investment managers and an examination of their guidelines and fees;

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and an assessment of the client's custody relationship(s) and fee structure, among other issues. Meketa Investment Group reports to the Board its assessment of each separate issue, makes appropriate recommendations, and prioritizes these recommendations within a timeframe of six to thirty-six months for implementation. The resulting Initial Fund Review document is typically in excess of sixty pages in length and becomes a useful guide for framing discussions and decision-making for the trustees and consultant.

We believe our role with respect to investment policy development is two-fold: to assist clients in setting their objectives, and to assist clients in achieving those objectives through the development of investment policies and manager guidelines that reflect real-world experience.

The identification and clarification of client objectives includes:

- explicit statement of the purposes of the assets,
- definition of the appropriate time horizon for the assets,
- identification of the degree of liquidity necessary and the funding patterns of the asset pool, and
- review of any legal, tax or special circumstances that affect the investment of the assets.

Once the client's objectives and constraints are identified, a relevant investment policy can be developed. Given that the asset allocation will be the primary determinant of the investment pool's risk and return characteristics, our investment policies focus on that area.

Investment policy development includes:

- extensive evaluation of risk and return attributes for various asset allocations,
- identification of a target asset allocation that best achieves the client's objectives, given their constraints,
- identification of appropriate ranges around which the long-term asset allocation may fluctuate, and
- description of the procedures for monitoring and adjusting the asset allocation over time.

The result of this process is a statement of Investment Policy that describes the fund's return expectations, the types of investment risks that can be assumed, and the rules used to measure these returns and risks. Most importantly, this document includes our recommendations for a long-term asset mix for the Retirement Systems.

Following the Initial Fund Review and Investment Policy development, Meketa Investment Group works with clients on how best to implement long-term strategy, addressing specialist manager roles, use of passive management, and active manager guidelines. The written Manager Guidelines describe in detail the type of investment services that the fund needs to meet its investment objectives.

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These manager guidelines list the types of investments to be made and the degree of risk that is acceptable.

The Investment Policy Statement and all manager guidelines will be reviewed at least annually to ensure that their objectives and constraints remain relevant. Further, these documents will be reviewed whenever significant developments in the circumstances of one of the Funds occur. Specifically, the Investment Policy Statement will be reviewed upon each actuarial valuation, and manager guidelines will be updated whenever a new manager is hired or the mandate changes for an existing manager. Finally, our quarterly fund evaluation will include an asset summary page that compares each fund's actual asset allocation to its target allocation.

Meketa Investment Group also develops a number of different investment strategy/policy statements, each customized to our clients' specific needs.

(b) Manager mandates, agreements or contracts?

During the Initial Fund Review, Meketa Investment Group develops a set of Manager Guidelines, which describes in detail the type of investment services that the fund needs in order to meet its investment objectives. These manager guidelines list the types of investments to be made and the degree of risk that is acceptable. The Manager Guidelines document will be reviewed upon each actuarial valuation, and will be updated whenever a new manager is hired or the mandate changes for an existing manager.

(c) Laws and regulations?

Our analysts and consultants review each manager's compliance with written investment guidelines. Meketa Investment Group works with clients to issue written guidelines for each manager that address all relevant laws and regulations, mandated investment styles (i.e., small capitalization value), and specific prohibitions expressed by the client.

The investment regulations governing the Retirement Systems and their interpretation are continuously subject to change. Meketa Investment Group recognizes that a thorough understanding of all laws, rules, and regulations that apply to the Retirement Systems is a critical part of meeting our fiduciary duty.

RESEARCH AND EDUCATION

54. Does the Firm undertake any research on general investment and pension-related issues?

Yes. To serve our clients well, we conduct in-depth internal research on a constant basis. Our research focuses on economics, capital markets, investment strategies, and investor needs. Meketa Investment Group formally revises a model portfolio document on an annual basis. The model portfolio represents our best practices with respect to all aspects of investing institutional assets, a comprehensive manual to guide a pension fund. It addresses dominant issues such as asset allocation, implementation issues (e.g., manager selection) and operational issues (e.g., custodian banking and securities lending). The model portfolio serves to organize all of our research efforts and to focus them on specific ways of improving performance.

We also prepare specialized "white papers" detailing the risks and opportunities implicit in various types of investments. We generally produce six to eight white papers per year that we distribute to our clients.

(a) How many research studies (reports and/or white papers) has the Firm produced over the last three years ending [date] on the following broad topics?

The table below reflects white papers written or updated in the past three years on each topic. In addition, on a quarterly basis, Meketa Investment Group publishes a Global Macroeconomic Outlook, a Capital Markets Outlook, and Market and Industry Analysis for private equity and real assets.

Research Reports/White Papers (Last 3 Years)	Number of Studies
Asset Allocation	2
Asset/Liability Management	0
Equity Markets & Strategies	5
Fixed Income Markets & Strategies	2
Alternative Investments - Private Equity, Hedge Funds, etc.	2
Real Assets - Real Estate, Infrastructure, Commodities, etc.	3
Risk Management	2
Investment Management or Portfolio Structure	4
Performance Measurement	1
Economic Policy	0
Other (please specify):	1

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(b) What other types of publications are made available to clients? How frequently are these publications produced?

Other Publications	Frequency of Publication
Economic or Capital Market Outlook	Quarterly
Newsletters	8-10 per year
Client Memos	As needed
Other (please specify): Research Papers	6-8 per year

55. How does the Firm provide education services to board trustees and staff?

Delivery of Education to Trustees/Staff	Yes/No
Regular Board Meetings and Retreats	Yes
Half to One-Day Seminars/Workshops at Client Offices	Yes
Annual Client Conference	Yes
Internet (Webinars)	No
Other (please specify): Research Papers, Newsletters	Yes

What is distinctive about your delivery of education to clients? Please explain briefly.

A significant component of our work as consultants is to provide on-going education to our clients. We welcome the opportunity to work with clients one-on-one or in a group forum at a location convenient to them. Our educational programs take many forms.

Meketa Investment Group considers Trustee education an important part of our job as consultants. All of our education is done on a client-by-client basis. In this way, each client receives Meketa Investment Group's full attention, and all investment seminars are organized specifically for each client.

We believe that an educated Trustee is much more likely to make prudent investment decisions. Consequently, we constantly strive to educate Board members on various investment topics. Our preference is to organize off-site investment seminars for clients, where we can devote uninterrupted time to investment education. However, we realize that many clients simply do not have the time to spend many days each year learning about investment issues. For those clients, we ensure that adequate time is spent at regularly scheduled Trustee meetings to discuss investment issues.

All of our educational work is presented in plain English, and is designed to be useful for non-investment professionals as well as sophisticated investors.

56. What percentage of total revenue did the Firm spend on research and investment technology (software, databases, etc.) on average over the past three years?

Meketa Investment Group has no set policy regarding reinvestment into any one specific business area. However, on average in the past three years, we have invested approximately 20% of our annual revenues into research and technology functions.

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LITIGATION AND INSURANCE

57. Has the Firm, or any officer, principal, or employee of the Firm or an affiliated company, ever been investigated and/or charged by the Securities and Exchange Commission ("SEC"), the U.S. Department of Labor ("DOL"), or any other regulatory authority for violation of applicable laws? If so, please explain.

Neither Meketa Investment Group nor any officer, principal or employee of the firm has ever been investigated and/or charged by the Securities and Exchange Commission ("SEC"), the U.S. Department of Labor ("DOL"), or any other regulatory authority for violation of applicable laws.

58. Has the Firm, or any officer, principal, or employee of the Firm, ever been involved in any business litigation or other legal proceeding? If so, please explain and indicate the current status of the litigation.

Neither Meketa Investment Group nor any officer or principal has ever been involved in business litigation or other legal proceeding. To the best of our knowledge, none of the firm's employees have ever been involved in any business litigation or other legal proceeding.

59. Does the Firm, or any officer, principal, or employee of the Firm, have any lawsuits pending against it concerning the delivery of investment consulting or related services for any client? If yes, please explain.

Neither Meketa Investment Group nor any officer or principal have any lawsuits pending against it concerning the delivery of investment consulting or related services for any client. To the best of our knowledge, none of the firm's employees have any lawsuits pending against them concerning the delivery of investment consulting or related services for any client.

60. What level of insurance coverage does the Firm have for professional liability or errors and omissions, and other types of liability insurance?

Type of Insurance Coverage	Name of Carrier	Aggregate Coverage	Coverage per Claim
Professional Liability or Errors & Omissions (E&O)	Houston Casualty Co., Liberty Mutual Insurance Co.	\$20 m	\$150,000
Directors' & Officers' Liability	Houston Casualty Co., Liberty Mutual Insurance Co.	\$20 m	
Fiduciary Liability	Hanover Insurance Co.	\$25 m	\$500,000 - \$1,000,000
Fidelity Bond	Included with Fiduciary Liability		
Other (please specify):			

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PERFORMANCE

61. Please provide the following information on the investment performance for the 5-year period ending June 30, 2012 of your full service public pension fund clients (where full service is defined to include advice on asset allocation, investment manager selection and performance measurement) which are similar in size to the City of Fresno Retirement Systems (i.e. \$1-10 billion). Note that we are asking for the simple unweighted average performance for all of these public pension client funds as a group, not the performance of each individual fund.

Performance Information for 5-Year Period Ending June 30, 2012	
Number of Full-Service Public Pension Fund Clients*	5
Average Total Fund Return	1.4%
Average Asset Mix Policy Return	1.3%
Average Excess Return (Total Fund - Asset Mix Policy)	+0.1%
Average Volatility (Standard Deviation) of Total Fund Return**	18%

For the same five full-service public pension fund clients, please find below our threeyear and one-year performance as of June 30, 2012 versus the average asset mix policy return.

Performance Information - Annualized as of June 30, 2012	1 Yr	3 Yrs
Average Total Fund Return*	-0.1%	11.1%
Average Asset Mix Policy Return	-0.7%	10.7%
Average Excess Return (Total Fund - Asset Mix Policy)	+0.6%	+0.4%

- Performance shown above includes all full service public fund clients of similar size to the City of Fresno Retirement Systems and may include clients which have not been a client of Meketa Investment Group for five years.
- Calculation used for the Average Volatility (Standard Deviation) of Total Fund Return is the straight average of the standard deviations of the annual calendar year returns from 2007-2011 for each client in the composite above.

PHILOSOPHY AND APPROACH TO CONSULTING

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PART C: PHILOSOPHY AND APPROACH TO CONSULTING

1. What is the overall philosophy of the firm regarding an investment consultant's relationship with the board of trustees, staff and investment managers?

Since the inception of the firm, we have been guided by the principles of excellence, integrity, and fiduciary responsibility. Meketa Investment Group is committed to offering independent advice, that is free of conflicts of interest. We work only for our clients and serving our clients' best interests is our only goal. To protect the Board members, who otherwise would shoulder all of the responsibility, Meketa Investment Group accepts fiduciary responsibility in our role as investment consultant.

We recognize that each client may require different levels of service. With some of our most successful client relationships, we have essentially become an extension of their Board and its Staff. We are willing and able to be extremely hands-on if requested to do so. We recognize that the Staff has many other duties outside of investment coordination, and we seek to leverage our expertise to solve problems of inefficiency and reduce the Staff's workload in our area of expertise.

The depth and quality of the Meketa Investment Group investment staff allows for high quality client service. We provide immediate and detailed responses to all inquiries from our clients. We maintain a very low client-to-consultant ratio. As a result, each of our clients is assured personal attention from one of several consultants, analysts, and support staff. We attend all meetings at which our presence is requested, and our responsibilities related to other clients will never interfere with our charge to provide the most comprehensive, personalized consulting services possible for the client.

Meketa Investment Group is committed to ensuring that each client receives the attention of experienced consulting staff members. We utilize a team approach which ensures that a number of experienced individuals are familiar with the circumstances and complexities of each client's account. This approach also ensures that we are able to meet with clients in person on a schedule that best meets their needs.

Meketa Investment Group maintains an ongoing dialogue with all of our clients regarding pertinent developments in the investment markets. We view ongoing client communication and education to be an essential component of the services provided by an investment consultant. These communications range from formal memoranda to telephone conversations to in-person discussions at our client's Board meetings.

Communication between Meketa Investment Group and investment managers is on-going. Once an investment manager is hired, we *continuously* monitor and evaluate the firm, the strategy, and the team. Our communication with managers includes conference calls, meetings at our offices, on-site visits, quarterly manager questionnaires, and on-going collection of holdings data and investment performance.

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2. State as clearly as possible the firm's investment philosophy. Are there any fundamental beliefs about capital markets which underpin the firm's investment advice to its pension plan clients? What are the critical issues to consider in establishing the investment policy for a public pension plan?

Most investment consultants do not take an active role in the funds they serve. To limit their own liability, these consultants offer only "arms length" advice.

Since 1978, Meketa Investment Group has been providing investment consulting services to our clients. During this time, we have assisted our clients in managing investment programs that have produced strong investments returns based on a prudent philosophy.

We believe in taking a long-term approach to investing, recognizing asset allocation will be the largest determinant of performance. We look to diversify broadly to protect against a wide variety of risks and avoid unnecessary risks. We believe long-term investors should invest in generative assets (equities) and approach new investment strategies or fads with skepticism. Within these constraints, we also believe that, at the margins, there are times when mispricings or opportunities in the market may require a Fund to be nimble, and, if prudent, act more tactically, to take advantage of those moments in time.

We believe clients can benefit from utilizing passive management in more efficient asset classes to achieve broad diversification with low management fees and low operating costs. Where active management is utilized, we seek to identify best-in-class managers through our thorough due diligence process that includes on-site visits and multiple points of on-going contact.

We also believe that risk should be managed much more holistically than many consultants approach it. We have developed, and continue to develop, proprietary methods such as Economic Regime Management®, and Quality, Stability and Income® (QSI) indexing methodology, to help our clients achieve their objectives in the most efficient way possible.

Essentially, we believe running a pension fund is no different than running any other business. You succeed by careful planning, attention to details, using the best people, moderating risks, and minimize fees and expenses, which is the surest way to increase investment returns.

We believe our role as investment consultant is two-fold: to assist clients in setting their objectives, and to assist clients in achieving those objectives. We achieve this through the three broad components of our services: Strategic Investment Advice, Fund Coordination, and Specialized Consulting Services. Strategic Investment Advice and Fund Coordination are essential for a successful investment program. Specialized Consulting Services are designed to add significant value for those clients for whom the services are appropriate.

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We believe the most challenging issues for all of our clients are:

- 1. Publicity (anti DB feelings) The defined benefit structure, which the private sector continues to trend away from, is often portrayed in the press as overly generous, inflexible, and no longer viable. However, the risks associated with alternative plans (i.e., defined contribution) should not be discounted, including limited/no required savings levels, lower returns on average relative to defined benefit plans, and greater dispersion among returns, on average.
- 2. Funding/regulation (limited ability to change benefit levels) Current funding levels, the combined result of previously promised benefits and low investment returns (notably over the last ten years) have reached critically low levels for some municipalities. Regulations/laws limit a municipality's ability to change benefit levels, resulting in larger inputs from: (1) investment returns, or (2) appropriations/contributions. Given the current state of the U.S. economy, increasing contributions to defined benefit plans will likely remain challenging for some time. Additionally, with the continued rebound in the global markets, expecting increased investment does not offer a strong alternative. As a result, further debate with regards to modifying benefits is likely.
- 3. Investment Return Hurdle rates of return, whether they be actuarial- or formula-based (multiples) are not always achievable. These expectations have not changed to keep pace with expectations of pension plans. In the years to come, there is likelihood that funds will not meet their targets. There are various ways a pension plan can attempt to mitigate these issues. Meketa Investment Group recommends that plans reduce overall portfolio expenses and increase exposure to illiquid investments. There are several ways that plans can reduce expenses such as utilizing passive managers and negotiating lower manager and custodial fees. In addition, plans should consider exposure to or increasing allocations in illiquid investments that can produce higher expected returns than traditional investments.
- 4. Interest Rates The current low interest rate environment presents yet another headwind for pension fund plan sponsors today. Allocations to fixed income investments offer lower yields, thus lowering overall total portfolio expected returns for investors. For now, this creates a challenge in achieving long-term target returns (we are not discounting the probability that this may be the case for some time). Further, in the event interest rates begin to rise, this will challenge returns for fixed income investors. Lastly, if rates rise significantly, as a result of the considerable balance sheet expansion by the Fed, fixed income returns may be severely impaired. We believe building a diversified fixed income portfolio, structured to weather numerous scenarios, is a critical component to investment a long-term portfolio today.

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- 5. State Budget Issues With funded ratios down, lower expected returns on global assets, and limited benefit flexibility, there will be greater pressure for increased appropriations/contributions by municipalities. However, the current condition of many state's budgets limits flexibility. Without denying current retirees or current employees' earned benefits, states must find a way to reduce the burden of the pension system on their budgets.
- 6. Governance/Conflicts of Interest Plans must employ a high level of due-diligence in each decision that is made with respect to its investments. Implementation of a policy statement inclusive of expectations along with roles of all parties involved helps to establish appropriate governance, and limit the potential for conflicts of interest. Consultants must be independent and objective. Meketa Investment Group is independently owned, and does not have any financial relationships with investment managers, brokers, banks, or actuaries. We do not receive soft dollars or any brokerage commissions. Unlike other consulting firms, we do not sell any services to the investment management industry. 100% of the firm's revenues are derived from our clients. Our independence allows us to provide clients with unbiased advice.
- 3. Please summarize, in one page or less, the firm's investment consulting capabilities and expertise. What are the firm's major strengths and limitations? Do you provide any services which are not provided by other investment consultants? Why should the retirement system engage you as its investment consultant?

Below are areas in which we believe are our firm's key strengths and competitive advantages:

Investment Consulting Focus & Fiduciary Responsibility — Meketa Investment Group is 100% committed to providing investment advisory services. It is our only line of business and has been since the inception of the firm thirty-four years ago. Meketa Investment Group acts in a *Fiduciary* capacity for all of the services we provide to our clients.

Independent, Objective Advisors — Consultants must be independent and objective. Meketa Investment Group is independently owned, and does not have any financial relationships with investment managers, brokers, banks, or actuaries. We do not receive soft dollars or any brokerage commissions. 100% of the firm's revenues are derived from our clients.

Employee-Owned Firm — Meketa Investment Group is independently owned by its senior professionals. Team continuity is paramount to our firm and most importantly our clients. As such, Meketa Investment Group is structured to maintain stability of its key investment professionals.

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Consulting Experience — Meketa Investment Group has been providing investment and consulting advice since it was hired by its first pension fund client in 1978, a relationship which continues to this day. Meketa Investment Group began consulting for public funds in 1998, when it was hired by a public pension fund, which remains a client today. Currently, we work with twenty public pension fund clients, located throughout the country, who have aggregate assets in excess of \$430 billion. We understand the public fund marketplace and the Board's responsibilities to the Retirement Systems, their missions, and goals.

Additionally, Meketa Investment Group actively participates in several public pension plan industry events nationwide. We are currently affiliated with the following organizations that keep us apprised of unique issues and developments affecting public employee retirement systems:

- National Conference on Public Employee Retirement Systems (NCPERS)
- Michigan Association of Public Employee Retirement Systems (MAPERS)
- Massachusetts Association of Contributory Retirement Systems (MACRS)
- Connecticut Public Pension Forum (CPPF)
- State Association of County Retirement Systems (SACRS)
- Florida Public Pension Trustees Association (FPPTA)
- Texas Association of Public Employee Retirement Systems (TEXPERS)

Customized Service — With 103 employees, including 60 investment professionals, Meketa Investment Group has a very low client-to-staff ratio. This allows us to offer our clients the intensive level of service that they deserve. Each of our clients is assured personal attention from one of several consultants, analysts, and support staff. We provide immediate and detailed responses to all inquiries from our clients. We attend all meetings at which our presence is requested, and our responsibilities related to other clients will never interfere with our charge to provide the most comprehensive, personalized consulting services possible to the Retirement Systems.

Operational Research — Meketa Investment Group has always offered a different approach from that of other consultants. In addition to traditional strategic investment advice services, Meketa Investment Group provides fund coordination services that are often not offered by other consultants. These are intensive, time-consuming services that Meketa Investment Group is staffed to perform because of our low client-to-staff ratio. These services include: manager transition supervision, Trustee protection, Crisis Response Plans, centralized cash coordination, cash flow management, control of unusual events, and fee negotiations. These services enable our clients to control costs, reduce risks, and enhance the performance of their funds.

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4. What do you consider the unique attributes of: (a) your asset allocation methodology, and (b) your investment manager search process? How do these distinguish your firm from other investment consulting organizations?

Asset Allocation Methodology - Meketa Investment Group employs a risk-focused, multifaceted approach to asset allocation. That is, we analyze assets and liabilities using both stochastic and deterministic analysis. While stochastic analysis provides information on a broad spectrum of asset/liability outcomes, it tends to underestimate the frequency and severity of large negative and positive events. Consequently, relying solely on stochastic analysis can cause decision-makers to underestimate the risk associated with various asset allocation policies. Meketa Investment Group corrects for this by using two types of deterministic analysis: scenario analysis and Economic Regime Analysis. Scenario analysis allows us to "stress test" asset/liability outcomes for severe market events. Economic regime analysis allows us to view the performance of assets and liabilities within the context of discrete economic environments.

Manager Search Process — Meketa Investment Group's manager research team is comprised of senior investment professionals, including former portfolio managers and research analysts. When conducting manager searches, we do not rely solely on a "preferred list" or a "stable" of investment managers. Instead, we employ a rigorous due diligence process to identify top flight managers to meet our clients' objectives. We intensively follow the universe of institutional quality asset classes, including domestic equity, developed foreign equity, emerging markets equity, fixed income, real assets, hedge funds and other alternatives.

5. Please summarize the firm's capabilities and expertise in value-added and opportunistic real estate investments, and its due diligence process for manager searches in this asset class.

Meketa Investment Group has been providing real estate investment consulting services to institutional clients for over nineteen years and public pension funds since 1998. We currently oversee real estate commitments for forty clients with committed assets exceeding \$3.9 billion. Our clients invest with over 60 different real estate managers in over 100 unique strategies. Our clients invest across the full spectrum of real estate strategies, including core, value-added, opportunistic, international, REITs, CMBS, PPIP, timber and mortgages, among others.

Meketa Investment Group offers real estate consulting services to assist clients in designing custom, diversified portfolios of real estate investments. Meketa Investment Group serves clients in both non-discretionary (recommending) and discretionary (selecting) roles. Our real estate consulting services provide all the necessary components for clients to successfully implement custom real estate programs.

Initial work includes defining the appropriate role of real estate within the client's overall investment portfolio, and identifying the types of strategies that fit that role. Implementation of the strategy involves carefully assembling a diversified group of real estate portfolios. Investments are monitored continuously as they distribute income and gains or require additional funding. Meketa Investment Group's real estate consulting

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service ensures that real estate investments are diversified and tailored to a client's risk tolerance and need for liquidity.

Our real estate consulting services are classified into two categories: Program Design and Program Implementation.

Custom Program Design	Custom Program Implementation
Strategic Planning	Cash Flow Coordination
& Policy Development	Program Monitoring
Pacing Analysis	and Review
Partnership Analysis	Annual GP Meeting Attendance
Manager Evaluation & Selection	Partnership Amendments
Legal Review	 Advisory Board Representation
Negotiating Terms and Fees	Client Reporting
Client Communication	
Board Education	

Our expertise in providing these services reduces the cost to the client in researching, performing due diligence, monitoring, reporting, and the administration of real estate investments.

We seek to apply our knowledge and experience in practical ways to improve our clients' portfolios. As a broad investment consultant, we are able to apply the knowledge and experience of the organization to help improve the clients' portfolios.

Meketa Investment Group's due diligence process for manager searches has four stages: Initial Screening, Phase I Analysis, Phase II Analysis, and Phase III Analysis. Our Private Markets Investment Committee (PMIC) must have a unanimous approval vote by the six voting members for every investment. A three person subset of the PMIC has membership in each asset class committee.

Initial Screening - Due to our reputation, Meketa Investment Group has historically received documentation on the majority of partnerships deemed to be of institutional quality. Most often, we will receive a Private Placement Memorandum (PPM), but other documents or marketing materials may initiate due diligence. Proactively, we seek information on all attractive investments identified via databases, trade publications, relationships, and conferences. As information or documents are received, investment terms are entered into our customized EquiTrak database. Investments are then assigned to team members who will serve as "Sponsors," driving the day to day due diligence for the investment opportunity.

Phase I - Phase I analysis determines whether or not an investment has attractive characteristics and if it fits within our clients' strategy and portfolio structure. For each fund, Sponsors prepare a Phase I Review, a three to five page summary report of the opportunity that is automatically assembled from populated fields in EquiTrak. Each Monday, team meetings are conducted where the most recently created Phase I Reviews are discussed. The Sponsor leads a discussion of the investment and receives input on the perceived strengths and weaknesses of the investment. At this point, a decision is

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made by the team on whether to pursue a meeting with the manager in our offices. As with all decisions that are part of the process, this will be recorded in the database. If the view is favorable, the Sponsor conducts a meeting with key investment professionals, and records it with comprehensive notes that are distributed company-wide and placed in the database. The fund is then discussed again at a team meeting and consensus is needed to propose this fund to the PMIC, which must vote unanimously to advance fund to the next phase.

Phase II - Phase II analysis probes competitive advantages in the market ahead and seeks to answer the question: "What is special about this opportunity?" In this phase of due diligence, we seek to know the professionals, their strategy, and their track record in extreme detail. Analysis continues by sending our comprehensive Due Diligence Questionnaire ("DDQ") to the target fund manager, reviewing the DDQ response, making preliminary reference calls, and scheduling an onsite visit with key professionals at the manager's offices. These visits involve extensive meetings with professionals, discussing questions that remain from the DDQ, reviewing portfolio investments in detail, and touring the facilities. When appropriate, the negotiation of investment terms begins at this stage. The attendees record their impressions from the meeting in the database where they are viewed by the team and respective committees. If favorable information is obtained from the onsite visit, work is begun on a Sponsor Recommendation, a fifty to seventy page document that explores the opportunity in greater detail. If, for example, a partnership has already made investments after a first closing, these early investments are examined here. A draft of the Sponsor Recommendation is presented to the PMIC as further reference checks are completed. In person, the Sponsor will present the fund to the PMIC for a vote to Phase III, along with the Committee's recommended size of investment.

Phase III - Phase III analysis seeks to ensure that no detail is missed by resolving any remaining issues with the investment. At this stage, the Sponsor Recommendation is reviewed further and amended with any additional analysis requested by the PMIC. During Phase III, each Sponsor completes further reference calls and documents the results. Background checks are performed on key professionals, and legal documents are sent to counsel for review and suggested revisions.

Final Approval - The PMIC makes a final decision to recommend the investment, to decline or recommend against the investment, or to conduct further analysis if no decision can be made due to insufficient information or lack of consensus. Further, the PMIC will approve or modify the recommended investment size. Unanimous approval is required for all investment and commitment size decisions.

Meketa Investment Group has developed an extensive and customized database of invested private markets managers and those currently soliciting capital. The EquiTrak Portfolio Management System ("EquiTrak") serves as a central information source for all private markets processes including cash flow coordination and client reporting, but is also particularly useful for investment manager search and evaluation. Approximately 1,500 funds are currently tracked in our private equity database. The EquiTrak database allows us to analyze funds by investment strategy, process, resources, track record, terms and conditions, etc. as well as to track key diversification data points such as vintage year, region, strategy, industry, etc.

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6. Describe the plans for managing the future growth of the firm, including limitations, if any, on the number of clients that the firm intends to accept.

In the future, we anticipate that Meketa Investment Group will continue to grow as a nationally recognized independent consulting firm, due to the high level of service we provide to all of our clients. Meketa Investment Group has a long standing commitment to excellence. We will never compromise the quality of our work in order to grow. We accept new assignments only if we believe we can offer client services of the highest caliber. Meketa Investment Group intends to continue to expand the ownership of the firm to other senior professionals.

7. If the firm or any affiliate provides services other than investment consulting, please explain briefly what policies or procedures the firm has established to avoid or mitigate any potential conflicts of interest that could arise in providing advice to its pension plan clients.

Meketa Investment Group does not provide services other than investment consulting. For some private markets clients, we provide this service on an advisory (i.e., non-discretionary) basis. For others, we assume the fiduciary responsibility of managing their private markets program on a discretionary basis. These discretionary accounts are customized and managed on a client-by-client basis.

We are an independent firm deliberately structured as such to avoid conflicts and control the objectivity of our services. Meketa Investment Group prides itself on behaving ethically, honestly, and with the highest degree of integrity in all of its business dealings. In an industry with its share of conflicts, Meketa Investment Group works consistently to avoid even the perception of conflict of interest.

8. Explain how the consulting team assigned to this account would function, including lead consultant, back-up, quality control and support services.

Mika Buffington Malone and Laura Wirick will serve as the primary consulting team that would service the Retirement Systems. Stephen McCourt would also act as a back-up consultant on the account, and would be available for meetings as necessary. In addition, a dedicated analyst would be assigned to the account. All four individuals are located in our San Diego office, within easy driving distance of the Retirement Systems' offices and meetings. All of Meketa Investment Group's services are provided on a team basis from our offices in Westwood, Miami, and San Diego. Meketa Investment Group utilizes a team structure that provides each client with multiple investment professionals familiar with the account at all times. This results in a built-in back-up function, improved quality control, and effective and efficient client service.

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9. How would you suggest that we measure and evaluate your performance as an investment consultant?

To measure a consultant's performance, the Retirement Systems should evaluate the System's investment performance, the level of diligence exercised by the consultant, and the quality of our relationship with the Retirement Systems.

To gauge investment performance, the Systems' performance should be compared against the policy objectives determined by the Board. These objectives should be outlined when conducting a review of the Systems' Investment Policy, and should include an investable alternative for the Systems. This alternative could be a blended benchmark of passive market indices that represent either the target asset allocations set forth in the Policy, a generic asset allocation for long-term plans, or the System's current asset allocation targets. Ideally, performance should be compared over a time period of at least three to five years (i.e., a full market cycle).

To evaluate our performance over shorter-term periods, the Board could assess the level of diligence exercised by Meketa Investment Group. For example, the Board could track the number of their investment managers with whom we meet annually. Further, the Board could measure the explicit cost savings it has received through Meketa Investment Group's supervision of manager transitions and fee negotiations. The Board can also evaluate if we have been responsive to their requests and have provided a satisfactory level of education and training.

ADDITIONAL DOCUMENTS AND MATERIALS

APPENDIX A

MEKETA INVESTMENT GROUP

ORGANIZATIONAL CHART AND

INVESTMENT PROFESSIONALS



M EKETA I NVESTMENT

GROUP

BOSTON

MIAMI

SAN DIEGO

EXECUTIVE COMMITTEE

James Meketa* Peter Woolley*

Managing Principal

Alan Spatrick* John Haggerty* Managing Principal Stephen McCourt* Frank Benham* Managing Principal

PRIVATE MARKETS

John Haggerty* Managing Principal /

Director of Private Market Investments

Private Markets Research

Kunal Shah, Principal

David Altshuler. Senior Vice President/ Infrastructure Practice Leader

Michael Dean, Senior Vice President Jess Downer, Senior Vice President

Steven Hartt, Senior Vice President Kimberly Rose, Senior Vice President

Todd Silverman, Senior Vice President

Gerald Chew, Vice President

Christopher Tehranian, Vice President Jason Post, Asst. Vice President

Jia He, Senior Associate

Christy Maher, Senior Associate Brian Teixeira, Senior Associate

LEGAL

Timothy Zayac Senior Vice President / Counsel

leff Reinke

Vice President Private Markets Operations Officer

Denise Beighley, Specialist Danny Chan, Specialist Andrew Reilley, Specialist

PRIVATE MARKETS ADMINISTRATION

Elaine Childs, Private Markets Administrative Manager

Natalie Reale, Client Service Coordinator and Operations Assistant

Jane Sawyer, Client Service Coordinator

Liat Alston, Legal & Compliance Coordinator

Laura Havens, Client Service Assistant Iulia Canchola. Administrative Assistant

Catherine Whitney, Jr. Administrative Asst.

INVESTMENT ADVISORY

Frank Benham*

James Meketa*, Managing Principal

Alan Spatrick*, Managing Principal

Peter Woolley*, Managing Principal

Frank Benham*, Managing Principal

Leandro Festino, Managing Principal

Kellie Coonan*, Principal

John Manley, Principal

Fran Peters, Principal

Dan Dynan, Senior Vice President

Henry Jaung, Senior Vice President

Laura Wirick*, Senior Vice President

Aneish Arora, Vice President

Gustavo Bikkesbakker, Vice President

Paul Cowie, Vice President

Brad Regier, Vice President

Marina Simanovich, Vice President

Edward Urban, Vice President

Colleen Clardy*, Asst. Vice President

Alexandra Wallace, Asst. Vice President

Larry Witt, Asst. Vice President Mary Mustard, Senior Associate

FINANCE

Alla Barskava

Executive Vice President / Director of Finance

Carol Patrick

Staff Accountant

MARKETING

Lisa Rubin Vice President /

Alyssa McLaughlin, Marketing Assistant

John Ledbetter

HUMAN RESOURCES

Nancy LaBier

Executive Vice President /

Director of Human Resources

Senior Vice President / Director of Technology

NETWORK INFRASTRUCTURE

Dubravko Mak, Technology Support Analyst

Michael Porrazzo, Technology Support Analyst

OPERATIONS

Lou Buccini

Principal / Chief Operating Officer

Chris Lyttle Office Operations and Facilities Coordinator

Lisa Kinniburgh

Senior Vice President / Director of Corporate Administration

Stacy Gooch, Vice President / Operations Officer / Administrative Manager

Laura Ferretti, Client Service Coordinator

Lynda Holbrook, Client Service Coordinator

Michelle Holfield, Client Service Coordinator

Kali Stampfli, Executive Assistant

Crystal Stokey, Client Service Coordinator

Teresa Barros, Client Service Assistant

LaVonya Conard, Client Service Assistant

Karen Dulaney, Client Service Assistant

Nathaly Duran Administrative Assistant

Susan Neville. Office Information and Resource Coordinator

Tracy Cullity, Administrative Assistant

Marjorie Heavey, Front Office Administrative Assistant

Natalie Alegre, Receptionist

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CARLSBAD CA 92008

760 795 3450 • FAX 760 795 3445

Kathleen Hillebrand, Receptionist

* Denotes multiple roles on this chart. As of September 7, 2012.

Managing Principal / Director of Research

General Consulting

Stephen McCourt*, Managing Principal

Ted Benedict*, Principal

Mika Buffington Malone, Principal

Marc Fandetti, Executive Vice President

Brian Dana*, Senior Vice President

LouAnn Eisenhut, Vice President

Richard O'Neill, Vice President

Erik Silver, Asst. Vice President

Edmund Walsh*, Asst. Vice President

Public Markets Research

Ted Benedict*, Principal Mitch Dynan, Principal /

Director of Public Markets Manager Research Brian Dana*, Senior Vice President /

Hedge Fund Practice Leader Ed Omata, Senior Vice President/ Assistant Director of Public Markets Manager Research

Laura Wirick*, Senior Vice President

Timothy Atkinson, Vice President

Colleen Clardy*, Asst. Vice President Chris Pompilio, Asst. Vice President

Edmund Walsh*, Asst. Vice President Patrick White, Asst. Vice President

Marketing Team Leader

Sarah Sorrentino, Marketing Specialist

Mary Leshchiner, Marketing Coordinator Colleen Cabasal, Marketing Coordinator

Brad Walker, Network Administrator

Kellie Coonan* Principal/ Director of Investment Operations

INVESTMENT ANALYTICS

Rob Mencunas, Asst. Vice President / Investment Analytics Team Leader

Shawn Bowen, Specialist

Val Geba, Specialist

Perry Opel, Specialist

Kumiko Green, Specialist Vlad Grigorov, Specialist

Austin Moore, Specialist Nazeela Nasseri, Specialist

& Support Manager Michael Rounds, Senior Applications Developer

John McCue, Investment Software

Anna Katz, Business Analyst Craig Burket, Applications Developer

INVESTMENT SOFTWARE & SUPPORT

BIOGRAPHIES

CONSULTANTS



James E. Meketa - Managing Principal

Mr. Meketa founded Meketa Investment Group in 1978 to provide a broad range of strategic investment advisory services to institutional clients. Mr. Meketa received his undergraduate degree from Harvard University, and served for many years with the Harvard Management Company, which manages the University's multi-billion dollar endowment portfolio.

Mr. Meketa has over thirty-five years of experience advising investment funds, and serves as the lead consultant on various defined benefit and health & welfare funds, with Taft-Hartley, non-profit, and endowment plan sponsors. His work includes investment policy design, asset allocation modeling, and analysis of manager and fund performance.

Mr. Meketa is also a member of the firm's Private Markets Investment Committee. In this role, he is involved in various aspects of policy development, and in the due diligence for each fund that is ultimately recommended for client investment.

Mr. Meketa served as a member of the Investment Committee of the Shady Hill School, as an Overseer of Boston's Museum of Science, and as a member of the Museum's Finance and Investment Committees. Mr. Meketa is a member of the American Australian Association and the American Association for the Advancement of Science. He is a frequent speaker at industry events, including the International Foundation of Employee Benefit Plans, the Advanced Trustee Institutes, and various CFA Societies.



Alan Spatrick, CFA - Managing Principal / Compliance Officer

Mr. Spatrick joined Meketa Investment Group in 1980. He received an undergraduate degree from Brandeis University with a concentration in Economics and the Chartered Financial Analyst designation from the CFA Institute.

Mr. Spatrick serves as the lead consultant on various defined benefit and health & welfare funds, with Taft-Hartley, non-profit, and corporate plan sponsors. His work for the firm includes investment policy design and asset allocation modeling, in addition to analysis of manager and fund performance. Mr. Spatrick is a member of the firm's Private Equity Investment Committee.

Prior to joining Meketa Investment Group, Mr. Spatrick was employed by the North Shore Economic Council and by Temple, Barker, and Sloane, an economic consulting firm. In addition, he served as the Treasurer and as Chairman of the Board of the Coolidge Corner Theater Foundation. He is a member of the Boston Security Analysts Society, the CFA Institute, and the International Foundation of Employee Benefit Plans. In September 2002, Mr. Spatrick's paper, "Endpoint Bias and the Generation of Expected Returns" was published in the Employee



Peter S. Woolley, CFA, CLU, ChFC - Managing Principal

Mr. Woolley joined Meketa Investment Group in 1996, and has been in the industry for twenty-four years. He completed his MBA degree with honors at Boston College's Carroll School of Management. He received his undergraduate degree from Dartmouth College, and has received the Chartered Financial Analyst designation from the CFA Institute.

Mr. Woolley is a Managing Principal of Meketa Investment Group and a member of the firm's Private Markets Investment Committee. His areas of expertise include investment policy development, asset allocation, and alternative investments including, private equity, private real estate, and infrastructure.

Mr. Woolley works with several clients with significant investments in alternative asset classes and is integral to the development and oversight of customized alternative investment programs.

He is a member of the Boston Security Analysts Society, the CFA Institute, the International Foundation of Employee Benefit Plans, the Massachusetts Association of Contributory Retirements Systems, and a former member of the New England Employee Benefits Council, and the Dartmouth College Alumni Council. He is a speaker at industry events, including the International Foundation of Employee Benefit Plans, the Dow Jones Private Equity Analyst Infrastructure Summit, the Institutional Real Estate, Inc. Investing in Infrastructure Conference and the Advanced Trustees Institute.



Stephen P. McCourt, CFA - Managing Principal

Mr. McCourt joined Meketa Investment Group in 1994. He received his graduate degree, a Master of Liberal Arts (ALM) in History, from Harvard University, and his undergraduate degree in Economics and Political Science from the University of Vermont.

Mr. McCourt received the Chartered Financial Analyst designation from the CFA Institute and currently serves as the Vice President and Program Chair of the CFA Society of San Diego. In addition, he is a member of the CFA Institute and the International Foundation of Employee Benefit Plans.

Mr. McCourt is a Managing Principal and serves as the lead consultant for several institutional funds, with public, Taft-Hartley, endowment, non-profit, and corporate plan sponsors. His consulting work includes investment policy design, strategic and tactical asset allocation modeling, asset-liability modeling, investment education, and investment manager analysis. In addition, Mr. McCourt is a member of the firm's Private Markets Investment Committee and is integral to the development and oversight of customized private markets programs.

Mr. McCourt speaks at numerous industry events including the Investment Education Symposium, the Corporate Funds Summit, the Endowment and Foundation Forum, the Global Investing Summit, the Private Equity Summit, and the International Foundation of Employee Benefit Plans (IFEBP) Annual Employee Benefits Conference. Mr. McCourt's research papers entitled "Monitoring Investment Managers" and "Pension Fund Investing and the State of American Public Finance" have been published in the IFEBP's Employee Benefit Issues publication.



BIOGRAPHIES

CONSULTANTS, (CONT.)



John A. Haggerty, CFA - Managing Principal / Director of Private Market Investments

Mr. Haggerty has been in the financial services industry since 1993, joined Meketa Investment Group in 1996, and carries consulting, management, and research responsibilities. He chairs the firm's Private Markets Investment Committee (PMIC) and oversees the firm's due diligence in this area, which has resulted in over \$1 billion in annual client commitments.

The PMIC governs client portfolio management, commitment pacing, strategic policy, and approval of individual investments. Mr. Haggerty is a member of the firm's Private Equity, Private Debt, Real Estate, Infrastructure, and Natural Resources Investment Committees.

Mr. Haggerty became a Chartered Financial Analyst in 1998 and is a member of the CFA Institute, the Boston Security Analysts Society, and the Pension Real Estate Association. He serves on the Advisory Board of select buyout and venture capital limited partnerships. Mr. Haggerty speaks at numerous industry events, including those sponsored by the International Foundation of Employee Benefits, Dow Jones, and Private Equity International.

Mr. Haggerty held previous positions at IBC/Financial Data and The Boston Company. He is a graduate of Cornell University.



Frank Benham, CFA, CAIA - Managing Principal / Director of Research

Mr. Benham joined Meketa Investment Group in 1999. As Director of Research, Mr. Benham oversees all research projects, including white papers and the firm's annual asset study. Mr. Benham leads the design of the firm's portfolio construction initiatives and he is key in constructing customized investment programs. Mr. Benham is a member of the firm's Investment Policy Committee, Private Markets Investment Committee, Infrastructure Investment Committee, and Natural Resources Investment Committee.

Mr. Benham received an undergraduate degree in Finance from Bentley College. He holds the Chartered Financial Analyst designation, and he is a member of the CFA Institute and the Boston Security Analysts Society. Mr. Benham also holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association. Prior to joining Meketa Investment Group, Mr. Benham was employed at State Street Bank, performing operations analysis and developing process improvements.

Mr. Benham has served as a frequent speaker at industry events, including: the International Foundation of Employee Benefit Plans Annual Conference, the NCPERS Annual Conference, Investment Forum for Endowments, Foundations and Pension Funds, the Endowment and Foundation Forum, the Made in America Conference, the Institutional Investor Public Funds Roundtable, the Institutional Investor Global Real Assets Forum, the Institutional Investor Infrastructure Investment Forum, the SuperReturn Latin America conference, the Institutional Real Estate VIP conference, and the Investing in Infrastructure Assets Europe and Americas conferences.



Leandro A. Festino, CFA, CAIA - Managing Principal

Mr. Festino joined Meketa Investment Group in 2003. He heads the firm's Miami office, and has been involved in the investment consulting industry since 1999. A Managing Principal of the firm, Mr. Festino advises various non-profit and for profit clients, including endowment, foundation, defined benefit, and defined contribution funds. His consulting work includes investment policy design and asset allocation modeling, in addition to analysis of manager and fund performance. He supports the Private Markets team conducting due diligence on Latin American partnerships.

An avid tennis player who has competed in NCAA and professional tournaments, Mr. Festino received an MBA degree with honors from Boston College and a summa cum laude undergraduate degree in Economics and Mathematics from the University of Evansville.

A speaker at industry events, Mr. Festino holds the Chartered Financial Analyst designation, and is a member of the CFA Institute and the CFA Societies of Miami and South Florida. He also held several leadership positions at the Board of the CFA Society of San Diego between 2007 and 2011, including serving as the Society's President. Mr. Festino also holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association. He is a member of the Texas Association of Public Employee Retirement Systems, and the Florida Public Pension Trustees Association, where he serves on the Advisory Board.



Ted G. Benedict, CFA, CAIA - Principal

Mr. Benedict joined Meketa Investment Group in 2007, and has been in the financial services industry for sixteen years. He received his undergraduate degree in Economics from St. Lawrence University. Mr. Benedict has received the Chartered Financial Analyst designation from the CFA Institute and is a member of the CFA Institute, as well as the CFA Society of San Diego. Mr. Benedict also holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association.

Mr. Benedict serves as the lead consultant on various defined benefit and defined contribution funds, Foundations and Endowments. His consulting work includes investment policy design, asset allocation modeling, defined contribution plans, and manager research.

Prior to joining Meketa Investment Group, Mr. Benedict was employed at Pacific Life, performing investment management research, fund coordination, and implementation of the firm's asset allocation program. Outside of the office, Mr. Benedict serves as a Trustee on a local Foundation, and enjoys spending time with his family.



BIOGRAPHIES

CONSULTANTS, (CONT.)



Mika Buffington Malone - Principal

Ms. Malone joined Meketa Investment Group in 2004. A Principal of the firm, Ms. Malone currently works as the lead consultant on a variety of clients on their Defined Benefit, Endowment, and Defined Contribution plans.

Her work includes developing asset allocation policies, selecting investment managers, and developing investment strategy for clients. Ms. Malone also coordinates the research and inclusion of transition managers for the use of our clients. Additionally, she is a member of the firm's Compliance, Defined Contribution, and Sustainability Committees.

Prior to joining Meketa Investment Group, Ms. Malone was employed as a portfolio assistant in the Treasury department for Clark Construction, Inc. Ms. Malone received an MBA from the University of San Diego, with a concentration in Finance, and an undergraduate degree in English, with honors, from the University of Maryland. Additionally, she sits on the Associate Board for San Diego Youth Services and volunteers with multiple organizations in the San Diego area. Outside the office, Ms. Malone is a competitive rider at hunter/jumper horse shows, and enjoys running half marathons and trail races.

Ms. Malone is an active speaker at investment industry conferences, including the International Foundation of Employee Benefit Plans (IFEBP), Opal, and Informational Management Network (IMN) events. She has recently spoken on a variety of topics ranging from Liability Driven Investing, to Global Investment Outlook, to Transition Management. Ms. Malone is currently enrolled in the CAIA Program as a Level II candidate.



Kellie L. Coonan - Principal / Director of Investment Operations

Ms. Coonan joined Meketa Investment Group in 1998. She is responsible for managing the firm's Investment Operations Department, and also acts as a consultant, working directly with clients. Most recently, Ms. Coonan has led the firm's major technological infrastructure project, which significantly enhances our analytic capabilities.

Ms. Coonan graduated from Salve Regina University with a bachelor's degree in Business Administration. She has completed Level I of the CFA examination, is a member of the Boston Security Analysts Society, and is currently enrolled in the CAIA Program as a Level II candidate. Outside the office, Ms. Coonan is a professional freelance photographer.



Mitch D. Dynan, CFA - Principal / Director of Public Markets Manager Research

Mr. Dynan joined Meketa Investment Group in 2008 and has more than twenty-five years of investment experience. He graduated from Tufts University, magna cum laude, with a double major in Economics and History, and holds the Chartered Financial Analyst (CFA) designation. He is a member of The Boston Society of Security Analysts and the CFA Institute.

Mr. Dynan started his career at the Chase Manhattan Bank and completed their credit training program. He subsequently joined Kidder, Peabody where he worked as a sell-side analyst before making the transition to investment management at MFS Investment Management.

Mr. Dynan spent sixteen years at MFS as an equity analyst and co-portfolio manager of Massachusetts Investors Trust, a large mutual fund. After two years at Fortis Investments, Mr. Dynan joined Mintz Levin Financial Advisors, a financial planning and wealth management firm, where he served as Chief Investment Officer. In that role, he worked with individual clients, wrote the firm's quarterly market commentary, analyzed and selected equity and fixed income managers, and evaluated a broad spectrum of alternative investments.



John J. Manley, CFA - Principal

Mr. Manley joined Meketa Investment Group in 2005. He received a BA in Economics and Government from Hamilton College and was recognized as a Hamilton College Scholar Athlete, playing on both the varsity football and ice hockey teams.

Mr. Manley serves as consultant on various defined benefit, defined contribution, annuity and health & welfare funds, with Taft-Hartley, non-profit and corporate plan sponsors. His consulting work includes investment policy design and asset allocation modeling, in addition to the analysis of manager and fund performance. Mr. Manley is also a member of the firm's General Consulting, Defined Contribution, and Marketing Committees.

Mr. Manley holds the Chartered Financial Analyst designation from the CFA Institute, and he is a member of the Boston Security Analysts Society and the CFA Institute. Additionally, Mr. Manley has passed Level I of the Chartered Alternative Investment Analyst (CAIA) exam.

Prior to joining Meketa Investment Group, Mr. Manley was a senior research analyst at Kobren Insight Management and a client account manager at Brown Brothers Harriman. Mr. Manley has been a guest speaker at the International Foundation of Employee Benefit Plans (IFEBP) Annual Employee Benefits Conference and Boston College's Carroll School of Management. Away from work, Mr. Manley is a member of the Noble and Greenough School Graduates Council.

BIOGRAPHIES

CONSULTANTS, (CONT.)



W. Fran Peters, CFA, CAIA - Principal

Mr. Peters joined Meketa Investment Group in 2004, and has been in the industry for fourteen years. He received an MBA with a concentration in Finance from the University of Massachusetts, Boston and a BS in Business Administration from the Whittemore School of Business & Economics at the University of New Hampshire.

He holds the Chartered Financial Analyst designation and is a member of the CFA Institute and the Boston Security Analysts Society. Mr. Peters also holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association.

Mr. Peters serves as the lead consultant on various defined benefit, health & welfare, and insurance funds, with public, Taft-Hartley, corporate, and not-for-profit plan sponsors. His consulting work includes investment policy design, asset allocation modeling, public and private market investment manager due diligence and fund performance analysis, among others. He is also a member of the firm's General Consulting and Real Estate Investment Committees.

He is a member of the National Conference on Public Employee Retirement Systems, the Massachusetts Association of Contributory Retirement Systems, and the Michigan Association of Public Employee Retirement Systems. He currently serves on the Advisory Board to the College of Management at the University of Massachusetts Boston. Additionally, Mr. Peters serves as a Trustee on the Town of Brookline OPEB Trust Board.

Mr. Peters speaks at numerous industry events, including the International Foundation of Employee Benefit Plans (IFEBP) Trustees and Administrators Institutes, the IFEBP Annual Employee Benefits Conference, the Public Funds Summit East and the New England Public Employees Retirement Systems Forum.

Prior to joining Meketa Investment Group, Mr. Peters was a client account manager at ING Financial Advisers, where he worked with Massachusetts public employees for four years.



Kunal K. Shah - Principal

Mr. Shah joined Meketa Investment Group in 2006. A Principal of the firm, Mr. Shah works in the Private Markets Group focusing on private equity, private debt, and natural resources investments. He focuses on performing due diligence for private market funds, maintaining and establishing new relationships with private market firms, and reporting on private market funds. Mr. Shah serves as coordinator of the private equity team, and is responsible for managing the private equity deal flow and due diligence processes. He also serves as coordinator for the sourcing and analyzing of private market secondary transactions.

He serves on the advisory board of select private market partnerships, representing several of the firm's clients. Mr. Shah is also a member of the private markets operations team and is responsible for various operations projects.

Prior to joining Meketa Investment Group, he was an analyst for The Vanguard Group. Prior to that, he worked in the private equity and research group of Hirtle, Callaghan & Co. Mr. Shah received a bachelor's degree in Business Administration with a concentration in Finance from Drexel University.



Marc A. Fandetti, CFA, CFP® - Executive Vice President

Mr. Fandetti, an Executive Vice President at the firm, joined Meketa Investment Group in 2006, and his sixteenth year of servicing retirement benefit plans. He began his finance career in 1997 at State Street (now ING Advisors), where he led a team that became among the first in the nation to provide financial advice to defined contribution plan participants.

In addition to personal financial advice and planning, Mr. Fandetti's roles eventually included investment advice product development, supervision of delivery, and reporting of results to participants and plan sponsors.

Prior to joining State Street/ING Advisors, Mr. Fandetti was a producer and weekend host at WPRO AM radio, in East Providence Rhode Island. He joined WPRO in 1992 as an intern. While with WPRO, Mr. Fandetti produced both the early morning and mid-day talk shows and delivered news and sports on weekends.

Mr. Fandetti serves as consultant on various defined benefit, defined contribution, annuity, and health & welfare funds, with Taft Hartley and corporate plan sponsors. His consulting work includes investment policy design and asset allocation modeling, in addition to the analysis of manager and fund performance.

Mr. Fandetti, a graduate of Providence College (BA) and the College for Financial Planning (MS), is a CERTIFIED FINANCIAL PLANNER TM , a Chartered Retirement Plans Specialist SM and a Chartered Mutual Fund Counselor SM . He currently holds the Chartered Financial Analyst designation and previously held the NASD Series 6, 63 and 65 licenses.



W. Brian Dana, CAIA - Senior Vice President / Hedge Fund Practice Leader

Mr. Dana joined Meketa Investment Group in 2006. He works with clients as well as in investment manager research, leading the firm's research on hedged strategies. This responsibility includes hedged strategy portfolio construction as well as sourcing, due diligence, and analysis of hedge funds and hedge fund of funds. Mr. Dana is a member of Meketa Investment Group's Marketable Securities Investment Committee (MSIC) which oversees manager due diligence.

Prior to joining the firm, he worked as an analyst with The University of Florida Investment Corporation (UFICO), the investment group for the University of Florida's endowment.

While at the UFICO, Mr. Dana focused on sourcing, due diligence and analysis of alternative investments. Previously, he served as an Associate with Citigroup Global Markets' Boston office in fixed income sales and trading. Mr. Dana received a Master of Science in Finance from the University of Florida in 2006 and his undergraduate degree in Economics from Drury University in 2000. Mr. Dana holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association.

BIOGRAPHIES

CONSULTANTS, (CONT.)



Jess W. Downer, CFA - Senior Vice President

Mr. Downer joined Meketa Investment Group in 2008. A Senior Vice President of the firm, Mr. Downer works in the Private Markets Group specializing in private equity and real estate investments. He focuses on client service, performing due diligence of private market funds, maintaining and establishing new relationships with private market firms, and reporting on private market funds. He serves on the advisory board of select private market partnerships, representing several of the firm's clients. Mr. Downer is also a member of the private markets operations team and is responsible for various operations projects.

Prior to joining the firm, he worked for five years with Pacific Corporate Group (PCG), now TorreyCove Capital Partners, a private equity advisor serving institutions through discretionary and advisory arrangements. While at PCG, Mr. Downer focused on sourcing, due diligence and analysis of alternative investments. Mr. Downer received a bachelor's degree in Business Administration with a concentration in Finance from the University of Puget Sound. Mr. Downer holds the Chartered Financial Analyst designation, and is a member of the CFA Society of San Diego.



Daniel R. Dynan, CFA, CAIA - Senior Vice President

Mr. Dynan joined Meketa Investment Group in 2009 and has been in the financial services industry for nine years. A Senior Vice President of the firm, Mr. Dynan serves as a consultant on various defined benefit, annuity and health & welfare funds, with Taft-Hartley, public, and corporate plan sponsors.

His consulting work includes investment policy design and asset allocation modeling, in addition to the analysis of investment manager and total fund performance. He received his undergraduate degree in Economics from the College of the Holy Cross.

Mr. Dynan holds the Chartered Financial Analyst designation and is a member of the Boston Security Analysts Society and the CFA Institute. Mr. Dynan also holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association. He is a member of the Massachusetts Association of Contributory Retirement Systems and the Florida Public Pension Fund Trustee Association.

Prior to joining the firm, Mr. Dynan held positions at Merrill Lynch & Co. and Bear, Stearns & Co., where he was responsible for the development of asset allocation and wealth preservation strategies for high net worth individuals.



Steven Hartt, CAIA - Senior Vice President

Mr. Hartt joined Meketa Investment Group in 2010 and has been in the financial services industry for twenty-five years. A Senior Vice President of the firm, Mr. Hartt works in the Private Markets Group where he focuses on client service and marketing, as well as performing due diligence on private markets managers. Prior to joining the firm, Mr. Hartt was a Senior Vice President at Amalgamated Bank where he was in charge of alternative investments.

While at Amalgamated Bank, Mr. Hartt managed the discretionary portfolios of private equity, debt, and infrastructure funds, in addition to the development, marketing and management of a private equity fund of funds.

Prior to this, he spent eleven years at Citigroup in financial advisory, marketing and investment positions. He was also a senior member of Citigroup Alternative Investments where he was responsible for originating, evaluating, and managing private equity fund and direct investments. Mr. Hartt was also a summer associate at Dean Witter Reynolds and an assistant trader at Morgan Guaranty Bank.

Mr. Hartt received a Masters of Business Administration from Columbia Business School, and a Bachelor of Science degree, cum laude, from the University of Colorado, Boulder. Mr. Hartt holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association.



Henry Jaung - Senior Vice President

Mr. Jaung joined Meketa Investment Group in 2010. He brings over twenty-five years of institutional investment experience as a trader, an investment consultant and a portfolio manager. Prior to joining the firm, Mr. Jaung was employed by Fidelity Investments in Boston from 1997 to 2010.

He held several senior investment roles during his fourteen-year tenure at Fidelity. Mr. Jaung was a member of the portfolio management team in the Global Asset Allocation Group. As the senior strategist and portfolio manager, he helped manage over \$100 billion of multi asset class funds in both tactical and strategic asset allocation funds.

He was also the lead investment consultant on many of Fidelity's largest corporate retirement plans where he advised on asset allocation and the portfolio construction process. Concurrently, Mr. Jaung was the Director of Research for Fidelity Institutional Retirement Services Company where he oversaw the due diligence process of outside managers for Fidelity's corporate retirement clients.

Prior to Fidelity Investments, Mr. Jaung held senior investment roles with national investment consulting firms, including SEI Asset Consulting Group, where he was a Principal, directing the Northeast practice and advising various defined benefit plans and endowments. His work included investment policy design and asset allocation modeling, in addition to analysis of manager and fund performance.

Mr. Jaung speaks at various industry events on the topics of asset allocation, portfolio construction and the capital markets. Mr. Jaung attended Columbia University where he studied Mathematics and received a BS, Mathematics from the University at Albany, State University of New York.



BIOGRAPHIES

CONSULTANTS, (CONT.)



Laura B. Wirick, CFA, CAIA - Senior Vice President

Ms. Wirick joined Meketa Investment Group in 2008. She works with Public, Endowment, Foundation, and Taft-Hartley clients to set investment policy and provide oversight of client portfolios, in addition to performing asset-liability modeling studies. Ms. Wirick is a member of Meketa Investment Group's public markets research team, for which she performs fixed income manager research, and is also a member of the Marketable Securities Investment Committee.

Prior to joining the firm, she was a Senior Investment Analyst for the Dartmouth College Endowment. While at Dartmouth, she participated in setting asset allocation policy, and selecting and monitoring both traditional and alternative investment managers for the Endowment. Prior to that, she worked with endowments and foundations as a Senior Consulting Associate at Cambridge Associates, where her responsibilities included both qualitative and quantitative analysis of client portfolios and research on fund governance issues.

Ms. Wirick received a bachelor's degree in Business Administration with concentrations in Finance and International Marketing from American University. She holds the Chartered Financial Analyst designation, and is a member of the CFA Society of San Diego. Ms. Wirick also holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association.



Aneish S. Arora - Vice President

Mr. Arora joined Meketa Investment Group in 2006. Mr. Arora, a Vice President of the firm, was previously employed as an investment analyst at The Marshall Financial Group in Doylestown, PA. Mr. Arora also previously worked as an assistant project director at Commerce Capital Markets in Philadelphia.

In 2004, Mr. Arora received an undergraduate degree in Finance from The Fox School of Business at Temple University. Mr. Arora is currently enrolled in the CAIA Program as a Level II candidate.



Paul F. Cowie, III - Vice President

Mr. Cowie joined Meketa Investment Group in 2005. A Vice President of the firm, Mr. Cowie is based out of the San Diego office and works directly with several of our West Coast clients. He graduated from Bucknell University with a bachelor's degree in Economics and a minor in Political Science.

Prior to joining the firm, Mr. Cowie was employed by Standish Mellon Asset Management and State Street Corporation as a portfolio accountant. Mr. Cowie is currently enrolled in the CFA Program as a Level III candidate and is a member of the CFA Society of San Diego.



Richard J. O'Neill, CAIA - Vice President

Mr. O'Neill joined Meketa Investment Group in 2008. Prior to joining the firm, he was a portfolio officer in the Private Wealth Management division of Mellon. Previously, Mr. O'Neill was employed as a portfolio analyst at The Rockwater Group and as a financial relationship specialist at Sovereign Bank. He received his undergraduate degree in Psychology and Philosophy from Boston College.

He holds the Chartered Alternative Investment Analyst (CAIA) designation, and is a member of the CAIA Association. Mr. O'Neill is currently enrolled in the CFA Program as a Level II candidate.



Bradley M. Regier, CFA, CAIA - Vice President

Mr. Regier joined Meketa Investment Group in 2010 and has been in the investment industry for twelve years. A Vice President of the firm, Mr. Regier's work includes developing asset allocation and investment policies, as well as providing oversight of client portfolios.

Mr. Regier worked as an equity research analyst for eight years, primarily at a long/short equity hedge fund, Viewpoint Investment Partners, and two investment banks, The Seidler Companies and Roth Capital Partners. Prior to joining Meketa Investment Group, he was research associate for Professor Kenneth R. French as the Tuck School of Business at Dartmouth.

Mr. Regier earned an MBA from the Tuck School of Business at Dartmouth in 2009 and a bachelor's degree in Business/Economics from Westmont College in 1997. He holds the Chartered Financial Analyst designation, and is a member of the CFA Society of San Diego. Mr. Regier also holds the Chartered Alternative Investment Analyst (CAIA) designation and is a member of the CAIA Association.



Edward C. Urban, CFA - Vice President

Mr. Urban joined Meketa Investment Group in 2009. Prior to joining the firm, he was a senior equity analyst and associate director with Bear, Stearns & Co. Previously, he worked as a summer associate for a media- and telecommunications-focused hedge fund and as a senior performance measurement analyst with Russell/Mellon Analytical Services, evaluating portfolio performance across asset classes for institutional investors with more than \$30 billion in assets under management.

Mr. Urban earned an MBA from the Yale School of Management and a BA from Eastern Nazarene College. He holds the Chartered Financial Analyst designation from the CFA Institute and is a member of the Boston Security Analysts Society.



BIOGRAPHIES

INVESTMENT PROFESSIONALS

David S. Altshuler, Ph.D. - Senior Vice President / Infrastructure Practice Leader

University of Chicago Ph.D.

Reed College, BA

Nuveen Investments, Assistant Vice President,

Infrastructure Financing (2002 - 2008)

Affiliations: Visiting Scholar, Collaboratory for Research

on Global Projects, Stanford University

Michael H. Dean - Senior Vice President

Baylor University, BBA

Ithecus Capital Group, Director of Investments (2003 - 2007)

The Amend Group, Associate (2002 – 2003) CCBN, Account Executive (2000 – 2001)

Acorn Land Corp, Associate (1998 – 2000)

Affiliations: Real Estate Finance Association

Ed Omata, CFA - Senior Vice President/

Assistant Director of Public Markets Manager Research

University of Wisconsin at Madison, BBA

Chartered Financial Analyst

Goldman Sachs & Co., Vice President (2004 - 2008)

UBS, Associate (2003)

Goldman Sachs & Co., Analyst (2000 - 2002)

Affiliations: New York Society of Security Analysts

Kimberly A. Rose, CAIA - Senior Vice President

UCLA Anderson School of Management, MBA

Arizona State University, W.P. Carey School of Business, BS

Chartered Alternative Investment Analyst

Credit Suisse Technology Banking Group,

Associate (Summer 2006)

Pacific Corporate Group, Associate (2002 - 2005)

Tucker Anthony Sutro, Business Analyst (2000 - 2001)

IBM, Financial Analyst (1999 - 2000)

Affiliations: CAIA Association

Todd K. Silverman, CAIA - Senior Vice President

Colgate University, BA

Chartered Alternative Investment Analyst

Liberty Mutual Group,

Investment Research Analyst (2005 - 2008)

Liberty Mutual Group, Internal Auditor (2003 – 2005)

Liberty Mutual Group,

Associate Financial Analyst (2002 - 2003)

Affiliations: CAIA Association

Timothy J. Atkinson - Vice President

Northeastern University, BS

Commonwealth Financial Network,

Investment Research Associate (2007 - 2008)

Federal Street Advisors, Research Analyst (2006 - 2007)

Gustavo Bikkesbakker - Vice President

Boston College Carroll Graduate School of Management, MS

Arthur D. Little School of Management, MBA

Fundación BankBoston Argentina, Analista de Sistemas

EMC Corporation (2005 - 2011)

Ernst Research and Management (2003 - 2005)

EMC Corporation Argentina (1999 - 2002)

Gerald S. Chew, CAIA - Vice President

UC Davis, BS

Chartered Alternative Investment Analyst

Passed Level I of CFA exam

NASD Series 7 & 66

Wells Fargo Private Asset Management,

Investment Management Specialist (2002 - 2007)

Affiliations: CAIA Association

LouAnn Eisenhut - Vice President

Boston College, MBA

Grove City College, BS

Passed Level I of CFA exam

Wellington Management Company, LLP,

Marketing Analyst (2004 - 2006)

The Boston Company Asset Management, LLC, Senior

Performance Measurement Analyst, Officer (1999 - 2004)

State Street Bank, Senior Fund Accountant (1999 - 1999)

Federated Investors / State Street Bank,

Fund Accountant (1997 - 1999)

Jeffrey W. Reinke - Vice President/ Private Markets Operations Officer

Western New England College, BA

LP Capital Advisors, Associate (2006 – 2008)

State Street Bank, Officer (2004 - 2006)

Cambridge Associates, Analyst (2001 - 2004)

Affiliations: New England Venture Capital Network

Marina Simanovich - Vice President

Brandeis University, BA

Passed Levels I and II of CFA exam

Goldman Sachs & Co., Financial Analyst (2000 - 2001)

Affiliations: Boston Security Analysts Society

CFA Institute

Chris P. Tehranian - Vice President

Boston College, MS

University of Florida, BA

Gulf Power Company, Financial Analyst (2005 - 2007)

Franklin Templeton Investments,

Portfolio Analyst (2004 - 2005)

Segal Advisors, Investment Analyst (2002 - 2004)

Colleen A. Clardy - Assistant Vice President

University of San Diego, MBA

California Polytechnic State University, San Luis Obispo, BS

Brandes Investment Partners, L.P.,

Senior Institutional Portfolio Assistant (2007 - 2011)

Standard Pacific Capital, LLC,

Senior Client Service Associate (2004 - 2007)

Robert A. Mencunas – Assistant Vice President / Investment Analytics Team Leader

University of Rhode Island, BA

Putnam Investments, Data Analyst (1999 - 2000)



BIOGRAPHIES

INVESTMENT PROFESSIONALS, (CONT.)

Christopher R. Pompilio, CFA - Assistant Vice President

Fordham University, MBA

State University of New York at Albany, BA

Chartered Financial Analyst Ten-Sixty Asset Management, Hedge Fund Analyst (2007 – 2010)

Insurance Services Offices,

Publication / Product Analyst (2001 – 2007) Affiliations: Boston Security Analysts Society

CFA Institute

Jason B. Post - Assistant Vice President

Cornell University, BS CFA Level II Candidate

Hotel Capital Advisors, Associate (2008 – 2011) J.P. Morgan Securities, Inc., Analyst (2007 – 2008)

Erik W. Silver- Assistant Vice President

 $Babson\ College, F.W.\ Olin\ Graduate\ School\ of\ Business, MBA$

Principia College, BS CFA Level II Candidate

The First Church of Christ, Scientist, Investment Analyst (2008 – 2010) The First Church of Christ, Scientist, Financial Analyst (2007 – 2008)

The Principia, Assistant Director of Admissions (2006 - 2007)

The Principia, Admissions Counselor (2003 – 2006) Affiliations: Boston Security Analysts Society

CFA Institute

Alexandra B. Wallace - Assistant Vice President

University of Massachusetts Amherst, BS

CFA Level II Candidate

Meketa Investment Group (2008 -)

Edmund A. Walsh - Assistant Vice President

 $Brande is\ University\ International\ Business\ School,\ MAief$

The Ohio State University, $\ensuremath{\mathsf{BA}}$

State Street Associates, Asset Allocation

and Risk Management Research Intern (2010 - 2011)

Croesus Investments, Researcher (2009 - 2010)

Patrick White - Assistant Vice President

Indiana University, Kelley School of Business, MBA

Fordham University, BS

Mercury Partners, Mining Analyst (2007 - 2008)

Belltown Capital, Analyst (2006 - 2007)

Worldco, LLC, Proprietary Trader (2000 - 2003)

Larry Witt, CFA - Assistant Vice President

University of Notre Dame, MBA San Diego State University, BS Chartered Financial Analyst

American Assets Investment Management, Associate Portfolio Manager (2011 – 2012) Morningstar, Equity Research Analyst (2006 – 2011)

Brandes Investment Partners,

Trading Correspondent (2004 – 2006)

Morgan Stanley, Account Representative (2000 - 2002)

Affiliations: CFA Society of San Diego

CFA Institute

Jia He - Senior Associate Tufts University, BA

CFA Level II Candidate

Meketa Investment Group (2010 -)

Christy Maher - Senior Associate

Northeastern University, BS Passed Level I of CFA exam John Hancock Financial Services, Staff Accountant (2006 – 2007)

Mary Mustard - Senior Associate

Bentley University, MBA Bentley University, BS

Danforth Associates, Research Analyst (2008 - 2010)

Brian M. Teixeira - Senior Associate

Williams College, BA Passed Level I of CFA exam Meketa Investment Group (2008 –)

Denise M. Beighley - Specialist

Bentley College, BS

Mellon Financial, Service Delivery Representative (2001 - 2004)

Shawn Bowen - Specialist
Assumption College, BA

Ullico, Inc., Analyst, (2010 - 2011)

Danny Chan - Specialist Boston University, BA Passed Level I of CFA exam

Brown Brothers Harriman, Fund Accountant, (2010 - 2012)

Valentina Geba - Specialist

Babson College, BS

D.N. Lukens, Operations Analyst, (2010 - 2011)

Kumiko Green - Specialist

Claremont Graduate University, MA

Waseda University, BA

Meketa Investment Group (2012 -)

Vlad Grigorov - Specialist Bentley University, BS

CFA Level I Candidate

Meketa Investment Group (2011 –)

Nazeela Nasseri - Specialist Mount Holyoke College, BA

Bloomberg LP, Analytics Generalist (2011 - 2012)

Perry M. Opel - Specialist University of Washington, BA CFA Level I Candidate

Umpqua Bank, Credit Analyst II (2010 - 2011) MetLife Securities, Financial Advisor (2009 - 2010)

Andrew D. Reilley - Specialist

University at Buffalo, The State University of New York, BS State Street Bank & Trust, Fund Accountant (2008 – 2011)



BIOGRAPHIES

CORPORATE ADMINISTRATION

Lou F. Buccini - Principal / Chief Operating Officer

University of Massachusetts, BA

State Street Bank, PrivateEdge Group, VP & Quantitative Analysis

Group Mgr. (1980 - 2003)

Alla Y. Barskaya, CPA - Executive Vice President/

Director of Finance

Moscow University, MBA Moscow University, BS

Northeastern University / Boston University,

Advanced Accounting Certificate

Certified Public Accountant

Accounting Lecturer at Boston University

V Squared Investment Management / Vella Capital,

CFO and Controller (2006 - 2007) Bank of America / Fleet Bank,

Senior Business Analyst (2000 - 2004)

Affiliations: American Institute of Certified Public Accountants

Massachusetts Society

of Certified Public Accountants

Nancy S. LaBier, SPHR® - Senior Vice President/

Director of Human Resources

Lesley University, MS

Senior Professional Human Resources

Affiliations: Northeast Human Resources Association

Society of Human Resources Management

John P. Ledbetter -Senior Vice President/ Director of Technology

Rollins College, BA

Boston University, MCSE Program Boston University, CFP Program

Microsoft Certified Professional, MCP

Certified SonicWALL Security Administrator, CSSA

Meketa Investment Group, Network Manager (2004 – 2006)

LoJack Corporation, Network Manager (1997 - 2004)

GenRad (Teradyne), IT Contractor (1996 - 1997)

LEGAL

Timothy G. Zayac - Senior Vice President/Counsel

Georgetown University Law Center, JD

Northeastern University, BA

Proskauer Rose, LLP, Associate (2006 - 2009)

In-Q-Tel, Inc., Associate Corporate Counsel (2003 - 2006) Bar Membership: Commonwealth of Massachusetts

Virginia

Affiliations: American Bar Association

Association of Corporate Counsel

Boston Bar Association Virginia Bar Association

APPENDIX B MEKETA INVESTMENT GROUP

CLIENT LIST



REPRESENTATIVE CLIENT LIST

Meketa Investment Group has been providing investment and advisory consulting services to institutional plan sponsors for thirty-four years. Our clients include some of the nation's largest and most sophisticated institutional investors. We work closely with public and private defined benefit plan sponsors, helping clients control costs, diversify risk, manage portfolios of alternative investments, heighten fiduciary oversight, and achieve their investment goals.

PUBLIC

City of Ann Arbor Employees' Retirement System

Arizona State Retirement System

Arlington OPEB Trust

California Public Employees' Retirement System

California State Teachers' Retirement System

California's Valued Trust

District of Columbia Retirement Board

El Paso Firemen & Policemen's Pension Fund

Employees' Retirement System of the Government of the

Virgin Islands

Town of Lexington Contributory Retirement System City of Marlborough Contributory Retirement System

Massachusetts Housing Finance Agency

Employees' Retirement System

Massachusetts Housing Finance Agency OPEB Trust

Town of Norwood Retirement System

City of Quincy Retirement System

San Jose Federated City Employees' Retirement System

Santa Barbara County Employees' Retirement System

Town of Wellesley OPEB

Washington State Investment Board

Worcester Retirement System

CORPORATE AND OTHER FOR PROFIT

Boston Herald, Inc.

The Marnell Companies, LLC

Marnell Sher LLC

The O'Connell Companies, Inc.

Solymar

HEALTHCARE, ENDOWMENT, AND NON-PROFIT

Albuquerque Academy

Arizona's Permanent State Land Funds Endowment

Group Health Cooperative

Gumpert Foundation

Joint Center for Radiation Therapy

League of Voluntary Hospitals and Homes

of New York Retired Employees

Massachusetts Medical Society

Milton Hospital

Neighborhood Health Plans of Rhode Island, Inc.

Pfaffinger Foundation

Rady Children's Hospital and Health Center

South Shore Hospital

Winchester Hospital

HIGH NET WORTH/FAMILY OFFICES Confidential Family Trust

* As of September 1, 2012

MULTI-EMPLOYER AND TAFT-HARTLEY

I.A.T.S.E. Local 33

I.A.T.S.E. National Benefit Funds

OCU Pension and Health & Welfare Trusts

Airconditioning and Refrigeration Industry

American Federation of Musicians and Employers

American Federation of Television and Radio Artists

Asbestos Workers Local 6 Building Service 32BJ

The Goodyear Health Care Trust

IAM National Pension Fund

International Union of Operating Engineers Local No. 98

Iron Workers of Western Pennsylvania

Laborers' District Council and Contractors of Ohio

Local 6 Club Employees

Lucent Retirees Healthcare Trust

Massachusetts Laborers

Michigan Laborers

Minnesota Laborers

Minnesota Teamsters Construction Division

New England Carpenters

New York State Nurses Association

New York State Teamsters

Northwest Ohio Carpenters

Ohio Carpenters

Painters and Allied Trades District Council No. 35

Plumbers & Pipefitters, Local Union #51

Plumbers Local Union No. 1

Producer-Writers Guild of America

Rhode Island Carpenters

Service Employees 32BJ North

Sheet Metal Workers' Local No. 9

Social Service Employees Local 371

Southern California Plastering Institute

Southern California United Food &

Commercial Workers Unions

Southern Nevada Carpenters

Teamsters Local 560

Teamsters Union 25

Teamsters Union Local 170

Twin City Iron Workers

UNITE HERE Local 25 and Hotel Association

of Washington, D.C.

Western States Insulators and Allied Workers

SOVEREIGN WEALTH FUND

Confidential Client

781 471 3500 FAX 781 471 3411

APPENDIX D

MEKETA INVESTMENT GROUP

CODE OF ETHICS AND

COMPLIANCE MANUAL



BOSTON

MIAMI

SAN DIEGO

MEKETA INVESTMENT GROUP, INC.

CODE OF ETHICS AND INVESTMENT POLICY, PROCEDURES, & COMPLIANCE MANUAL

7 KLV & RGH RI (WKLFV DQG ,QYHVWPHQW 3 ROLF\LV WKH SURSHUW\ RI OHNHWD ,QYHVdWm2st DeWeturnbett the Company flyour employment or association with the Company is terminated for reason. The contents of this Manual are confidential, and should not be revealed parties.

MEKETA INVESTMENT GROUP CODE OF ETHICS

AND

Investment Policy, Procedures, and Compliance Manual

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TABLE OF CONTENTS

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Part II:	Investment Policy, Pro	ocedures, and Compliance
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	Article XIII.	Books and Records
	Article XIV.	Regulatory Reporting
	Article XV.	Custodyand Possession of Client Assets
	Articles XVI.	Proxy Voting
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	Article XIX.	Foreign Corrupt Practices Act
	Article XX.	Further Information
Exhibits:		
A.	Certificate of Compl	iance
B.	Securities Holdings R	Report
C.	Quarterly Reportof Securities Transactions	
D.	Notification Concerning Insider Informizen Abuse	
E.	Form ADV Part 1A; Item 11 Disciplinary History Disclosure	
F.	Gift & Entertainment LMO Form	
G.	Annual Financial/Con	flict of Interest Statement
Appendi d	ces	
1.	Gifts & Entertainment Policy	
2.	Policy With Respect to Payments to Public afsic	
3.	Foreign Corrupt Practices Act Policy	
4.	Proxy Voting Policies and Procedures	

MEKETA INVESTMENT GROUP CODE OF ETHICS AND INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

Manual

I NTRODUCTION

INTRODUCTION

7 K L V & R G H R I (W K L F V D Q G , Q Y H V W P H Q W 3 R O L F \ 3 U R F H G X U I prepared for Supervised Persons (as defined in Article I hereoff) tecketa Investment Group, Inc. W K H ^& R P S D Q \ \ \ \ \ D Q X D O G R H V Q R W D G G U H V V D O O of the & R P S D Q \ \ \ V E X V L. QA & cho'r d/ing Dy F the treat the fixthe full he fix those issues that are discussed in this Manual is not be acustive. The Manual is intended merely to summar be at an of the dial issues involved L Q W K H & R P S D Q \ \ \ V Earl d V to Qe stablish Dulle by and L pho de thu les applicable to all employees of the Company.

The relationship betweetheCompany and our clients is our most important asset. The entire basis of our business is the trust of our clients; without their trust we cannot do our jobs or remain in EXVLQHVV : H VWULYH WR PDLQWDLQ RXU FOLHQWV· WUXV independent and unbiased consulting advice.

The Companyacts as a fiduciary and our employees have the responsibility to render our clients professional, continuous, and unbiased consulting advice. We owe our clients a duty of honesty, good faith, and fair & DOLQJ: HPXVWDFWDWDWDOOWSER Howoid QRXUF any conflicts of interesthis Manual implements procedures to achieve these goals. Any violation of this Manual constitutes grounds for disciplinary sanctions, up including dismissal.

This Manual will be reviewed annually to evaluate its adequacy and the effectiveness of its implementation in light of the issues arising during the previous tyneoutevelopment of the & R P S D Q \ \ V E X iVietsQaHdVhVechangeVs in Yapplicable regulatory requirements.

MEKETA INVESTMENT GROUP CODE OF ETHICS AND

INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE MANUAL

PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

Article 1. Scope

- 1.1. Supervised Persons 7 K L V O D Q X D O L V D S S O L F D E O H W R W K H & R Supervised Persons include (i) all directors and officertseoCompany (ii) all employees of the Company, and (iii) any other persoantingon behalf of the Company and who is subject to the & R P S D Q \ \ · V V X S H U Y L V L R Q D Q G F R Q W U R O
- 1.2. Access Persons \$Q^\$ FFHVV 3 HUVRQ μ LV DQ\6 X SmhatterYaLVHG 3 H non-pubOLF LQIRUPDWLRQ UHJDUGLQJ FOLHQWV·S XUFKDVH RU vany fund or plan advised by the Company, (ii) is involved in making securities recommendations or rendering advice to clients, or (hii)s access to such recommendations that are neprublic in nature For the avoidance of doubtQaO RI WKH & RPSDQ\·V GLUHFWRUV DQG I
- 1.3. Beneficial Ownership. For purposes of the reporting requirements contained in Article III, and the compliance requirements of Article IV, the reports and compliance requirements specified therein are applicable to accounts of which the person making the report may be considered to be WKH $^{\prime}$ EHQHILFLDO RZQHU μ \$ 6XSHUYLVHG 3 the Secucities V FRQVDFFRXQW RIDQ\PHPEHURI WKH 6XSHUYLVHG 3 HUVRQV LPF with the Supervised Person, and (ii) any securities account in which the Supervised Person has a direct or indirect beneficial interest.

Article II. General Principles

- 2.1. Codes and Regulations All Supervised Personsare expected to be reasonably knowledgeable of, and comply with, applicable fedesate and non-U.S. laws and regulations relating to the & R P S D Q \ \ V aEtWivies They are expected to abide by the intermation practices set for the the Company in this lanual.
- 2.2. General Standards of Business ConductThe Company expects that all Supervised Persons will conduct themselves consistently with the following general regardless of whether this Manual prescribe more specific practices or procedures in relation to certain conduct.
 - a. All Supervised Persons must comply with all applicable securities New Supervised Persons shall be permitted in connection which purchase or sale of a security held or to be acquired by a client, directly or indirectly:
 - 1. To defraud such client in any manner;
 - 2. To mislead such client, including by making a statement that omits material facts:
 - 3. To engage in any act, practice or coursconduct which operates or would operate as a fraud or deceit upon such client;
 - 4. To engage in any manipulative practice with respect to such client; or
 - 5. To engage in any manipulative practice with respect to securities, including price manipulation.
 - b. As a fiduciary, the Company has an affirmative duty of care, loyalty, honesty, and good faith to act in the best interests of its clients. All Supervised Persons must conduct themselves a mannerconsistentwith such dues by, for example:
 - 1. Avoiding conflicts of interest and fully disclosing all material facts concerning any conflict that does arise with respect to any client;
 - 2. Refraining from inappropriate favoritism of one client over another;

MEKETA INVESTMENT GROUP CODE OF ETHICS AND INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

Manual

PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

- 3. Using caution in accepting gifts or bequests from clients from taking loans from clients;
- 4. Avoiding activities that are competitive with the Companny;



- c. Certain of W K H & R PcBeDtSaire Wenefit plans subject to the Employee Retirement , Q F R P H 6 H F X U L W \ \$ F, and the Company, with Frestpesc to such clients, acts as fiduciarly heretoin accordance with the fiduciary standards imposed by ERISA All Supervised Persons must be indful of such standards and render advice and services in a manner consistent the following:
 - 1. Exclusive Benefit fiduciarymust discharge his or her duties with respect to a plan solely in the interest of the participants and beneficiaries put and for the xclusive purpose for providing benefits to participants and their beneficiaries.
 - 2. Prudent Expert Rule. A fiduciary in discharginghis or her duties with respect to a planis required to act Z L W K W K H F D U H V N L O O S U X G H Q F I under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims
 - 3. DiversificationA fiduciarywho has investment respecibility must diversify the investments of a plan so amitromize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.
 - 4. Non-Deviation from In Documents A fiduciary must act in accordance with the documents athinstruments governing plan insofar as the documents and instruments are consistent with the provisions of ERISA.

Article III. Securities Reports

- 3.1. Covered Securities \$ V X V H G K H U H L Q W K H W H U P '& R Y H U H G 6 H F future, in Y H V W P H Q W F R Q W U D F W R U D Q \ R W K H U L Q V W U X P H Q W Advisers Act.
 - a. The termCovered Securities also includebutis not limited to:
 - 1. Options on securities, on indexes, and on currencies;
 - 2. All kinds of limited partnerships;
 - 3. Foreign unit trusts and foreign mutual funds; and
 - 4. Private investment funds, hedge funds, and investment clubs.
 - b. The termCovered Securities does not include:
 - 1. Transactions effected pursuant to an automatic investment plan;
 - 2. Transactions insecurities held accounts over which the Supervised Person has no influencer control, direct or indirect;
 - 3. Direct obligations of the U.S. government;
 - high quality shortterm debt obligations, incding repurchase agreements;
 - 5. Shares issued by money market funds;

Manual

Part II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

- 6. Exchange Traded Funds;
- 5. Shares of open mutual funds that are not advised underadvised by the Company; or
- 6. Shares issued by unit investment trusts that are invested exclusively in one or more openend funds, none of which are funds advised or activities by the Company.
- 3.2. Initial and Annual Holdings Reports. All Supervised Personare required to submit to the Chief Compliance Officer a complete report of their holdings of Coveredit Rescwithin ten (10) days following the day on which such person becomes a Supervised Person of the Company, and within thirty (30) days following the close of each calendar year thereafter. Such reports must be current as of a date not later thanty (30) GD \ V SULRU WR WKH GDWH RI WKH
- 3.3. **Quarterly Transaction Reports**
 - a. Each Supervised Person must submit to the Chief Compliance Officer, thirthin 30 days following the close of each calendar quarter, a report detailing salhal transactions in Covered Securities dursing hquarter. The report must include trades made in all personal securities accounts beneficially owned by the Supervised Person, including retirement accounts.
 - b. The quarterly transaction reports mustuble the date the report is submitted and with respect to each security (i) the date of the transaction, (ii) the title and exchange ticker symbol or CUSIP number, (iii) the interest rate and maturity date (if applicable), (iv) the number of shares purchas or sold or the principal amount, (as applicable), (v) the nature of the transaction (egrchase/sale), (vi) he price of the security at which the transaction was effected, and (vii) the name of the broker, dealer, or bank with or through which theransaction was effected.
 - c. Supervised Persons must attach broker trade confirmations or account statements to their quarterly transaction report.
 - d. The Company will use its best efforts to keep confidential bamation submitted by Supervised Persons toomply with the reporting requirements of this Article III Complete confidentiality may not be possible in every case, however, , where example, investigation and regulatory reporting may be required.
- 3.4. Review of Securities Reports
 - a. The Chief ComSOLDQFH 211LFHU RU DQ\ RWKHU PHPEHU & RPPLWWHH LQ WKH FDVH RI UHYLHZ RI WKH & KLHI & RPS SHULRGLFDOO\ EXW QRW OHVV IUHTXHQWO\ WKDQ DQC securities holidings reports and periodicallybut not less frequently than quarterly, review each Supervised Personsecurities transaction reports in each case to guard against improper trading or other conduct inconsistenthid Imanual applicable securities laws. Specifically, the reviewer will:

RI V

- 1. Analyze trading patterns for signs of improper trading; and
- 2. Promptly investigate any suspected wrongdoing.
- b. The Chief Compliance Officer will promptly submit a report to the Compliance Committee detailing any significarfindings following any such review.

Manual

PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

Article IV. Compliance Controls

- 4.1. Pre-Clearance of Trades Supervised Persons must obtain the approval of the Chief Compliance Officer prior to acquiring securities in:
 - a. Initial public offerings; or
 - b. Limited orprivate offerings.
- 4.2. Certain types of Securities Supervised Persons are prohibited from trading in:
 - a. The financial securities of Qa\ RI WKH & RPSDQ\·V FOLHQWV
 - b. The securities of any company or firm, the majority of whose revenues derive from investment management, for example, T. Rowe Price (this restriction applies primarily to investment decision making personnel); and
 - c. Securities known by the Supervised Person to be in the process of being acquired or liquidated by a client.
- 4.3. Other Measures TheChief Compliance Officer will determine if prohibitions on personal trading in addition to those described above or other measures designed to prevent improper trading should exist for specific securities because, for example: (i) the firm is analyzing and considering information relevant to a particular security or securities; or (ii) client trades are being placed or recommendations are being made in respect of, or which might have an effect on the price of, such security.

Article V. Insider Trading and the Protection of Material Nonpublic Information

- 5.1. Introduction.
 - a. The Company absolutely forbids insider trading. No employee may trade, personath behalf others (such as private pooled investment velated lient accounts managed by the Company), while in possession of material modulic information. No employee may communicate material nepublic information to anyone except individuals who are entitled to receive the information in connection with their performance of their reities fibril the Company.
- 5.2 Material Non-public Information.



consider the information important deciding whether to hold, buy or sell the security in questi R Q $_{\rm C}$, Q I R U P D W L R Q $_{\rm C}$ L V $_{\rm C}$ D L N H O \ W R $_{\rm C}$ E H $_{\rm C}$ P D W H U L D O $_{\rm H}$ L the issuer of the securi, tiensluding but not limited to

- 1. The impending termination of an investment manager;
- 2. Earnings (pretax income, operating income, net income) m
- 3. Mergers, acquisitions declaration of tock splits or dividen increase, decrease or omission
- 4. Major management changes;
- 5. Major accounting changes, changes in tax rate or significant changes in debt or equity;
- 6. Establishment of a program to purchase LtMeVXHU·VRZQVKDUHV
- 7. Purchase or sale of a significant asset;
- 8. Write-downs or writeffs of assets;

Investment Policy, Procedures, and Compliance Manual

PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

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- 9. Additions to reserves for bad debts or contingent liabilities;
- 10. Proposals or agreements involving a joint venture, merger, acquisition, consolidation, divesture, leveraged buyout or other reorganization
- 11. Dispute with majorsupplier or customer;
- 12. Debt service or liquidity problems;
- 13. The public or private sale of a significant amount of securities;
- 14. Criminal indictments, civil litigation or government investigas;
- 15. Acquisition or loss of a significant contract;
- 16. A significant new product or discovery; or
- 17.
- b. Re SXEOLFµ LQIRUPDWLRQ LV LQIRUPDWLRQtheWKDW investing public generally, has been provided on a confidential basis, or has been provided in breach of a fiduciary duty not to disclose the information. Once material non-public information has beed is seminated broadly to the investing public through recognized channels of distribion designed to reach to be readily absorbed by e securities marketplace. (j., through a national wire servicte. Wall Street Jourona The New York Times r through the filing of a public disclosure document such as a proxy statement or prosphers with the SEC or other appropriate regulatory agency), it loses its status as nomblic information
- c. Material nonSXEOLF LQIRUPDWLRQ LQFOXGHV LQIRUPDWLRQ UHFRPPHQGDWLRQV DQG LQIRUPDWLRQ DERXibMsFOLHQW·V (including pending transactions) The Company and Supervised Persons are not ordinarily privy to information regarding impending trades made in client portfolios. However, in the eventsuch information become available to the Company or any Supervised Person, such information will be considered material-problic information.
- d. **(1984)**
 - identified as confidentiality is subjet to a confidentiality agreement or arrangement proscribing the use and/or further dissemination of such information, (ii) is potentially embarrassing or detrimental to the client. Such confidential information about a client should be treatedrias mate non-public information. See also Section 5.4.
- e. No simple test exists to determine when information is material; assessments of materiality involve a highly factopecific inquiry. If Supervised Persons uncertain whether or not certain informationmaterial, he or she should contact the Chief Compliance Officer
- 5.3. Policies and Procedures for Protection of Material Npublic Information. The use or improper disclosure of material npublic information is prohibited under applicable secusitie laws and this Manual
 - a. The following should govern the handling of material -poundic information and should be strictly followed at all times:
 - 1. Never trade, recommend, direct, or otherwise cause the trading in securities for a client account, your owncount, or the account of the Company or

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PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

- any third party when you are aware of material-public information relating to the issuer of the securities.
- 2. Never disclose material nepublic information relating to any person except (i) to the extent such dissure is authorized by the unanimous written approval of themembers of the Compliance Committee and when necessary in connection with your duties to the Company or a client; or (ii) when the person to whom the disclosure is made is undeformal obligation of confidence to the Company, as is the case with other Company employees, outside counsel or auditorand only when the person to whom the disclosure is made has egitimateneed to know such information (iii) to the SEC, the U.S. Department of D E RDOL µ'or other regulators at the direction of internal or outside counsel to the Company.
- b. The following policies and procedures have been adopted to prevent illegal disclosures generally:
 - 1. Good judgment and care should be exercised at all timesvotion unauthorized or improper disclosures. Conversations in public places such as restaurants and elevators should be limited to matters that do not pertain to confidential information.
 - or outside the office should be kept in envelopes or folders. Envelopes FRQWDLQLQJFRQILGHQWLDO LQIRUPDWLRQ VKRXOG should only be opened by the addressee.
 - 3. Increasingly, sensitive confidential materials are being transmityted b facsimile and email. When sending confidential materials via facsimile, the VHQGHU VKRXOG YHULI\ WKDW WKH UHFLSLHQW·V I place or that the intended recipient is standing by the machine when the transmission is made. When the transmission is made. When the VHQGHU VKRXOG YHUL-Imail and offers to the finished Hinatw·V H confidential information is not misdirected.
- 5.4. & RQILGHQWLDOLW\ RI & OLHQWMIVinforEnationRpletr@aining tooglen,tQIRUPDV or its account/KDOO EH FRQVLG land isln@t toFbR @isttil@utecOttoNalnyDparpties outside of the Company, except as necessary to provide services as describuech in OLHQW·V DGYLV agreement.

Article VI. Reporting of Violations

Any violations of this Manushould be reported promptly to the Chief Compliance Officer or a member of the Compliance Committed the Company will use its best efforts to keep confidential the identity of any employee who makes such a report. Complete confidential not be possible in every case, however, where investigation and regulatory reporting may be required. Nonetheless, the Company will not permit retribution, harassment or intimidation of any employee who in good faith makes any such report.

Article VII. Chief Compliance Officer; Compliance Committee

7.1. Compliance Committee The Company shall maintain a Compliance Committee with FHUWDLQ UHSUHVHQWDWLYHV IURP WKH & RPSDQ\·V VHQLRU composed of: Alan Spaitck, Alla Barskaya, Ted Benedict, Mika Buffington, Kellie Coonan, Mitch

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PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

Dynan, Lisa Kinniburgh, and Nancy LaBier. Tim Zayac serves as an observer to the Compliance Committee.

- 7.2. Chief Compliance Officer. Alan Spatrick is dH V L J Q D W H G D V WelfCldmp&ia?hdes D Q \ · V Officer.
- 7.3. Periodic Review. Pursuant to Section 3.4, the Chief Compliance Officer, or his delegate, shall investigate any unusual transactions or trades executed by any Supervised Person and shall promptly bring them to the attentiorhef@ompliance Committee for appropriate action.
- 7.4. Authority; Annual Review. The Chief Compliance Officer shall conduct and document an annual review of WKH & RPSDQ \V -VHWKLFVDQGFRPSOLDQFHSROLFL develop and enforce appropriate policies and procedures designed to prevent violation of applicable federal and stasecurities laws.
- 7.5. Document Distribution. The Chief Compliance Officer shall ensuinely distribution of the & R P S D Q \lor V) R U P \$ ' 9 3 D U W ret@ GlienW S S O H P H Q W V W K H

Article VIII. Record Keeping

In addition to the Books & Records requirements set forth in ArticlaeXIIIhitef Compliance Officer shall maintain, or cause the maintenance of, the following records in a readily accessible place:

- a. A copy of eachCode of Ethics and Investment Policy, Procedures, & Compliance Manual that has been in effect at any time during the pa(st) fixers;
- b. A copy of each written report of the Chief Compliance Officer prepared pursuant to Section 7.4;
- c. A record of my violation of tils Manual (or previous versions thereout) any action taken as a result of such violation. Such records are to be maintained from the end of the fiscal year in which the violation occurred;
- d. The written acknowledgements of receipt of this Man(coal) previous versions thereof, and any amendmenthereto on thereto) of each person who is currently, or who within the past fiv(5) years was, a Supervised Pers(ans applicable)
- e. Holdings and transactions reports made pursutothis Manual (or previous versions thereof) including any brokerage confirmation and account statements the past five (5) years
- f. A record of persons responsible for reviewing the securities holdings and transaction reports of Supervised Pagns currently and within the past (5))years;
- g. A list of the names of persons who are currently, or within the passy were, Access Persons:
- h. A list of the names of persowho are currently, oto the extent applicable, thin the past five (5) years were, Covered Persons (as such term is defined in Appendix 2 hereto); and
- i. Records of any decision and supporting reasons for approving the acquisition of any securities by a Supervised Person, the acquisition of which required the Chief Compli D Q F H 2 I I LalphtoWall Suscible the cords are to be maintained fo(5)ve years following the end of the fiscal year in which approval was granted.

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PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

Article IX. Client Management

- 9.1. Account Acceptance and Opening Procedures.
 - a. A Principal of the Compan must approve each new client relationship.
 - b. When a new client relationship is established the clientemtest into a formadaisory agreement with the Company
 - c. The Advisers Act requires the Company to deliver a current brochure (PaA of Form ADV) to a clienbefore or at the time it entension anadvisory agreement with such clientand (2) supplements (Part 2B of Form ADV) to each attemt before time whereach Supervised Person begins to provide advisory services at the specific client.
- 9.2. Procedures for Acceptinglients. The following are the basic procedures and polices that should be followed after a new client is accepted:
 - Each client should be provided with copies of all executed agreeaments
 - b. Copies of all xecuted agreements and related documents hould be retained for recordkeeping purposes.

Article X. Advertising and Promotional Materials

10.1 General Principals.

a. Advertisements include promotional materials and any other written communications or emails directed to more than one person and which concern our consulting or advisory services, whether specifically or generally. Advertisements must not be fraudulent, deceptive, or manipulative. All Supervised Persons shall comply with the following guidelines to ensure that all advertisements comply with the federal securities laws and other regulatory requirements.

- 1. No communications with the press or other news media should occur without the prior approval of the president or Chief Compliance Officer. This prohibition includes, but is not limited to, interviews with print or electronic media, appearances on national network, local or cable television or radio broadcasts, publication of written investment related articles, or publication of materials overetimternet.
- 2. If the purpose of a communication to promote the business of the Company, such activities may be considered advertising and must be reviewed and approved in advanceby Peter S. Woolley or his designee. Each Supervised Person is responsible ensuring that all advertisements distributed outside the Company have been properly approved.
- 3. The head of the Marketing is responsible for maintaining copies of all advertising and marketing materials, including approvals there of supporting documentation to demonstrate example how performance claims (if any) were made or a period of five years following the last dissemination of such material

¹A client must be given a brochure supplement for each Supervised Person who: (i) formulates investment advice formulates client direct client contaon (ii) makes discretionary in HVWPHQWGHFLVLRQVIRUWKDWFOLHQWVDHWV client contact.

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- 4. It is the policy of the Company that employees may not publicly identify or comment on clients the Company or provide any information regarding securities held in client accounts.
- 5. The Company will adhere by all applicable SEQues and regulations governing the use of websites by investment management firms

10.2 Prohibited Activities.

- a. Various rulesgovern what the Company can and cannot say in communications with existing and prospective clients. As a general mattemployee may
 - 1. Employ any device, scheme or artifice to defrangl client or prospective client:
 - 2. Engage in anytransaction practice or course of business which operates as a fraud or deceit upon any clieont prospective client;
 - 3. Engage in any fraudulent, deceptive or manipulative practice with respect to any client or prospective client;
 - 4. Use any materials or make any communication that contains any untrue statement, omission of a material fact necessary to make the statements not misleading, or is otherwise false or misleading;
 - 5. Make any communication which employs or is part of a prigs suresales approach; or
 - 6. Use any materials make any communication which contains promises of specific results, exaggerated or unwarranted claims, opinions for which there is no reasonable basis, or forecasts of future events which are unwarranted or which are notlearly labeled as forecasts

10.3 Ad vertisements by Investment Advisers

- a. No employee shall publish, circulate or distribute any advertisement:
 - 1. which refers, directly or indirectly, to any testimonial of any kind concerning the Company or concerning any advice, analysis, report or othercerv rendered by the Company; or
 - 2. which refers, directly or indirectly, to past specific recommerstal time Company which were or would have been profitable to any person; provided, however, that this shall not prohibit an advertisement which sets out oroffers to furnish a list of all recommendations made by the Company within the immediately preceding period of not less than (1) nyear in accordance with SEC Rule 2061(4)(2) or
 - 3. which represents, directly or indirectly, that any graph, chart, laoomu other device being offered can in and of itself be used to determine which securities to buy or sell, or when to buy or sell them; or which represents directly or indirectly, that any graph, chart, formula or other device being offered will assist superson in making his or her own decisions as to which securities to buy or sell, or when to buy or sell them, without prominently disclosing in such advertisement the limitations thereof and the difficulties with respect to its use; or
 - 4. which contains anytatement to the effect that any report, analysis, or other service will be furnished free or without charge, unless such report, analysis

PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

- or other service actually is or will be furnished entirely free and without any condition or obligation, directly imdirectly; or
- 5. which makes specific projections or forecasts without disclosing material factors which may affect such projections or forecasts;
- 6. which include any statement implying that performance is guaranteed; or
- 7. which contains any untrue statement aterial fact, or which is otherwise false or misleading.
-) RUWKH SXUSRVHV KHUHRI WKH WHUP DGYHUWLVHPHQ letter or other written communication addressed to more than perison, or any notice or other announcement in any publication or by radio or television, which offers (a) any analysis, report, or publication concerning securities, or which is to be used in making any determination as to when to buy or sell any security, or which security to buy or) sell, or (b any graph, chart, formula or other device to be used in making any determination as to when to buy or sell any security, or which security to buy or sell, or (c) any other investment advisory service with regard to securities.

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Article XI. Recommendations

11.1 Client Recommendations

H J

- a. W Consultants may make final investment recommendations to clients.
- b. Recommendations made by onsultants who have been employed at the Company for fewer than threself years must be reviewed by a more senior consultant.
- c. All data shown in reports, recommendations, memoranda, or other client documents should be checked for accuracy by at leas(1) investment professional other than the writer.
- d. No client may be treated in preference to any other client.
- 11.2 The investment staffashmake no specific recommendation of any security to or for any person or organization other than those persons or organizations who are clients of the Company. Exceptions may be made:

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PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

- a. In those instances where the Company is soliciting the businessospective client and an investment recommendation is necessary for the information and decisional purposes of such prospective client. Any member of the investment staff making such recommendations should inform the potential client that the reconstitute is for their information and decisional purposes only, is based upon limited available information and is to be considered operative only for a limited time; or
- b. For advice rendered to accounts of which the Supervised Person may be considered the beneficial owner (e.gthe accounts of a spouse, children or relatives).
 - Members of the vestment staff may participate in discussions of investment related topics with nonclients only if the discussion does not pose a conflict with any clienthip lations violate any applicable securities laws.
- c. All Supervised Personsmust sign a financial/conflict of interest statement annually disclosing any relationships that may be considered a conflict of interest.

Article XII. Disaster Management and BusinesContinuity

As part of its fiduciary duty to its clients and as a matter of best busines the practice and will periodically review its policies and procedures designed to address the specific types of disasters the Company might reals by nobe confronted with. The Chief Operating Office LV UHVSRQVLEOH IRU PDLQWDLQLQJ LPSOHPHQWLQJ DQG including, but not limited to, the following aspects of such plan:

- a. Maintenance of backp equipment and stablishment of security procedures in UHVSHFW RI WKH & RPSDQ\\V FRPSXWHU V\VWHPV
- b. Maintenance of data storage and recovery equipment, locations and procedures; and
- c. Maintenance of backp communication systems.

Article XIII. Books and Records

- 13.1 The Company maintains all books and records under the Rule 220674 the Advisers Act in its relevant office for the periods require slubby rule
- 13.2 The Company maintains a record of all compliance programs and policies that are currently in effect or thateme in effect at any time during the previous (5) we are.
- 13.3 The Company ensures that:
 - a. Books and records can be easily located, accessed and retrieved;
 - b. All books and records are legiblarue and complete;
 - c. Records are adequately safeguarded froms; lossed
 - d.
- The Chief Compliance Officer is responsible for implementing and periodically reviewing WKH & RPSDQ\ \cdot V SROLFLHV DQG SU-Reephing the 8HRVP \$100 \P D LQRVRDNLVQD records.

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PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

Article XIV. Regulatory Reporting

- 141 The Chief Compliance Officer is responsible for ensuring:
 - is made within ninety (90) days following the close of the Compa V I L V F D O \ H D U
 - b. 📜

activities

14.2 $Q \ LQIRUPDWLRQ LQ WKH &RPSDQ \) RUP $ '9 RU RWKH Person believes to be inacatus, or omits to include material information, should be reported promptly to amember of the Compliance Committee.$

Article XV. Custody and Possession of Client Assets

- 15.1 Advisers registered under the Advisors Act thatD L Q W D L Q ´F X V W R G \nµd R Y H U F securities(as defined in Rule 206(24) under the Advisers A)chave certain obligations with regard to safeguarding those assets.
- 15.2 An adviser has custody of client assets (and must therefore comply with Rule) 2006(4) it holds directly or indirectly or indirectly or securities or has any authority to obtain possession of them.
- 15.3 Although the Company may be deemed under SEC rules to have custody of client assets, it LV WKH & RPSDQ\·V SROLF\ QRW WR UHFHLYH RelientWAR KDYH Sclient funds and securities will be held by a qualified custodian (as defined under Rule2206(4) under the Advisers Act)with the assetseld by the TXDOLILHG FXVWRGLDQ HLWKHU QDPH RU XQGHU WKH & RPSUSDA for the Dilentlebts should be wastructed U to make all payments to their accounts by wire transfer directly to the bank or brokerage firm acting as custodian for that client. Any check received inadvertently from foocliteret benefit of airth party or from a third party for the benefit of aschieult be returne promptly and in any event within three (3) business days.
- 15.4 The Company will be deemed to have custody of the funds and securities of any private pooled investment vehicle (each) ΄) X Q G μ IRU ZKLFK LW VHUYHV DV DQ Company must comply with Rule 20624) ith respect to any such Fund W LV WKH & RPSD(policy to cause each Fund with assets over which the Company is deemed to have custody to distribute anually audited financial statements, prepared in accordance with U.S. generally DFFHSWHG DFFRXQWLQJ SULQFLSOHV ′*\$\$3µ DQG DXGLW inspection by the Public Company Accounting Oversight Board, to investors in suchnotates than one-hundred twenty 1(20) days after the end of each fiscal yearn@hundred eighty 180 GD\V IRU DQ\)XQG WKDW LV D 'IXQG-122). Rint add & too 6, Vippon 10 hVe GHILQ final liquidation of any such Fund, the Companyllwibtain a final audit and distribute audited financial statements prepared in accordance with GAAP with respect to such Fund to all investors thereof promptly after completion of the audit. Investments by clients immanaged by the Company should be sent by wire transfer directly to the prime brokerage or the qualified custodian for the particular Fund. Any check received inadvertently from a client should be returned to the client promptly and in any event within three (3) business days.
- 15.5 If a Funddoes not deliver auded financial statementsiborestors a Fundin compliance with Rule 206(4), or the Company is deemed to have custody over other advisory client funds or securities, then with respect to such Funds and/or client account €(a)pthmy must have a reasonable belief that the qualified custodian will send quarterly account statements to each

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are discovered).

PART II INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE

investor or client, as applicable (b) an independent public accountant registered with, and subject to regular inspection by, the Public pany Accounting Oversight Board will conduct a surprise examination of the assets and securities of such Funds and/or client accounts at least annually and file a certificate on Form All with the SEC within one-hundred twenty1(20) days of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the SEC within of the securities of such examination (and notify the securities of such examination (and noti

15.6 The Company is not required to have a qualified custodian hold privatelyed uncertificated securities if ownership of the securities is recolydered thre books of the issuer or its WUDQVIHU DJHQW LQ WKH FOLHQW·VQDPH DQG WUDQVIHU RU KROGHUV RI WKH LVVXHU·V RXWVWDQGLQJ VHFXU-LWLHV offered uncertificated securities with respect to the account of a Fund only if such Fund is audited annually, and the audited financial statements are distributed, as described in Rule (20)(30)4) and applicable SEC staff guidance.

Article XVI. Proxy Voting

The Company has adopted policies and procedures WKH 3UR[\ 9RWLQJ 3ROLFLHV designed to ensure that client securities are voted in the best interests of the client and to address conflicts of interes Each Supervised Person a position of participate in or make decisions with respect to proxy voting must familiarize himself or herself with voting Policies and Procedures and Strictly adhere to its provision be Proxy Voting Policies and Procedures set forth on Appendix 4td ached hereto. The Proxy Voting Policies and Procedures to be provided to clients on request.

Article XVII. Gifts and Entertainment

3 O H D V H U H Y L H Z \$ S S H Q G L [**L I W V D Q G (Q W H U W D L Q P H Q

Article XVI II. Payments to Public Officials

POHDVH UHYLHZ \$SSHQGL['3ROLF\ :LWK 5HVSHFW WR

Article XIX. Foreign Corrupt Practices Act

3 O H D V H U H Y L H Z \$ S S H Q G L [') R U H L J Q & R U U X S W 3 U D F W L

Article XX. Further Information

The Compliance Committee and the Chief Compliance Officer have authorized the distribution of WKLVODQXDO WRDOORIWKH&RPSDQ\\·VHPSOR\HHVDWUHCOMPANDOORIWKH&RPSDQ\\·VHPSOR\HHVDWUHCOMPANDOORIGE
Company upon the commencement of their employment. Employees who have quest**iting** relato anything contained herein or who wish advice concerning the application of the guidelines contained herein to specific transactions or factual contexts are encouraged to speak with the Chief Compliance Officer or any member of the Compliance Content

Investment Policy, Procedures, and Compliance Manual

Ехнівіт А

CERTIFICATE OF COMPLIANCE

I have received, read and understand the Code of Ethicsnames tment Policy, Procedures, &
& RPSOLDQFH ODQXDO RIOHNHWD , QYHV WXHPbirtsCaMMdappedindeicXess WKH
thereto, and agree to comply fullythwall policies, procedureandguidelinescontained therein. If
I have previously signed a Certificate of Compliance with respect to themedoutivened
documents, I also hereby certify that I have complied fully with all policies, proceedures
guidelines contained therein since the danaet last signed such a Certificate of Compliance. I
understand that any violation of such policies, procedures or guidelines could not only result in my
immediate dismissal but also may subject me, my family,&tlRePSDQ\ DQG WKH &RPSDQ`
to civil and criminapenalties

Full Name		
Signature		
Date		

Ехнівіт В

	SECURITIES HOLDING REPORT		
I,, h i V G H I L Q H G L Q O H N H W Oode(such list is current as of a date not lateth		dures, & Compliance Mabuat	eficially owned by me and tha
Type of Security	Name of Security, Ticker Symbol or CUSIP Number (as applicable)	Number of Shares or Principal Amount (as applicable)	Interest Rate and Maturity Date (if applicable)
]	
Full Name	Signature		Date

Ехнівіт С

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	C	QUARTERLY REPORT	OF SECURITIES	TRANSACTI	ONS	
Employee Na	me:			Quar	ter-End:	
	have made no security transact			confirmation	ns or sta	tem e nts
Transaction Date	Full Name of Security and Ticker Symbol	Interest Rate, Maturity Date	# of Shares or Principal	Purchase or Sale	Price	Name of Broker, Dealer, or Bank
	Signature		-			 Date

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EXHIBIT D

NOTIFICATION CONCERNING

INSIDER INFORMATION ABUSE

I understand that the business known as Meketa Investment Group Winks. H $^{\circ}$ & R, $^{\circ}$ R of $^{\circ}$ Violes \ $^{\circ}$ investment management and investment investment management and investment management and investment investment $^{\circ}$ R of $^$

I understand that my relationship those Company, whether contractual or orthwise, may give meaccess to confidential client informational material nonpublic information. Such information includes any details or knowledge concerning the investments, assets, or investment strategies define Company its principals, or clients at has not been inseminated broadly to the investing public.

I understand that should I acquire or otherwise be made awaresonchaimn formation through my relationship with the Company I may not use such information for spenal gain, nor may I disclose such information to family, friends, or other parties.

I understand that any misuses of chinformation that I may acquire through my relationship with the Companymay constitute a criminal offense for which substaint and criminal penalties may apply.

Print Name	
(PSOR\HH·V 6LJQDWX	 Date

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EXHIBIT F

DISCIPLINARY HISTORY DISCLOSURE

In this exhibit, we ask for information about your disciplinary history. The SEC will use this information to decide whether to revoke our registration or to pladeolinsion our activities as an investment adviser, and to identify potential problem areas to focus on duringities on H [D P L Q D W L R Q V R I R X U E X V L Q H V V 3 O H D V H Q R W H W K D W R Q one of the questions belowhalicized terms are defined in the Glossary of Terms below.

		Yes	No
A.	In the past ten years, have you		
	(1) EHHQ FRQYLFWHG RI RU SOHG JXLOW\ RU QROR foreign, or military court to a feylon §		
	(2) beencharged with any felon §		
B.	In the past ten years, have you		
	(1) EHHQ FRQYLFWHG RIRU SOHG JXLOW\ RU QROR foreign, or military court tomasdemeandnvolving: investments or ainvestment relatedbusiness, or any fraud, false statements, or omissions, wrongful taking of property, bribery, perjury, forgery, counterfeiting, extortion, or a conspiracy to coany of these offenses?		
	(2) beencharged with amisdemeand is ted in Item B(1)?		
C.	Has the SEC or the Commodity Futures Trading Commission (CFTC) ever:		
	(1) foundyou to have made a false statement or omission?		
	(2) .foundyou to have beeimvolvedin a violation of SEC or CFTC regulations or statute		
	(3) foundyou to have been a cause of namest mentelated business having its authorization to do busins denied, suspended, revoked, or restricted?		
	(4) entered anorderagainst you in connection withvestmentelated activity?		
	(5) imposed a civil money penalty on you, corderedyou to cease and desist from any activity?		
D.	Has any other federal regulatory agency, any state regulatory agency, of or financial regulatory authority:		
	(1) everfoundyou to have made a false statement moission, or been dishonest, unfair, or unethical?		
	(2) everfoundyou to have beeimvolvedin a violation of investmentelated egulations or statutes?		
	(3) everfoundyou to have been a cause of aimvestmentelatedbusiness having its authorization to do business denied, suspended, revoked, or restricted?		
	(4) in the past ten years, entereobaderagainst you in connection with immestment related activity?		
	(5) ever denied, suspended, or revoked your registration or license, or otherwise prevented you or any advisory affiliate, dayder from associating with an investmen related business or restricted ryautivity?		
E.	Has any self-regulatory organization or commodities exchange ever:		
	(1) foundyou to have made a false statement or omission?		
	(2) foundyou to have been involved in violation of its rules (other than a violation		

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EXHIBIT F

		Yes	No
	GHVLJQDWnihlo-GruDe-WiolDatiopi XQGHU D SODQ DSSURYHG		
	(3) foundyou to have been the cause of namest mentelated business having its authorization to do business denied, suspended revoked, or restricted?		
	(4) disciplined you by expelling or suspending you from membership, barring or suspending you from association with other members, or otherwise restricting y activities?		
F.	Has an authorization to act as an attorney, accountant, or federal contractor grante you ever been revoked or suspended?		
G.	Are you now the subject of any gulatory proceeding WKDW FRXOG UHVXO' to any part of Item C, D or E?		
Н.	(1) Has any domestic or foreign court:		
	(a) in the past ten yeaesnjoinedyou in connection with aringvestmentelated activity?		
	(b) everfoundthat you werenvolved in a violation of nvestmentelated tatutes or regulations?		
	(c) ever dismissed, pursuant to a settlement agreemeintvæstmentelateocivil action brought against you by a state or foficiamcial regulatory authority		
	(2) Are you now the subject of any opinib ceeding WKDW FRXOG UHVXOW any part of Item H(I)?		
Nan	ne of Submitting Person (please print <u>)</u> :		
Sigr	ature of Submitting Person <u>:</u>		
Date	e of Submission:		

GLOSSARY OF TERMS

Charged: Being accused of a crime in a formal complaint, information, or indictment (or equivalent formal charge).

Enjoined: This term includes being subject to a mandatory injunction, prohibitory injunction, preliminary injunction, or a temporary restraining der.

Felony: For jurisdictions that do not differentiate between a felony mandemeanor, a felony is an offense punishable by a sentence of at least one year imprisonment and/or a fine of at least \$1,000. The term also includes a general court martial.

Foreign Financial Regulatory Authority: This term includes (1) a foreign securities authority; (2) another governmental body or foreign equivalent of a laws relating to the regulation empowered by a foreign government to administer or enforce its laws relating to the regulation member-hip organization, a function which is to regulate the participation of its members in the activities listed above.

Found: This term includes adverse final actions, including consent decrees in which the respondent

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EXHIBIT F

has neither admitted nor denied the findings, but does not denot reports, deficiency letters, examination reports, memoranda of understanding, letters of caution, admonishments, and similar informal resolutions of matters.

Investment-Related: Activities that pertain to securities, commodities, banking, insurranceal estate (including, but not limited to, acting as or being associated with an investment adviser, broker-dealer, municipal securities dealer, government securities broker or dealer, issuer, investment company, futures sponsor, bank, or savingsciestion).

Involved: Engaging in any act or omission, aiding, abetting, counseling, commanding, inducing, conspiring with or failing reasonably to supervise another in doing an act.

Minor Rule Violation: A violation of aelf-regulatory organization rule that has been designated DV $^{\prime}$ PLQRU $_{\mu}$ SXUVXDQW WR D SODQ DSSURYHG E\ WKH 6 (& under a plan if the sanction imposed consists of a fine of \$2,500 or less, and if the sanctioned does not contest the fileheck with the appropriate f-regulatory organization to determine if a SDUWLFXODU UXOH YLRODWLRQ KDV EHHQ GHVLJQDWHG DV

Misdemeanor: For jurisdictions that do not differentiate between and a misdemeanor, a misdemeanor is an offense punishable by a sentence of less than one year imprisonment and/or a fine of less than \$1,000. The term also includes a special court martial.

Order: A written directive issued pursuant to statutory authority and proceduresnignal order of denial, exemption, suspension, or revocation. Unless included in an order, this term does not include special stipulations, undertakings, or agreements relating to payments, limitations on activity or other restrictions.

Person: A natural person (an individual) or a company. A company includes any partnership, FRUSRUDWLRQ WUXVW OLPLWHG OLDELOLW\ FRPSDQ\ proprietorship, or other organization.

Proceeding: This term includes a formal admistrative or civil action initiated by a governmental agency, self-regulatory organization or foreign financial regulatory authority; a felony criminal indictment or information (or equivalent formal charge), mois demeanor criminal information (or equivalent formal charge). This term does not include other civil litigation, investigations, or arrests or similar charges effected in the absence of a formal criminal indictment or information (or equivalent formal charge).

Self-Regulatory Organizationor SRO: Any national securities or commodities exchange, registered securities association, or registered clearing agency. For example, the Chicago Board of Trade $^{\circ}$ & $^{\circ}$ 2 7 μ), 1 5 \$ D Q G 1 H Z < R U N 6 W R-regulatory kr0a0izations. 1 < 6 (μ

INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE MANUAL

EXHIBIT F

GIFT & ENTERTAINMENT **REPORT**

Check all that a	apply and Complete the Table	e Below:			
Reporting a	a payment or loan (direct on (union) or officer, agent				
based, in w	compensation was received compensation was received inment, meals, travel, lodging (annual or special) or servent ODU IXQFWLRQFKDUJHDEOH WRAMENT ACCEPT	that the @loymped with respect d with respected with respected with responding, etc. in convice as an investigation of \$50 give a gift. inment with a	enders to a client or client of to services the Compared OHNHWD·VEXV as or of a private pooled invenention with attending a stor advisory board member OIRIDFOLHQW SLFOH·VLQ stimated value of \$50.00 co.	s subject to ERISA. ny renders to the LQHVV JHQ estment vehicle in to meeting of such or observer (or sulfor more per person	following H U D O O \ he form of Wehicle bstantially O L H Q W · V
Date/Proposed Date of Reportable Event	Detailed Description of Payment, Compensation, Gift or Entertainment	(To be) Given or Received	(To be) Given To / Received From	Value (Per Person) Estimate if necessary	
Additional Infori	Attach additional p		ovided is inadequate duals involved, etc.)		
Employee Signa	(please print):ture:				
Request for App	proval Approved by		Date:		

¹ E.g., any gift or entertainment, including, without limitation, any promotional items, holiday **grifittings**|Spectator sporting event, spe**via**nt, conference, seminar, travel, meal and lodging, and charitable contributions.

2 Payments to service providers and vendors that are unrelated to their status as agents to a labor organizatiopometed not be re

3 For more information, see the Com**Q**aλ·V **LIWV (QWHUWDLQPHQW 3 ROLF\ μ \$ SSHQGL[WR WKH & RPSDQ\·V & RG

4, G 7 KH & RPSDQ\ LV DVNLQJ WKDW HPSOR\HHV UHSRUW FR-M-QSheta@y\gibts\/intcRuding\/Widds\(\text{Syntheta}\) with extantioning Widds\(\text{Syntheta}\) with extantioning Widds\(\text{Syntheta}\) with extantioning Taffartey plans.

GE.g., if the principal purpose of the event was to discuss a particular client or clients or the third party widers (engice paderling manager or custodian) to a particular clientor clients, please identify such client(s).

At Meketa Investment Group W K H ´& R, Rv6 BtQv6 pto avoid circumstances where a conflict of interest or bias might imparate R P S D integrity or impartiality.	ir or appea	r to impair t
In WKH & R Rdection making processes, a conflict interest shall be declared by an employee who deems him/herself to be in who could reasonably be perceived to have a conflict of interest. Such employee shall refrain from discussion beforeafdle discussion on the issue in question and shall absent him/herself from the portion of the meeting where the matter libed is recorded in the minutes.	e rintg e deba	ate or
1. Within the past twelve (12) months, have you or members of your immediate fam DFTXLUHG VLJQLILF a. That directly affect or reasonably appear to affect your work or company business; or b. In entities whose financial interests directly or reasonably appear to affect your work or company business.	Yes	☐ No
*Significant financial interests: Financial interests valued in excess of .00,000 which equal or exceed 5% ownership (i.e., as the actual or beneficial owner of more than five percent (5%) of the voting stock or controlling interest enterprise or entity when aggregated for you and your immediate family.		
2. Within the past twelve (12) months, have you or members of your immediate family had an employment, consulting financial relationship with: a. A company that des business with thempany?	Yes	No
b. An outside organization contributing gift funds the Companythat are under your control or of direct benefit to work activities?		

inancial interests in an entity increase to the . \$56/60 0thre n signing and submitting this form, I certify that the abov nowledge, withfederal law, state law and @bmpany polici	ve information is true to the best of my knowledge, amo	ta hap lialaace, to the best of my
3	•	tothmodial acce. to the best of my
inancial interests in an entity increase to the \$56,690thre	/	
ertification: I agree to update and submit this form to H		III Status of Hushijotalwineeres
	luman Daga maga within sintu ((0) daga af any abanana	
recreat should decide their energinatures and derisart vi	with a managing rimelpai.	
nerest snould deciate their circumstances and consult w		n doubt ab pate mtial conflict of
	est in vour employm ¢ht Wäth pany Employees who are ii	
easonably appear to present a financial conflict of intere		
I \RX DQVZHUHG \HVµ WR DQ\ R elow. Please describe anyhort relationships, commitments easonably appear to present a financial conflict of intere enterest should declare their circumstances and consult w	s, or activities that you or any member of your immedi	ate family have that might present o

MANUAL

A PPENDIX 1

GIFTS AND ENTERTAINMENT POLICY

INTRODUCTION

The giving and receiving of business gifts and entertainment is a customary and acdepute of fine creating good will, building and reinforcing business relationships and, with certain restrictions, represents a lawful practice. However, the giving or receiving of gifts could be seen as an attempt to bias a business decision or to enhance padriscestyles by a misuse of company funds.

\$ F F R U G L Q J O \ V X E M H F W W R W K L V Policy W V DHOP S O(ROWHIHLW WDDULHO PSH to offer, give and receive gifts and participate in entertainment events in connection with their work withor on behalf of clients, prospective clients, vendors, and other service providers (collectively, Business Partners

A PPLICABILITY

This Policy applies to a Company employees (and their family members).

This Policy applies to the offering, giving, requing or receiving of (directly or indirectly) any gift or entertainment, including, without limitation, any promotional item, holiday gift, golf outing, spectator sport, special event, conference and seminar, travel, meal, and lodging.

Where uncertainty xists regarding a specific gift or entertainment event, employees must contact the Chief Compliance Officerior to accepting or extending chair or event.

GENERAL PROHIBITIONS

No employee may ask for any gift or entertainment from Business Partners.

No gift or entertainment may be offered, given to or accepted from any Business Partner, where, for example:

It is in the form of cash or a cash equivalent (e.g., a gift certificate);

It may appear inconsistent with KH & R Pc6sDochary Vousiness praces;

There is no demonstrable benefit Wok H & R Posisiness: V

It may appear disproportionately generous or occur so frequently as to raise a question of propriety;

It may be construed as a bribe, payoff or kickback;

It could reasonably be construed as inducement to affect a business decision or creating an obligation on the recipient;

If the proposed entertainment will be attended by an employee and/or a family member without the presence of the offering party;

The employee would be embarrassed if exagues knew about the gift or entertainment ²or if it became public knowledge (e.g., reported in the press);

It would violateWKH & RPS3DRQQ\LF\:\:LWK 5HVSHFW WR 3D\PHQW

MANUAL

A PPENDIX 1

It would violate any law or regulation (including, forat/midance of doubt, ERISA); or It would violate the terms W/K H & R Pa@re@nenty with such Business Partner.

6HH DOVR WKH VHFWLRQ HQWLWOHG ´6SHFLDO 6LWXDWLRQ`

GIFT POLICY

Offering or Giving Gifts: Gifts should be offered or given only oneraccasions, and then primarily by those employee that serve as Consultants to existing clients.

As a general rule, the value of any gift offered or given is not to equal or exoced16500 ose instances where the proposed gift would equal or exoced1600 n value, or is to be offered or given E\DQ HPSOR\HHRWKHURE/MORKAIDIQGIOU & RDV*XLOW DDQQAG (DQ WM HUW DLQ the form attached as Exhibit F to this Mamusat be submitted to the Chief Compliance Officer for review and approval prior the offering or giving of such giftHHDOVRWKHVHFWLRQV F6LWXDWLRQVµDQG ORQLWRULQJ 5HFRUGNHHSLQJ 5HSRU

Accepting Gifts: Employees are discouraged from receiving Reportable Gifts and must report the receipt thereof to the Chief Compliance Officer.

Treatment of Reportable GiftsIn general, Reportable Gifts will be returned or disposed of in some appropriate manner, such as by donation to a charitable organization. The Chief Compliance Officer will determine the appropriate manner in which to treat Reportable Gifts.

Exclusions: Subject to the General Prohibitions, employees are not prohibited from accepting (and need not report) promotional gifts valued at less that the control of the

ENTERTAINMENT POLICY

The Companygenerally encourages participational propriate entertainment events where there is a clear business purpose and ellevant business information is expected to be gained through attendance

Accepting Entertainment:Employees must, when possible, seek prior approval to attend an entertainment event by submitting a Gift and Entertainment Report to the Chief Compliance Officer. A Gift and Entertainment Report should also be submitted whenever the value of an accepted entertainment is estimated to equal or exce**@O**p\$5 person.

Offering or Providing Entertainment Employees providing entertainment (e.g., client meals, golf outings, sporting events, etc.) with a value equal or in excess Offe 5 person must, when possible, seek prior approval from the Chief Compliance Officer by isting a Gift and Entertainment Report.

SPECIAL SITUATIONS

Government Officials/Public Plans: Employees are to be aware that (i) certain laws, regulations, and rules prohibit or place restrictions on gifts and entertainment extended to publicab@ficials,

A PPENDIX 1

(ii) Company contracts with publidan Business Partners may conflict with this Policy. Therefore, it is incumbent on those employees working with public plans to be aware of applicable laws, regulations, rules, policies and contract provisions a nonexhaustive list of the restrictions imposed by such entities.

<u>Federal Government</u>tU.S. federal government employees are generally prohibited from accepting gifts and entertainment.

Massachusetts Public PlansGenerally, gifts and entertainmte (including, but not limited to, meals, travel, sports tickets, and golf fees) expenses related to Maky-bf & R PMassachusetts municipal clients (including their employees and such employee family members) are limited to an aggregate of less that ODO oper person, per year.

District of Columbia Retirement BoardPursuant toW K H & R PcorDract with the Boardple Company is prohibited from requesting or accepting (directly or indirectly) any compensation, fee, commission, gift, or ikind payment from any potential or current investment manager of the Board or any investment manager or services provider (i.e., a custodian) presented or recommended to the Board, except to the extent that any such investment manager or service provider is a Company client and the investment manager, service provider, candidate or entity is compensating the Companysolely for bona fide purposes that are unrelated to the standard to the Board.

See also WKH & RP S3DROO\L-FV\: LWKD 5. FP MF SQ. HVVFWW WWRR 3 380 EQ OG LF) ELUIHLIF LOD O&VR LUU U 3 UD FWLFHV \$ FW 3 ROLF\ L

MONITORING , RECORDKEEPING & REPORTING

Employees are responsible for monitoring applicable client contracts, and the laws, regulations, rules and policies governing publicant clients with respect to gift and entertainment restrictions.

Employees are also responsible for maintaining records sufficiently detailed to verify the accuracy and completeness of any Gift and Entertainment Report, FortOLFMing or Form 5500, Schedule C report. Employees must retain any record necessary to verify, explain, or clarify reports, including, but not limited, to vouchers, receipts, worksheets, etc.

Taft-Hartley Clients and Form LM10 Reporting Requirements DOL requires reporting of any payment σ loan (direct or indirect) of money or other thing of value (including reimbursed expenses, and including, for example, the extension of gifts and gratuities), or any promise or agreement therefor to any labor organization or officer, agent, shop stemplary lee or other representative of a labor organization. Sporadic or occasional gifts, gratuities or favors of LQVXEVWDQWLDO YDOXHµJLYHQ XQGHU FLUFXPVWDQFHV DC labor organization need not be reported Form LM- ´, QVXEVWDQWLDO YDOXHµ gratuities with an aggregate value of \$250 cless; provided that if the aggregate value of multiple gifts or gratuities to a single union or union official exceed σ 0 and σ 1 and the aggregate value of the transactions will be reportable.

ERISA Clients and Form 5500, Schedule C (Indirect Compensation) Reporting Requirements: a service provider to ERISA plans (including Taffartley plans), the Company may be required to UHSRUW WR DQ\ VXFK (5,6\$ SODQ DPRXQWV RI LQGLUHFW

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than the plan or the plan sponsor.

Indirect compensation is compensation received with respect to the services rendered to the plan or a perV R Q · V $\,$ S R V L W L R Q $\,$ Z L W K $\,$ W K H $\,$ S O D Q $\,$ L $\,$ H $\,$ U H F H Lth $\,$ L W L R Q $\,$ Company U H Q G H U V $\,$ W R $\,$ D $\,$ S O D Q $\,$ D Q G $\,$ F R P H V $\,$ W Z R $\,$ P D L Q $\,$ I R U P V $\,$ R W K H U $\,$ L Q G L U H F W $\,$ F R P S H Q V D W L R Q $\,$ (of their Lth $\,$ Indirect service fees, and soft dollars. Other indirect compensation includes all indirect compensation that is not eligible compensation (e.g., gifts, meals, entertainment, etc.).

The Company is permitted to exclude from such reports-mometary compensation of insubstantial value, which is tax deductible for federal income purposes by the person providing the gift or entertainment and that would not be taxable income to the trectipe normonetary gift or entertainment must be valued at less than \$\mathbb{C}\$ for the aggregate value of gifts or entertainment from or \$\mathbb{(\frac{1}{2})}\$ source in a calendar year must be valued at less than \$\mathbb{C}\$ 10 \$\mathbb{C}\$ the \$1000 aggregate value limit is exceed then the value of all of the gifts and entertainment will be reportable compensation; provided that monetary gifts and entertainment of less than \$\mathbb{C}\$ 10 need not be included in calculating the aggregate value of all gifts required to be reported eve the \$1000 limit is otherwise exceeded.

Notwithstanding the foregoing, it is permissible to presume that ordinary promotional gifts, such as a coffee mug, greeting cards, plaques, certificates, trophies and similar items of insubstantial value that display a company logo of the person or entity providing the gift have a value of less than \$1000 On the other hand, a gift that clearly has a value in excess@scalo as a \$4.00golf club or an expensive luxury pen (even if embossed with a acroymlogo), would be reportable. Also, exchanges of holiday gifts that are based solely upon a personal relationship LQGHSHQWREP \$600sQns.thathappendidhdb business with ERISA plans are not reportable indirect common as a contract of the provided business with ERISA plans are not reportable indirect common as a contract of the provided business with ERISA plans are not reportable indirect common as a contract of the provided business with ERISA plans are not reportable indirect common as a contract of the provided business with ERISA plans are not reportable indirect common as a contract of the provided business with ERISA plans are not reportable indirect common as a contract or providing the providing that the providing that the providing the providing that the providing

Where indirect compensation is not received with respect to a particulapleRISA ent but by the Companygenerally, the Companymust assume that the gift was received with respect to all ERISA plan clients and the amount of such indirectpensation reportable to any ERISA plan client would be prorated across ERISIA clients (based on, for example, the number of such clients or their assets under management). Where a formula theuseumpanymust disclose such formula to the applications.

OTHER

Violations of this Policy will be grounds for disciplinary action, up to and including termination.

Any questions about this Policy should be directed to the Chief Compliance Officer or, in his or her absence, WKH & R First @r@I\@al\@al\cumple counsel

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APPENDIX 2

POLICY WITH RESPECT TO PAYMENTS TO PUBLIC OFFICIALS

INTRODUCTION

As a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended <u>Advisers Act µ</u> D Q G D V D Q H Q W L W \ W K D W F R Q 6cx | Fg w c/rn Eexit V L Q H V V entities, the Company is subject to laws, regulations, rules and policies that restrict or prohibit the making of certain campaign contributions or other Payments to Public Officials.

Capitalized terms used and not defined herein have teamings assigned to them <u>Sohedule A</u> hereto.

A PPLICATION

This Policy applies to K H & R P ffibeOs,\enviplofyees, consultants and independent contractors that engage (or supervises any Person who engages or performs such activities) in the foliatio any Government Entity on K H & R P IS ID IQD, O V Cloverfect Person T D Q G W K H L U \$ I I L Constitution of the foliation of the first person of the foliation of the first person of the first p

POLICY

Prohibited Payments Payments to, or coordinathom solicitation of Payments on behalf of, any Public Official who controls, could (directly odinectly) influence, or participates in decisions by a Government Entity to select or retain investment advisers, or can appoint any person who can (directly or indirectly) influence the selection or retention of investment advisers by a Government Entity.

<u>Permitted Payments</u> Payments (other than Prohibited Payments) by a Covered Person to any individual who is a candidate or successful candidate for federal elective office (U.S. President, Vice President or Member of Congress (Senate and House of Repartises)), including a Person known to be providing assistance with respect to the candidacy of any such individual (including but not limited to any PAC and in inauguration or transition committee) and a foundation or other charitable institution known be closely associated with any such individual, unless such individual, at the time any Payment is made (or coordination or solicitation of Payments by others occurs) holds an elected or appointed office of a Government Entity.

REPORTING

Covered Person Beginning on March 31, 2011 and promptly following each calendar quarter WKHUHDIWHU HDFK & RYHUHG 3HUVRQ PXVW FRPSOHWH WKH 3XEOLF 2IILFLDOV 'LVFORVXUH) RUP μ UHSRUWpcQidusDQ\ 3D\ quarter or the absence thereof, and submit such form to the Chief Compliance Officer. With respect to the initial disclosures made on March 31, 2011, Covered Persons must report any payments made

⁸Rule 206(4) I L XQGHU \$GYLVHUV \$FW GHILtNDe HEONIMpanny Roccountinoun Micrate Mulinect Phythor Din Odirect Dyt, WK UHVS for the purpose of obtaining or retaining a client for, or refeatherent atothe Company

⁹ E.g., Organizing fundraisers and other raising of fulfiddsm others (including PACsf)or, or on behalf of, a Public OfficReliven if nothing is contributed.

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APPENDIX 2

during the period from March 14, 2011 throughclMaft, 2011.

New Hires and Promotions Every perspective hire of Covered Person or promotion of an individual to a Covered Person position requires, prior to such hire or promotion, the completion by DQ\VXFK LQGLYLGXDO RI W KeHodlcRPbyPherht CoWPubNov Officials DisclosureLDO DO) RUP μ UHSRUWLQJ DQ\3D\PHQWV WR 3XEOLF 2IILFLDOV GX and submit such form to the Chief Compliance Officer. If any reported Payment to Public Officials constituts a Prohibited Payment in violation of applicable law, regulation, rule or policy, such LQGLYLGXDO·V VWDUW GDWH RU SUVRIPR W&LRRPSSIED CLOSUR FOR DVH delayed or rescinded.

OTHER

Covered Persons are expressly prohibitedm taking any action indirectly that if done directly, would result in a violation of this Policy.

If a Covered Person discovers that he or she has made a Payment in violation of this Policy, such person shall immediately notify the Chief Compliance officer, use best efforts to obtain the return of such Payment.

Violations of this Policy will be grounds for disciplinary action, up to and including termination.

Any questions about this Policy should beedired to the Chief Compliance Officer or, in his or her absence, WKH & R Firster (a) Nedal counsel

¹⁰ E.g., The spouse of a Covered Personakesa Paymentwhere the Covered Person could not, ar Covered Person gives money to a PAC that is funneling donations to a particular Public Official.

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APPENDIX 2

SCHEDULE A

ADDITIONAL DEFINITIONS

Affiliate µmeans, as to any Covered Person, any Person's directly or indirectly controlled by, or primarily forthe benefit of, such Covered Person, including, without limitation, to any political action committee (3 \$) Aumder direct or indirect control of such Covered Person.

Government Entity pmeans any state and political subdivision of a state, including pancy, authority, or instrumentality of the state or political subdivision thereof; a plan, program, or pool of assets sponsored or established by the state or political subdivision or any agency, authority or instrumentality thereof (e.g., all public piem plans and collective government funds, including participant directed plans such as 403(b), 457 and 529 plans); and officers, agents or employees of the state or political subdivision or any agency, authority or instrumentality thereof, acting in thei official capacity.

Payment µmeans any gift, subscription, loan, advance, deposit of money, or anything of value for the purpose of influencing any election for federal, state or local office; payment for debts incurred in connection with such electi**and** transition or inaugural expenses of the successful candidate for public office.

- 13 H U Means any natural person, general partnership, limited partnership, limited liability, partnership, limited liability company, corporation, joint venture, trusiness trust, cooperative or association.
- 3 X E O L F 2melabs: (10) Only individual who was, at the time any Payment is made (or coordination or solicitation of Payments by others occurs), an incumbent, candidate or successful candidate for elective in a Government Entity; (2) any individual who is a candidate or successful candidate for federal elective office (U.S. President, Vice President or Member of Congress (Senate and House of Representatives)) if such individual, at the time any Payment i made (or coordination or solicitation of Payments by others occurs) holds an elected or appointed office of a Government Entity; (3) any Person known to be providing assistance with respect to the candidacy of any of the foregoing, including but notte into any PAC, any inauguration or transition committee, and a local or state political party; and (4) a foundation or other charitable institution known to be closely associated with any of the foregoing.

* * * * * *

INITIAL AND PERIODIC PAYMENT TO PU BLIC OFFICIALS DISCLOSURE FORM

Name of Submit Date of Submiss	ting Person <u>:</u> ion: <u>/</u> /				
☐ Nothing to Re	eport				
Date of Payment	Amount of Payment	Form of Payment	Name of Public Official, Candidate or PAC	Office or Position Held(and/or Sought) by Public Official or Candidate at the time of Payment	Total Payments Made to such Public Official in During the Previous 12 Months
Additional Inform	nation ² :				
NEW/PROSPECT	<u>IVE EMPLOYEE</u> : ADDIT	TIONAL DISCLOSURES (C	CHECK ALL THAT ARE APPLICA	BLE):	
☐ I solicited Go	vernment Entities (or s	supervised those that o	lid) on behalf of my prior emp	oloyer. If checked, please ide nitif yemploy	er:
☐ I was an emp	loyee of a Government	Entity within the past	five (5) years. If so, please	identify the Government Entityua nd ley.o_	
☐ I have made a	a Payment within the p	past two (2) years. If	so, please disclose all such Pa	ayments in the table above.	
		ed or required to be		is (was) unregistered in rel tan ec exem pti	on available under Section 203(b)(3
					Signature of Submitting Person

 $^{^1}$ Capit D O L] H G W H U P V D U H G H I L Q H G L Q PolithyNWHtNVRDspeCt YtoHPAyNthPnHsQtoWPublid QfXicSals., Q F \cdot V 2 E.g., provide a brief description of the reason for each Payment, coordination or solicitation and any other relevant facts correcting through the reason for each Payment, coordination or solicitation and any other relevant facts correcting through the reason for each Payment, coordination or solicitation and any other relevant facts correcting through the reason for each Payment, coordination or solicitation and any other relevant facts correcting through the reason for each Payment, coordination or solicitation and any other relevant facts correcting through the reason for each Payment, coordination or solicitation and any other relevant facts correcting through the reason for each Payment, coordination or solicitation and any other relevant facts correcting through the reason for each Payment, coordination or solicitation and any other relevant facts correcting through the reason for each Payment, coordination or solicitation and any other relevant facts correcting through the reason for each Payment, coordination or solicitation and any other relevant facts correcting through the reason for each Payment facts are considered in the reason for each Payment facts are considered in the reason factor of the reason factor of

AND
INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE
MANUAL

APPENDIX 3

FOREIGN CORRUPT PRACTICES ACT POLICY

INTRODUCTION

Meketa Investment Group, Inc., (the& R P S Di@ supject to thes. Foreign Corrupt Practices Act of 1977 W K H ´) & 3 \$ μ D S U R Y L V L R Q R I W K H 6 H F X U L W L H V D Q prohibits persons from corruptly paying or offering to pay, directly or indirectly, money or anything of value to a foreign official to obtain or retain business.

ANTIBRIBERY PROVISIONS

7 K H) & 3 \$ · V D Q W L E U L E H U \ S U R Y L V L R Q V J H Q H U D O O \ S U R K L E L paying or offering to pay, directly or indirectly, money or anything luef to a foreign official, a foreign political party or official, or a candidate for footfigne for purposes of influencing any act or decision (including a decision not to act) of such official in his or her official capacity, inducing the officiato do any act in violation of his or her lawful duty, or to secure any improper advantage in order to assist the payor in obtaining or retaining business for or with any person, or in directing business to any person.

LONN . μThe term anyth QJ RI YDOXHμ LV QRW GHILQHG LQ WKH has been broadly construed and can include not only cash or cash equivalenss, abundady other things, discounts; gifts; use of materials; facilities or equipment; entertainment; dribsks; mea transportation; lodging; insurance benefits; and promise of future employment. Please note that there is note minimisy DOXH DVVRFLDWHG ZLWK WKH DONKLQJ RI YD

Foreign Official. The FCPA defines the term foreign official to include eintinent part:

(«DQ\ RIILFHU RU HPSOR\HH RI D IRUHLJQ JRYHUQPHQW LQVWUXPHQWDOLW\ WKHUHRI«RU DQ\ SHUVRQ DFWLQJ L RI DQ\ VXFK JRYHUQPHQW GHSDUWPHQW DJHQF\ RU LQ

Pleasenote that the enforcement agencies broadly interpret this term to include not only traditional government officials, but also employees of stateQ H G R U V W D W H F R Q W U R O O H G H W K H W K H R U \ W K D W 6 2 (V D U H D @poverbm@en/tWEVe/n PF lel fon/Migh @nltity is µ R I V not wholly R Z Q H G E \ D I R U H L J Q V W D W H L W P D \ V W L O O E H F R Q V government if it exercises substantial control over the entity.

12 E W D L Q R U 5 H W7 IX IHQ 18 E W IDIQQQ VERXULUCHHW IV μ H O H P H Q W R I D Q D also has broad application and will be satisfied even if the improper payment to a foreign official does not lead to a government contract, including, but not limited to, improper payments to secure special tax or custom treatment, secure government licenses or permits need to do business in a foreign jurisdiction, or otherwise secure an improper advantage over competitors.

INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE MANUAL

APPENDIX 3

THIRD PARTY PAYMENT PROVISIONS

The antibribery provisions contain broad thiralty payment provisions under which the actions of foreign affiliates and other third parties (such as agents, consultants, joint venture partners, etc.) can result in FCPA liability to a company or an affiliate thereof engaging theathird. Thus, companies are not immune from FCPA liability by doing business abroad through others because WKHDQWLEULEHU\SURYLVLRQVFRYHULPSURSHUSD\PHQWVportion of such money or thing of value will be offered, given, orsechrolizectly or indirectly, to a foreign official. Under the FCPA, knowledge is defined broadly and is present when one knows that an event is certain or likely to occur. Further, failing to take note of an event or being willfully blind can also constite knowledge.

FINES AND PENALTIES

Violations of the FCPA can result in significant fines partial ties For instance, a company can be criminally fined up to \$2 million per violation and culpable individuals can be subject to a criminal fine of up t\$250,000 per violation as well as imprisonment for up to five (5) years. Such fine and penalties are in addition to harsh collateral sanction that can result from an FCPA violation, including termination of government licenses and contracts.

POLICY

IW LV WKH & RPSDQ\·V SROLF\ WEarch Finapho Spece of the Occompany back the WKH) responsibility for compliance with the FCPA within his or her area of authority, and must report any suspected violations to the Chief Compliance Officer in an inarthely in the compliance of the compli

As noted above, KH & RPSDQ\ \cdot V EXVLQHVV SDUWQHU.\$\text{S}(op\text{WkttbirWtheD} UH RSHU.S. with a focus abroad) WKH & RPSDQ\ \cdot V EHKDOI $\dot{}$) RUHLJQ % XVLQHV with the FCPA and violations of the FCPA by such FigoreBusiness Partners may be imputed to the Company. 7 KHUHIRUH LW LV HDFK HPSOR\HH \cdot V DQG) RUHLJQ understand what may constitute a violation, and to proactively seek assistance should he, she or it see a possible vibition of the FCPA.

3 O H D V H Q R W H W K D W L W L V R I W H Q G L I I L F X O W W R G H W H U P L C specific circumstance might constitute a violation of the FCPA. Therefore, it is imperative that all employees read and understant bis Policy, ask questions if any aspect to this Policy is unclear, and W K D W D O O W K H & R P S D Q \ \cdot V) R U H L J Q % X V L Q H V V 3 D U W Q H U V F understanding and agreement with this Policy in general and the FCPA specifically san appear certification attached hereto.

AND INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE Manual

APPENDIX 3

This certification should be included in any agreement the Company makes to hire outside companies or other third parties who will be acting on behalf of the Companyon U.S. jurisdiction and must be signedyban authorized representative of subthird party.

CERTIFICATION

CERTIFICATION
This Agreement is contingent upon compliance with any applicable U.S. laws, particularly the) RUHLJQ & RUUXSW 3UDFWLFHV \$FW <u>WKH $^{\prime}$) & 3\$ µ[InsertD V ZHOC country(ies) inwhich services are to be performed by third party on behalf of Meketa].</u>
On behalf of $\tt >$, Q V H U W Q D P H R I R X W V L G H Short PS D Q \ Name @ μ W K H X Q G H U V L J Q H G K H U H E [Shott HN8 nble] is \text{Vfathn Daw} with \text{Dt Now the FCPA} and will conduct all actions on behalf of Meketa Investment Group, Inc. $\tt OHNHWD\mu$ L Q D F F R U G D Q F H Z L W K W K H) & 3 \$ 7 K H X Q G H U no money paid to Short Name as compensation or otherwise has been or \text{will be date} to pay any bribe or kickback in violation of U.S. or foreign law.
[Short Name]agrees to provide prompt certification of its continuing compliance with applicable laws whenever requested by Meketa.
All agents or employees <code>\$\frac{1}{2}\$ hort Name]</code> who will beinvolved in representing Meketa must be identified in writing to Meketa and approved by Meketa before they perform any actions on OHNHWD·VEHKDOI \$ ZULWWHQDFRXQWI[SQbdrt Name] wite H NHSV agents or employees on behalf Meketa, or out of funds provided by Meketa. A copy of this accounting must be provided to Meketa upon request. In no event shall any payment be made by [Short Name] or its agents or employees to any undisclosed third party.
It is understood and agmethat[Short Name]s an independent contractor without authority to bind Meketa in any way.
This Agreement can be terminated immediately either upon violation of its terms or in the event that this Agreement is found to be impermissible under U.Sreignidaw.
The undersigned hereby certifies that he/she has authority to enter into and condition of this Agreement, including this Certification.
[INSERT NAME OF OUTSIDE COMPANY/THIRD PARTY]
By: Name: Title:
Data

AND
INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE
MANUAL

APPENDIX 4

PROXY VOTING POLICIES AND PROCEDURES

INTRODUCTION

OHNHWD, QYHVWPHQW * URNXsSadopt@cfhe followWinlepolicesRalPhosphocedures (these Proxy Voting Policies and Procedures which have been designed to ensuther the Company complies with the requirements of Rule 2066(at)d Rule 2021(c)(2) under the InvestmentAdvisers Actof 1940 DQG UHIOHFW WKH & RPSDQ\·V FRPPLWPHC for which it exercises voting authority in a manner commission that the best interest of its clients. Supervised Persons who have the authority to vote client securities must familiarize themselves with and adhere to the Proxy Voting Policies and Procedures.

PROXY VOTING POLICIES AND PROCEDURES

The Company monitors the performance, activities and events related to each investment with respect to which it has the authority to vote client seculifies exercising its voting authority over client securities, the Company considers such information, evaluate is sottes that could have an impact on the value of the security and votes with a view toward maximizing overall value. The Company votes all proxies in a prudent manner, considering the prevailing circumstances at such time and in a manner consisted three Proxy Voting Policies and 3 URFHGXUHV DQG WKH & RPSDQ\\V ILGXFLDU\\ GXWLHV WR LV

The Company reviews each proposal submitted for a vote on abycaase basis to determine whether it is in the best interest of the disentresult, depHQGLQJRQWKHFOLHQW·FLUFXPVWDQFHV WKH &RPSDQ\PD\YRWHRQHFOLHQW·V another client, or may vote differently on various proposals, even though the securities or proposals are similar (or identical, QVRPHLQVWDQFHV WKH &RPSDQ\PD\GHWH interest for the Company tabstain prom voting or not to vote at all, and will do so accordingly.

VOTING PROCEDURES

The following procedures are performed when voting erids are received:

The investment professionals who assigned to the investment review the current performance, activities and events related to the investment and ensure that the Company receives all necessary voting materials.

Such investment professials, after consultation with an aging Principals the Chief Compliance Officer internal counsed nd/or outside counsel, as appropriate, determine how the securities should be voted.

Such investment professionals ensure that the voting and/or consentalsnætær FRPSOHWHG DQG UHWXUQHG RQ WLPH XQOHVV LW KD interests for the Company not to vote on such matter).

AND
INVESTMENT POLICY, PROCEDURES, AND COMPLIANCE
MANUAL

APPENDIX 4

CONFLICTS

In connection with exercising its voting authority, relevant Meketa investment commutations. analysts (in consultation with internal and outside counsel, as appropriate) consider the relevant facts and whether or not a material conflict of interest may arise due to business, personal or family relationships of Meketa, its owners, its eneals or its related persons, with such persons having a material interest in the outcome of the Viotæ material conflict exist Meketa takes steps to ensure that its voting decision is based on the best interests of the client and is not the roduct of conflict. Meketa may, at its discretion: (a) seek the advice of the applicable advisory board (if any) LQ YRWLQJ VXFK VHFXULW\ Ε GLVFORVH WKH FRQIOLFW voting recommendation; (c) defer to the voting recommendation of an independent third party provider of proxy voting services; and/or (d) take such other action in good faith (in consultation ZLWK OHNHWD.V LQWHUQDO DQG RU RXWVLGH FRXQVHO of the clint. Depending on the particular circumstances involved, the appropriate resolution of one conflict of interest may differ from the resolution of another conflict of interest, even though the general facts underlying both conflicts may be similar (ortional). The Company may, at its discretion, (a) seek the advice of the advisory committee of a fund in voting such security (if any); (b) disclose the conflict of interest to the client or the applicable advisory committee of the particular fund and deferW R W K H FOLHQW · V Y R W L Q J U H F R P P H Q G D W L R Q independent third party provider of proxy voting services; and/or (d) take such other action in JRRG IDLWK LQ FRQVXOWDWLRQ ZLWK W)K, Whitelan Proposition of the V RXW' the best interest of the clipepending on the particular circumstances involved, the appropriate resolution of one conflict of interest may differ from the resolution of another conflict of interest, even though the general facts deriving both conflicts may be similar (or identical).

DISCLOSURE INFORMATION

The Company will deliver to each clieantd investor (as the case mayuhae)n written request a complete copy offnese Proxy Voting Policies and Procedures and/or information in voted proxies for the applicable client fund account.

APPENDIX E

MEKETA INVESTMENT GROUP

SAMPLE QUARTERLY AND

EXECUTIVE PERFORMANCE REPORTS

Confidentiality

The material contained in this report is confidential and may not be reproduced, disclosed, or distributed, in whole or in part, to any person or entity other than the intended recipient. The data are provided for informational purposes only, may not be complete, and cannot be relied upon for any purpose other than for discussion.

Meketa Investment Group has prepared this report on the basis of sources believed to be reliable. The data are based on matters as they are known as of the date of preparation of the report, and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available.



1. Corporate Update

2. Executive Summary

- Broad Market Overview
- Aggregate Fund Overview
- Manager Highlights
- 3. Fund Governance
- 4. Fund Summary
- 5. Fund Detail
- 6. Portfolio Reviews
- 7. Appendices
 - The World Markets in the Fourth Quarter of 2011
 - Disclaimer, Glossary, and Notes

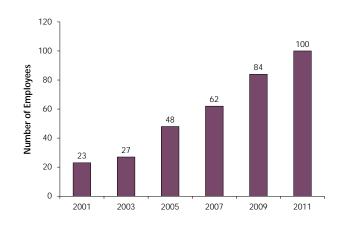
Meketa Investment Group Corporate Update

Meketa Investment Group Firm Overview

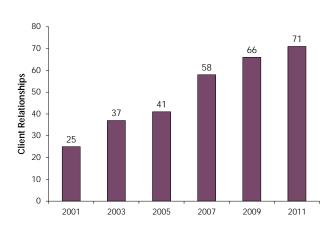
- Staff of 100, including 61 investment professionals and 17 CFA charterholders
- 71 clients, with over 140 funds throughout the United States
- Significant investment in staff and resources
- Offices in Boston, Miami, and San Diego
- Clients have aggregate assets of approximately \$300 billion
 - Over \$20 billion in assets committed to alternative investments
 - Private Equity
- Infrastructure
- **Natural Resources**

- Real Estate
- Hedge Funds
- Commodities

Employee Growth



Client Growth



Meketa Investment Group is proud to work for 3.2 million American families everyday



Asset Classes Followed Intensively by Meketa Investment Group

Domestic	International	Private	Real	Fixed	Hedge
Equities	Equities	Equity	Assets	Income	Funds
 Passive Enhanced Index Large Cap Midcap Small Cap Microcap 130/30 	 Large Cap Developed Small Cap Developed Emerging Markets Frontier Markets 	 Buyouts Venture Capital Private Debt Special Situations Secondaries Fund of Funds 	 Public REITs Core Real Estate Value Added Real Estate Opportunistic Real Estate Infrastructure Timber Natural Resources Commodities 	 Short-Term Core Core Plus TIPS High Yield Bank Loans Distressed Global Emerging Markets 	 Long/Short Equity Event Driven Relative Value Fixed Income Arbitrage Multi Strategy Market Neutral Global Macro Fund of Funds Portable Alpha



Executive Summary
As of December 31, 2011

In the fourth quarter, investors returned to risk assets due partly to improved economic data and hopes of a resolution to the sovereign debt issues in the Euro-zone.

- Real GDP growth in the U.S. was 2.8% in the fourth quarter, 1.0% above the level of the prior quarter. Continued slow growth is projected in 2012 with GDP estimates between 1.0% and 2.0%, according to the International Monetary Fund.
- In October, the Federal Reserve began their "Operation Twist" program designed to stimulate growth by further reducing long-term borrowing rates.
- The U.S. unemployment rate declined 0.6% during the fourth quarter, to 8.5%. Total nonfarm payrolls increased by 412,000 during the quarter, led by the private sector, while government sector employment was down slightly.
- In late December, the European Central Bank (ECB) announced it would make \$628 billion in liquidity available to 500 banks across Europe, through three-year loans.

Global equity markets rallied after the third quarter selloff, as strong corporate and better than expected economic data outweighed concerns over the sovereign debt crisis in the Euro-zone.

- Continued sovereign debt concerns in Europe, a weak quarter in Japan (-3.8%), and a strengthening U.S. dollar weighed on international equities. The domestic equity market, as proxied by the Russell 3000 index, rose 12.1%, while the developed international equity market, as proxied by the MSCI EAFE index, gained 3.3%.
- Emerging markets equities (+4.4%) outpaced developed international equities (+3.3%); however, they ended a volatile year down 18.4%.

Spread sectors outperformed government bonds due to investors' renewed appetite for risk.

• The Barclays high yield index led fixed income markets during the quarter, returning 6.5%, compared to 2.7% and 1.1% for the Barclays TIPS and Aggregate indices, respectively.



The Pension Fund's total market value was \$1.57 billion as of December 31, 2011, up from \$1.51 billion at the end of the last quarter.

- The Fund returned 5.1% during the fourth quarter and 2.6% for the calendar year.
- All asset classes experienced positive returns during the quarter. Domestic equities were extremely strong gaining 10.2% during the quarter.
- All asset classes were within their respective target ranges on September 30 with the exception of real estate and private equity. Private equity comprised 14% of the portfolio versus a target of 10% and real estate comprised 4% of the Fund versus a target of 10%.
- The Pension Fund paid out \$13.5 million in benefits during the fourth quarter.



Domestic Equity

- The newly added Rhumbline QSI portfolio performed as expected, providing some downside protection. Since August the portfolio had a return of 1.4% versus a -2.8% return for the Russell 3000 Index.
- NorthPointe had an extremely weak year, returning -20.4% versus -2.9% for the Russell 2000 Growth. The portfolio was hurt by its holdings in the industrial and energy sectors.

International Equity

Vontobel returned 1.4% for the calendar year, outperforming the MSCI EAFE Index by 13.5%. The portfolio's consumer staple exposure as well positions in the U.K. and France led to the strong performance. An underweight position in Financials was also beneficial.

Fixed Income

• Inflation protected securities experienced very strong returns in 2012. The JP Morgan Safety Reserve portfolio gained 13.3% during the year, despite negative real yields.

Natural Resources

 Natural Resources Fund V returned 1.6% over the past year, compared to a 12 month return of -13.4% for the Dow Jones UBS Commodities Index. Fund V's ability to short commodities in downward trending markets enabled them to significantly outperform.





Investment Policy and Strategic Plan

- All investments are made and reviewed in the context of a formal, long-term, strategic investment plan.

Investment Manager Oversight

- All investment managers are provided with operating guidelines to ensure assets are managed consistent with the Fund's policy.
- All managers were in compliance with their investment guidelines.

Safety Reserve®

- The Safety Reserve® is designed to ensure benefit payments regardless of the financial market environment.
- Investments are made in only the safest securities and cash-flow matched against the worst-case benefit projections provided by the actuary.

Crisis Recovery Plan

In an unforeseen crisis, Fund assets will be managed prudently and without disruption according to the annually reviewed Crisis Recovery Plan.

New managers and transfers

- Transferred \$10 million from Wellington Emerging Companies to Opportunistic Emerging Markets Debt in February 2011.
- Transferred \$20 million from DFA Int'l Small Cap to JPMorgan Fixed (\$10mm) and Shenkman Credos Floating Rate (\$10mm) in March 2011.
- Transferred \$10 million from Post to JPMorgan TIPS in March 2011.
- Transferred \$10 million from Northpointe and \$10 million from Wellington Emerging Companies to the Russell 1000 Index in April 2011.
- Replaced both the Investment Firm A accounts and the SSgA Total Market Index with the Russell 1000 Index in May 2011.
- Funded the Real Estate Fund XIII in July 2011.
- Funded the Rhumbline QSI Index in August 2011.
- Replaced Post with Fort Washington High Yield in September 2011.
- Transferred \$10 million from Fort Washington to Shenkman Credos in September 2011.
- Funded the AFL-CIO Housing Investment Trust fixed income strategy in September 2011.
- Funded the Hedge Fund I strategy in November 2011.

Private Market Commitments

- Made commitments to 4 Real Estate limited partnerships. The Fund's real estate partnerships called \$31.3 million in capital and distributed \$1.2 million.
- Made commitments to 3 Natural Resource partnerships. The Fund's natural resources partnerships called \$8.1 million in capital and distributed \$3.2 million.
- Made commitments to 1 Infrastructure partnership. The Fund's infrastructure partnerships called \$8.0 million in capital and distributed \$4.2 million.
- Made commitments to 11 Private Equity partnerships. The Fund's private equity partnerships called \$44.8 million in capital and distributed \$60.7 million.

Other items

- During 2011, the Fund paid out \$66.5 million in Pension benefits.
- Voted to convert the Payden and Rygel account to a Global Fixed Income strategy.

In 2011, Meketa Investment Group held 41 due diligence meetings or conference calls with the Plans' managers

- As a result of these meetings, Meketa Investment Group was able to conclude that there were no significant changes to firm resources or process that are expected to adversely affect investment results.
- Meketa Investment Group will continue to monitor managers proactively and report back to the Trustees.

Public Securities Managers	Guideline Compliance Checked (Yes/No)	Significant Events (Yes/No)	Last Meeting with Investment Committee	Last Meeting with Meketa Investment Group
AllianceBernstein	Yes	No	August 2007	July 2011
Artisan	Yes	No	July 2010	October 2011
Baird	Yes	No	July 2008	January 2012
DFA	Yes	No	April 2008	November 2011
Dodge & Cox	Yes	No	April 2009	September 2011
ERECT Fund	Yes	No	August 2006	April 2011
Franklin Templeton	Yes	No	July 2010	October 2011
HGK	Yes	No		February 2012
ING Clarion	Yes	No	April 2008	July 2011
Jennison	Yes	No	August 2007	November 2011
J.P. Morgan	Yes	No		September 2011
Loomis Sayles	Yes	No	August 2008	November 2011
Mount Lucas	Yes	No	October 2009	July 2011
NorthPointe	Yes	No	March 2010	December 2011
Payden & Rygel	Yes	No	March 2010	February 2011
PIMCO	Yes	No	March 2010	November 2011
Post	Yes	YES	April 2009	July 2011
Shenkman	Yes	No	March 2010	October 2011
SSgA	Yes	No	July 2009	January 2012
Sparta	Yes	No	March 2010	September 2011
Standard Pacific	Yes	No	March 2010	September 2011
T. Rowe Price	Yes	No	August 2008	September 2011
TimesSquare	Yes	No	August 2008	September 2011

Public Securities Managers (continued)	Guideline Compliance Checked (Yes/No)	Significant Events (Yes/No)	Last Meeting with Investment Committee	Last Meeting with Meketa Investment Group
ULLICO	Yes	No	October 2008	December 2011
Van Eck	Yes	No	April 2009	July 2011
Vontobel	Yes	No	June 2009	July 2011
Wellington	Yes	No	July 2010	October 2011

Private Equity Managers	Significant Events (Yes/No)	Last Meeting with Meketa Investment Group
Private Equity Manager A	No	February 2011
Private Equity Manager B	No	April 2010
Private Equity Manager C	No	February 2011
Private Equity Manager D	No	November 2010
Private Equity Manager E	No	July 2009
Private Equity Manager F	No	May 2010
Private Equity Manager G	No	May 2011
Private Equity Manager H	No	July 2010
Private Equity Manager I	No	June 2011
Private Equity Manager J	No	October 2011
Private Equity Manager K	No	June 2010
Private Equity Manager L	No	November 2010
Private Equity Manager M	No	May 2011
Private Equity Manager N	No	November 2010
Private Equity Manager O	No	October 2010
Private Equity Manager P	No	September 2010
Private Equity Manager Q	No	September 2010
Private Equity Manager R	No	November 2011
Private Equity Manager S	No	August 2010
Private Equity Manager T	No	September 2010
Private Equity Manager U	No	May 2010

Private Equity Managers (continued)	Significant Events (Yes/No)	Last Meeting with Meketa Investment Group
Private Equity Manager V	No	January 2011
Private Equity Manager W	No	December 2010
Private Equity Manager X	No	June 2011
Private Equity Manager Y	No	April 2010
Private Equity Manager Z	No	November 2010
Private Equity Manager AA	No	October 2008
Private Equity Manager BB	No	May 2010
Private Equity Manager CC	No	April 2011

Infrastructure Managers	Significant Events (Yes/No)	Last Meeting with Meketa Investment Group
Infrastructure Manager A	No	December 2010
Infrastructure Manager B	No	November 2010
Infrastructure Manager C	No	July 2009
Infrastructure Manager D	No	March 2009
Infrastructure Manager E	No	July 2011
Infrastructure Manager F	No	January 2012
Infrastructure Manager G	No	July 2010

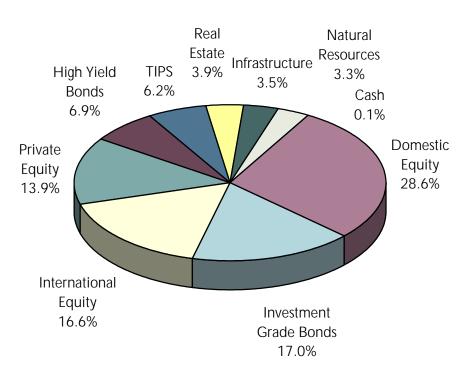
Natural Resources Managers	Significant Events (Yes/No)	Last Meeting with Meketa Investment Group	
Natural Resources Manager A	No	January 2011	
Natural Resources Manager B	No	November 2010	
Natural Resources Manager C	No	June 2011	

Real Estate Managers	Significant Events (Yes/No)	Last Meeting with Meketa Investment Group
Real Estate Manager A	No	July 2011
Real Estate Manager B	No	November 2010
Real Estate Manager C	No	July 2011
Real Estate Manager D	No	December 2010
Real Estate Manager E	No	October 2010

Fund Summary As of December 31, 2011

Aggregate Assets as of 12/31/11







Aggregate Assets Asset Summary as of 12/31/11

	Market Value 12/31/11 (\$ mm)	% of Fund	Target Allocation (%)	Target Range (%)	Market Value 9/30/11 (\$ mm)
Total Fund	1,573.7	100	NA	NA	1,511.0
Domestic Equity Assets	450.5	29	27	22-32	411.7
International Equity Assets	260.7	17	18	13-23	249.5
Investment Grade Bond Assets	268.1	17	15	10-20	264.7
High Yield Assets	108.0	7	5	3-7	103.1
TIPS Assets	98.1	6	5	3-7	109.3
Private Equity Assets	218.5	14	10	7-13	215.9
Real Estate Assets	61.4	4	10	5-15	55.4
Infrastructure Assets	54.7	3	5	3-7	51.4
Natural Resources Assets	52.4	3	5	3-7	47.2
Cash	1.3	< 1	0	< 5	2.9



	Market Value 12/31/11 (\$ mm)	% of Asset Class	% of Fund	Target Allocation (%)	Target Range (%)	Market Value 9/30/11 (\$ mm)
Total Fund	1,573.7	NA	100	NA	NA	1,511.0
Domestic Equity Assets	450.5	100	29	27	22-32	411.7
RhumbLine QSI Index	99.4	22	6			88.7
SSgA Russell 1000 Index-NL	52.8	12	3			51.1
Jennison Large Cap Growth Equity	50.8	11	3			47.5
Dodge & Cox Equity	49.9	11	3			44.9
TimesSquare MidCap Growth	44.1	10	3			39.0
T. Rowe Price MidCap Value	42.1	9	3			38.3
Wellington Micro Cap	30.8	7	2			26.6
Standard Pacific Capital Offshore Fund, Ltd.	26.7	6	2			28.5
NorthPointe Focused Small Cap Growth Equity	23.7	5	2			21.2
Sparta Small Cap Growth Equity	16.9	4	1			15.4
Wellington Emerging Companies	12.0	3	< 1			10.6
Hedge Fund I	1.3	< 1	< 1			0.0
International Equity Assets	260.7	100	17	18	13-23	249.5
Vontobel International Equity	81.7	31	5			76.6
SSgA MSCI EAFE Index-NL	57.1	22	4			55.3
Artisan International Value	41.5	16	3			38.8



	Market Value 12/31/11 (\$ mm)	% of Asset Class	% of Fund	Target Allocation (%)	Target Range (%)	Market Value 9/30/11 (\$ mm)
International Equity Assets (continued)						
Dimensional Emerging Markets Value	27.8	11	2			26.8
Dimensional International Small Cap Value	19.8	8	1			19.6
Artisan International Small Cap	19.3	7	1			19.0
Templeton Frontier Markets	13.5	5	< 1			13.4
Investment Grade Bond Assets	268.1	100	17	15	10-20	264.7
PIMCO Total Return	84.8	32	5			83.4
Loomis Sayles Multi-Sector Full Discretion	46.3	17	3			46.6
Baird Advisors Core Plus Bond	40.5	15	3			40.0
Payden Core Fixed Income	32.9	12	2			32.5
Wellington Opportunistic Emerging Market Debt	26.2	10	2			25.1
ULLICO Separate Account W1	15.8	6	1			15.7
AFL-CIO Housing Investment Trust	10.2	4	< 1			10.0
ERECT Fund I	6.1	2	< 1			6.1
ULLICO "J for Jobs"	5.3	2	< 1			5.3



	Market Value 12/31/11 (\$ mm)	% of Asset Class	% of Fund	Target Allocation (%)	Target Range (%)	Market Value 9/30/11 (\$ mm)
High Yield Assets	108.0	100	7	5	3-7	103.1
Fort Washington High Yield	63.0	58	4			59.3
Shenkman Credos Floating Rate Fund, L.P.	41.3	38	3			40.1
Post Traditional High Yield	3.7	3	< 1			3.7
TIPS Assets	98.1	100	6	5	3-7	109.3
JPMorgan Safety Reserve (TIPS)	77.4	79	5			88.7
HGK Fixed Income	20.7	21	1			20.5
Private Equity Assets	218.5	100	14	10	7-13	215.9
Buyouts	123.9	57	8			122.1
Buyout Fund IX	13.3	6	< 1			12.6
Buyout Fund XIII	8.0	4	< 1			8.9
Buyout Fund X	7.9	4	< 1			7.5
Buyout Fund VIII	7.2	3	< 1			7.1
Buyout Fund XII	6.9	3	< 1			6.4
Buyout Fund XVIII	6.6	3	< 1			6.0
Buyout Fund XV	6.6	3	< 1			6.1
Buyout Fund VII	5.0	2	< 1			5.5
Buyout Fund XVI	4.9	2	< 1			5.7



	Market Value 12/31/11 (\$ mm)	% of Asset Class	% of Fund	Target Allocation (%)	Target Range (%)	Market Value 9/30/11 (\$ mm)
Private Equity Assets (continued)						
Buyout Fund XI	4.8	2	< 1			4.9
Buyout Fund III	4.8	2	< 1			6.2
Buyout Fund XIV	4.3	2	< 1			4.6
Buyout XVII	4.0	2	< 1			4.1
Buyout Fund XX	3.9	2	< 1			3.7
Buyout Fund V	3.8	2	< 1			3.6
Buyout Fund IV	3.1	1	< 1			3.5
Buyout Fund VI	2.9	1	< 1			3.1
Buyout Fund XXVIII	2.7	1	< 1			1.9
Buyout Fund XXVI	2.6	1	< 1			1.7
Buyout Fund XXV	2.3	1	< 1			2.2
Buyout Fund XXIV	2.1	< 1	< 1			2.2
Buyout Fund XXIX	1.9	< 1	< 1			1.8
Buyout Fund XXIII	1.8	< 1	< 1			1.8
Buyout Fund XXII	1.7	< 1	< 1			3.2
Buyout Fund II	1.6	< 1	< 1			2.0
Buyout Fund XXI	1.5	< 1	< 1			1.2



	Market Value 12/31/11 (\$ mm)	% of Asset Class	% of Fund	Target Allocation (%)	Target Range (%)	Market Value 9/30/11 (\$ mm)
Private Equity Assets (continued)						
Buyout Fund XXXVIII	1.5	< 1	< 1			1.2
Buyout Fund I	1.5	< 1	< 1			1.5
Buyout Fund XXXVII	1.0	< 1	< 1			0.6
Buyout Fund XXXXV	1.0	< 1	< 1			0.0
Buyout Fund XXXXIV	0.7	< 1	< 1			0.0
Buyout Fund XXVII	0.7	< 1	< 1			0.7
Buyout Fund XXXXIII	0.5	< 1	< 1			0.2
Buyout Fund XXXXII	0.4	< 1	< 1			0.0
Buyout Fund XXXXI	0.3	< 1	< 1			0.2
Buyout Fund IV	0.3	< 1	< 1			0.0
Buyout Fund XXXX	0.0	< 1	< 1			0.0
Buyout Fund XIX	0.0	0	0			0.0
Private Debt	44.1	20	3			44.8
Private Debt Fund III	8.6	4	< 1			8.7
Private Debt Fund VI	7.4	3	< 1			8.4
Private Debt Fund VII	6.0	3	< 1			5.8
Private Debt Fund II	5.4	2	< 1			6.5



	Market Value 12/31/11 (\$ mm)	% of Asset Class	% of Fund	Target Allocation (%)	Target Range (%)	Market Value 9/30/11 (\$ mm)
Private Equity Assets (continued)						
Private Debt Fund V	4.1	2	< 1			3.5
Private Debt Fund IV	4.1	2	< 1			4.0
Private Debt Fund VIII	3.7	2	< 1			3.4
Private Debt Fund I	3.6	2	< 1			3.8
Private Debt Fund VI	0.7	< 1	< 1			0.4
Private Debt Fund XIX	0.4	< 1	< 1			0.4
Venture Capital Funds	14.8	7	< 1			12.7
Venture Capital Fund I	4.0	2	< 1			4.2
Venture Capital Fund XVIII	3.0	1	< 1			2.1
Venture Capital Fund IV	3.0	1	< 1			2.2
Venture Capital Fund III	1.9	< 1	< 1			1.7
Venture Capital Fund II	0.9	< 1	< 1			0.9
Venture Capital Fund VIII	0.9	< 1	< 1			0.6
Venture Capital Fund V	0.6	< 1	< 1			0.5
Venture Capital Fund XXII	0.4	< 1	< 1			0.4
Venture Capital Fund XIX	0.2	< 1	< 1			0.2



	Market Value 12/31/11 (\$ mm)	% of Asset Class	% of Fund	Target Allocation (%)	Target Range (%)	Market Value 9/30/11 (\$ mm)
Private Equity Assets (continued)						
Special Situations	13.5	6	< 1			13.6
Special Situations Fund II	7.4	3	< 1			6.5
Special Situations Fund V	2.9	1	< 1			2.8
Special Situations Fund VI	1.4	< 1	< 1			1.5
Special Situations Fund I	1.3	< 1	< 1			2.4
Special Situations Fund VII	0.6	< 1	< 1			0.4
Fund of Funds	12.8	6	< 1			14.2
Fund of Funds I	12.8	6	< 1			14.2
Secondary	9.4	4	< 1			8.6
Secondary Fund II	5.2	2	< 1			5.4
Secondary Fund I	4.2	2	< 1			3.1
Real Estate Assets	61.4	100	4	10	5-15	55.4
Real Estate Fund I	20.4	33	1			19.1
Real Estate Fund XIII	15.2	25	< 1			12.0
Real Estate Fund II	9.6	16	< 1			9.0
Real Estate Fund XLIII	4.9	8	< 1			5.2
Real Estate Fund VI	4.3	7	< 1			4.6



	Market Value 12/31/11 (\$ mm)	% of Asset Class	% of Fund	Target Allocation (%)	Target Range (%)	Market Value 9/30/11 (\$ mm)
Real Estate Assets (continued)						
Real Estate Fund VIII	3.1	5	< 1			2.2
Real Estate Fund VII	1.9	3	< 1			2.1
Real Estate Fund XXXIII	0.9	1	< 1			0.9
Real Estate Fund LII	0.8	1	< 1			0.0
Real Estate Fund LIII	0.2	< 1	< 1			0.3
Real Estate Fund XVIII	0.1	< 1	< 1			0.0
Infrastructure Assets	54.7	100	3	5	3-7	51.4
Infrastructure Fund I	16.9	31	1			16.5
Infrastructure Fund II	15.6	29	< 1			16.1
Infrastructure Fund III	6.0	11	< 1			5.7
Infrastructure Fund IV	4.3	8	< 1			4.1
Infrastructure Fund V	3.1	6	< 1			3.0
Infrastructure Fund VIII	2.7	5	< 1			1.8
Infrastructure Fund VI	2.7	5	< 1			2.5
Infrastructure Fund XII	1.2	2	< 1			0.0
Infrastructure Fund VII	1.2	2	< 1			0.8
Infrastructure Fund IX	0.9	2	< 1			0.8



	Market Value 12/31/11 (\$ mm)	% of Asset Class	% of Fund	Target Allocation (%)	Target Range (%)	Market Value 9/30/11 (\$ mm)
Natural Resources Assets	52.4	100	3	5	3-7	47.2
Natural Resources Fund III	21.9	42	1			20.2
Natural Resources Fund V	10.2	19	< 1			10.4
Natural Resources Fund I	6.5	12	< 1			6.3
Natural Resources Fund II	4.0	8	< 1			3.3
Natural Resources Fund VI	2.8	5	< 1			2.3
Natural Resources Fund IX	2.3	4	< 1			2.0
Natural Resources Fund X	2.1	4	< 1			2.0
Natural Resources Fund XIII	0.9	2	< 1			0.1
Natural Resources Fund XIV	0.8	2	< 1			0.0
Natural Resources Fund XII	0.7	1	< 1			0.6
Natural Resources Fund XV	0.0	< 1	< 1			0.0
Cash	1.3	100	< 1	0	< 5	2.9
Payden Enhanced Cash	23.3					35.3
Master Account	1.3	100	< 1			2.9
State Street Bank STIF	0.0	0	0			0.0



	4Q11 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	20 YR (%)	Inception Date	Since Inception (%)
Total Fund	5.1	2.6	13.8	3.2	6.2	9.1	7/1/79	10.5
CPI (inflation)	-0.5	3.0	2.4	2.3	2.5	2.5		3.6
Domestic Equity	10.2	-1.9	17.5	0.7	5.1	NA	7/1/97	6.9
S&P 500	11.8	2.1	14.1	-0.3	2.9	7.8		4.3
Russell 3000	12.1	1.0	14.9	0.0	3.5	8.0		4.7
International Equity	4.6	-9.6	12.4	-1.9	6.3	NA	11/1/97	5.2
MSCI ACWI (ex. U.S.)	3.7	-13.7	10.7	-2.9	6.3	5.4		4.6
Fixed Income	2.6	7.6	12.6	7.2	6.1	6.7	7/1/79	8.4
Barclays Universal	1.4	7.4	7.7	6.4	6.0	6.6		NA
Real Estate	1.7	5.0	15.4	NA	NA	NA	7/1/08	2.0
NAREIT AII	14.3	7.3	20.4	-2.1	9.5	10.2		4.3
NCREIF Property	3.0	14.3	2.4	3.1	8.1	8.1		-0.5
Natural Resources Assets	4.4	3.1	NA	NA	NA	NA	2/1/09	1.9
90-Day T-Bills + 4%	1.0	4.0	4.1	5.5	5.9	7.4		4.1



	4Q11 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	20 YR (%)	Inception Date	Since Inception (%)
Total Fund	5.1	2.6	13.8	3.2	6.2	9.1	7/1/79	10.5
CPI (inflation)	-0.5	3.0	2.4	2.3	2.5	2.5		3.6
Domestic Equity	10.2	-1.9	17.5	0.7	5.1	NA	7/1/97	6.9
RhumbLine QSI Index	12.1	NA	NA	NA	NA	NA	8/1/11	1.4
QSI Index	12.3	6.1	14.8	2.8	5.3	NA		1.6
Russell 3000	12.1	1.0	14.9	0.0	3.5	8.0		-2.8
SSgA Russell 1000 Index-NL	11.8	NA	NA	NA	NA	NA	5/1/11	-7.7
Russell 1000	11.8	1.5	14.8	0.0	3.3	8.0		-7.3
Jennison Large Cap Growth Equity	7.2	1.1	17.6	2.7	3.5	NA	1/1/96	7.1
Russell 1000 Growth	10.6	2.6	18.0	2.5	2.6	6.6		5.5
Dodge & Cox Equity	11.2	-3.6	13.6	-3.8	4.4	NA	9/1/00	5.7
Russell 1000 Value	13.1	0.4	11.5	-2.6	3.9	8.9		3.3
TimesSquare MidCap Growth	13.3	-0.7	18.0	4.1	NA	NA	4/1/06	4.8
Russell MidCap Growth	11.2	-1.7	22.1	2.4	5.3	8.2		2.6
T. Rowe Price MidCap Value	9.8	-4.5	19.4	1.9	8.8	NA	2/1/99	10.6
Russell MidCap Value	13.4	-1.4	18.2	0.0	7.7	11.0		7.7
Wellington Micro Cap	16.2	-3.2	30.2	4.8	NA	NA	6/1/06	5.8
Russell Microcap	13.8	-9.3	14.2	-3.8	4.7	NA		-1.9



	4Q11 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	20 YR (%)	Inception Date	Since Inception (%)
Domestic Equity (continued)								
Standard Pacific Capital Offshore Fund, Ltd.	-6.2	-4.5	NA	NA	NA	NA	7/1/10	5.1
HFRI Equity Hedge (Long/Short Equity)	2.2	-8.0	8.2	0.5	4.6	11.6		2.5
NorthPointe Focused Small Cap Growth Equity	12.1	-20.4	17.7	NA	NA	NA	10/1/08	4.1
Russell 2000 Growth	15.0	-2.9	19.0	2.1	4.5	5.8		6.4
Sparta Small Cap Growth Equity	10.0	-7.2	16.8	NA	NA	NA	10/1/08	6.9
Russell 2000 Growth	15.0	-2.9	19.0	2.1	4.5	5.8		6.4
Wellington Emerging Companies	13.4	-8.6	21.2	-0.6	8.3	NA	11/1/96	10.5
Russell 2000 Value	16.0	-5.5	12.4	-1.9	6.4	10.7		8.5
EnTrust Special Opportunities Fund II, Ltd.	NA	NA	NA	NA	NA	NA	12/1/11	NA
HFRI Relative Value Index	1.3	0.6	12.1	4.7	6.2	9.9		0.5
International Equity	4.6	-9.6	12.4	-1.9	6.3	NA	11/1/97	5.2
Vontobel International Equity	6.9	1.4	NA	NA	NA	NA	8/1/09	11.8
MSCI EAFE	3.3	-12.1	7.6	-4.7	4.7	4.6		2.4
SSgA MSCI EAFE Index-NL	3.3	-11.9	7.9	-4.4	NA	NA	10/1/06	-2.4
MSCI EAFE	3.3	-12.1	7.6	-4.7	4.7	4.6		-2.7



	4Q11 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	20 YR (%)	Inception Date	Since Inception (%)
International Equity (continued)								
Artisan International Value	7.1	-5.8	NA	NA	NA	NA	8/1/09	11.0
MSCI EAFE	3.3	-12.1	7.6	-4.7	4.7	4.6		2.4
Dimensional Emerging Markets Value	3.6	-25.6	20.4	3.2	NA	NA	7/1/06	7.4
MSCI Emerging Markets	4.4	-18.4	20.1	2.4	13.9	NA		6.2
Dimensional International Small Cap Value	1.4	-15.4	10.8	NA	NA	NA	9/1/08	-1.9
MSCI EAFE Small Cap	-0.6	-15.9	14.6	-4.1	9.0	NA		-0.9
Artisan International Small Cap	2.1	-13.5	NA	NA	NA	NA	10/1/10	-6.0
MSCI EAFE Small Cap	-0.6	-15.9	14.6	-4.1	9.0	NA		-4.9
Templeton Frontier Markets	0.5	-18.1	NA	NA	NA	NA	10/1/10	-9.8
MSCI Frontier Market	-1.9	-18.7	3.9	-6.1	NA	NA		-9.9
Fixed Income	2.6	7.6	12.6	7.2	6.1	6.7	7/1/79	8.4
PIMCO Total Return	1.7	8.9	11.9	9.1	7.7	7.8	9/1/80	9.6
Barclays Gov't/Credit	1.2	8.7	6.6	6.5	5.9	6.6		8.8
JPMorgan Safety Reserve (TIPS)	2.6	13.3	10.3	8.0	5.6	NA	4/1/95	6.2
Custom Benchmark ¹	2.7	13.6	10.4	7.7	5.3	NA		5.9

¹ Through May 31, 2006, J.P. Morgan was benchmarked to the Barclays 1-3 Year Government index. Beginning June 1, 2006, the benchmark changed to 50% Barclays 1-3 Year Government index and 50% Barclays U.S. TIPS index. Beginning on November 1, 2007, the benchmark changed to the Barclays U.S. TIPS index.



	4Q11 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	20 YR (%)	Inception Date	Since Inception (%)
Fixed Income (continued)	2.6	7.6	12.6	7.2	6.1	6.7	7/1/79	8.4
Fort Washington High Yield	6.4	NA	NA	NA	NA	NA	10/1/11	6.4
Barclays High Yield BB/B	6.0	6.1	20.8	7.0	8.0	NA		6.0
Loomis Sayles Multi-Sector Full Discretion	2.2	4.5	18.3	7.7	7.2	NA	1/1/96	7.1
75% Barclays Credit / 25% Barclays HY	2.9	7.6	14.2	7.1	7.1	7.4		6.7
Shenkman Credos Floating Rate Fund, L.P.	3.0	1.0	NA	NA	NA	NA	6/1/10	4.7
CSFB Leveraged Loan	2.7	1.8	17.5	3.3	4.7	5.9		5.1
Baird Advisors Core Plus Bond	1.2	8.3	NA	NA	NA	NA	5/1/09	7.6
Barclays Aggregate	1.1	7.8	6.8	6.5	5.8	6.5		7.4
Payden Core Fixed Income	1.4	6.7	7.3	6.0	NA	NA	5/1/02	5.5
Barclays Aggregate	1.1	7.8	6.8	6.5	5.8	6.5		5.8
Wellington Opportunistic Emerging Market Debt	4.5	5.3	NA	NA	NA	NA	10/1/10	3.7
JPMorgan EMBI Global	5.1	8.5	15.9	8.1	11.0	NA		5.1
HGK Fixed Income	0.6	3.0	NA	NA	NA	NA	4/1/10	2.0
Merrill Lynch Treasury 1-3 Year	0.2	1.6	1.6	3.7	3.3	4.7		1.8
ULLICO Separate Account W1	1.1	4.5	NA	NA	NA	NA	1/1/10	2.8
Barclays Mortgage	0.9	6.2	5.8	6.5	5.7	6.4		5.8



	4Q11 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	20 YR (%)	Inception Date	Since Inception (%)
Fixed Income (continued)								
AFL-CIO Housing Investment Trust	1.5	NA	NA	NA	NA	NA	10/1/11	1.5
Barclays Mortgage	0.9	6.2	5.8	6.5	5.7	6.4		0.9
ERECT Fund I	0.6	1.9	2.2	4.1	NA	NA	12/1/06	4.0
Barclays Mortgage	0.9	6.2	5.8	6.5	5.7	6.4		6.4
ULLICO "J for Jobs"	0.6	3.5	-1.8	1.7	NA	NA	10/1/06	2.1
Barclays Mortgage	0.9	6.2	5.8	6.5	5.7	6.4		6.5
Real Estate	1.7	5.0	15.4	NA	NA	NA	7/1/08	2.0
Real Estate Fund I	6.9	-4.1	15.4	NA	NA	NA	8/1/08	-0.2
S&P/Citigroup BMI World Property Index	6.2	-5.7	13.9	-6.9	NA	NA		-1.9
Real Estate Fund XIII	2.4	NA	NA	NA	NA	NA	7/1/11	2.6
NCREIF Property	3.0	14.3	2.4	3.1	8.1	8.1		6.4
NCREIF ODCE	3.0	16.0	-1.8	-0.3	6.2	7.2		6.6
Natural Resources Assets	4.4	3.1	NA	NA	NA	NA	2/1/09	1.9
Natural Resources Fund III	8.7	-15.7	NA	NA	NA	NA	11/1/09	9.1
S&P Global Natural Resources	7.8	-14.9	8.8	2.4	NA	NA		0.8
Natural Resources Fund V	-1.8	1.6	NA	NA	NA	NA	4/1/10	1.1
Dow Jones-Commodity U.S. Index	0.3	-13.4	6.3	-3.3	5.4	5.1		3.6



	4Q11 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	20 YR (%)	Inception Date	Since Inception (%)
Cash								
Payden Enhanced Cash	0.1	0.5	1.3	1.6	2.1	NA	6/1/92	3.7
90-Day T-Bills	0.0	0.1	0.1	1.4	1.9	3.3		3.3



	2011 (%)	2010 (%)	2009 (%)	2008 (%)	2007 (%)	2006 (%)	2005 (%)	2004 (%)	2003 (%)	2002 (%)
Total Fund	2.6	15.7	24.1	-26.7	8.3	13.1	6.8	13.1	27.1	-10.0
CPI (inflation)	3.0	1.5	2.7	0.1	4.1	2.5	3.4	3.3	1.9	2.4
Domestic Equity	-1.9	20.7	37.0	-39.3	5.0	14.7	8.0	15.6	36.0	-18.4
S&P 500	2.1	15.1	26.5	-37.0	5.5	15.8	4.9	10.9	28.7	-22.1
Russell 3000	1.0	16.9	28.3	-37.3	5.1	15.7	6.1	11.9	31.1	-21.5
International Equity	-9.6	14.2	37.3	-45.0	16.4	22.0	8.8	21.1	37.1	-7.7
MSCI ACWI (ex. U.S.)	-13.7	11.2	41.4	-45.5	16.7	26.7	16.6	20.9	40.8	-14.9
Fixed Income	7.6	9.3	21.3	-7.5	7.2	4.8	1.8	5.2	7.8	6.0
Barclays Universal	7.4	7.2	8.6	2.4	6.5	5.0	2.7	5.0	5.8	9.8
Real Estate	5.0	14.1	28.3	NA						
NAREIT AII	7.3	27.6	27.4	-37.3	-17.8	34.4	8.3	30.4	38.5	5.2
NCREIF Property	14.3	13.1	-16.9	-6.5	15.8	16.6	20.1	14.5	9.0	6.7
Natural Resources Assets	3.1	16.5	NA							
90-Day T-Bills + 4%	4.0	4.1	4.1	6.1	9.0	8.9	7.1	5.2	5.1	5.7



	2011 (%)	2010 (%)	2009 (%)	2008 (%)	2007 (%)	2006 (%)	2005 (%)	2004 (%)	2003 (%)	2002 (%)
Total Fund	2.6	15.7	24.1	-26.7	8.3	13.1	6.8	13.1	27.1	-10.0
CPI (inflation)	3.0	1.5	2.7	0.1	4.1	2.5	3.4	3.3	1.9	2.4
Domestic Equity	-1.9	20.7	37.0	-39.3	5.0	14.7	8.0	15.6	36.0	-18.4
RhumbLine QSI Index										
QSI Index	6.1	15.1	24.0	-26.4	2.8	14.2	5.5	13.5	27.4	-16.2
Russell 3000	1.0	16.9	28.3	-37.3	5.1	15.7	6.1	11.9	31.1	-21.5
SSgA Russell 1000 Index-NL	NA									
Russell 1000	1.5	16.1	28.4	-37.6	5.8	15.5	6.3	11.4	29.9	-21.7
Jennison Large Cap Growth Equity	1.1	12.1	43.7	-37.5	12.4	3.1	14.7	10.8	34.6	-29.8
Russell 1000 Growth	2.6	16.7	37.2	-38.4	11.8	9.1	5.3	6.3	29.7	-27.9
Dodge & Cox Equity	-3.6	14.1	33.2	-43.9	-0.1	19.3	9.5	19.9	33.4	-10.2
Russell 1000 Value	0.4	15.5	19.7	-36.8	-0.2	22.2	7.1	16.5	30.0	-15.5
TimesSquare MidCap Growth	-0.7	19.3	38.7	-32.9	10.9	NA	NA	NA	NA	NA
Russell MidCap Growth	-1.7	26.4	46.3	-44.3	11.4	10.6	12.1	15.5	42.7	-27.4
T. Rowe Price MidCap Value	-4.5	18.8	50.0	-36.2	1.0	22.4	8.3	22.6	41.2	-7.3
Russell MidCap Value	-1.4	24.8	34.2	-38.4	-1.4	20.2	12.6	23.7	38.1	-9.6
Wellington Micro Cap	-3.2	42.5	59.9	-47.2	8.3	NA	NA	NA	NA	NA
Russell Microcap	-9.3	28.9	27.5	-39.8	-8.0	16.5	3.1	14.1	66.4	-16.1



	2011 (%)	2010 (%)	2009 (%)	2008 (%)	2007 (%)	2006 (%)	2005 (%)	2004 (%)	2003 (%)	2002 (%)
Domestic Equity (continued)										
Standard Pacific Capital Offshore Fund, Ltd.	-4.5	NA								
HFRI Equity Hedge (Long/Short Equity)	-8.0	10.5	24.6	-26.6	10.5	11.7	10.6	7.7	20.5	-4.7
NorthPointe Focused Small Cap Growth Equity	-20.4	48.0	38.5	NA						
Russell 2000 Growth	-2.9	29.1	34.5	-38.5	7.0	13.3	4.2	14.3	48.5	-30.3
Sparta Small Cap Growth Equity	-7.2	25.4	36.8	NA						
Russell 2000 Growth	-2.9	29.1	34.5	-38.5	7.0	13.3	4.2	14.3	48.5	-30.3
Wellington Emerging Companies	-8.6	33.2	46.4	-44.5	-2.0	17.2	10.0	25.1	61.4	-12.3
Russell 2000 Value	-5.5	24.5	20.6	-28.9	-9.8	23.5	4.7	22.2	46.0	-11.4
EnTrust Special Opportunities Fund II, Ltd.	NA									
HFRI Relative Value Index	0.6	11.4	25.8	-18.0	8.9	12.3	6.0	5.6	9.7	5.4
International Equity	-9.6	14.2	37.3	-45.0	16.4	22.0	8.8	21.1	37.1	-7.7
Vontobel International Equity	1.4	13.5	NA							
MSCI EAFE	-12.1	7.7	31.8	-43.4	11.2	26.3	13.5	20.2	38.6	-15.9
SSgA MSCI EAFE Index-NL	-11.9	8.0	32.2	-43.1	11.4	NA	NA	NA	NA	NA
MSCI EAFE	-12.1	7.7	31.8	-43.4	11.2	26.3	13.5	20.2	38.6	-15.9
Artisan International Value	-5.8	20.8	NA							
MSCI EAFE	-12.1	7.7	31.8	-43.4	11.2	26.3	13.5	20.2	38.6	-15.9



	2011 (%)	2010 (%)	2009 (%)	2008 (%)	2007 (%)	2006 (%)	2005 (%)	2004 (%)	2003 (%)	2002 (%)
International Equity (continued)										
Dimensional Emerging Markets Value	-25.6	22.0	92.1	-53.9	45.6	NA	NA	NA	NA	NA
MSCI Emerging Markets	-18.4	18.9	78.5	-53.3	39.4	32.2	34.0	25.6	55.8	-6.2
Dimensional International Small Cap Value	-15.4	15.2	39.5	NA						
MSCI EAFE Small Cap	-15.9	22.0	46.8	-47.0	1.4	19.3	26.2	30.8	61.3	-7.8
Artisan International Small Cap	-13.5	NA								
MSCI EAFE Small Cap	-15.9	22.0	46.8	-47.0	1.4	19.3	26.2	30.8	61.3	-7.8
Templeton Frontier Markets	-18.1	NA								
MSCI Frontier Market	-18.7	23.8	11.6	-54.1	41.9	-8.9	72.7	22.6	43.5	NA



	2011 (%)	2010 (%)	2009 (%)	2008 (%)	2007 (%)	2006 (%)	2005 (%)	2004 (%)	2003 (%)	2002 (%)
Fixed Income	7.6	9.3	21.3	-7.5	7.2	4.8	1.8	5.2	7.8	6.0
PIMCO Total Return	8.9	9.7	17.2	0.7	9.4	4.3	3.4	5.2	7.2	11.4
Barclays Gov't/Credit	8.7	6.6	4.5	5.7	7.2	3.8	2.3	4.2	4.7	11.0
JPMorgan Safety Reserve (TIPS)	13.3	7.1	10.5	-1.1	11.0	4.1	1.8	0.7	2.3	7.8
Custom Benchmark ¹	13.6	6.3	11.4	-2.4	10.4	3.8	1.7	1.1	2.0	6.0
Fort Washington High Yield	NA									
Barclays High Yield BB/B	6.1	14.3	45.4	-22.5	2.5	10.7	3.2	10.0	23.3	-0.5
Barclays High Yield	5.0	15.1	58.2	-26.2	1.9	11.8	2.7	11.1	29.0	-1.4
Loomis Sayles Multi-Sector Full Discretion	4.5	13.7	39.3	-17.3	6.0	8.9	2.8	9.5	19.2	-5.1
75% Barclays Credit / 25% Barclays HY	7.6	10.1	25.6	-9.2	4.3	6.1	2.2	6.7	12.7	7.6
Shenkman Credos Floating Rate Fund, L.P.	1.0	NA								
CSFB Leveraged Loan	1.8	10.0	44.9	-28.8	1.9	7.2	5.7	5.6	11.0	1.1
Baird Advisors Core Plus Bond	8.3	6.8	NA							
Barclays Aggregate	7.8	6.5	5.9	5.2	7.0	4.3	2.4	4.3	4.1	10.3

¹ Through May 31, 2006, J.P. Morgan was benchmarked to the Barclays 1-3 Year Government index. Beginning June 1, 2006, the benchmark changed to 50% Barclays 1-3 Year Government index and 50% Barclays U.S. TIPS index. Beginning on November 1, 2007, the benchmark changed to the Barclays U.S. TIPS index.



	2011 (%)	2010 (%)	2009 (%)	2008 (%)	2007 (%)	2006 (%)	2005 (%)	2004 (%)	2003 (%)	2002 (%)
Fixed Income (continued)										
Payden Core Fixed Income	6.7	6.9	8.4	2.4	5.5	3.8	1.7	4.8	4.4	NA
Barclays Aggregate	7.8	6.5	5.9	5.2	7.0	4.3	2.4	4.3	4.1	10.3
Wellington Opportunistic Emerging Market Debt	5.3	NA								
JPMorgan EMBI Global	8.5	12.0	28.2	-10.9	6.3	9.9	10.7	11.7	25.7	13.1
HGK Fixed Income	3.0	NA								
Merrill Lynch Treasury 1-3 Year	1.6	2.3	8.0	6.6	7.3	4.0	1.7	0.9	1.9	5.8
ULLICO Separate Account W1	4.5	1.2	NA							
Barclays Mortgage	6.2	5.4	5.9	8.3	6.9	5.2	2.6	4.7	3.1	8.7
AFL-CIO Housing Investment Trust	NA									
Barclays Mortgage	6.2	5.4	5.9	8.3	6.9	5.2	2.6	4.7	3.1	8.7
ERECT Fund I	1.9	5.6	-0.9	6.4	7.8	NA	NA	NA	NA	NA
Barclays Mortgage	6.2	5.4	5.9	8.3	6.9	5.2	2.6	4.7	3.1	8.7
ULLICO "J for Jobs"	3.5	-0.6	-7.8	5.3	9.1	NA	NA	NA	NA	NA
Barclays Mortgage	6.2	5.4	5.9	8.3	6.9	5.2	2.6	4.7	3.1	8.7



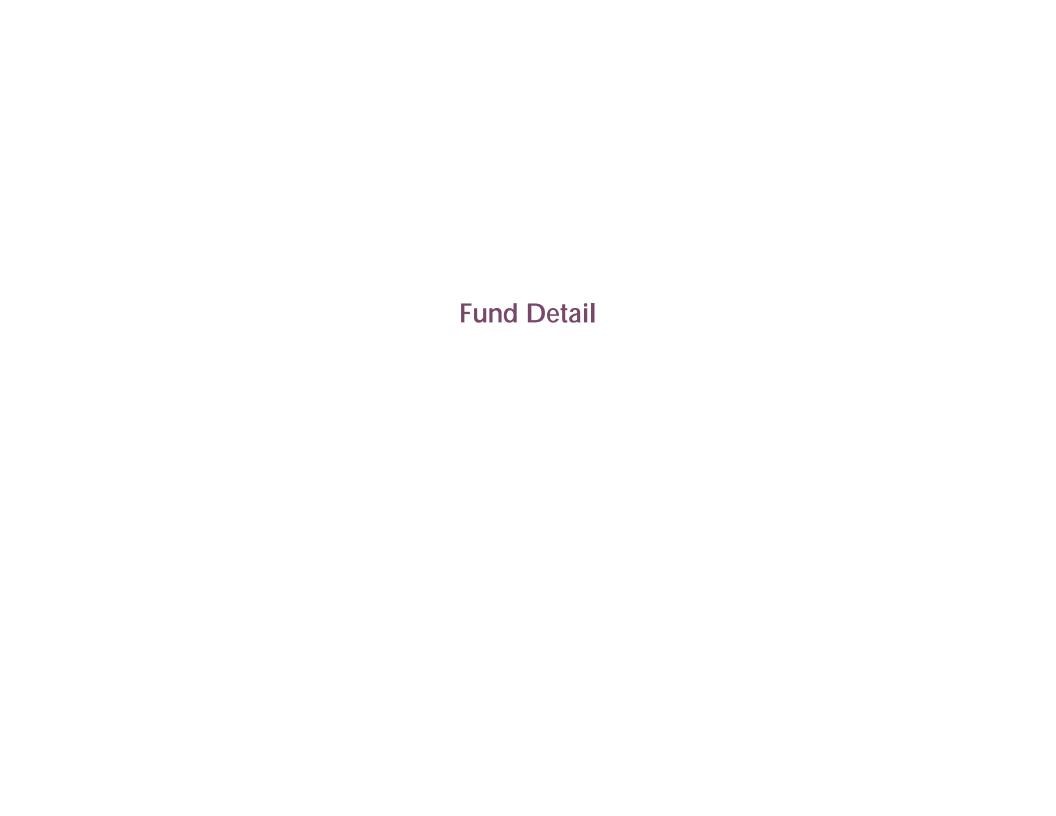
	2011 (%)	2010 (%)	2009 (%)	2008 (%)	2007 (%)	2006 (%)	2005 (%)	2004 (%)	2003 (%)	2002 (%)
Real Estate	5.0	14.1	28.3	NA						
Real Estate Fund I	-4.1	17.0	36.9	NA						
S&P/Citigroup BMI World Property Index	-5.7	17.8	32.9	-46.7	-11.1	NA	NA	NA	NA	NA
Real Estate Fund XIII	NA									
NCREIF Property	14.3	13.1	-16.9	-6.5	15.8	16.6	20.1	14.5	9.0	6.7
NCREIF ODCE	16.0	16.4	-29.9	-10.0	16.0	16.3	21.4	13.1	9.3	5.5
Natural Resources Assets	3.1	16.5	NA							
Natural Resources Fund III	-15.7	30.0	NA							
S&P Global Natural Resources	-14.9	11.0	36.1	-38.3	41.7	29.8	26.8	24.4	41.6	NA
Natural Resources Fund V	1.6	NA								
Dow Jones-Commodity U.S. Index	-13.4	16.7	18.7	-36.6	11.1	-2.7	21.4	9.1	23.9	25.9
Cash										
Payden Enhanced Cash	0.5	1.1	2.3	-0.2	4.2	4.9	3.0	1.4	1.4	2.5
90-Day T-Bills	0.1	0.1	0.2	2.1	4.9	4.7	2.8	1.2	1.1	1.8



Aggregate Assets Universe Comparison as of 12/31/11

Total Fund vs. Master Universe 20% 15% 10% 0% 4Q11 1 YR 3 YR 5 YR 10 YR (%) (%) (%) (%) (%) **Total Fund** 5.1 2.6 13.8 3.2 6.2 25th percentile 11.7 1.9 5.3 6.6 1.2 Median 6.0 .04 11.1 1.5 5.0 9.7 75th percentile 5.4 -0.4 1.3 4.4 60% Wilshire 5000 / 40% Barclays Aggregate 7.7 4.1 12.2 3.2 5.0



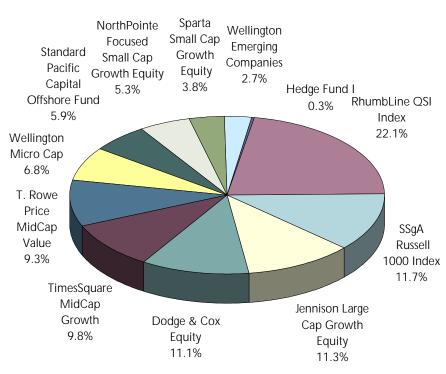


Domestic Equity Assets
As of December 31, 2011



Domestic Equity Assets as of 12/31/11







Domestic Equity Assets Risk as of 12/31/11

Risk: (sixty months)	Aggregate Domestic Equity 12/31/11	Russell 3000 12/31/11
Annualized Return (%)	0.7	0.0
Standard Deviation (%)	21.4	20.1
Best Monthly Return (%)	13.5	11.5
Worst Monthly Return (%)	-18.6	-17.7
Beta	1.05	1.00
Correlation (R ²) to Index	0.99	1.00
Correlation to Total Fund Return	0.97	NA
Sharpe Measure (risk-adjusted return) ¹	Neg.	Neg.
Information Ratio	0.26	NA

¹ A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.



Domestic Equity Assets Style as of 12/31/11





Domestic Equity Assets Characteristics as of 12/31/11

Capitalization Structure:	Aggregate Domestic Equity 12/31/11	Russell 3000 12/31/11	Aggregate Domestic Equity 9/30/11
Weighted Average Market Cap. (US\$ billion)	44.4	78.3	40.8
Median Market Cap. (US\$ billion)	3.5	0.9	3.2
Large (% over US\$10 billion)	54	73	52
Medium (% US\$2 billion to US\$10 billion)	24	19	26
Small (% under US\$2 billion)	22	7	23
Fundamental Structure:			
Price-Earnings Ratio	20	18	18
Price-Book Value Ratio	3.3	3.2	3.0
Dividend Yield (%)	1.6	2.0	1.7
Historical Earnings Growth Rate (%)	8	8	8
Projected Earnings Growth Rate (%)	12	11	12



Domestic Equity Assets Diversification as of 12/31/11

Diversification:	Aggregate Domestic Equity 12/31/11	Russell 3000 12/31/11	Aggregate Domestic Equity 9/30/11
Number of Holdings	1,377	2,946	1,374
% in 5 largest holdings	5	10	5
% in 10 largest holdings	9	17	9

Largest Five Holdings:	% of Portfolio	Economic Sector
ExxonMobil	1.3	Energy
Microsoft	1.0	Software & Services
IBM	1.0	Software & Services
Apple	1.0	Technology Hardware
Schlumberger	0.9	Energy



Domestic Equity Assets Sector Allocation as of 12/31/11

Sector Allocation (%):	Aggregate Domestic Equity 12/31/11	Russell 3000 12/31/11	Aggregate Domestic Equity 9/30/11
Information Technology	22	18	22
Consumer Discretionary	14	12	15
Materials	5	4	5
Health Care	13	12	13
Industrials	12	11	11
Telecom	2	3	2
Energy	10	11	9
Financials	14	15	13
Utilities	2	4	3
Consumer Staples	6	10	7



International Equity Assets as of 12/31/11

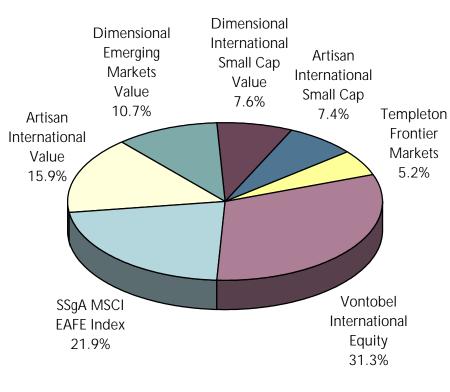
Client Pension Fund

International Equity Assets As of December 31, 2011



International Equity Assets as of 12/31/11







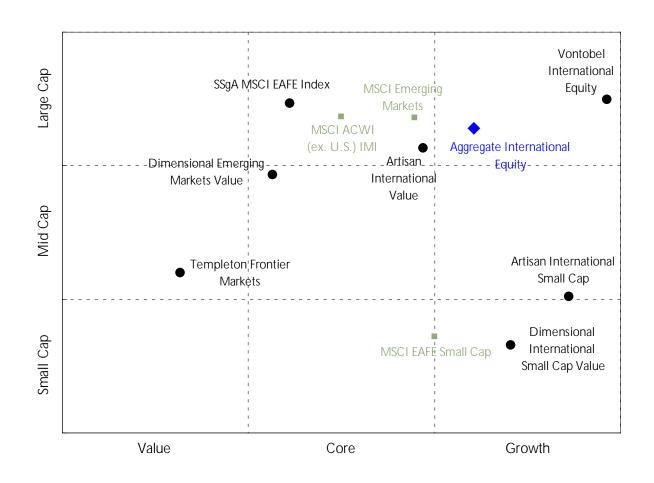
International Equity Assets Risk as of 12/31/11

Risk: (sixty months)	Aggregate International Equity 12/31/11	MSCI ACWI (ex. U.S.) 12/31/11
Annualized Return (%)	-1.9	-2.9
Standard Deviation (%)	23.3	23.9
Best Monthly Return (%)	13.0	13.6
Worst Monthly Return (%)	-23.4	-22.0
Beta	0.96	1.00
Correlation (R ²) to Index	0.99	1.00
Correlation to Total Fund Return	0.97	NA
Sharpe Measure (risk-adjusted return) ¹	Neg.	Neg.
Information Ratio	0.33	NA

¹ A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.



International Equity Assets Style as of 12/31/11





International Equity Assets Characteristics as of 12/31/11

Aggregate International Equity 12/31/11	MSCI ACWI (ex. U.S.) 12/31/11	Aggregate International Equity 9/30/11
35.5	48.1	31.9
381	5,492	382
55	74	53
27	24	28
18	1	19
16	15	16
2.9	2.3	2.7
3.1	3.4	3.3
8	6	9
11	8	9
	International Equity 12/31/11 35.5 381 55 27 18 16 2.9 3.1 8	International Equity 12/31/11 MSCI ACWI (ex. U.S.) 12/31/11 35.5 48.1 381 5,492 55 74 27 24 18 1 16 2.9 3.1 3.4 8 6



International Equity Assets Diversification as of 12/31/11

Diversification:	Aggregate International Equity 12/31/11	MSCI ACWI (ex. U.S.) 12/31/11	Aggregate International Equity 9/30/11
Number of Holdings	5,451	1,846	5,532
% in 5 largest holdings	9	5	9
% in 10 largest holdings	15	10	14

Largest Five Holdings:	% of Portfolio	Economic Sector
Nestle	2.1	Food Beverage & Tobacco
British American Tobacco	1.8	Food Beverage & Tobacco
Novartis	1.6	Pharmaceuticals & Biotech
Imperial Tobacco	1.6	Food Beverage & Tobacco
Philip Morris International	1.6	Food Beverage & Tobacco



International Equity Assets Sector Allocation as of 12/31/11

Sector Allocation (%):	Aggregate International Equity 12/31/11	MSCI ACWI (ex. U.S.) 12/31/11	Aggregate International Equity 9/30/11
Consumer Staples	21	10	22
Consumer Discretionary	13	9	13
Industrials	13	11	13
Health Care	8	7	8
Utilities	3	4	3
Information Technology	5	6	5
Materials	8	12	8
Energy	8	12	7
Telecom	3	6	3
Financials	18	23	18



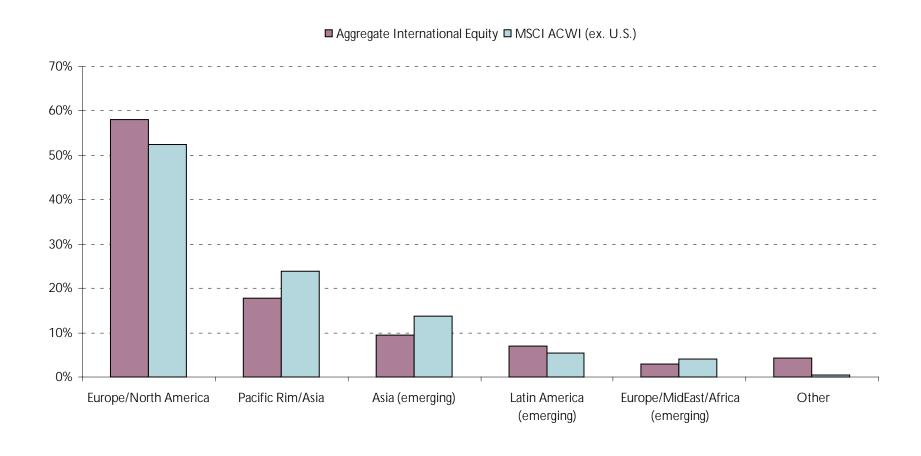
International Equity Assets Country & Region Breakdown as of 12/31/11

	Aggregate International Equity 12/31/11 (%)	MSCI ACWI (ex. U.S.) 12/31/11 (%)
Europe/North America	58.1	52.5
United States	6.1	0.0
United Kingdom	19.5	15.9
Netherlands	3.1	1.7
Switzerland	6.9	5.9
Denmark	1.7	0.7
Ireland	1.1	0.2
Belgium	1.4	0.6
France	6.3	6.2
Italy	1.2	1.6
Germany	5.0	5.4
Sweden	1.1	2.1
Canada	2.9	8.4
Pacific Rim/Asia	17.8	23.8
Singapore	1.3	1.1
Hong Kong	1.8	1.9
Australia	4.2	5.9
Japan	10.4	14.8

	Aggregate International Equity 12/31/11 (%)	MSCI ACWI (ex. U.S.) 12/31/11 (%)
Asia (emerging)	9.4	13.8
India	1.7	1.4
China	3.0	4.2
Taiwan	1.4	2.6
South Korea	1.6	3.5
Latin America (emerging)	6.9	5.4
Brazil	5.4	3.5
Europe/MidEast/Africa (emerging)	3.0	4.2
Russia	1.1	1.5
South Africa	1.0	1.8
Other	4.2	0.4



International Equity Assets Region Breakdown as of 12/31/11



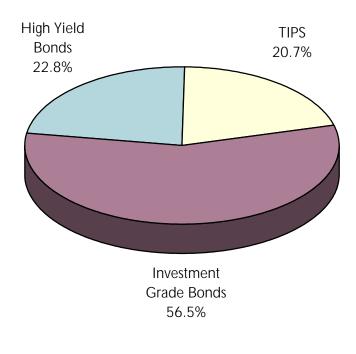


Fixed Income Assets
As of December 31, 2011



Fixed Income Assets as of 12/31/11







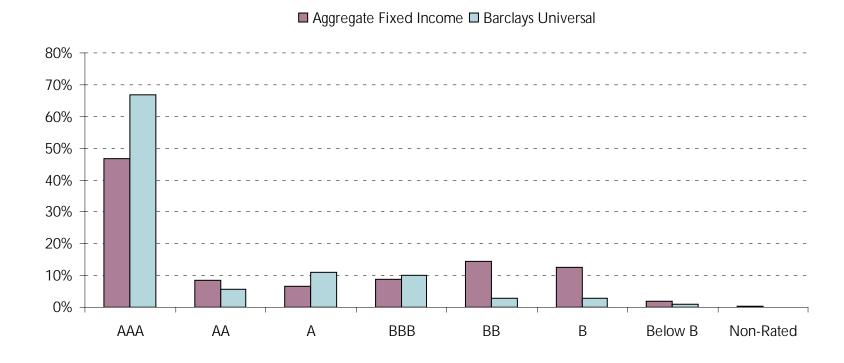
Fixed Income Assets Risk as of 12/31/11

Risk: (sixty months)	Aggregate Fixed Income 12/31/11	Barclays Universal 12/31/11
Annualized Return (%)	7.2	6.4
Standard Deviation (%)	6.7	4.0
Best Monthly Return (%)	5.3	3.8
Worst Monthly Return (%)	-7.5	-3.6
Beta	1.40	1.00
Correlation (R ²) to Index	0.84	1.00
Correlation to Total Fund Return	0.68	NA
Sharpe Measure (risk-adjusted return)	0.86	1.24
Information Ratio	0.22	NA



Fixed Income Assets Characteristics as of 12/31/11

	Aggregate		Aggregate	
Duration & Yield:	Fixed Income 12/31/11	Barclays Universal 12/31/11	Fixed Income 9/30/11	
Average Effective Duration (years)	4.7	4.9	4.6	
Yield to Maturity (%)	4.2	2.8	4.8	





Fixed Income Assets Diversification as of 12/31/11

Market Allocation (%):	Aggregate Fixed Income 12/31/11	Barclays Universal 12/31/11	Aggregate Fixed Income 9/30/11
United States	86	86	88
Foreign (developed markets)	6	12	4
Foreign (emerging markets)	8	3	7
Currency Allocation (%):			
Non-U.S. Dollar Exposure	5	0	5
Sector Allocation (%):			
U.S. Treasury-Nominal	9	31	8
U.S. Treasury-TIPS	18	0	20
U.S. Agency	4	8	4
Mortgage Backed	11	28	13
Corporate	28	26	27
Bank Loans	9	0	9
Local & Provincial Government	3	1	3
Sovereign & Supranational	9	4	9
Commercial Mortgage Backed	4	2	3
Asset Backed	1	0	1
Cash Equivalent	3	0	3
Other	0	0	1

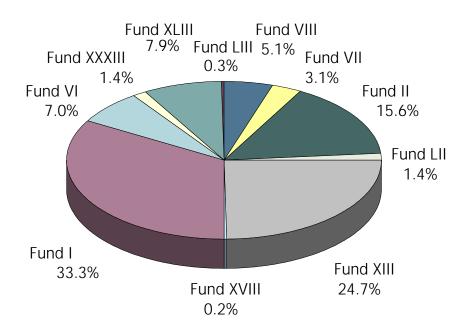


Real Estate Assets
As of December 31, 2011



Real Estate Assets as of 12/31/11







Real Estate Assets Breakdown as of 12/31/11







Real Estate Assets Characteristics as of 12/31/11



Number of Funds: 10

Commitments: \$93.1

Capital Called: \$43.4

Distributions: \$1.6

Reported Value: \$61.4



Real Estate Assets Portfolio Listing as of 12/31/11

	Market	Strategy	Reported Value 12/31/11 (\$ mm)	% of Asset Class
Real Estate Assets			61.4	100
Real Estate Fund I	Public	Public REITS	20.4	33
Real Estate Fund XIII	Private	Diversified Core	15.2	25
Real Estate Fund II	Private	Opportunistic	9.6	16
Real Estate Fund XLIII	Private	Debt	4.9	8
Real Estate Fund VI	Private	Opportunistic	4.3	7
Real Estate Fund VIII	Private	Opportunistic	3.1	5
Real Estate Fund VII	Private	Int'l - Opportunistic	1.9	3
Real Estate Fund XXXIII	Private	Opportunistic	0.9	1
Real Estate Fund LII	Private	Value-Added	0.8	1
Real Estate Fund LIII	Private	Opportunistic	0.2	< 1
Real Estate Fund XVIII	Private	Value-Added	0.1	< 1

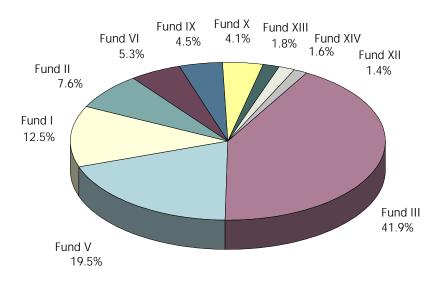


Natural Resources Assets As of December 31, 2011



Natural Resources Assets as of 12/31/11





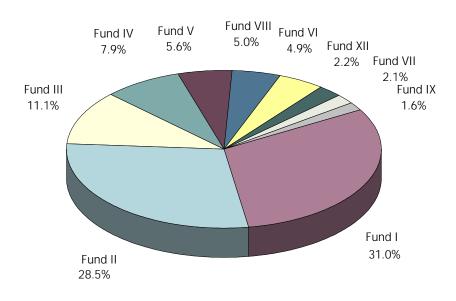


Infrastructure Assets
As of December 31, 2011



Infrastructure Assets as of 12/31/11





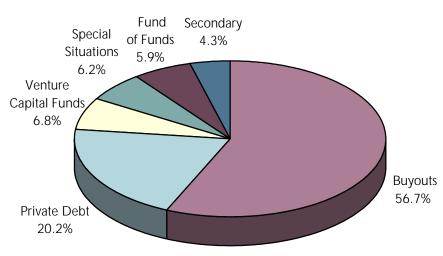


Private Equity Assets
As of December 31, 2011



Private Equity Assets as of 12/31/11





Fair values for private markets assets are based on reported values of 9/30/11, adjusted for cash flows though 12/31/11. Unless otherwise denoted, all values have been converted into US dollars using 12/31/11 exchange rates.

Private Equity Assets Financial Summary as of 12/31/11



Financial Summary: (Reported value as of 9/30/2011, adjusted for cash flows through 12/31/2011)

Program to Date

Allocation Target:	10%
Number of Funds:	65
Commitments:	\$415.5
Capital Called:	\$311.2
Distributions:	\$209.4
Reported Value:	\$218.5



Partnership	Туре	Focus	Vintage Year
Buyout Fund I	Buyout	Small Market	уууу
Buyout Fund II	Buyout	Middle Market Buyout	уууу
Fund of Funds I	Fund of Funds	European Buyout	уууу
Secondary Fund I	Secondary Market	Diversified Buyout	уууу
Private Debt Fund I	Mezzanine Debt	Middle Market Buyout	уууу
Buyout Fund III	Buyout	Middle Market Buyout	уууу
Buyout Fund IV	Buyout	Middle Market Buyout	уууу
Special Situations Fund I	Special Situations	Royalties	уууу
Buyout Fund V	Buyout	Middle Market Buyout	уууу
Buyout Fund VI	Buyout	Middle Market Buyout	уууу
Secondary Fund II	Secondary Market	Diversified Private Equity	уууу
Buyout Fund VII	Buyout	Middle Market Buyout	уууу
Elevation Partners	Special Situations	Media & Communication	уууу
Buyout Fund VIII	Buyout	Middle Market Buyout	уууу
Private Debt Fund II	Mezzanine Debt	Middle Market Buyout	уууу
Buyout Fund XX	Buyout	Small Market Buyout	уууу
Private Debt Fund III	Private Debt	Distressed	уууу
Private Debt Fund IV	Mezzanine Debt	Middle Market Buyout	уууу
Buyout Fund XI	Buyout	Middle Market Buyout	уууу



Partnership	Туре	Focus	Vintage Year
Buyout Fund XII	Buyout	Large Market	уууу
Venture Capital Fund I	Venture Capital	Early Stage	уууу
Buyout Fund XIII	European Buyout	Middle Market European Buyout	уууу
Buyout Fund X	Mega Buyout	Mega European Buyout	уууу
Buyout Fund XV	Buyout	Middle Market Buyout	уууу
Special Situations Fund V	Special Situations	Turnaround	уууу
Private Debt Fund V	Private Debt	Mezzanine	уууу
Buyout Fund XVI	Buyout	Mega Market Buyout	уууу
Venture Capital Fund II	Venture Capital	Early Stage	уууу
Buyout Fund XVII	Emerging Markets	Middle Market Buyout	уууу
Buyout Fund XVIII	Buyout	Middle Market Buyout	уууу
Venture Capital Fund III	Venture Capital	Early Stage	уууу
Buyout Fund XIV	Emerging Markets	Middle Market Buyout	уууу
Buyout Fund XIX	Buyout	Large Market Buyout	уууу
Private Debt Fund VI	Private Debt	Distressed	уууу
Special Situations Fund VI	Special Situations	Healthcare	уууу
Buyout Fund XX	Buyout	Middle Market Buyout	уууу
Buyout Fund XXI	Buyout	Small Market Buyout	уууу
Buyout Fund XXII	Buyout	Middle Market Buyout	уууу
Private Debt Fund VII	Private Debt	Distressed	уууу



Partnership	Туре	Focus	Vintage Year
Buyout Fund XXIII	Buyout	Middle Market Buyout	уууу
Buyout Fund XXIV	Buyout	Middle Market Buyout	уууу
Buyout Fund XXVII	Buyout	Middle Market Buyout	уууу
Venture Capital Fund V	Venture Capital	Later Stage	уууу
Special Situations Fund V	Special Situations	Turnaround	уууу
Buyout Fund XXV	Buyout	Large Market	уууу
Buyout Fund XXVI	Buyout	Large Market	уууу
Buyout Fund XXVIII	Buyout	Middle Market	уууу
Buyout Fund XXIX	Buyout	Middle Market Buyout	уууу
Venture Capital Fund XIX	Venture Capital	Balanced Stage	уууу
Venture Capital Fund IX	Venture Capital	Balanced Stage	уууу
Buyout Fund XXXVIII	Buyout	Middle Market	уууу
Private Debt Fund VIII	Private Debt	Credit Opportunities	уууу
Private Debt Fund VI	Private Debt	Credit Opportunities	уууу
Buyout Fund XXXXV	Buyout	Small Market Buyout	уууу
Venture Capital Fund VIII	Venture Capital	Early Stage	уууу
Buyout Fund XXXVII	Buyout	Middle Market Buyout	уууу
Private Debt Fund XIX	Private Debt	Middle Market	уууу
Buyout Fund XXXXII	Buyout	Middle Market Buyout	уууу
Venture Capital Fund XXII	Venture Capital	Early Stage	уууу



Partnership	Туре	Focus	Vintage Year
Buyout Fund XXXXIII	Buyout	Middle Market Buyout	2011
Buyout Fund XXXXIV	Buyout	Middle Market Buyout	2011
Buyout Fund XXXXI	Buyout	Middle Market Buyout	2011
Buyout Fund IV	Buyout	Middle Market Buyout	2011
Buyout Fund XXXX	Buyout	Large Market	2012



Portfolio Reviews As of December 31, 2011

Domestic Equity Portfolio Reviews As of December 31, 2011



RhumbLine QSI Index Portfolio Detail as of 12/31/11

Mandate:	Domestic Equities				Ō
Active/Passive:	Passive		Value	Core	Growth
Market Value:	\$99.4 million				
Portfolio Manager:	Julie Lind	Large			
Location:	Boston, Massachusetts	Medium			
Inception Date:	8/1/2011				
Account Type:	Commingled Fund	Small			

Fee Schedule:

0.055% on first \$100 mm; 0.03% thereafter

Liquidity Constraints:

Monthly

Strategy:

Based on its own proprietary model, Meketa Investment Group has established specific, defined criteria governing the stocks that are included in the QSI Index. The QSI Index is designed to be approximately market capitalization- and sector-neutral relative to the Russell 3000 Index at the time of reconstitution, and all stocks within the QSI Index are members of the Russell 3000 Index. The QSI Index is maintained by Meketa Investment Group and reconstituted on February 1 and August 1 each year.

Performance (%):	4Q11	YTD	Since 8/1/11
RhumbLine QSI Index	12.1	NA	1.4
QSI Index	12.3	6.1	1.6
Russell 3000	12.1	1.0	-2.8
Peer Large Cap Core	12.0	1.3	-2.5
Peer Ranking (percentile)	47	NA	7

	12/31/11			9/30/11	
Capitalization Structure:	RhumbLine QSI Index	QSI Index	RhumbLine QSI Index	QSI Index	
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	64.6 4.8	64.5 4.8	57.3 4.5	57.2 4.5	
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	72 19 8	72 19 8	68 23 9	68 23 9	
Fundamental Structure:					
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	16 3.5 2.6 9 10	16 3.5 2.5 9 10	14 3.2 2.8 9 11	14 3.2 2.8 9 11	
Sector Allocation (%):					
Information Technology Financials Consumer Discretionary Industrials Energy Health Care Consumer Staples Materials Utilities Telecom	18 16 13 11 11 10 10 5 3 3	18 16 13 11 11 10 10 5 3 3	18 16 12 11 11 11 10 5 3 3	18 16 12 11 11 11 10 5 3 3	
Diversification:					
Number of Holdings % in 5 largest holdings % in 10 largest holdings	204 12 20	204 12 20	206 12 20	206 12 20	
Largest Ten Holdings:		Industry			
ExxonMobil Microsoft Chevron IBM AT&T Johnson & Johnson Wal-Mart Stores Paychex Chubb Automatic Data Processing	3.6 2.3 2.2 2.1 1.8 1.7 1.7 1.7 1.7	Energy Software & Services Energy Software & Services Telecommunication Services Pharmaceuticals & Biotech Food & Staples Retailing Software & Services Insurance Software & Services			



SSgA Russell 1000 Index-NL Portfolio Detail as of 12/31/11

Mandate: Domestic Equities Growth Active/Passive: Passive Market Value: \$52.8 million Large Portfolio Manager: Team Location: Boston, Massachusetts Medium Inception Date: 5/1/2011 Small Account Type: Commingled Fund

Fee Schedule:

0.05% on first \$50 mm; 0.04% on next \$50 mm; 0.03% thereafter

Liquidity Constraints:

Daily

Strategy:

The SSgA Russell 1000 Index strategy seeks to replicate the returns of the Russell 1000 index. The strategy employs a "full replication" methodology, holding each of the stocks that comprise the index with the same weight as the index. Portfolio trading occurs only when there are changes in the composition of the index or to reinvest cash distributed from securities in the portfolio.

Performance (%):	4Q11	YTD	Since 5/1/11
SSgA Russell 1000 Index-NL	11.8	NA	-7.7
Russell 1000	11.8	1.5	-7.3

	12/3 SSgA	31/11	9/3 SSgA	0/11
0 7 17 17 01 1	Russell 1000	D 4000	Russell 1000	D 11.4000
Capitalization Structure:	Index	Russell 1000	Index	Russell 1000
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	86.4 5.0	86.3 5.0	77.4 4.5	77.4 4.5
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	79 20 1	79 20 1	78 21 2	78 21 2
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	17 3.3 2.0 8 11	17 3.3 1.8 8 11	16 3.1 2.0 8 11	16 3.0 2.0 8 11
Sector Allocation (%):				
Information Technology Financials Health Care Energy Consumer Discretionary Industrials Consumer Staples Materials Utilities Telecom	18 14 12 12 11 11 10 4 4 3	18 14 12 12 11 11 10 4 4 3	19 14 12 11 11 11 11 4 4 3	19 14 12 11 12 11 11 4 4 3
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings	978 11 18	980 11 18	981 11 18	979 11 18
Largest Ten Holdings:		Industry		
ExxonMobil Apple IBM Chevron Microsoft General Electric Procter & Gamble Johnson & Johnson AT&T Pfizer	3.2 2.9 1.7 1.7 1.5 1.5 1.4 1.4 1.4	Energy Technology Hai Software & Serv Energy Software & Serv Capital Goods Household/Pers Pharmaceutical Telecommunica Pharmaceutical	vices vices sonal Products s & Biotech ation Services	



Jennison Large Cap Growth Equity Portfolio Detail as of 12/31/11

Mandate: Domestic Equities Growth Active/Passive: Active Market Value: \$50.8 million Large Portfolio Manager: Blair Boyer Location: New York, New York Medium Inception Date: 1/1/1996 Small Account Type: Separately Managed

Fee Schedule:

0.75% on first \$10 mm; 0.50% on next \$30 mm; 0.35% on next \$25 mm; 0.25% on next \$335 mm; 0.22% on next \$600 mm; 0.20% thereafter

Liquidity Constraints:

Daily

Strategy:

Jennison Associates manages a large capitalization growth portfolio of 55 to 70 stocks. Jennison focuses on reasonably-priced growth stocks that possess sustainable attractive earnings growth.

Guidelines:

Benchmark = Russell 1000 Growth; Max. position < 5%; Max. % in Int'l securities = 15%; Max. % in convertible securities = 10%; Max. % in REITs = 10%

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 1/1/96
Jennison Large Cap Growth Equity	7.2	1.1	17.6	2.7	7.1
Russell 1000 Growth	10.6	2.6	18.0	2.5	5.5
Peer Large Cap Growth	10.3	-0.1	16.3	1.9	6.9
Peer Ranking (percentile)	95	35	34	33	44

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
Jennison Large Cap Growth Equity	19.4%	0.95	0.07	0.06	0.98
Russell 1000 Growth	20.0	1.00	0.05	NA	1.00

	12	/31/11 Russell 1000	9/3	0/11 Russell 1000
Capitalization Structure:	Jennison	Growth	Jennison	Growth
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	67.2 23.4	96.7 5.7	64.2 21.3	88.3 5.0
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	90 10 0	80 20 1	88 11 0	77 22 1
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	27 5.3 0.8 20 16	19 4.7 1.4 15 13	28 5.2 0.7 21 17	19 4.4 1.6 15 13
Sector Allocation (%):				
Consumer Discretionary Information Technology Health Care Financials Utilities Telecom Materials Energy Consumer Staples Industrials	23 33 15 6 0 0 3 6 8 7	14 28 11 4 0 1 5 11 13	24 33 13 4 0 2 3 5 8 7	14 29 11 4 0 1 5 10 13
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings	73 17 30	588 20 28	72 19 30	587 20 29
Largest Ten Holdings:		Industry		
Apple Amazon.Com Google MasterCard Schlumberger Precision Castparts Starbucks Nike Vmware Inc -CI A IBM	5.0 3.7 3.1 3.0 2.6 2.6 2.5 2.5 2.5 2.4 2.3	Technology Hard Retailing Software & Servi Software & Servi Energy Capital Goods Consumer Servic Consumer Durat Software & Servi Software & Servi	ces ces es ole & Apparel ces	



Dodge & Cox Equity Portfolio Detail as of 12/31/11

Mandate: Domestic Equities Growth Active/Passive: Active \$49.9 million Market Value: Large Portfolio Manager: Team Location: San Francisco, California Medium 9/1/2000 Inception Date: Small Account Type: Separately Managed

Fee Schedule:

0.60% on first \$10 mm; 0.40% on next \$15 mm; 0.30% on next \$25 mm; 0.25% on next \$50 mm; 0.20% thereafter

Liquidity Constraints:

Daily

Strategy:

Dodge & Cox invests in companies that appear to be temporarily undervalued by the stock market, but have a favorable outlook for long-term growth. The strategy focuses on the underlying financial conditions and prospects of individual companies, which includes future earnings, cash flow, and dividends. Various other factors including financial strength, economic condition, competitive advantage, quality of the business franchise, and management quality are weighed against valuation in selecting individual securities.

Guidelines:

Benchmark = Russell 1000 Value; Max. position < 5%; Max. % in Int'l securities = 20%; Max. % in convertible securities = 10%; Max. % in REITs = 10%

Performance (%):		4Q11	1 YR	3 YR	5 YR	Since 9/1/00
Dodge & Cox Equity		11.2	-3.6	13.6	-3.8	5.7
Russell 1000 Value		13.1	0.4	11.5	-2.6	3.3
Peer Large Cap Value		13.0	0.8	13.0	-1.0	4.7
Peer Ranking (percentile)		86	84	38	97	18
	C4I		Ch	16		

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure ¹	Info. Ratio	Correlation to Index
Dodge & Cox Equity	22.3%	1.08	Neg.	Neg.	0.98
Russell 1000 Value	20.2	1.00	Neg.	NA	1.00

	12/3	31/11	9/30		
Capitalization Structure:	Dodge & Cox	Russell 1000 Value	Dodge & Cox	Russell 1000 Value	
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	68.5 18.7	76.0 4.6	61.0 18.9	66.2 4.1	
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	86 13 1	79 19 1	84 15 1	78 20 2	
Fundamental Structure:					
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	15 2.3 2.0 0 8	15 1.9 2.2 1 9	14 1.9 2.2 1 10	14 1.7 2.5 2 9	
Sector Allocation (%):					
Information Technology Health Care Consumer Discretionary Materials Industrials Telecom Energy Financials Consumer Staples Utilities	20 22 18 4 8 3 8 17 1	9 13 9 3 9 5 12 24 8 8	20 22 17 3 7 3 8 19 1	9 13 9 3 9 5 12 25 8	
Diversification:					
Number of Holdings % in 5 largest holdings % in 10 largest holdings	74 19 35	656 14 24	75 18 33	653 14 24	
Largest Ten Holdings:		Industry			
Merck Comcast Wells Fargo Hewlett-Packard General Electric Amgen Pfizer Capital One Financial Time Warner Sanofi	4.0 3.9 3.8 3.6 3.5 3.3 3.2 3.1 2.8	Pharmaceuticals & Biotech Media Banks Technology Hardware Capital Goods Pharmaceuticals & Biotech Pharmaceuticals & Biotech Diversified Financials Media Pharmaceuticals & Biotech			

A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.



Portfolio Detail 5

TimesSquare MidCap Growth Portfolio Detail as of 12/31/11

Mandate: Domestic Equities Growth Active/Passive: Active Market Value: \$44.1 million Large Portfolio Manager: Tony Rosenthal, CFA Location: New York, New York Medium 4/1/2006 Inception Date: Small Account Type: Separately Managed

Fee Schedule:

0.70% on first \$100 mm; 0.60% thereafter

Liquidity Constraints:

Monthly

Strategy:

Times quare manages a diversified portfolio of midcap growth stocks that places emphasis on the assessment of management quality, and an in-depth understanding of superior business models. The initial universe consists of approximately 1,000 companies with market capitalizations between \$2.5 billion and \$15 billion at time of purchase that have demonstrated the ability to grow earnings and sales at least 15% per year. Of these, approximately 250 are followed closely with 65 to 75 stocks to be included in the portfolio.

Guidelines:

Benchmark = Russell Mid Cap Growth; Max. position < 7%; Max. % in Int'l securities = 10%; Max. % in convertible securities = 10%; Max. % in REITs = 10%

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 4/1/06
TimesSquare MidCap Growth	13.3	-0.7	18.0	4.1	4.8
Russell MidCap Growth	11.2	-1.7	22.1	2.4	2.6
Peer MidCap Growth	11.6	-1.8	20.6	3.6	3.4
Peer Ranking (percentile)	24	43	76	40	28

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
TimesSquare MidCap Growth	20.8%	0.84	0.13	0.32	0.98
Russell MidCap Growth	24.2	1.00	0.04	NA	1.00

	12/3	1/11 Russell	9/30	/11 Russell
Capitalization Structure:	TimesSquare	MidCap Growth	TimesSquare	MidCap Growth
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	7.4 5.7	7.9 4.2	6.8 4.8	7.0 4.0
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	26 70 3	29 68 2	18 78 4	22 75 3
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	22 4.4 0.8 13 12	24 4.5 1.0 12 15	21 4.1 0.9 12 8	23 4.1 1.1 12 13
Sector Allocation (%):				
Information Technology Financials Industrials Telecom Utilities Energy Consumer Staples Health Care Materials Consumer Discretionary	25 11 17 3 0 9 5 11 4	18 7 15 2 0 10 6 13 9 20	26 9 18 5 0 8 5 11 4	19 7 14 2 0 9 7 14 8 20
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings	76 17 29	466 5 8	78 18 30	465 4 7
Largest Ten Holdings:		Industry		
Davita Virgin Media SBA Communications Renaissancere Holdings Alliance Data Systems Amdocs Discovery Communications Ecolab Kansas City Southern Neustar	5.1 3.3 3.2 3.0 2.9 2.4 2.4 2.2 2.2	Health Equipm Media Telecommunic Insurance Software & Ser Software & Ser Media Materials Transportation Software & Ser	vices vices	



T. Rowe Price MidCap Value Portfolio Detail as of 12/31/11

Mandate: Domestic Equities Growth Active/Passive: Active Market Value: \$42.1 million Portfolio Manager: David J. Wallack Location: Baltimore, Maryland Medium 2/1/1999 Inception Date: Small Account Type: Separately Managed

Fee Schedule:

0.50% on all assets

Liquidity Constraints:

Daily

Strategy:

T. Rowe Price seeks undervalued mid-cap companies possessing a catalyst that will eventually drive the stock to full valuation. Most have established brands and good franchises that have withstood the test of time, but have suffered challenges. These challenges can include a poorly integrated acquisition, difficulties in product manufacturing or distribution, a downturn in a major end market, or an increase in industry capacity that drives down prices. T. Rowe Price follows a clearly defined investment process emphasizing fundamental research and active, bottom-up stock selection.

Guidelines:

Benchmark = Russell MidCap Value; Max. position < 5%; Max. % in Int'l securities = 10%; Max. % in convertible securities = 10%; Max. % in REITs = 10%

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 2/1/99
T. Rowe Price MidCap Value	9.8	-4.5	19.4	1.9	10.6
Russell MidCap Value	13.4	-1.4	18.2	0.0	7.7
Peer MidCap Value	13.6	-2.8	17.5	2.0	9.0
Peer Ranking (percentile)	94	73	27	53	12

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure ¹	Info. Ratio	Correlation to Index
T. Rowe Price MidCap Value	23.2%	0.94	0.02	0.46	0.99
Russell MidCap Value	24.1	1.00	Neg.	NA	1.00

Capitalization Structure:	12/3 T.Rowe Price	1/11 Russell MidCap Value	9/30	/11 Russell MidCap Value	
·	1.Rowe Price	value	1.Rowe Price	Value	
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	7.4 4.9	7.8 3.7	6.8 4.5	7.0 3.3	
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	27 57 16	30 65 5	23 58 18	26 67 7	
Fundamental Structure:					
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	20 2.4 2.1 -1 11	19 1.7 2.2 1 9	16 2.1 2.1 0 11	18 1.5 2.5 1 9	
Sector Allocation (%):					
Consumer Discretionary Consumer Staples Energy Materials Telecom Industrials Health Care Information Technology Utilities Financials	16 10 8 6 1 11 5 7 10 25	11 7 7 5 1 10 6 8 15 31	16 10 8 5 1 9 7 8 12 25	11 7 6 4 1 10 7 8 15 31	
Diversification:					
Number of Holdings % in 5 largest holdings % in 10 largest holdings	135 10 18	528 5 9	137 11 19	525 5 9	
Largest Ten Holdings:		Industry			
Northern Trust Nexen Firstenergy Southwest Airlines Weyerhaeuser Kroger CIT Group Marsh & McLennan White Mtns Ins Group Textron	2.2 2.1 2.0 1.8 1.8 1.7 1.7 1.7	Diversified Financials Energy Utilities Transportation Real Estate Food & Staples Retailing Banks Insurance Insurance Capital Goods			

¹ A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.



Portfolio Detail

Wellington Micro Cap Portfolio Detail as of 12/31/11

Mandate: Domestic Equities Growth Active/Passive: Active Market Value: \$30.8 million Large Portfolio Manager: David DuBard, CFA Location: Boston, Massachusetts Medium 6/1/2006 Inception Date: Small Account Type: Commingled Fund

Fee Schedule:

1.00% on all assets; plus 10% performance fee; plus 1% transaction charge

Liquidity Constraints:

Monthly

Strategy:

The Wellington Micro Cap strategy provides exposure to domestic common stocks with very small capitalization, usually less than \$125 million. Wellington generates approximately ninety percent of its own research to build the portfolio utilizing bottom-up stock selection. There are no guidelines regarding industry weights relative to the benchmark. Portfolio turnover is moderate.

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 6/1/06
Wellington Micro Cap	16.2	-3.2	30.2	4.8	5.8
Russell Microcap	13.8	-9.3	14.2	-3.8	-1.9

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure ¹	Info. Ratio	Correlation to Index
Wellington Micro Cap	26.5%	0.88	0.13	0.77	0.92
Russell Microcap	25.5	1.00	Neg.	NA	1.00

	12/3	31/11 Russell	9/30)/11 Russell	
Capitalization Structure:	Wellington	Microcap	Wellington	Microcap	
Weighted Average Market Cap. (US\$ million) Median Market Cap. (US\$ million)	133.3 97.7	305.4 135.5	108.8 86.0	250.0 123.0	
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	0 0 100	0 0 100	0 0 100	0 0 100	
Fundamental Structure:					
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	17 1.8 0.7 1 15	25 2.4 1.4 3 16	16 1.5 0.9 3 15	22 2.1 1.6 3 15	
Sector Allocation (%):					
Information Technology Materials Energy Telecom Consumer Staples Utilities Industrials Health Care Consumer Discretionary Financials	28 16 7 2 1 0 12 13 8	16 4 4 1 2 1 14 17 13 27	31 13 7 0 2 0 13 11 11	17 4 4 1 2 2 14 18 13 26	
Diversification:					
Number of Holdings % in 5 largest holdings % in 10 largest holdings	83 16 27	1,566 2 3	79 14 25	1,578 2 3	
Largest Ten Holdings:		Industry			
Arabian American Development Aurcana Eplus Mitcham Industries GP Strategies Anika Therapeutics Mediware Information Systems Nova Measuring Instruments Silvercrest Mines Computer Task Group	4.3 4.0 2.6 2.5 2.4 2.4 2.3 2.3 2.3	Materials Materials Software & Services Energy Commercial & Professional Services Health Equipment & Services Health Equipment & Services Technology Hardware Materials Software & Services			

A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.



Standard Pacific Capital Offshore Fund, Ltd. Portfolio Detail as of 12/31/11

Mandate: Domestic Equities

Active/Passive: Active

Market Value: \$26.7 million

Portfolio Manager: Raj Venkatesan and Doug Dillard

Location: San Francisco, California

Inception Date: 7/1/2010

Account Type: Commingled Fund

Fee Schedule:

1.5% management fee and 20% performance fee, subject to a high water mark

Liquidity Constraints:

Quarterly with 45 days notice after initial one-year lock-up

Strategy

Standard Pacific uses fundamental bottom-up stock selection (of both long and short investments), to seek to provide returns to investors. The fund will invest across the globe, though typically with a large portion invested in the U.S. The investment team seeks to provide added value by maintaining a two-way dialogue between staff and key industry contacts. Contacts include not only portfolio company contacts but those across industry, regulatory bodies, and geographies. The investment team utilizes their own research to find companies that may be misunderstood by the market at large.

Performance (%):	4Q11	1 YR	Since 7/1/10
Standard Pacific Capital Offshore Fund, Ltd.	-6.2	-4.5	5.1
HFRI Equity Hedge (Long/Short Equity)	2.2	-8.0	2.5



NorthPointe Focused Small Cap Growth Equity Portfolio Detail as of 12/31/11

Mandate: Domestic Equities Growth Active/Passive: Active Market Value: \$23.7 million Portfolio Manager: Carl Wilk, CFP Location: Troy, Michigan Medium 10/1/2008 Inception Date: Small Account Type: Separately Managed

Fee Schedule:

1.00% on first \$50 mm; 0.75% on next \$50 mm

Liquidity Constraints:

Monthly

Strategy:

The Northpointe Focused Small Cap Growth Equity portfolio invests primarily in the common stock of small capitalization companies that exhibit quality growth characteristics. The portfolio management team's investment philosophy is rooted in the belief that strong fundamental research, combined with quantitative risk control, is the key to stock selection.

Guidelines:

Benchmark = Russell 2000 Growth; Max. position < 10%; Max. % in Int'l securities = 20%; Max. % in convertible securities = 10%; Max. % in REITs = 10%

Performance (%):	4Q11	1 YR	3 YR	Since 10/1/08
NorthPointe Focused Small Cap Growth Equity	12.1	-20.4	17.7	4.1
Russell 2000 Growth	15.0	-2.9	19.0	6.4
Peer Small Cap Growth	14.6	-0.8	20.0	7.9
Peer Ranking (percentile)	79	99	76	90

Risk: (thirty-nine months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
NorthPointe Focused SCG Equity	41.0%	1.23	0.09	Neg.	0.96
Russell 2000 Growth	31.4	1.00	0.20	NA	1.00

	12/31/11			0/11
Capitalization Structure:	NorthPointe Small Cap Growth	Russell 2000 Growth	NorthPointe Small Cap Growth	Russell 2000 Growth
Weighted Average Market Cap. (US\$ million) Median Market Cap. (US\$ million)	879.1 821.1	1,388.7 528.4	666.3 454.7	1,183.1 477.9
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	0 6 94	0 23 77	0 6 94	0 14 86
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	30 2.8 0.1 13 18	29 4.0 0.7 11 18	18 2.6 0.1 9 16	28 3.7 0.8 11 18
Sector Allocation (%):				
Energy Information Technology Health Care Industrials Materials Utilities Telecom Consumer Staples Financials Consumer Discretionary	20 29 23 19 4 0 0 0 0	8 23 20 17 4 0 1 4 8	14 21 27 15 6 0 0 0	7 23 21 16 4 0 1 5 8
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings	22 27 51	1,162 3 5	21 31 57	1,141 3 5
Largest Ten Holdings:		Industry		
Web.Com Group World Fuel Services Ultratech Merge Healthcare Magnum Hunter Resources Abraxas Petroleum Corp/Nv Impax Laboratories Air Transport Services Group Quantum Iconix Brand Group	6.2 5.5 5.4 5.0 5.0 4.9 4.8 4.8	Software & Serv Energy Semiconductors Health Equipme Energy Pharmaceutical Transportation Technology Hai Consumer Dura	s & Biotech	



Sparta Small Cap Growth Equity Portfolio Detail as of 12/31/11

Mandate: Domestic Equities Growth Active/Passive: Active Market Value: \$16.9 million Large Portfolio Manager: Ryan Carr, CFA Location: Bellevue, WA Medium 10/1/2008 Inception Date: Small Account Type: Separately Managed

Fee Schedule:

1.00% on first \$25 mm; 0.85% on next \$25 mm

Liquidity Constraints:

Daily

Strategy:

Sparta's team uses a combination of fundamental and quantitative techniques to identify companies trading at a discount to their growth potential or historical valuations. The team focuses on what they consider to be each company's "enterprise value". They then consider that company's current market valuation relative to that value. For those companies trading at a discount to Sparta's estimated enterprise value, the team then seeks to uncover those firms with a near term catalyst that will bring the market valuation of the company closer in line with their estimated enterprise value.

Guidelines:

Benchmark = Russell 2000 Growth; Max. position < 10%; Max. % in Int'l securities = 15%; Max. % in convertible securities = 10%; Max. % in REITs = 10%

Performance (%):	4Q11	1 YR	3 YR	Since 10/1/08
Sparta Small Cap Growth Equity	10.0	-7.2	16.8	6.9
Russell 2000 Growth	15.0	-2.9	19.0	6.4
Peer Small Cap Growth	14.6	-0.8	20.0	7.9
Peer Ranking (percentile)	95	90	83	63

Risk: (thirty-nine months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
Sparta Small Cap Growth Equity	30.5%	0.94	0.22	0.07	0.96
Russell 2000 Growth	31.4	1.00	0.20	NA	1.00

	12/31/11 9/30/11				
	Sparta Small	31/11	9/3 Sparta Small	0/11	
Capitalization Structure:	Cap Growth Equity	Russell 2000 Growth	Cap Growth Equity	Russell 2000 Growth	
Weighted Average Market Cap. (US\$ million) Median Market Cap. (US\$ million)	847.6 611.7	1,388.7 528.4	706.1 562.1	1,183.1 477.9	
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	0 14 86	0 23 77	0 0 100	0 14 86	
Fundamental Structure:					
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	29 2.3 0.3 -7 19	29 4.0 0.7 11 18	20 1.9 0.4 -4 21	28 3.7 0.8 11 18	
Sector Allocation (%):					
Information Technology Energy Materials Utilities Telecom Health Care Industrials Consumer Staples Financials Consumer Discretionary	34 14 9 0 0 19 13 0 3	23 8 4 0 1 20 17 4 8	29 11 7 0 0 23 16 0 3	23 7 4 0 1 21 16 5 8 15	
Diversification:					
Number of Holdings % in 5 largest holdings % in 10 largest holdings	29 29 52	1,162 3 5	27 32 55	1,141 3 5	
Largest Ten Holdings:		Industry			
Onyx Pharmaceuticals Emulex Rubicon Technology Rex Energy O2Micro International Silicon Image Dice Holdings OM Group Wet Seal Robbins & Myers	6.1 5.9 5.8 5.6 5.6 5.4 4.5 4.5 4.4	Pharmaceutical Technology Ha Semiconductor Energy Semiconductor Semiconductor Software & Sen Materials Retailing Capital Goods	rdware s s		



Wellington Emerging Companies Portfolio Detail as of 12/31/11

Mandate: Domestic Equities Growth Active/Passive: Active Market Value: \$12.0 million Portfolio Manager: Jamie Rome, CFA Location: Boston, Massachusetts Medium Inception Date: 11/1/1996 Small Account Type: Commingled Fund

Fee Schedule: 0.90% on all assets

Liquidity Constraints:

Monthly

Strategy:

Wellington seeks to outperform the Russell 2000 Index by investing in very small U.S. companies. They focus on solid, growing companies with attractive valuations. Purchase and sale decisions at Wellington are based on fundamental analysis. The portfolio invests primarily in companies with market capitalizations under \$1 billion at the time of purchase.

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 11/1/96
Wellington Emerging Companies	13.4	-8.6	21.2	-0.6	10.5
Russell 2000 Value	16.0	-5.5	12.4	-1.9	8.5
Peer Small Cap Value	16.7	-2.6	17.5	1.9	10.2
Peer Ranking (percentile)	87	91	18	85	44

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure ¹	Info. Ratio	Correlation to Index
Wellington Emerging Companies	27.1%	0.97	Neg.	0.12	0.92
Russell 2000 Value	25.5	1.00	Neg.	NA	1.00

	12/3	31/11 Russell 2000	9/3	0/11 Russell 2000
Capitalization Structure:	Wellington	Value	Wellington	Value
Weighted Average Market Cap. (US\$ million) Median Market Cap. (US\$ million)	702.8 395.7	1,074.4 406.2	623.0 347.8	922.5 345.9
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	0 4 96	0 12 88	0 3 97	0 7 93
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	23 2.0 1.5 1 14	21 1.5 2.2 0 11	20 1.8 1.4 0 13	18 1.3 2.5 1 11
Sector Allocation (%):				
Information Technology Materials Energy Consumer Discretionary Consumer Staples Telecom Industrials Health Care Utilities Financials	20 11 9 14 5 2 16 6 2	11 5 5 12 3 1 15 5 7	21 10 7 15 5 2 16 6 2	11 5 5 11 3 1 15 5 8 36
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings	168 6 10	1,354 2 4	168 5 10	1,345 2 5
Largest Ten Holdings:		Industry		
C&J Energy Services H&E Equipment Services Restoque Com E Con Wabash National RDA Microelectroncs Inc -Adr American Vanguard Kratos Defense & Security Unvl Stainless & Alloy Prods Textainer Group Holdings Seacube Container Leasing	1.2 1.2 1.1 1.1 1.0 1.0 1.0 1.0 1.0	Energy Capital Goods Consumer Dura Capital Goods Technology Har Materials Capital Goods Materials Diversified Final Capital Goods	dware	

A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.



Hedge Fund I Portfolio Detail as of 12/31/11

Mandate: Hedge FoF
Active/Passive: Active

Market Value: \$1.3 million

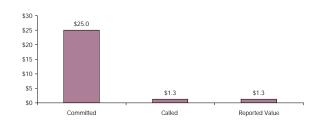
Commitment: \$25 million

Portfolio Manager: Mr. A

Location: Tri-State Area

Inception Date: yyyy

Account Type: Ltd. Partnership



Fee Schedule:

1.25% Mgmt/ 10% Incentive/ 7.5% Hurdle

Liquidity Constraints:

Illiquid Investment

Strategy:

Hedge Fund I primarily offers hedge fund of fund products, however the firm launched the Fund in order to invest in direct, opportunistic investment offerings sourced through their current underlying hedge fund of fund manager roster. Fund I is invested in a combination of 15 to 25 direct investments and fund investments. The fund does not use leverage and is expected to focus on European credit, middle market debt, real estate debt, and activist equity deals.



International Equity Portfolio Reviews As of December 31, 2011



Vontobel International Equity Portfolio Detail as of 12/31/11

Mandate: International Equities, Growth Developed Markets Active/Passive: Active Market Value: \$81.7 million Large Portfolio Manager: Rajiv Jain Medium Location: New York, New York 8/1/2009 Inception Date: Small

Fee Schedule: 0.65% on all assets Liquidity Constraints:

Separately Managed

Account Type:

Daily

Strategy:

Vontobel, through bottom-up, fundamental analysis, seeks to outperform the MSCI EAFE Index of foreign stocks by identifying seemingly high quality international businesses with demonstrated operating profitability and apparently favorable long-term economic prospects, at seemingly attractive valuations. Vontobel examines historical data to identify companies with a defensible franchise, pricing power, stable operating margins, and other factors. Vontobel also seeks a "margin of safety" (price in excess of value) of at least 25% on any purchase. The result is a somewhat concentrated portfolio of 40-60 stocks with moderate turnover.

Guidelines:

Benchmark = MSCI EAFE; Max. position = greater of 5% or 2x benchmark weight; Max. % in one country = 40%; Max. % in convertible securities = 15%; Max. exposure to emerging markets < 35%.

Performance (%):	4Q11	1 YR	Since 8/1/09
Vontobel International Equity	6.9	1.4	11.8
MSCI EAFE	3.3	-12.1	2.4
Peer International Growth	6.2	-11.4	6.6
Peer Ranking (percentile)	26	2	5

	12/3 Vontobel International		9/30 Vontobel International	
Capitalization Structure:	Equity	MSCI EAFE	Equity	MSCI EAFE
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	55.6 21.7	52.6 6.3	50.1 21.1	48.1 6.3
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	82 17 2	78 22 1	78 20 2	76 23 1
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	19 5.0 2.8 16 11	14 2.2 3.6 3 7	18 4.8 3.0 16 8	14 2.1 3.7 3 7
Sector Allocation (%):				
Consumer Staples Health Care Utilities Information Technology Energy Consumer Discretionary Telecom Industrials Materials Financials	46 13 4 3 7 5 0 6 3	12 10 5 5 9 10 6 12 10 21	49 12 4 3 7 6 0 6 3 10	11 10 5 5 8 10 6 12 10 22
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings	59 24 39	924 8 14	56 25 39	943 8 13
Region Allocation (%):				
Americas Europe Pacific Rim Other	17 54 10 19	0 65 35 0	16 55 12 17	0 64 36 0
Largest Five Holdings:		Industry		
British American Tobacco Philip Morris International Imperial Tobacco Nestle Novo-Nordisk	5.3 5.3 5.0 4.7 3.6	Food Beverage Food Beverage Food Beverage Food Beverage Pharmaceutica	& Tobacco & Tobacco & Tobacco	



SSgA MSCI EAFE Index-NL Portfolio Detail as of 12/31/11

Mandate: International Equities, Growth Developed Markets Passive Active/Passive: Market Value: \$57.1 million Large Portfolio Manager: Team Medium Location: Boston, Massachusetts Inception Date: 10/1/2006 Small

Account Type: Fee Schedule:

0.06% on first \$50 mm; 0.05% on next \$50 mm; 0.04% thereafter

Commingled Fund

Liquidity Constraints:

Daily

Strategy:

This SSgA MSCI EAFE Index strategy seeks to replicate the returns of the MSCI EAFE index, a proxy for developed market equity performance (excluding the U.S. and Canada). The strategy provides broad diversification (there are 21 developed country indices within the index) at minimal expense.

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 10/1/06
SSgA MSCI EAFE Index-NL	3.3	-11.9	7.9	-4.4	-2.4
MSCI FAFF	3.3	-12.1	7.6	-4.7	-2.7

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure ¹	Info. Ratio	Correlation to Index
SSgA MSCI EAFE Index-NL	22.5%	1.00	Neg.	NA	1.00
MSCI EAFE	22.4	1.00	Neg.	NA	1.00

		31/11		0/11
Capitalization Structure:	SSgA MSCI EAFE	MSCI EAFE	SSgA MSCI EAFE	MSCI EAFE
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	52.5 6.1	52.6 6.3	48.2 6.1	48.1 6.3
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	78 22 1	78 22 1	76 23 1	76 23 1
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	14 2.2 3.6 3 7	14 2.2 3.6 3 7	14 2.1 3.7 3 7	14 2.1 3.7 3 7
Sector Allocation (%):				
Financials Industrials Consumer Staples Materials Health Care Consumer Discretionary Energy Telecom Information Technology Utilities	21 12 12 10 10 10 9 6 5	21 12 12 10 10 10 9 6 5	22 12 11 10 10 10 8 6 5	22 12 11 10 10 10 8 6 5
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings	962 8 14	924 8 14	984 8 14	943 8 13
Region Allocation (%):				
Americas Europe Pacific Rim Other	0 65 35 0	0 65 35 0	0 64 36 0	0 64 36 0
Largest Five Holdings:		Industry		
Nestle Vodafone Novartis HSBC Holdings Plc BP	2.0 1.5 1.4 1.4	Food Beverage Telecommunica Pharmaceutical Banks Energy	ation Services	

¹ A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.



Portfolio Detail 16

Artisan International Value Portfolio Detail as of 12/31/11

Mandate: International Equities, Growth Developed Markets Active/Passive: Active Market Value: \$41.5 million Large Portfolio Manager: David Samra Dan O'Keefe Medium Location: San Francisco, California Small 8/1/2009

Account Type: Separately Managed

Fee Schedule:

Inception Date:

0.80% on first \$50 mm; 0.60% on next \$50 mm; 0.50% thereafter

Liquidity Constraints:

Daily

Strategy:

Artisan employs a bottom-up investment approach seeking to identify undervalued quality businesses that offer the potential for superior risk/reward outcomes. Artisan runs a somewhat concentrated portfolio of 40 to 60 stocks. They are benchmark-agnostic, and willing to have exposures that are different than the benchmark.

Benchmark = MSCI EAFE; Max. position < 5% at time of purchase; Max. % in Global securities = 10%; Max. % in convertible securities = 10%; Max. % in one country = 35%

Performance (%):		4Q1	1 1 YR	8/1/09
Artisan Internation	nal Value	7.1	-5.8	11.0
MSCI EAFE		3.3	-12.1	2.4
Peer Internati	onal Value	4.3	-12.0	3.1
Peer Rankin	g (percentile)	2	8	1

Capitalization Structure	12/3 Artisan International		9/30 Artisan International	
Capitalization Structure:	Value	MSCI EAFE	Value	MSCI EAFE
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	26.2 8.0	52.6 6.3	24.4 6.9	48.1 6.3
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	52 38 10	78 22 1	51 39 9	76 23 1
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	16 2.4 2.6 -1 11	14 2.2 3.6 3 7	15 2.2 2.7 8 8	14 2.1 3.7 3 7
Sector Allocation (%):				
Consumer Discretionary Consumer Staples Industrials Information Technology Financials Health Care Utilities Telecom Energy Materials	24 16 17 7 21 9 0 0 3 3	10 12 12 5 21 10 5 6 9	24 16 16 7 23 8 0 0 3 3	10 11 12 5 22 10 5 6 8
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings	44 24 41	924 8 14	47 22 38	943 8 13
Region Allocation (%):				
Americas Europe Pacific Rim Other	19 65 15 1	0 65 35 0	18 65 17 1	0 64 36 0
Largest Five Holdings:		Industry		
Compass Group Arch Capital Group TE Connectivity Signet Jewelers Novartis	6.4 5.0 4.7 4.0 3.9	Consumer Serv Insurance Technology Ha Retailing Pharmaceutica	rdware	



Dimensional Emerging Markets Value Portfolio Detail as of 12/31/11

Mandate: International Equities,

Emerging Markets

Active/Passive: Active

Market Value: \$27.8 million

Portfolio Manager: Team

Location: Santa Monica, California

Inception Date: 7/1/2006

Account Type: Mutual Fund (DFEVX)

Fee Schedule: 0.70% on all assets Liquidity Constraints:

Daily

Strategy:

Dimensional Fund Advisors' ("DFA") investment approach combines both top-down and bottom-up elements. The top-down analysis involves drawing the boundaries for qualifying countries and company characteristics. It does not include macro-economic forecasting or tactical country allocation decisions. In its bottom-up work, DFA analyzes the attributes of individual securities for portfolio suitability. DFA limits its sector and industry weightings to 25% of the portfolio's market value. Country weights have a maximum target of 15% per country at the time of purchase, to mitigate country risk. Risk is controlled by investing across a broad group of emerging markets companies and countries.

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 7/1/06
Dimensional Emerging Markets Value	3.6	-25.6	20.4	3.2	7.4
MSCI Emerging Markets	4.4	-18.4	20.1	2.4	6.2
Peer Emerging Markets	5.0	-18.4	20.3	2.1	6.1
Peer Ranking (percentile)	81	93	49	32	30

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
Dimensional Emerging Markets Value	36.1%	1.10	0.05	0.12	0.98
MSCI Emerging Markets	31.5	1.00	0.03	NA	1.00

		31/11	9/30	0/11
Capitalization Structure:	Dimensional Emerging Markets Value	MSCI Emerging Markets	Dimensional Emerging Markets Value	MSCI Emerging Markets
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ million)	17.3 303.8	41.9 4,401.7	15.9 302.8	37.9 4,261.5
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	34 38 29	64 32 4	33 38 30	62 34 4
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	13 1.3 3.2 8 11	14 2.5 3.0 15 11	13 1.3 3.3 8 17	14 2.4 3.0 15 13
Sector Allocation (%):				
Financials Industrials Materials Energy Health Care Consumer Discretionary Consumer Staples Utilities Telecom Information Technology Diversification:	30 11 17 17 1 8 7 2 2 6	24 6 13 14 1 8 8 4 9	31 11 17 17 1 1 8 7 2 3 6	24 7 14 14 1 8 7 3 9
Number of Holdings % in 5 largest holdings % in 10 largest holdings	2,183 13 19	820 10 16	2,192 12 18	825 9 15
Region Allocation (%):				
Asia Latin America Europe, Middle East and Africa Canada Other	60 21 18 0 1	59 23 18 0	61 19 19 0 1	59 22 18 0 0
Largest Five Holdings:		Industry		
Gazprom Petroleo Brasiliero Bank Of China (Bj) Petrobras-Petroleo Brasilier Reliance Industries	4.3 2.6 2.2 2.0 1.6	Energy Energy Banks Energy Energy		



Growth

Large

Medium

Small

Dimensional International Small Cap Value Portfolio Detail as of 12/31/11

Mandate: International Equities,

Developed Markets

Active/Passive: Active

Market Value: \$19.8 million

Portfolio Manager: Team

Location: Santa Monica, CA

9/1/2008 Inception Date:

Mutual Fund (DISVX) Account Type:

Fee Schedule: 0.69% on all assets Liquidity Constraints:

Daily

Strategy:

The Dimensional (DFA) International Small Cap Value Portfolio is designed to provide broadly diversified exposure to international small cap equities, and will own two thousand companies or more. Portfolio managers seek to achieve long-term capital appreciation by investing in the stocks of small non-U.S. companies which DFA believes to be value stocks at the time of purchase. Securities are considered value stocks primarily because a company's shares have a high book value in relation to their market value. In assessing value, additional factors such as price to cash flow or price to earning ratios may be considered, as well as economic conditions and developments in the issuer's industry. The portfolio currently invests primarily in companies located in Europe and Asia.

Performance (%):	4Q11	1 YR	3 YR	Since 9/1/08
Dimensional International Small Cap Value	1.4	-15.4	10.8	-1.9
MSCI EAFE Small Cap	-0.6	-15.9	14.6	-0.9
Peer International Small Cap	1.9	-14.1	16.5	0.8
Peer Ranking (percentile)	63	62	94	85

Risk: (forty months)	Standard Deviation	Beta	Sharpe Measure ¹	Info. Ratio	Correlation to Index
Dimensional International Small Cap Value	29.7%	1.00	Neg.	Neg.	0.98
MSCI EAFE Small Cap	29.5	1.00	Neg.	NA	1.00

	12/3 DFA	1/11	9/30 DFA)/11
Capitalization Structure:	International Small Cap	MSCI EAFE Small Cap	International Small Cap	MSCI EAFE Small Cap
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ million)	1.2 211.4	1.4 569.1	1.2 203.2	1.4 569.3
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	0 22 78	0 22 78	0 18 82	0 22 78
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	16 0.8 3.2 -2 20	17 1.9 3.3 5 12	16 0.8 3.2 -2 6	17 1.9 3.3 5 7
Sector Allocation (%):				
Materials Industrials Energy Consumer Discretionary Telecom Consumer Staples Financials Utilities Health Care Information Technology	18 25 7 19 0 5 18 0 2	11 23 5 18 1 7 20 2 6	18 25 6 20 0 5 18 0 2	11 23 5 18 1 7 20 2 6 8
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings	2,201 5 9	2,362 2 3	2,254 5 8	2,406 2 3
Region Allocation (%):				
Americas Europe Pacific Rim Other	14 49 37 0	0 54 46 0	12 49 38 0	0 54 46 0
Largest Five Holdings:		Industry		
Bilfinger Berger Hiscox Travis Perkins Meggitt Trelleborg Ab	1.1 0.9 0.9 0.9 0.9	Capital Goods Insurance Capital Goods Capital Goods Capital Goods		

A negative Sharpe ratio indicates that the portfolio underperformed the risk-free rate during the sample period.



Growth

Medium

Small

Artisan International Small Cap Portfolio Detail as of 12/31/11

Mandate: International Equities Growth Active/Passive: Active \$19.3 million Market Value: Portfolio Manager: Mark Yockey Location: San Francisco, CA Medium 10/1/2010 Inception Date: Small Account Type: Separately Managed

Fee Schedule:

1.05% on all assets

Liquidity Constraints:

Daily

Strategy:

Artisan believes that a consistent approach to fundamental stock selection will lead to outperformance over a full market cycle. Artisan combines a thematic approach to identifying global trends with a bottom-up search for companies that exhibit sustainable growth and are priced at reasonable valuations. Artisan's idea generation process utilizes quantitative and qualitative screening tools to identify companies that they believe can generate long-term sustainable earnings growth, typically in the 10-20% range. Deep, fundamental research is then conducted on candidate investments to assess the quality of the business. High quality characteristics include a strong management team, a dominant or accelerating industry position, and sustainable competitive advantages. Finally, the focus shifts to valuation. A company's valuation is analyzed on a number of different metrics relative to its own historical range, as well as local and global peers.

Guidelines

chmark = MSCI EAFE Small Cap; Max. position < 5% at time of purchase; Max. % in emerging markets = 25%;

Performance (%):	4Q11	1 YR	Since 10/1/10
Artisan International Small Cap	2.1	-13.5	-6.0
MSCI EAFE Small Cap	-0.6	-15.9	-4.9
Peer International Small Cap	1.9	-14.1	-4.0
Peer Ranking (percentile)	41	40	80

	12/3 Artisan	31/11	9/30 Artisan	0/11
Capitalization Structure:	International Small Cap	MSCI EAFE Small Cap	International Small Cap	MSCI EAFE Small Cap
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	2.6 1.5	1.4 0.6	2.7 1.5	1.4 0.6
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	4 36 61	0 22 78	2 40 58	0 22 78
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	19 2.6 2.2 16 14	17 1.9 3.3 5 12	17 2.6 2.4 14 9	17 1.9 3.3 5 7
Sector Allocation (%):				
Consumer Discretionary Industrials Consumer Staples Utilities Information Technology Telecom Health Care Energy Materials Financials	33 29 12 6 9 0 4 0 5	18 23 7 2 9 1 6 5 11 20	30 27 15 6 10 0 5 0 5	18 23 7 2 8 1 6 5 11 20
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings Region Allocation (%):	51 26 43	2,362 2 3	52 27 43	2,406 2 3
Europe/North America Pacific Rim/Asia Asia (emerging) Latin America (emerging) Europe/MidEast/Africa (emerging) Other	52 19 18 1 7 3	53 46 0 0 0	60 19 18 1 2	53 46 0 0 0
Largest Five Holdings:		Industry		
Wirecard Ag Babcock Intl Group Transcontainer Ojs Davide De Campari GFK Se	7.7 5.1 4.5 4.3 4.2	Software & Ser Commercial & Transportation Food Beverage Media	Professional Servi	ces



Templeton Frontier Markets Portfolio Detail as of 12/31/11

Mandate: International Equities,

Emerging Markets

Active/Passive: Active

Market Value: \$13.5 million

Portfolio Manager: Team

Location: Johannesburg, South Africa

Inception Date: 10/1/2010

Account Type: Mutual Fund (TFMAX)

Fee Schedule: 1.85% on all assets Liquidity Constraints:

Daily

Strategy:

Templeton's investment strategy focuses on three core principles: a value orientation, a patient investment outlook and a bottom-up investment approach. Templeton believes that the combination of these three characteristics provides them the discipline to look beyond short-term news, noise, and emotion, and to focus on the best long-term investment opportunities for their clients. The Templeton process begins with a screen of the investable universe on valuation, size and liquidity to identify potential bargains that may be worth further analysis. Interesting candidates are then subject to intense fundamental research which focuses on both quantitative and qualitative factors. Specific to the Frontier Markets strategy, the Templeton investment team also spends a great deal of time analyzing macro and country-specific factors which are particularly important in this asset class. Each company/market analysis is subject to an extensive peer review by the other members of the investment team. Ultimately a broadly diversified portfolio of 100-150 stocks is constructed and continually monitored by the team.

Performance (%):	4Q11	1 YR	10/1/10
Templeton Frontier Markets	0.5	-18.1	-9.8
MSCI Frontier Market	-1.9	-18.7	-9.9
Peer Emerging Markets	5.0	-18.4	-9.9
Peer Ranking (percentile)	98	48	49

Capitalization Structure:	12/3 Templeton Frontier Markets	1/11 MSCI Frontier Market	9/30 Templeton Frontier Markets	/11 MSCI Frontier Market
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ million)	3.8 527.2	6.2 1,300.3	4.8 1,276.0	6.2 1,276.0
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	6 50 44	24 47 30	8 48 44	24 46 30
Fundamental Structure:				
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	9 1.5 4.5 10 8	15 2.3 5.8 4 2	11 2.1 6.6 5 5	15 2.1 5.8 3 3
Sector Allocation (%):				
Materials Energy Consumer Discretionary Health Care Consumer Staples Industrials Telecom Utilities Financials Information Technology	11 17 3 4 8 6 16 0 35	3 10 0 2 7 7 17 1 52 0	10 11 8 2 9 8 23 1 27 0	3 10 1 3 4 7 18 2 53 0
Diversification:				
Number of Holdings % in 5 largest holdings % in 10 largest holdings	82 26 42	153 26 37	81 21 35	161 26 37
Region Allocation (%):				
Asia Latin America Middle East and Africa Other	8 17 57 18	6 6 76 12	6 14 59 21	7 6 73 14
Largest Five Holdings:		Industry		
Kazmunaigas Explor Orascom Tel Hldg Comm Bk Of Qatar Qatar Telecom Zenith Bank Plc	7.9 7.0 4.2 3.7 3.7	Energy Telecommunic Banks Telecommunic Banks		



Growth

Large

Medium

Small

Investment Grade Bond Portfolio Reviews As of December 31, 2011



PIMCO Total Return Portfolio Detail as of 12/31/11

Mandate: Fixed Income Active/Passive: Active Market Value: \$84.8 million High Portfolio Manager: William H. Gross Location: Newport Beach, California Medium 9/1/1980 Inception Date: Low Account Type: Separately Managed

Fee Schedule:

0.25% on all assets

Liquidity Constraints:

Daily

Strategy:

PIMCO Total Return is a core portfolio that typically invests in intermediate term, investment grade bonds and seeks to maximize total return using both top-down and bottom-up analysis to construct portfolios. PIMCO couples their three-to-five year secular outlook for interest rates and the global economy with their bottom-up fundamental credit research to construct the portfolios.

Guidelines:

Benchmark = Barclays Gov't/Credit; Duration = +/- 2 years from index; Max. duration = 7 yrs; Max. % in foreign bonds = 20%; Min. avg quality = "A"; Max. % below "Baa" = 20%

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 9/1/80
PIMCO Total Return	1.7	8.9	11.9	9.1	9.6
Barclays Gov't/Credit	1.2	8.7	6.6	6.5	8.8
Peer Core Fixed Income	1.2	7.7	6.9	6.8	NA
Peer Ranking (percentile)	14	21	1	1	NA

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
PIMCO Total Return	7.1%	1.13	1.08	0.59	0.78
Barclays Gov't/Credit	4.8	1.00	1.07	NA	1.00

	12/	/31/11	9/30/11		
Duration & Yield:	PIMCO	Barclays Gov't/Credit	PIMCO	Barclays Gov't/Credit	
Average Effective Duration (years) Yield to Maturity (%)	6.2 3.1	6.0 2.0	6.2 3.8	6.0 2.1	
Quality Structure (%):					
Average Quality AAA (includes Treasuries and Agencies) AA A BBB BB B B Below B Non-Rated	AA 67 7 17 3 3 1 2	AA+ 63 8 16 14 0 0 0	AA 66 11 12 4 4 -2 5	AA + 63 8 16 14 0 0 0	
Sector Allocation (%):					
U.S. Treasury-Nominal U.S. Treasury-TIPS U.S. Agency Mortgage Backed Corporate Bank Loans Local & Provincial Government Sovereign & Supranational Commercial Mortgage Backed Asset Backed Cash Equivalent Other	19 5 1 26 17 0 11 14 0 1 3	53 0 10 0 30 0 2 4 0 0	14 5 1 35 18 0 11 14 0 1 -1	53 0 10 0 30 0 2 4 0 0	
Market Allocation (%):					
United States Foreign (developed markets) Foreign (emerging markets)	85 6 9	88 11 1	86 6 8	88 11 1	
Currency Allocation (%):					
Non-U.S. Dollar Exposure	2	0	4	0	



Loomis Sayles Multi-Sector Full Discretion Portfolio Detail as of 12/31/11

Mandate: Fixed Income Active/Passive: Active Market Value: \$46.3 million High Portfolio Manager: Kathleen Gaffney, CFA Location: Boston, Massachusetts Medium 1/1/1996 Inception Date: Low Account Type: Separately Managed

Fee Schedule:

0.50% on first \$20 mm; 0.40% on next \$30 mm; 0.30% thereafter

Liquidity Constraints:

Daily

Strategy:

The Loomis Sayles Multi-Sector Full Discretion strategy seeks to exploit the global fixed income insights generated by the Loomis Sayles Fixed Income Team. Portfolio construction is driven by bottom-up security selection and top-down macroeconomic analysis. Portfolios are structured to be benchmark-aware, but not constrained, and tactical investments in non-benchmark sectors (high yield, non-U.S. dollar, and emerging markets) are a key source of potential return.

Guidelines:

Benchmark = Barclays Credit; Max. duration = 8 yrs; Max. % in foreign bonds = 30%; Min. avg quality = "BBB-"; Max. % below "Baa3" = 30%

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 1/1/96
Loomis Sayles Multi-Sector Full Discretion	2.2	4.5	18.3	7.7	7.1
75% Barclays Credit / 25% Barclays HY	2.9	7.6	14.2	7.1	6.7
Peer Core Plus	1.5	7.5	9.4	6.8	6.4
Peer Ranking (percentile)	6	97	1	14	5

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
Loomis Sayles Multi-Sector Full Discretion	11.4%	1.31	0.55	0.16	0.96
75% Barclays Credit / 25% Barclays HY	8.3	1.00	0.69	NA	1.00

	12/3	31/11 75/25 Leh Credit/	9/3	30/11 75/25 Leh Credit/
Duration & Yield:	Loomis	Leh HY	Loomis	Leh HY
Average Effective Duration (years) Yield to Maturity (%)	5.9 5.5	6.1 4.7	6.1 5.6	6.1 5.1
Quality Structure (%):				
Average Quality AAA (includes Treasuries and Agencies) AA A BBB BB BB B BN Below B Non-Rated	BBB 15 15 11 31 9 9 10	A- 7 10 31 26 10 11 4	BBB 16 16 15 27 11 6 9	A- 7 10 31 26 10 11 4
Sector Allocation (%):				
U.S. Treasury-Nominal U.S. Treasury-TIPS U.S. Agency Mortgage Backed Corporate Bank Loans Local & Provincial Government Sovereign & Supranational Commercial Mortgage Backed Asset Backed Cash Equivalent Other	8 0 4 2 57 0 5 6 9 2 8 0	0 0 4 0 84 0 4 8 0 0 0	9 0 4 0 56 0 5 6 9 1 7	0 0 4 0 84 0 4 8 0 0 0
Market Allocation (%):				
United States Foreign (developed markets) Foreign (emerging markets)	71 27 3	74 24 2	71 27 2	74 24 2
Currency Allocation (%):				
Non-U.S. Dollar Exposure	22	0	23	0



Baird Advisors Core Plus Bond Portfolio Detail as of 12/31/11

Mandate: Fixed Income Active/Passive: Active Market Value: \$40.5 million High Portfolio Manager: Charlie Groeschell Location: Milwaukee, Wisconsin Medium 5/1/2009 Inception Date: Low Account Type: Separately Managed

Fee Schedule:

0.30% on first \$25 mm; 0.25% on next \$25 mm; 0.20% on next \$50 mm; 0.15% thereafter

Liquidity Constraints:

Daily

Strategy:

The Baird Core Plus strategy seeks to outperform the Barclays Aggregate Bond index using a duration neutral process. Baird seeks to add incremental value through security selection, sector allocation, yield curve positioning, but the manager believes it is difficult to accurately forecast interest rates over the long-term.

Guidelines:

Benchmark = Barclays Aggregate; Duration = \pm 1 years from index; Max. % in foreign bonds = 10%; Min. avg quality = "Aa"; Max. % in "A" or below = 30%; Max. % below "Baa" = 10%

Performance (%):	4Q11	1 YR	5/1/09
Baird Advisors Core Plus Bond	1.2	8.3	7.6
Barclays Aggregate	1.1	7.8	7.4
Peer Core Fixed Income	1.2	7.7	7.5
Peer Ranking (percentile)	45	25	43

	12/31/11 9/30/11			
Duration & Yield:	Baird Core Plus Bond	Barclays Aggregate	Baird Core Plus Bond	Barclays Aggregate
Average Effective Duration (years) Yield to Maturity (%)	5.0 2.8	5.0 2.2	5.0 2.9	5.0 2.4
Quality Structure (%):				
Average Quality AAA (includes Treasuries and Agencies) AA A BBB BB B Below B Non-Rated	AA + 68 6 12 12 0 1 1 0	AA+ 75 5 11 9 0 0 0	AA+ 67 7 12 12 0 2 1	AA + 75 5 11 9 0 0 0 0 0
Sector Allocation (%):				
U.S. Treasury-Nominal U.S. Treasury-TIPS U.S. Agency Mortgage Backed Corporate Bank Loans Local & Provincial Government Sovereign & Supranational Commercial Mortgage Backed Asset Backed Cash Equivalent Other	24 0 0 30 27 0 1 1 11 5 2	35 0 7 32 20 0 1 1 3 2 0 0	24 0 0 29 28 0 1 1 9 5 4	35 0 7 32 20 0 1 1 3 2 0 0
Market Allocation (%):				
United States Foreign (developed markets) Foreign (emerging markets)	91 8 1	92 7 1	100 0 0	92 7 1
Currency Allocation (%):				
Non-U.S. Dollar Exposure	0	0	0	0



Payden Core Fixed Income Portfolio Detail as of 12/31/11

Mandate: Fixed Income Active/Passive: Active Market Value: \$32.9 million High Portfolio Manager: Jim Sarni, CFA Location: Los Angeles, California Medium 5/1/2002 Inception Date: Low Account Type: Separately Managed

Fee Schedule:

0.23% on all assets

Liquidity Constraints:

Daily

Strategy:

Payden Core Fixed Income is a high quality, intermediate term core bond strategy that includes all maturities and sectors in the investment-grade fixed income market. The portfolio primarily consists of Treasuries, Agencies, investment-grade corporates, and asset/mortgage-backed securities.

Guidelines:

Benchmark = Barclays Aggregate; Duration = +/- 1 years from index; Max. % in foreign bonds = 10%; Min. avg quality = "Aa"; Min. % in securities issued by U.S. government or its agencies = 50%; Max. % in "A" or below = 30%; Max. % below "Baa" = 10%

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 5/1/02
Payden Core Fixed Income	1.4	6.7	7.3	6.0	5.5
Barclays Aggregate	1.1	7.8	6.8	6.5	5.8
Peer Core Fixed Income	1.2	7.7	6.9	6.8	6.0
Peer Ranking (percentile)	33	73	39	88	87

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
Payden Core Fixed Income	3.9%	1.00	1.15	Neg.	0.96
Barclays Aggregate	3.8	1.00	1.32	NA	1.00

		31/11		0/11
Duration & Yield:	Payden & Rygel	Barclays Aggregate	Payden & Rygel	Barclays Aggregate
Average Effective Duration (years) Yield to Maturity (%)	5.1 2.8	5.0 2.2	5.0 2.8	5.0 2.4
Quality Structure (%):				
Average Quality AAA (includes Treasuries and Agencies) AA A BBB BB B B Below B Non-Rated	AA 62 9 9 17 1 2 0	AA+ 75 5 11 9 0 0 0	A+ 5 64 13 14 1 4 0	AA+ 75 5 11 9 0 0 0
Sector Allocation (%):				
U.S. Treasury-Nominal U.S. Treasury-TIPS U.S. Agency Mortgage Backed Corporate Bank Loans Local & Provincial Government Sovereign & Supranational Commercial Mortgage Backed Asset Backed Cash Equivalent Other	12 0 0 40 34 0 0 1 0 0 10 3	35 0 7 32 20 0 1 1 3 2 0 0	14 0 0 41 34 0 0 1 0 0 8 3	35 0 7 32 20 0 1 1 3 2 0 0
Market Allocation (%):				
United States Foreign (developed markets) Foreign (emerging markets)	96 3 1	92 7 1	94 5 1	92 7 1
Currency Allocation (%):				
Non-U.S. Dollar Exposure	0	0	0	0



Wellington Opportunistic Emerging Market Debt Portfolio Detail as of 12/31/11

Mandate: Fixed Income

Active/Passive: Active

Active \$26.2 million

Portfolio Manager: Jim Valone and Ricardo Adrogue

Location: Boston, MA

Inception Date: 10/1/2010

Fee Schedule: 0.55% on all assets

Account Type:

Liquidity Constraints:

Commingled Fund

Monthly

Strategy:

The Wellington Opportunistic Emerging Markets Debt strategy employs an unconstrained, best ideas approach in order to take advantage of investment opportunities in emerging markets sovereign, corporate, and local markets. Wellington believes that emerging markets must be approached from a global perspective and that market inefficiencies can be exploited through the use of proprietary, quantitative, and fundamental research integrated into a disciplined investment process. Portfolios will invest primarily in the liquid, tradable sovereign and corporate bonds of emerging countries, as well as local currency-denominated bonds on both a hedged and an unhedged basis. There is no minimum credit rating for holdings in securities or currencies, but typical average portfolio credit quality is expected to be investment grade. The Wellington team makes limited use of derivatives within the portfolio. Occasionally, they will enter into interest rate or total return swaps to help manage portfolio duration or gain exposure to local markets when pricing or liquidity is more attractive in the derivatives market than in the cash bond market.

Performance (%):	4Q11	1 YR	Since 10/1/10
Wellington Opportunistic Emerging Market Debt	4.5	5.3	3.7
JPMorgan EMBI Global	5.1	8.5	5.1

	12/31/11 9/30/11						
	Wellington	51/11	Wellington	50/11			
Duration & Yield:	Emerging Debt	JPMorgan EMBI Global	Emerging Debt	JPMorgan EMBI Global			
Duration & field.	Debt	EIVIDI GIUDAI	Debt	EIVIDI GIUDAI			
Average Effective Duration (years) Yield to Maturity (%)	6.2 5.5	7.0 5.7	5.9 6.0	6.9 6.1			
Quality Structure (%):							
Average Quality AAA (includes Treasuries and Agencies) AA A BBB BB B B Below B Non-Rated	BBB- 0 16 8 39 21 10 0	BB+ 0 2 7 45 26 12 0	BB 0 6 9 37 21 11 0	BB+ 0 2 7 48 25 11 0			
Sector Allocation (%):							
U.S. Treasury-Nominal U.S. Treasury-TIPS U.S. Agency Mortgage Backed Corporate Bank Loans Local & Provincial Government Sovereign & Supranational Commercial Mortgage Backed Asset Backed Cash Equivalent Other	0 0 0 0 0 0 0 100 0 0	0 0 0 0 0 0 0 100 0 0	0 0 0 0 0 0 0 100 0 0	0 0 0 0 0 0 100 0 0			
Market Allocation (%):							
United States Foreign (developed markets) Foreign (emerging markets)	0 0 100	0 0 100	0 0 100	0 0 100			
Currency Allocation (%):							
Non-U.S. Dollar Exposure	41	100	41	100			



ULLICO Separate Account W1 Portfolio Detail as of 12/31/11

Mandate: Fixed Income

Active/Passive: Active

Market Value: \$15.8 million

Portfolio Manager: Herbert Kolben

Location: Washington, District of Columbia

Inception Date: 1/1/2010

Account Type: Separately Managed

Fee Schedule:

0.75% on first \$100mm; 0.1% loan servicing fee

Liquidity Constraints:

Monthly

Strategy:

The ULLICO Separate Account W1 portfolio will primarily consist of construction and permanent mortgage loans issued for U.S. commercial properties. The management team targets investments in forward permanent and construction loans for new construction or extensive renovation projects. From time to time, and subject to excess liquidity and market conditions, the account may invest in permanent mortgages on existing buildings. Loans made by Union Labor Life using account proceeds are generally collateralized by first mortgages on real property. Union Labor Life's investment strategy aims to capitalize on opportunities in the current real estate market by making loans to borrowers in connection with their projects related to multi-family (rental and for sale), multi-tenanted, single-tenanted and owner occupied properties, including office, medical office, anchored retail, industrial, and business-oriented hotels with major chains. Union Labor Life uses account proceeds to invest in metropolitan areas

Performance (%):	4Q11	1 YR	Since 1/1/10
ULLICO Separate Account W1	1.1	4.5	2.8
Barclays Mortgage	0.9	6.2	5.8



AFL-CIO Housing Investment Trust Portfolio Detail as of 12/31/11

Mandate: Fixed Income Active/Passive: Active Market Value: \$10.2 million High Portfolio Manager: Chang Suh Location: Washington, District of Columbia Medium 10/1/2011 Inception Date: Low Account Type: Commingled Fund

Fee Schedule:

0.41% on all assets

Liquidity Constraints:

Monthly (Last day of the month)

Strategy:

The AFL-CIO Housing Investment Trust (HIT) is a fixed income investment program comprised of high grade, public- and private-market mortgage bonds. The HIT portfolio combines long-duration, agency-insured multifamily mortgage-backed securities (MBS) with short-duration, single-family MBS and intermediate-term agency securities. The structure of the HIT portfolio means that it will not possess credit risk. Unlike most mortgage investments, the HIT portfolio invests mainly in issues with limited prepayment risk.

Performance (%):	4Q11	YTD	Since 10/1/11
AFL-CIO Housing Investment Trust	1.5	NA	1.5
Barclays Mortgage	0.9	6.2	0.9

	12/3		9/30	30/11		
Duration & Yield:	AFL CIO HIT	Barclays Mortgage	AFL CIO HIT	Barclays Mortgage		
Average Effective Duration (years) Yield to Maturity (%)	4.3 2.8	2.9 2.7	4.3 2.9	3.0 2.8		
Quality Structure (%):						
Average Quality AAA (includes Treasuries and Agencies) AA A BBB BB B B B Below B Non-Rated	AAA 94 4 2 0 0 0 0	AAA 100 0 0 0 0 0 0	AAA 94 4 2 0 0 0 0	AAA 100 0 0 0 0 0 0		
Sector Allocation (%):						
U.S. Treasury-Nominal U.S. Treasury-TIPS U.S. Agency Mortgage Backed Corporate Bank Loans Local & Provincial Government Sovereign & Supranational Commercial Mortgage Backed Asset Backed Cash Equivalent Other	8 0 0 26 0 0 0 0 65 0	0 0 0 100 0 0 0 0 0	6 0 0 27 0 0 0 0 65 0 2	0 0 0 100 0 0 0 0 0		
Market Allocation (%):						
United States Foreign (developed markets) Foreign (emerging markets)	100 0 0	100 0 0	100 0 0	100 0 0		
Currency Allocation (%):						
Non-U.S. Dollar Exposure	0	0	0	0		



ERECT Fund I Portfolio Detail as of 12/31/11

Mandate: Fixed Income

Active/Passive: Active

Market Value: \$6.1 million

Portfolio Manager: Tad Imbrie

Location: Pittsburgh, Pennsylvania

Inception Date: 12/1/2006

Account Type: Commingled Fund

Fee Schedule:

1.35% on invested assets; 0.2% on cash balances

Liquidity Constraints:

Daily

Strategy:

The ERECT Fund I, a commingled fund, provides exposure to mortgage-backed securities and multi-family housing loans while attempting to outperform the Barclays Mortgage Index over long time periods. The fund provides for month-end liquidity, preferring 5 to 10 days advance notice of withdrawals. The ERECT Fund invests in private real estate that involves construction. All properties are located in eastern Ohio, western Pennsylvania, and West Virginia. The fund can invest in various property types, including office, retail, apartments, condominiums, warehouses, medical office buildings, and hotels. The ERECT Fund I provides first and second mortgage loans for commercial real estate projects, essentially underwriting construction risk for the projects. Generally, the loans are held to maturity in order to generate income, but they may be sold by the fund's managers.

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 12/1/06
ERECT Fund I	0.6	1.9	2.2	4.1	4.0
Barclays Mortgage	0.9	6.2	5.8	6.5	6.4

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
ERECT Fund I	2.8%	0.36	0.95	Neg.	0.39
Barclays Mortgage	3.0	1.00	1.71	NA	1.00



ULLICO "J for Jobs" Portfolio Detail as of 12/31/11

Mandate: Fixed Income

Active/Passive: Active

Market Value: \$5.3 million

Portfolio Manager: Herbert Kolben

Location: Washington, District of Columbia

Inception Date: 10/1/2006

Account Type: Commingled Fund

Fee Schedule:

0.675% on all assets

Liquidity Constraints:

Monthly

Strategy:

The "J for Jobs" portfolio is an open-ended, commingled pool that invests in high-quality secured mortgages on development projects. Investments in "J for Jobs" are primarily in new construction or extensive renovations. The portfolio consists of high-quality construction loans and permanent mortgages secured by a variety of properties throughout the United States. To qualify for a "J for Jobs" mortgage, borrowers must certify that they will employ contractors and subcontractors signatory to collective bargaining agreements with unions affiliated with their local Building and Construction Trades Council. All projects are by construction workers affiliated with the Buildings and Construction Trades Department of the AFL-CIO. Additionally, all assets held by the "J for Jobs" fund are in a separate account that is fully insulated from the creditors of ULLICO.

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 10/1/06
ULLICO "J for Jobs"	0.6	3.5	-1.8	1.7	2.1
Barclays Mortgage	0.9	6.2	5.8	6.5	6.5

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
ULLICO "J for Jobs"	2.5%	-0.07	0.11	Neg.	-0.03
Barclays Mortgage	3.0	1.00	1.71	NA	1.00



High Yield Bond Portfolio Reviews As of December 31, 2011



Fort Washington High Yield Portfolio Detail as of 12/31/11

Mandate: Fixed Income Active/Passive: Active Market Value: \$63.0 million High Portfolio Manager: Brendan White Location: Cincinnati, Ohio Medium Inception Date: 10/1/2011 Low Commingled Fund Account Type:

Fee Schedule:

0.50% on first \$25 million; 0.45% on next \$25 million; 0.35% thereafter

Liquidity Constraints:

Daily

Strategy:

The Fort Washington High Yield strategy seeks to outperform over a full market cycle by protecting principal in phases of market decline while providing a stable base of income across all periods. The portfolio managers emphasize higher quality credits and will not buy securities rated CCC or below.

P	erformance (%):	4Q11	YTD	10/1/11	
Fo	ort Washington High Yield	6.4	NA	6.4	
	Barclays High Yield BB/B	6.0	6.1	6.0	
	Peer High Yield	6.1	4.6	6.1	
	Peer Ranking (percentile)	34	NA	34	

	12/31/11 9/30/11				
Duration & Yield:	Fort WA IA	Barclays HY BB/B	Fort WA IA	Barclays HY BB/B	
Average Effective Duration (years) Yield to Maturity (%)	4.6 7.3	4.3 7.3	4.4 8.1	4.6 8.4	
Quality Structure (%):					
Average Quality AAA (includes Treasuries and Agencies) AA A BBB BB B B Below B Non-Rated	BB- 1 0 0 2 45 51 2 0	BB 0 0 0 0 48 52 0	BB- 3 0 0 1 44 51 1	BB 0 0 0 0 48 52 0	
Sector Allocation (%):					
U.S. Treasury-Nominal U.S. Treasury-TIPS U.S. Agency Mortgage Backed Corporate Bank Loans Local & Provincial Government Sovereign & Supranational Commercial Mortgage Backed Asset Backed Cash Equivalent Other	0 0 0 0 99 0 0 0 0 0	0 0 0 0 100 0 0 0 0 0	0 0 0 97 0 0 0 0 0	0 0 0 100 0 0 0 0 0	
Market Allocation (%):					
United States Foreign (developed markets) Foreign (emerging markets)	91 8 1	100 0 0	100 0 0	100 0 0	
Currency Allocation (%):					
Non-U.S. Dollar Exposure	0	0	0	0	



Shenkman Credos Floating Rate Fund, L.P. Portfolio Detail as of 12/31/11

Mandate: High Yield Active/Passive: Active ∄ Market Value: \$41.3 million High Portfolio Manager: Jonathan Savas and Beth Wahlig Location: New York, New York Medium 6/1/2010 Inception Date: Low Account Type: Commingled Fund

Fee Schedule:

0.50% on all assets

Liquidity Constraints:

Quarterly

Strategy:

The investment objective of the Credos Fund is to maximize total returns (i.e., current income and capital appreciation) by investing primarily in senior secured, floating rate loans of non-investment grade (i.e., "high yield") companies. The portfolio strategy is conservatively managed and focused on preserving capital and generating strong returns through the selection of high quality credits.

Performance (%):	4Q11	1 YR	Since 6/1/10
Shenkman Credos Floating Rate Fund, L.P.	3.0	1.0	4.7
CSFB Leveraged Loan	2.7	1.8	5.1



TIPS Portfolio Reviews as of 12/31/11

TIPS Portfolio Reviews As of December 31, 2011



JPMorgan Safety Reserve (TIPS) Portfolio Detail as of 12/31/11

Safety Reserve® Mandate: Active/Passive: Active Market Value: \$77.4 million High Portfolio Manager: Doug Gimple Location: Columbus, Ohio Medium 4/1/1995 Inception Date: Low Account Type: Separately Managed

Fee Schedule:

0.06% on all assets

Liquidity Constraints:

Daily

Strategy:

The J.P. Morgan Safety Reserve (TIPS) portfolio invests primarily in a portfolio of domestic inflation-linked securities. In addition to serving as a potential source of cash in a crisis (as well as for ongoing benefit payments), the Safety Reserve® is an extremely conservative and stable investment portfolio.

Guidelines:

Permissible assets include U.S. TIPS, U.S. Treasury and agency securities, STIF accounts at the custodian bank, and funds invested by a designated cash manager.

Performance (%):	4Q11	1 YR	3 YR	5 YR	Since 4/1/95
JPMorgan Safety Reserve (TIPS)	2.6	13.3	10.3	8.0	6.2
Custom Benchmark ¹	2.7	13.6	10.4	7.7	5.9
Peer TIPS	2.6	12.8	10.1	7.9	NA
Peer Ranking (percentile)	59	42	41	43	NA

Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure	Info. Ratio	Correlation to Index
JPMorgan Safety Reserve (TIPS)	8.3%	1.04	0.79	0.24	0.99
Custom Benchmark ¹	7.0	1.00	0.80	NΔ	1.00

12/31/11 9/30/11				
Duration & Yield:	J.P. Morgan	Barclays TIPS	J.P. Morgan	Barclays TIPS
Average Effective Duration (years) Yield to Maturity (%)	4.8 1.8	4.2 1.7	4.7 2.0	5.5 1.9
Quality Structure (%):				
Average Quality AAA (includes Treasuries and Agencies) AA A BBB BB BB B Below B Non-Rated	AAA 100 0 0 0 0 0 0	AAA 100 0 0 0 0 0 0	AAA 100 0 0 0 0 0 0	AAA 100 0 0 0 0 0 0
Sector Allocation (%):				
U.S. Treasury-Nominal U.S. Treasury-TIPS U.S. Agency Mortgage Backed Corporate Bank Loans Local & Provincial Government Sovereign & Supranational Commercial Mortgage Backed Asset Backed Cash Equivalent Other	0 99 0 0 0 0 0 0 0 0	0 100 0 0 0 0 0 0 0 0	0 97 0 0 0 0 0 0 0 0 0	0 100 0 0 0 0 0 0 0 0
Market Allocation (%):				
United States Foreign (developed markets) Foreign (emerging markets)	100 0 0	100 0 0	100 0 0	100 0 0
Currency Allocation (%):				
Non-U.S. Dollar Exposure	0	0	0	0

¹ Through May 31, 2006, J.P. Morgan was benchmarked to the Barclays 1-3 Year Government index. Beginning June 1, 2006, the benchmark changed to 50% Barclays 1-3 Year Government index and 50% Barclays U.S. TIPS index. Beginning in November 1, 2007, the benchmark changed to the Barclays U.S. TIPS index.



HGK Fixed Income Portfolio Detail as of 12/31/11

Mandate: Safety Reserve® Active/Passive: Active Market Value: \$20.7 million High Portfolio Manager: Anthony P. Santoliquido Location: Jersey City, New Jersey Medium Inception Date: 4/1/2010 Low Account Type: Separately Managed

Fee Schedule: 0.15% on all assets

Liquidity Constraints:

Daily

Strategy:

The HGK Fixed Income strategy emphasizes spread risk versus treasuries, in lieu of credit risk. HGK focuses on spread risk by allocating to "AA" & "AAA" rated U.S. agencies, MBS, ABS, and CMBS. HGK restricts unsecured fixed income securities rated "AA" or lower to 1.5% of the portfolio and they mandate that credit based securities that are downgraded to below "A" are sold.

Performance (%):	4Q11	1 YR	4/1/10
HGK Fixed Income	0.6	3.0	2.0
Merrill Lynch Treasury 1-3 Year	0.2	1.6	1.8

Duration & Yield:	12/3 HGK	ML 1-3 yr Treas
Average Effective Duration (years) Yield to Maturity (%)	2.0 0.0	1.9 0.3
Quality Structure (%):		
Average Quality AAA (includes Treasuries and Agencies) AA A BBB BB B B Below B Non-Rated	AA + 30 70 0 0 0 0 0	AAA 100 0 0 0 0 0 0
Sector Allocation (%):		
U.S. Treasury-Nominal U.S. Treasury-TIPS U.S. Agency Mortgage Backed Corporate Bank Loans Local & Provincial Government Sovereign & Supranational Commercial Mortgage Backed Asset Backed Cash Equivalent Other	29 0 71 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0
Market Allocation (%):		
United States Foreign (developed markets) Foreign (emerging markets)	100 0 0	100 0 0
Currency Allocation (%):		
Non-U.S. Dollar Exposure	0	0



Real Estate Portfolio Reviews as of 12/31/11

Real Estate Portfolio Reviews As of December 31, 2011



Real Estate Fund XIII Portfolio Detail as of 12/31/11

Strategy: Real Estate

Private Market

Diversified Core

Market Value: \$15.2 million

Senior Professionals: Mr. B

Location: West Coast United States

Account Type: Commingled Fund

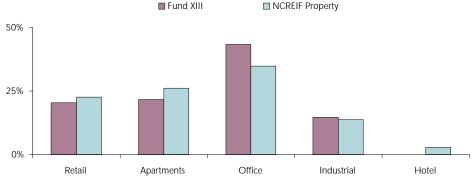
Liquidity Constraints: Quarterly

Fee Schedule: 1.10% on first \$25 mm; 0.95% on next \$50 mm; 0.85% thereafter

Performance (%):	4Q11	YTD	Since yyyy
Real Estate Fund XIII	2.4	NA	2.6
NCREIF Property	3.0	14.3	6.4
NCREIF ODCE	3.0	16.0	6.6



Property Type:



Investment Strategy:

Real Estate Fund XIII targets institutional-quality office, industrial, retail, and multifamily properties in the United States. Fund XIII will seek properties in the \$5 million to \$50 million range. Target properties will be 80% to 100% occupied, less than ten years old, and will be diversified by tenant base

Real Estate Fund LI Portfolio Detail as of 12/31/11

Strategy: Real Estate

Public Market Public REITS

Market Value: \$20.4 million

Senior Professionals: Team

Location: New England

Inception Date: yyyy

Account Type: Separately Managed

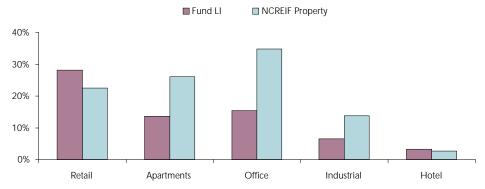
Liquidity Constraints: Daily

Fee Schedule: 0.65% on all assets

Performance (%):	4Q11	1 YR	3 YR	Since yyyy
Real Estate Fund LI	6.9	-4.1	15.4	-0.2
S&P/Citigroup BMI World Property Index	6.2	-5.7	13.9	-1.9
Peer Global REIT	7.5	-6.6	15.0	-0.9
Peer Ranking (percentile)	61	11	39	16



Property Type:



Investment Strategy:

Real Estate Fund LI's team uses a top-down and bottom-up investment approach to construct a portfolio of 90 to 110 listed real estate-related securities, made up of an investment universe including REITs and REOCs. The expected annual average turnover rate will range from 40% to 80%. A Global Investment Policy Committee meets quarterly to determine allocation decisions at the country/regional and sector level, after which Fund LI utilizes a proprietary system which ranks securities based on quantitative and qualitative factors.



Natural Resources Portfolio Reviews As of December 31, 2011



Natural Resources Fund V Portfolio Detail as of 12/31/11

Mandate: Natural Resources

Active/Passive: Active

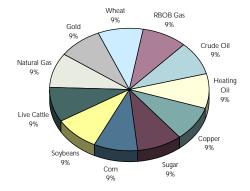
Market Value: \$10.2 million

Portfolio Manager: Mr. A

Location: Northeastern United States

Inception Date: yyyy

Account Type: Commingled Fund



Fee Schedule:

1.25% on all assets

Liquidity Constraints:

Monthly (First and last day of the month)

Strategy:

Natural Resources Fund V is a trend following strategy that invests in commodity futures. It is a systematic program that initiates a long position when the front month futures prices crosses above the 200 daily moving average. The program covers 11 commodities and is equal weighted. The program will automatically roll if the price remains above the 200 daily moving average. A sell signal is generated if the futures price crosses below the 200 daily moving average.

Performance (%):	4Q11	1 YR	уууу
Natural Resources Fund V	-1.8	1.6	1.1
Dow Jones-Commodity U.S. Index	0.3	-13.4	3.6



Natural Resources Fund I Portfolio Detail as of 12/31/11

Strategy: Natural Resources

Special Situations

Senior Professionals: Team

Location: New England

Vintage Year: yyyy

Fee Schedule: 1.36% of commitments:

20% carried interest;

8% preferred return

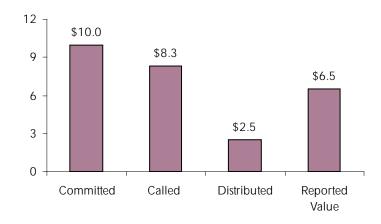
Commitment: \$10.0 million

Capital Contributions: \$8.3 million

Outstanding Commitment: \$1.7 million

Realized Proceeds: \$2.5 million

Total Value: \$6.5 million



Investment Strategy:

Natural Resources Fund I was formed to make investments in energy-related service companies with limited holdings of natural resources, such as coal mines. The managers will typically focus on companies with enterprise values of \$300 million to \$4 billion. Typical equity investments will range from \$100 million to \$500 million. In some cases, with an emerging technology, they may make smaller investments to develop a company with a proven concept or process where there is execution risk but no technology risk. The Fund may also invest in environmentally friendly power generation techniques and infrastructure.



Natural Resources Fund II Portfolio Detail as of 12/31/11

Strategy: Natural Resources

Senior Professionals: Mr. A

Location: Tri-State Area

Vintage Year: yyyy

Fee Schedule: 1.875% mgt fee,

8% preferred return,

19.75% carry

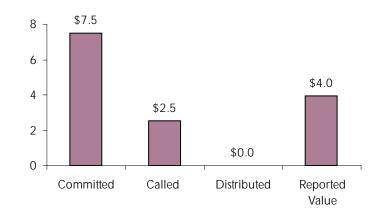
Commitment: \$7.5 million

Capital Contributions: \$2.5 million

Outstanding Commitment: \$5.0 million

Realized Proceeds: \$0.0 million

Total Value: \$4.0 million



Investment Strategy:

Natural Resources Fund II will make growth equity and buyout investments in middle-market North American energy companies. Fund II targets undermanaged companies and will bring in new resources to grow and manage the businesses more effectively. The Fund will only invest when it is the largest investor and has a controlling position. Approximately 50% of the Fund's investments will be in oil and gas exploration and production companies and the remaining 50% invested in energy services companies. The Fund may invest in midstream assets. The Fund will invest \$50 to \$100 million in nine to twelve energy companies with enterprise values ranging from \$50 to \$200 million. The Fund will limit acquisition leverage to 30% to 50% and will use an active hedging program to lower volatility when acquiring existing reserves.



Natural Resources Fund VI Portfolio Detail as of 12/31/11

Strategy: Natural Resources **Commitment:** \$5.0 million

Capital Contributions: \$2.5 million

6

Senior Team **Professionals:**

Location:

Fee Schedule:

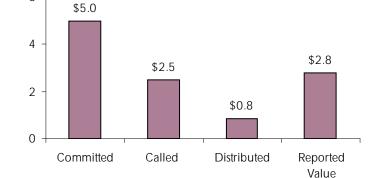
Outstanding Commitment: \$2.5 million

Vintage Year: yyyy

yyyy Realized Proceeds: \$0.8 million
2% management fee, 8% preferred Total Value: \$2.8 million

return, 20% carried interest

Northeastern United States



Investment Strategy:

Natural Resources Fund VI will make investments in small to medium sized metals and mining companies with market capitalizations ranging from \$25 million to \$250 million. Fund VI will invest in both public and private companies with undervalued assets. The typical company will have completed basic exploration, identified a mineral body, and completed scoping studies, typically at the pre-feasibility stage or later. The team may also invest in non-core assets of larger companies or distressed opportunities. The Fund's geographic focus will be industrialized countries, such as Australia, Canada, and the U.S., but may invest in certain emerging markets. The Fund will make 10 to 15 "core" investments in the amount of \$10 million to \$100 million, and will also make 10 to 15 smaller "strategic equity" investments ranging from less than \$1 million to \$10 million. To mitigate risk, the team prefers to utilize secured convertible securities to attain debt style protection with equity upside exposure.



Natural Resources Fund IX Portfolio Detail as of 12/31/11

Strategy: Natural Resources Commitment: \$5.0 million

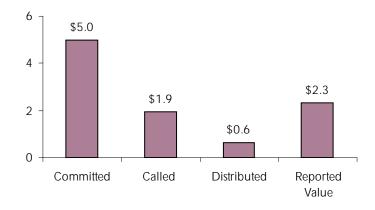
Extracted Upstream

Senior Professionals: Team Capital Contributions: \$1.9 million

Location: Southern United States **Outstanding Commitment:** \$3.1 million

Vintage Year: yyyy Realized Proceeds: \$0.6 million

Total Value: \$2.3 million



Investment Strategy:

Natural Resources Fund IX is a diversified, international energy partnership with a focus on acquiring existing companies with proven management teams in the oil and gas, coal, and power industries. Fund IX will also back management teams with new strategies and no existing assets, if an attractive opportunity presents itself. The Partnership will target 12 to 20 total investments, with commitment sizes ranging from \$10 million to \$75 million per company. The total portfolio is likely to be 75% invested in U.S. companies and 25% in non-U.S. companies, with the majority of the non-U.S. assets being in China and focused on coal. Fund IX's target assets for the Fund will be 55-80% oil and gas, 15-30% coal, and 5-15% other (power). Sixty percent of the Fund's capital is likely to be invested in direct assets, with 40% invested in services companies. Fund IX expects to be a control investor for most of its U.S. based investments.



Natural Resources Fund XIII Portfolio Detail as of 12/31/11

Strategy: Natural Resources Commitment: \$5.0 million

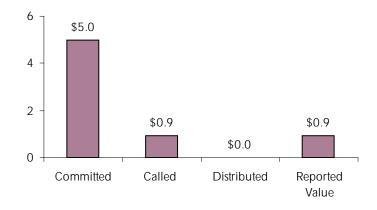
Extracted Upstream

Senior Professionals: Team Capital Contributions: \$0.9 million

Location: Southern United States **Outstanding Commitment:** \$4.1 million

Vintage Year: yyyy Realized Proceeds: \$0.0 million

Total Value: \$0.9 million



Investment Strategy:

Natural Resources Fund XIII will acquire and operate mature, producing oil and gas assets that can generate a high current yield over the term of the partnership. Fund XIII is managed by Manager G, an operating company with over 500 employees across 15 field offices in the U.S. and Canada. Fund XIII typically invests in onshore, U.S. assets in transactions that require over \$100 million. The Fund seeks to limit risk by pricing acquisitions conservatively, spreading the investment period over six to nine years, and hedging up to 70% of the production during the first three years of operating an asset. It then seeks to reduce the hedges to an average of 40% over the full term of the partnership.



Natural Resources Fund XII Portfolio Detail as of 12/31/11

Strategy: Natural Resources Commitment: \$6.0 million

Extracted Upstream

Senior Professionals: Team Capital Contributions: \$0.7 million

Location: Southern United States **Outstanding Commitment:** \$5.3 million

Realized Proceeds:

Vintage Year: yyyy

Fee Schedule: 1.5% of committed during

the commitment period; 1.5% of net funded commitments after the commitment period. 8% preferred return 20% carried

interest

\$6.0 4 - 2 2 - \$0.7 Committed Called Distributed Reported Value

Investment Strategy:

Natural Resources Fund XII intends to make commitments of \$50 to \$200 million to 20 or more management teams intending to build new, upstream ("E&P") oil and gas companies. Fund XII expects more than half of the capital for the Fund to go toward teams it has successfully backed in prior funds. Fund XII also has the flexibility to invest up to 10% of its capital in midstream assets. Fund XII's portfolio companies have little to no debt, and portfolio-wide the leverage ratio is only expected to be 20%. Exits for companies in Fund XIII may come through strategic sales, auctions, or the public markets.

\$0.0 million

Total Value: \$0.7 million



Natural Resources Fund III Portfolio Detail as of 12/31/11

Mandate: Natural Resources

Active/Passive: Active

Market Value: \$21.9 million

Portfolio Manager: Mr. Y

Location: Tri-State Area

Inception Date: yyyy

Account Type: Separately Managed

Fee Schedule: 0.75% on all assets Liquidity Constraints:

Daily

Strategy:

Natural Resources Fund III strategy focuses on equity investments in hard asset sectors including, but not limited to, energy, precious metals, base metals, forest and paper products, and agriculture. This strategy seeks to take advantage of global growth trends and the worldwide demand for raw materials.

Guidelines

Max position size 10% of portfolio market value; max convertible securities 10%; Securities of foreign companies, including dollar and non-dollar denominated, as well as ADRs, ADSs, GDRs, GDRs, and other depository receipts and shares, may not comprise more than 50% of the portfolio's market value at the time of purchase; No more than 10% may be invested in passively managed exchange traded funds; Max REIT 10%: Max 20% in derivatives; no leverage and no currency hedging allowed.

Performance (%):	4Q11	1 YR	уууу
Natural Resources Fund III Hard Assets	8.7	-15.7	9.1
S&P Global Natural Resources	7.8	-14.9	0.8

	12/31/11 9/30/11		
Capitalization Structure:	Natural Resources Fund III	Natural Resources Fund III	
Weighted Average Market Cap. (US\$ billion) Median Market Cap. (US\$ billion)	23.8 8.3	20.7 7.5	
Large (% over US\$10 billion) Medium (% US\$2 billion to US\$10 billion) Small (% under US\$2 billion)	53 43 4	46 49 5	
Fundamental Structure:			
Price-Earnings Ratio Price-Book Value Ratio Dividend Yield (%) Historical Earnings Growth Rate (%) Projected Earnings Growth Rate (%)	17 2.1 1.1 9 17	19 2.0 1.3 10 15	
Sector Allocation (%):			
Energy Materials Industrials Consumer Discretionary Consumer Staples Financials Health Care Information Technology Telecom Utilities	67 31 2 0 0 0 0 0 0	65 33 2 0 0 0 0 0 0	
Diversification:			
Number of Holdings % in 5 largest holdings % in 10 largest holdings	64 20 34	65 20 35	
Region Allocation (%):			
Europe/North America Pacific Rim/Asia Asia (emerging) Latin America (emerging) Europe/MidEast/Africa (emerging)	99 0 1 1 0	98 0 1 1 0	
Largest Five Holdings:	Industry		
Energy Company F 5.0 Materials Company D 4.2 Energy Company C 3.9 Energy Company B 3.6 Energy Company D 3.3	Energy Materials Energy Energy Energy		



Natural Resources Fund X Portfolio Detail as of 12/31/11

Natural Resources Strategy: Commitment: \$5.0 million

Harvested

Capital Contributions: Senior Professionals: Mr. A \$2.2 million

> Location: Northeastern United States **Outstanding Commitment:**

Vintage Year: Realized Proceeds: уууу

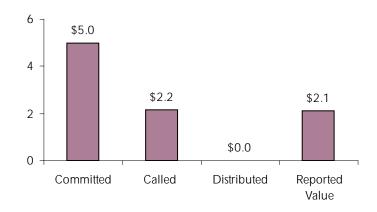
Fee Schedule: 0.65% on uncalled and 1.1%

on contributed capital; after investment period, 1.1% on lower of contributed capital adjusted for inflation or NAV 6% real preferred return Carried Interest: 5%-20%, depending on real IRR.

\$2.8 million

\$0.0 million

Total Value: \$2.1 million



Investment Strategy:

Natural Resources Fund X is an employee-owned timberland manager based in Northeastern United States with six additional offices outside the U.S. Fund X will invest in plantation timberland properties outside of the U.S. Fund X will typically be the majority owner, investing between \$20 million and \$200 million in each property. The portfolio will comprise a mixture of immature, mature, even-aged, and afforestation investments, with an emphasis on early-stage opportunities. Fund X will invest at least 60% in the Oceana region, Latin America, and Central Eastern Europe. No more than 40% will be invested in frontier markets such as Africa, Asia, and Central America. Fund X will be diversified across a minimum of four investments, three species types, two continents, and three countries



Cash Portfolio Review As of December 31, 2011



Payden Enhanced Cash Portfolio Detail as of 12/31/11

Mandate: Cash Sweep Active/Passive: Active Market Value: \$23.3 million High Portfolio Manager: Jim Sarni, CFA Location: Los Angeles, California Medium Inception Date: 6/1/1992 Low Account Type: Separately Managed

Fee Schedule:

0.20% on first \$50 mm; 0.175% on next \$50 mm; 0.125% on next \$50 mm; 0.10% on next \$50 mm

Liquidity Constraints:

Daily

Strategy:

Payden & Rygel manages the excess working cash of each of the other separate account managers in a "sweep" account. Their investment goal is to outperform the return of the custodian's STIF vehicle, net of fees.

Guidelines:

NA

Performance (%):		4Q11	1 YR	3 YR	5 YR	6/1/92
Payden Enhanced Cash		0.1	0.5	1.3	1.6	3.7
90-Day T-Bills		0.0	0.1	0.1	1.4	3.3
Risk: (sixty months)	Standard Deviation	Beta	Sharpe Measure	Info Rati		orrelation to Index
Payden Enhanced Cash	1.0%	0.00	0.13	0.1	3	0.30
90-Day T-Bills	0.5	1.00	0.00	N.A	4	1.00

	12/3	1/11	0/20	9/30/11		
Duration & Yield:	Payden & Rygel	90-Day T-Bills	Payden & Rygel	90-Day T-Bills		
Average Effective Duration (years) Yield to Maturity (%)	0.6 0.8	0.2 0.1	0.7 0.5	0.2 0.3		
Quality Structure (%):						
Average Quality AAA (includes Treasuries and Agencies) AA A BBB BB B B Below B Non-Rated	AA + 66 12 17 5 0 0	AAA 100 0 0 0 0 0 0	AA 12 70 14 3 0 0 0	AAA 100 0 0 0 0 0 0		
Sector Allocation (%):						
U.S. Treasury-Nominal U.S. Treasury-TIPS U.S. Agency Mortgage Backed Corporate Bank Loans Local & Provincial Government Sovereign & Supranational Commercial Mortgage Backed Asset Backed Cash Equivalent Other	13 0 8 12 33 0 0 2 0 8 24	100 0 0 0 0 0 0 0 0 0	9 0 6 8 24 0 0 2 0 7 44 0	100 0 0 0 0 0 0 0 0 0		
Market Allocation (%):						
United States Foreign (developed markets) Foreign (emerging markets)	88 12 0	100 0 0	92 8 0	100 0 0		
Currency Allocation (%):						
Non-U.S. Dollar Exposure	0	0	0	0		



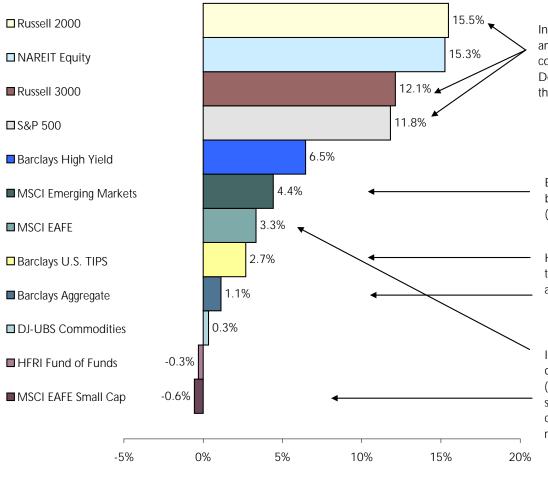


The World Markets Fourth Quarter of 2011



The World Markets 4th Quarter of 2011

The World Markets Fourth Quarter of 2011



In the fourth quarter continued strong corporate data and better than expected economic data outweighed concerns over the sovereign debt crisis in Europe. Domestic stocks posted double-digit returns during the quarter with small cap stocks leading the way.

Emerging markets increased for the quarter driven by returns from Latin America, particularly Brazil (+9.5%).

High quality bonds rose in the fourth quarter, but trailed riskier asset classes due to investors' renewed appetite for risk.

International developed market equities trailed domestic equities for the quarter. Stocks in Japan (-3.8%) weighed on relative performance due to signs of softening export demand. The dollar continued to strengthen, further weighing on returns for U.S. investors.

The World Markets 4th Quarter of 2011

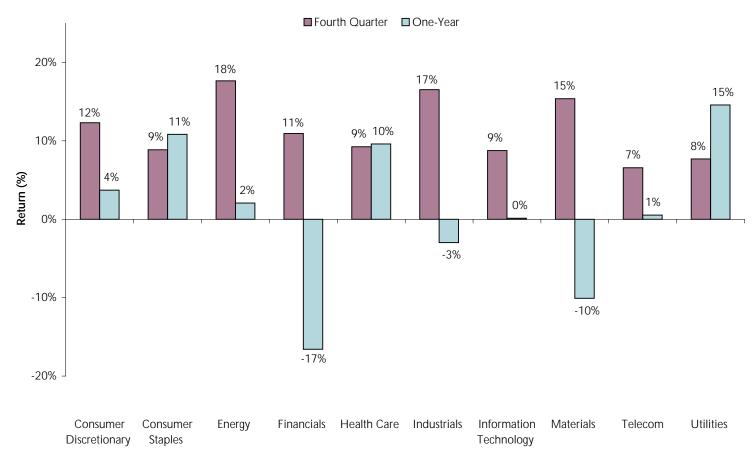
Index Returns

	4Q11 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Domestic Equity					
Russell 3000	12.1	1.0	14.9	0.0	3.5
Russell 1000	11.8	1.5	14.8	-0.2	3.3
Russell 1000 Growth	10.6	2.6	18.0	2.5	2.6
Russell 1000 Value	13.1	0.4	11.6	-2.6	3.9
Russell MidCap	12.3	-1.6	20.2	1.4	7.0
Russell MidCap Growth	11.2	-1.7	22.1	2.4	5.3
Russell MidCap Value	13.4	-1.4	18.2	0.0	7.7
Russell 2000	15.5	-4.2	15.6	0.2	5.6
Russell 2000 Growth	15.0	-2.9	19.0	2.1	4.5
Russell 2000 Value	16.0	-5.5	12.4	-1.9	6.4
Foreign Equity					
MSCI ACWI (ex. U.S.)	3.7	-13.7	10.7	-2.9	6.3
MSCI EAFE	3.3	-12.1	7.7	-4.7	4.7
MSCI EAFE Small Cap	-0.6	-15.9	14.6	-4.1	9.0
MSCI Emerging Markets	4.4	-18.4	20.1	2.4	13.9
Fixed Income					
Barclays Universal	1.5	7.4	7.7	6.4	6.0
Barclays Aggregate	1.1	7.8	6.8	6.5	5.8
Barclays U.S. TIPS	2.7	13.6	10.4	8.0	7.6
Barclays High Yield	6.5	5.0	24.1	7.5	8.9
JPMorgan GBI-EM Global Diversified	0.5	-1.8	11.5	9.2	NA
Other					
NAREIT Equity	15.3	8.3	21.0	-1.4	10.2
DJ-UBS Commodities	0.3	-13.4	6.3	-3.3	5.4
HFRI Fund of Funds	-0.3	-5.5	3.6	-0.7	3.3



S&P Sector Returns

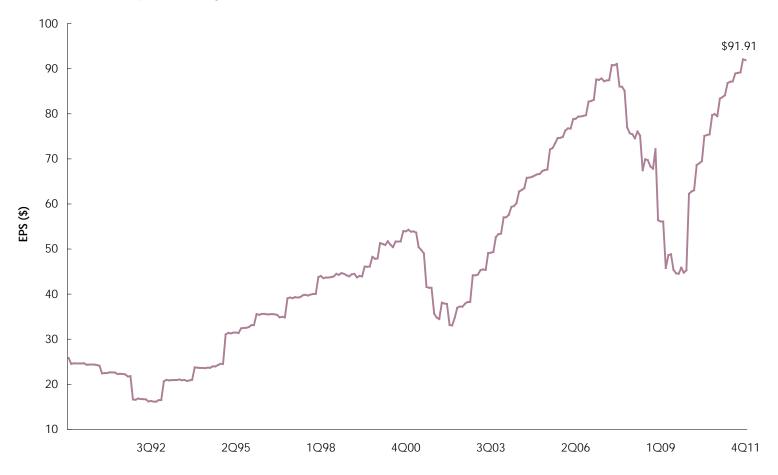
In a reversal of the third quarter, all ten sectors in the S&P 1500 posted gains, with the traditionally cyclical sectors leading the way. Energy (+18%) was the strongest performer as oil prices increased by close to \$20/barrel. For the trailing year, the majority of sectors posted positive returns, with utilities (+15%) posting the largest gain.





S&P 500 Earnings Per Share

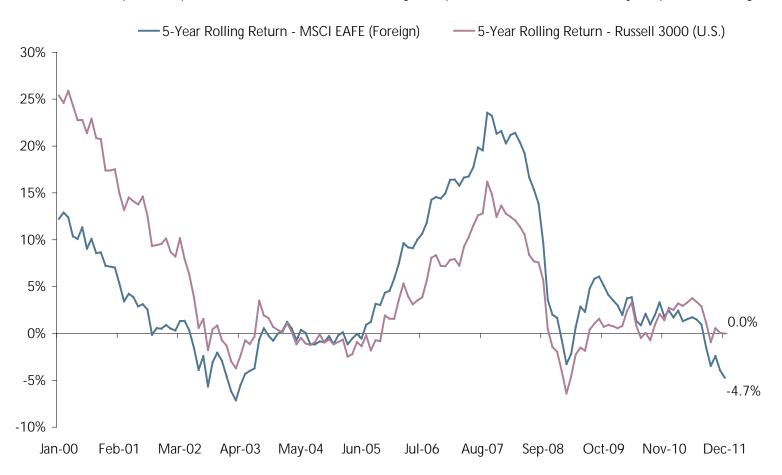
In the fourth quarter, corporate profitability grew for the ninth straight quarter. S&P 500 trailing one-year earnings were \$91.91 as of quarter-end, a level above the previous highs reached in 2007.





Equity Markets

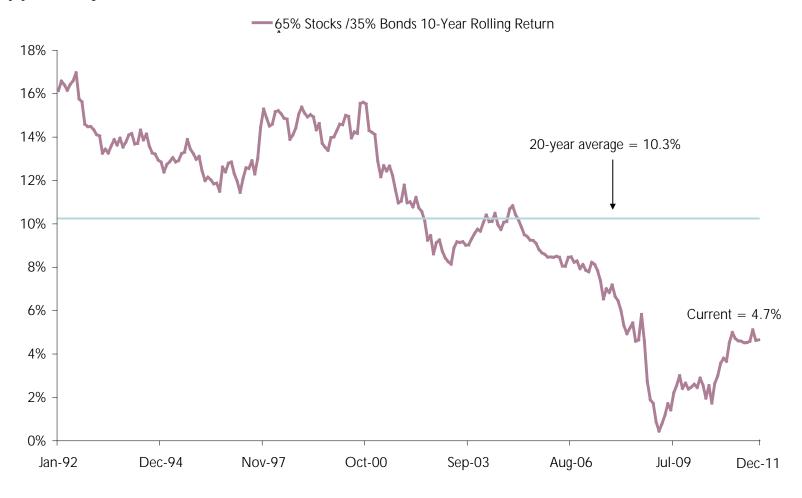
In the fourth quarter, the domestic equity market (+12.1%) substantially outpaced international developed market equities (+3.3%), due in part to a strengthening U.S. dollar and continued sovereign debt concerns in the Euro-zone. The performance spread between domestic and international equities expanded an additional 2.1% during the quarter to 4.7% for the five-year period ending December 31.





Rolling Ten-Year Returns: 65% Stocks and 35% Bonds

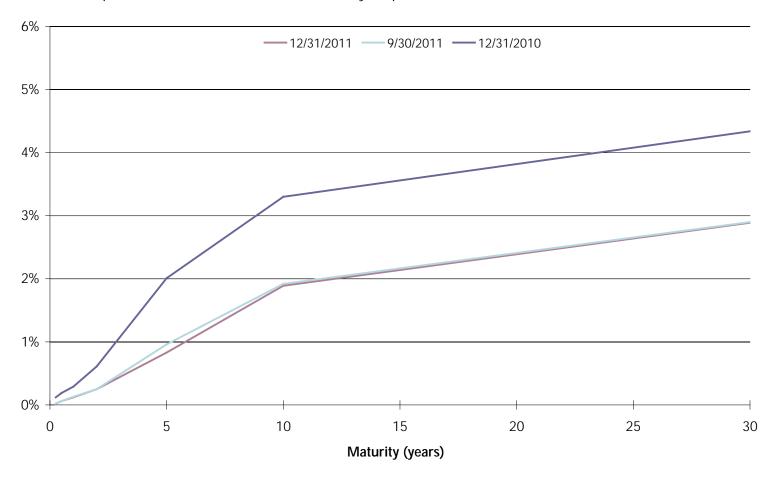
At year-end, the ten-year annual return of a portfolio comprised of 65% domestic stocks (Russell 3000) and 35% investment grade bonds (Barclays Aggregate) was 4.7%. Since February 2009, the portfolio's ten-year annual return increased by 4.3%, but remains less than half the twenty-year average.





Treasury Yields

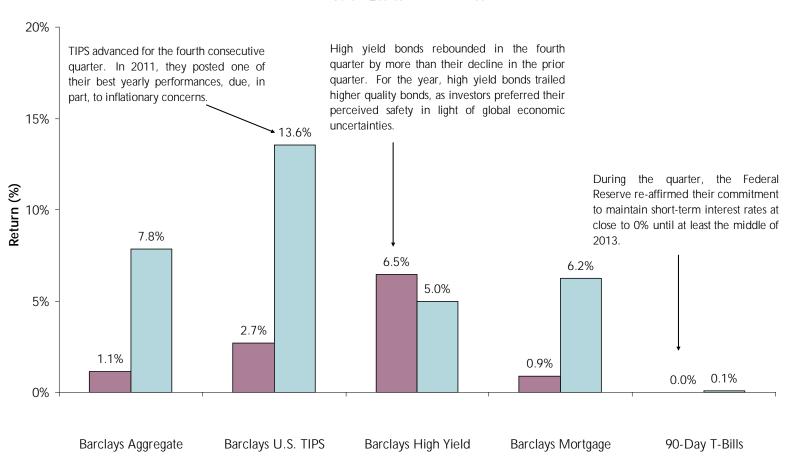
Treasury yields changed little during the fourth quarter, but declined dramatically from the end of 2010. The yield on the ten-year Treasury was 1.9% as of quarter-end, a level 1.4% lower than a year prior.





U.S. Fixed Income Markets

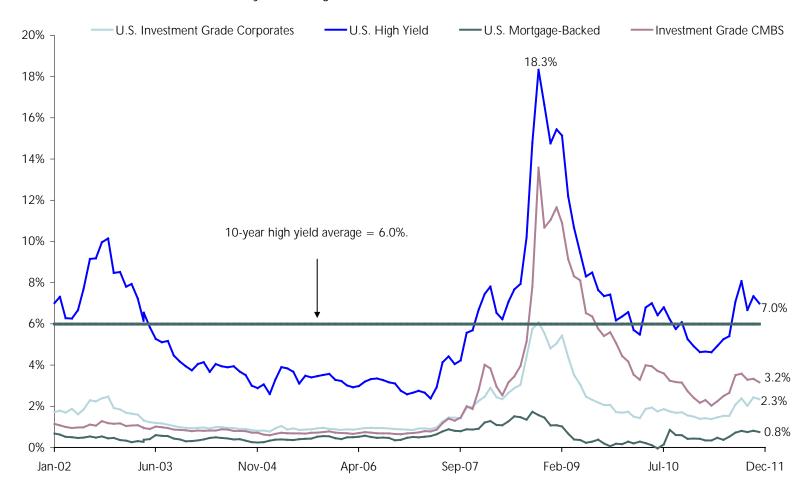
■ Fourth Quarter ■ 1-Year





Credit Spreads vs. U.S. Treasury Bonds

In a reversal of the trend over the past two quarters, credit spreads compressed across all sectors. High yield spreads declined the most (-1.1%), to 7.0%, a level 1.0% above the ten-year average.





Sovereign Debt

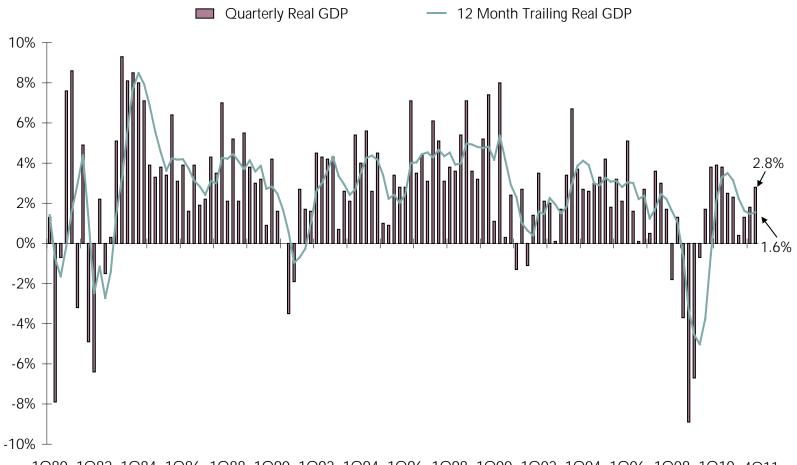
While cumulative debt/GDP levels are below 40% for emerging markets, developed market levels are over 100%. Many economists believe that debt/GDP levels over 100% are unsustainable in the long term.





Real Gross Domestic Product (GDP) Growth¹

Real GDP growth increased for the third consecutive quarter, up 2.8% on an annualized basis. Companies restocking their inventories, a likely temporary phenomenon, drove growth in the fourth quarter.



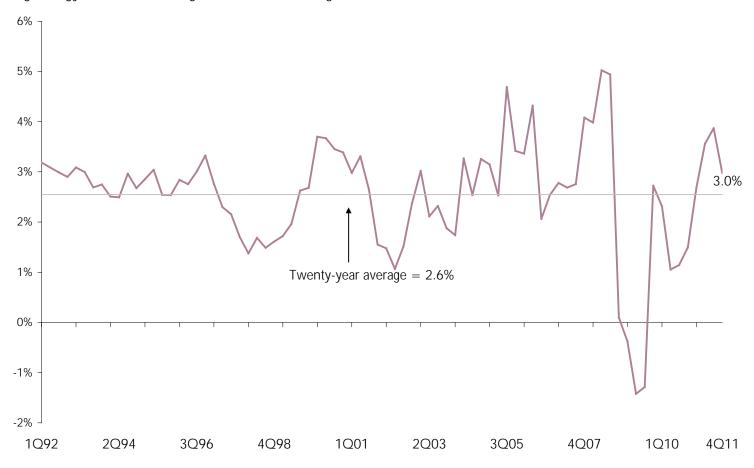
1Q80 1Q82 1Q84 1Q86 1Q88 1Q90 1Q92 1Q94 1Q96 1Q98 1Q00 1Q02 1Q04 1Q06 1Q08 1Q10 4Q11

¹ Quarterly data are annualized.



U.S. Inflation (CPI) Trailing Twelve Months¹

Driven by falling energy costs, the trailing twelve-month CPI growth rate eased to 3.0%.

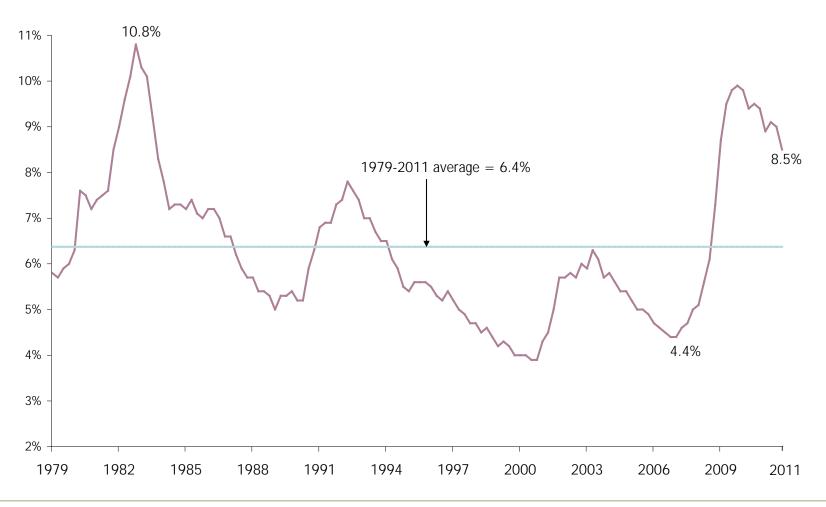


¹ Data is non-seasonally adjusted CPI, which may be volatile in the short-term.



U.S. Unemployment

The unemployment rate declined 0.6% during the fourth quarter to 8.5%, due in part to seasonal hiring and a reduction in the labor force. Over 400,000 non-farm payroll jobs were added during the fourth quarter, with the trend of payroll growth in the private sector and payroll decline in the government sector continuing.





Disclaimer, Glossary, and Notes As of December 31, 2011



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In general, the valuation numbers presented in this report are prepared by the custodian bank for listed securities, and by the fund manager or appropriate General Partner in the case of unlisted securities. The data used in the market comparison sections of this report are sourced from various databases. These data are continuously updated and are subject to change.

This report does not contain all the information necessary to fully evaluate the potential risks of any of the investments described herein. Because of inherent uncertainties involved in the valuations of investments that are not publicly traded, any estimated fair values shown in this report may differ significantly from the values that would have been used had a ready market for the underlying securities existed, and the differences could be material. Note that for unlisted securities the valuations may be lagged by one or more calendar quarters, or may reflect original cost.

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Glossary Investment Terminology

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage or other debt/security becomes due and is to be paid off.

Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about is future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit



Glossary Investment Terminology

above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a "basis book." For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

Sources: <u>Investment Terminology</u>, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991.



Client Pension Fund Notes

The Russell Indices ®, TM, SM are trademarks/service marks of the Frank Russell Company.

Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.



Executive Summary
As of December 31, 2011

In the fourth quarter, investors returned to risk assets due partly to improved economic data and hopes of a resolution to the sovereign debt issues in the Euro-zone.

- Real GDP growth in the U.S. was 2.8% in the fourth quarter, 1.0% above the level of the prior quarter. Continued slow growth is projected in 2012 with GDP estimates between 1.0% and 2.0%, according to the International Monetary Fund.
- In October, the Federal Reserve began their "Operation Twist" program designed to stimulate growth by further reducing long-term borrowing rates.
- The U.S. unemployment rate declined 0.6% during the fourth quarter, to 8.5%. Total nonfarm payrolls increased by 412,000 during the quarter, led by the private sector, while government sector employment was down slightly.
- In late December, the European Central Bank (ECB) announced it would make \$628 billion in liquidity available to 500 banks across Europe, through three-year loans.

Global equity markets rallied after the third quarter selloff, as strong corporate and better than expected economic data outweighed concerns over the sovereign debt crisis in the Euro-zone.

- Continued sovereign debt concerns in Europe, a weak quarter in Japan (-3.8%), and a strengthening U.S. dollar weighed on international equities. The domestic equity market, as proxied by the Russell 3000 index, rose 12.1%, while the developed international equity market, as proxied by the MSCI EAFE index, gained 3.3%.
- Emerging markets equities (+4.4%) outpaced developed international equities (+3.3%); however, they ended a volatile year down 18.4%.

Spread sectors outperformed government bonds due to investors' renewed appetite for risk.

• The Barclays high yield index led fixed income markets during the quarter, returning 6.5%, compared to 2.7% and 1.1% for the Barclays TIPS and Aggregate indices, respectively.



The Pension Fund's total market value was \$1.57 billion as of December 31, 2011, up from \$1.51 billion at the end of the last quarter.

- The Fund returned 5.1% during the fourth quarter and 2.6% for the calendar year.
- All asset classes experienced positive returns during the quarter. Domestic equities were extremely strong gaining 10.2% during the quarter.
- All asset classes were within their respective target ranges on September 30 with the exception of real estate and private equity. Private equity comprised 14% of the portfolio versus a target of 10% and real estate comprised 4% of the Fund versus a target of 10%.
- The Pension Fund paid out \$13.5 million in benefits during the fourth quarter.



Domestic Equity

- The newly added Rhumbline QSI portfolio performed as expected, providing some downside protection. Since August the portfolio had a return of 1.4% versus a -2.8% return for the Russell 3000 Index.
- NorthPointe had an extremely weak year, returning -20.4% versus -2.9% for the Russell 2000 Growth. The portfolio was hurt by its holdings in the industrial and energy sectors.

International Equity

Vontobel returned 1.4% for the calendar year, outperforming the MSCI EAFE Index by 13.5%. The portfolio's consumer staple exposure as well positions in the U.K. and France led to the strong performance. An underweight position in Financials was also beneficial.

Fixed Income

• Inflation protected securities experienced very strong returns in 2012. The JP Morgan Safety Reserve portfolio gained 13.3% during the year, despite negative real yields.

Natural Resources

 Natural Resources Fund V returned 1.6% over the past year, compared to a 12 month return of -13.4% for the Dow Jones UBS Commodities Index. Fund V's ability to short commodities in downward trending markets enabled them to significantly outperform.



APPENDIX F

MEKETA INVESTMENT GROUP

SAMPLE MANAGER DUE DILIGENCE REPORT



BOSTON

MIAMI

SAN DIEGO

MEKETA INVESTMENT GROUP

PUBLIC MARKETS MANAGER ANALYSIS

SMALL CAP CORE

APRIL 2012

Portions of this document have been redacted to ensure the security of certain confidential or sensitive information.



MANAGER A

Firm: Manager A	Manager Rating:	4
New England, United States		
		Patrick White /
	MIG Analyst:	Mitch Dynan
Primary Contact: Mr. A	Date:	8.2.11
XXX-XXX-XXXX		
xxx@xxx.com	Original or Update:	Original
Product: Small Cap Core		
•	Factor Ratings Summary	
Portfolio Manager: Mr. B	Organization:	3
C	Investment Team:	4
Strategy Synopsis: Small Cap Core	Investment Philosophy	5
	Investment Process:	5
Clients: None	Performance:	4
	Fees:	4
	Overall Manager Rating:	4

Executive Summary & Conclusions

- · Manager A is a strong option in the Small Cap Core space and should be included in future searches. All three investors came across as articulate, intelligent, and experienced. They are all very passionate about the investment industry and are deeply involved in the research process. Mr. B, the portfolio manager, has managed the strategy using the same philosophy for over 10 years. His core approach blends both value and growth names. Mr. B and Mr. C have worked together for years, an obvious plus. Due diligence is extremely thorough and on par with any of the managers we have come across. Performance has been consistently strong over a long period of time.
- The only concern I have with regards to this offering is the size of the team and the universe they cover. The four full-time investment professionals cover Micro, Small, and Midcap, a considerable amount of names. One could make the argument that the team may be missing ideas and along with that, an opportunity cost. This is mitigated by the experience of the four investment professionals and the low turnover of the products. Small cap turnover is low and requires about 15-20 names/year, a manageable number for the team.

Meketa Investment Group Public Markets Manager Analysis Important Risks

- · There are no major risks.
- A minor concern is the asset gathering mentality accompanied by all large organizations such as Manager A, which is mitigated by the boutique structure. The team largely controls all major decisions such as capacity.
- To a lesser extent there is a risk that Manager A decides these funds are too small and sells them off.
- The relatively small team is also a minor concern. This is mitigated by the experience of the team and the tenure which Mr. B has run the strategy.

Meketa Investment Group Public Markets Manager Analysis Organization

Factor Rating: 3

- Manager A had over \$200B in AUM as of 3/31/11, of which about \$40B is in U.S.-based institutional accounts. The remainder is in Canadian-based institutional and retail. The parent-is a relatively strong bank with AA- S&P rating.
- The asset management business uses a boutique structure with teams based in the Northern U.S. (U.S. headquarters), New England, and the Central United States. The large cap value team, who I have met with, is also based in New England.
- Manager A's appeal to Mr. B is the boutique structure. He has investment independence and receives marketing and organization support from Manager A. Mr. B's compensation is base salary plus a bonus based on performance. He also "owns" his P&L and receives a profit share. The profit split varies between 50/50 and 75/25 depending on the level of profitability.
- Mr. C, one of the members of the team, also manages a mid cap value strategy with AUM of over \$100M. Mr. C brought the strategy from Manager B, where both he and Mr. B had worked, and has managed it since yyyy. The team does not seem large enough to compete in mid cap, though Mr. C's performance is very impressive.
- Manager B was acquired by Manager C to bring in equity capabilities as well as provide a growth platform. In the late yyyy's, Manager C became very reactive to the market and forced Manager B to launch growth products and absolute return vehicles which did not blend well with the culture of the firm. (This highlights the pitfalls of working for an insurance company with an asset gathering mentality that is not run by investment professionals.) Performance was disappointing and eventually Manager A purchased the mutual funds run by Mr. C and Mr. B. Manager B had been a sub-advisor to the Manager A product, which made the transition more palatable to the larger organization. Mr. B and Mr. C could have started their own firm, but had no interest in all the activities involved in marketing or administration. They both really wanted to focus on investment research, picking stocks, and managing portfolios.
- Currently, the team runs over \$350 million in Small Cap Core, over \$200 million in Midcap Value, and over \$200 million in microcap, plus an additional \$50 million in microcap concentrated for two institutional clients. Mr. B indicated that the team would run a concentrated Small Cap product.
 - Micro Cap Core = over \$200MM total (all mutual fund)

Meketa Investment Group Public Markets Manager Analysis Organization

Factor Rating: 3

- **Small Cap Core** = over \$300MM total (over \$120MM in Manager A mutual fund; over \$150MM in Institutional. Additionally, since 6/30 we have won an additional \$25MM for separate accounts that is not included here.)
- Mid Cap Value = over \$150MM total (over \$120MM in PH&N mutual fund available only in Canada; over \$2MM in Manager A mutual fund; over \$20MM in separate accounts. Additionally, Manager A was just awarded over \$50MM mandate that will fund on yyyy).

Meketa Investment Group Public Markets Manager Analysis Investment Team

Factor Rating: 4

- The team consists of 3 PMs, who are also analysts, 2 consultants, and one dedicated trader. They are all very experienced, and have impressive work and academic credentials. Everyone on the investment team worked together at Manager B. I like the diverse backgrounds of the team and how they leverage the expertise of the consultants.
- Manager B manages the small cap and micro strategies, and provides analytical support to mid cap. He has managed the small cap portfolio for 20 years. His coverage is broad, but he focuses on the consumer, industrial, and financial services sectors. He and Mr. C were lifted out of Manager B and joined Manager A in yyyy. Mr. B was head of Manager B's small/mid cap value team. He worked in the industry prior to joining Manager B in yyyy. AB University A/MBA University B.
- Mr. C has managed the mid cap value strategy for a dozen years. He joined Manager A in yyyy with Mr. C from Manager B. He also started at Manager B in yyyy and previously worked in strategy consulting, M&A, and investment banking. BA University C/MBA University D.
- Mr. D is the third member of the team and serves as the research analyst for the 3 strategies. Mr. B recruited him from Manager D where he was an equity analyst. The two had worked together at Manager B. He has been in the investment business since yyyy. He has also founded two companies. He holds a number of patents and is, according to Mr. B, very good at evaluating the operations of a company. Mr. D is based in the Southern United States, but comes to New England one week a month and spends the summer here. BA University E.
- Mr. E, a former full-time consultant, agreed to become the fourth full-time member of the team as of October 1. He is a former CPA, former CFO, and consultant with 30 years experience. He does a lot of on-site visits for the team and "has been extremely valuable."
- The one consultant is under exclusive contract and has been working for 5 years. Each is used the equivalent of one day/week. He is an MD and emergency room surgeon. He has been very useful in health care research and has also used his network to generate ideas. He must comply with all Manager A compliance rules and trading policies. It seems like he has been very valuable in doing on-site visits and grass roots research.

Meketa Investment Group Public Markets Manager Analysis Investment Philosophy & Strategy

Factor Rating: 5

- I would characterize Mr. B as a core investor. He owns companies that are both value (relative) and growth and has a higher quality focus.
- His core belief is that earnings and cash flow drive stock prices over the long-term. Mr. B is more earnings oriented, while Mr. C is more focused on DCFs. They do think about ROIC and believe that a company's ROIC needs to exceed its cost of capital in order to be a good investment. Rising ROIC correlates with favorable stock price performance, while deteriorating ROIC is cause for concern, especially when a company diversifies out of its core area. He also believes in mean reversion with respect to a company's margins and valuation.
- Mr. B is looking for under-followed or neglected companies with long-term attractive business fundamentals, near-term profitability improvement potential and low valuations at time of purchase. Attributes he looks for are companies with proven products or services market leadership (prefers to buy the #1 company in a market, but if he owns #2 or #3, he wants the company to be gaining share), sustainable competitive advantage and strong finances. He prefers companies with low debt, but will accept higher debt if demand for the company's products is stable.

Meketa Investment Group Public Markets Manager Analysis Investment Process

Factor Rating: 5

- The process is straightforward. Companies within the market cap range of the Manager E are candidates, but new purchases are concentrated in companies with market caps between \$200M and \$1B. 80% of ideas come from their "intelligence pool," that is company meetings, industry contacts and the knowledge of the team. A minority of the ideas come from quantitative screens using low P/S, P/CF, P/B and P/E, strong balance sheets, potential earnings acceleration, and low institutional ownership/high insider ownership.
- Mr. B claims they meet with 1K companies per year. When I raised an eyebrow that that seemed like a very high number for such a small group, he stood by his claim. He recently returned from a conference where he saw 40 companies in a week and had 15 one-on-one's. They see an average of 1 or 2 companies in their offices each day. Given his tenure in the business, he has developed long-term relationships with a number of management teams. This is a positive. Following companies for an extended period of time is a competitive advantage.
- One person on the team researches each new idea. Due diligence is in-depth and they leverage the two consultants. If it is important to do so, they will do on-site visits. For an industrial company, a visit is more important than for an insurance company. Meeting with management is "absolutely important."
- The primary analyst will present the idea to the group and everyone will provide their viewpoint. Mr. B makes the final decision.
- Mr. B's investment horizon is 3 to 5 years during which time he would like the stock price to have the potential to double. He thinks in terms of risk and reward. Mr. B wants the catalyst to materialize within 2 to 3 quarters and wants some visibility on that catalyst when he starts the position. He typically does not get in at the bottom. He ends up owning a lot of growth cyclicals. About 20% of the portfolio consists of steady growers with a high percentage of recurring revenue. Turnover is low, typically 25% to 30%.
- Mr. B is benchmark aware, but the portfolio deviates significantly from the benchmark. The portfolio is currently 10 percentage points underweight in Financials and 10 percentage points overweight in Industrials.
- Positions are started at 75 to 100 bp. The largest holdings are just under 4%. The
 portfolio is 98% bottom-up driven, but they do think about the macro environment
 and ask themselves if they are comfortable with the overall positioning of the
 portfolio.

Meketa Investment Group Public Markets Manager Analysis Investment Process

Factor Rating: 5

- The number of portfolio holdings is between 50 and 80, 75 currently.
- · The current portfolio is skewed toward economically sensitive companies.

Meketa Investment Group Public Markets Manager Analysis Performance

Factor Rating: 4

- Excess return ranks: 1 year = 24th percentile, 3 year = 14th percentile, 5 year = 22nd percentile. 2002 and 2009 were standout years for the strategy. 2005 and 1999 were laggards.
- Information Ration ranks within the entire Small Cap equity manager universe: 3 year = 6th percentile, 7 year = 25th percentile, 10 year = 24th percentile.
- Attribution presented over the last 5 years verifies what Mr. B had communicated with us, namely consistent results with very few homeruns or blowups. On an annual basis there are nearly no stocks that either positively or negatively impact results more than 150 bps. Stock picking in Industrials has been quite strong with few other standouts either way. As one would expect, just over 2/3 of excess returns can be attributed to stock selection.
- Mr. B has been running this strategy since yyyy. The results here are gross returns from the mutual fund.

	Manager A	Manager E	Excess
уууу	18.1%	-3.0%	21.1%
уууу	7.5%	21.3%	-13.8%
уууу	-3.1%	-2.5%	-0.6%
уууу	35.0%	22.4%	12.6%
уууу	29.4%	16.5%	12.9%
уууу	21.6%	28.4%	-6.8%
уууу	-6.0%	-1.8%	-4.2%
уууу	21.4%	18.9%	2.5%
уууу	18.8%	18.4%	0.4%
уууу	5.8%	6.6%	-0.8%

Meketa Investment Group Public Markets Manager Analysis Performance

Factor Rating: 4

• Performance presented here is from Evestment and represents gross returns from the separate account.

	MRQ	YTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	SI
Manager A	-0.66	9.38	44.23	13.24	7.58	8.65	9.56	12.29
Russell 2000	-1.61	6.21	37.41	7.77	4.08	6.28	6.27	9.51
Excess	0.95	3.18	6.82	5.47	3.49	2.37	3.3	2.78

	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
Manager A	31.64	35.42	-30.98	-1.49	21.81	-1.34	20.89	45.72	-8.78	4.07
Russell 2000	26.85	27.17	-33.79	-1.57	18.37	4.55	18.33	47.25	-20.48	2.49
Excess Returns	4.79	8.25	2.8	0.07	3.44	-5.9	2.56	-1.53	11.7	1.58

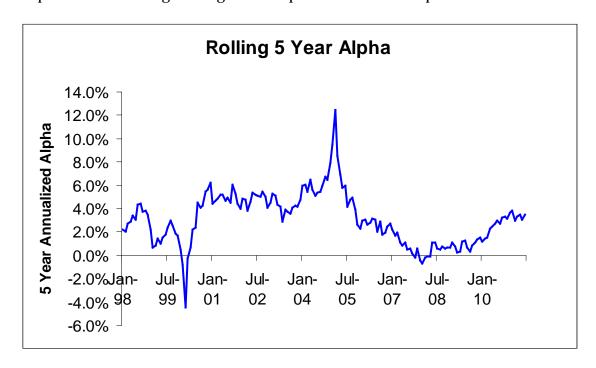
Risk/Regression	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	SI
Standard Deviation	20.71	27.95	23.09	20.85	19.73	17.33
Annualized Alpha	1.44	5.09	3.42	2.41	3.64	4.51
Beta	1.12	1.01	1	0.98	0.91	0.8
Correlation Coefficient (r)	0.99	0.99	0.98	0.98	0.96	0.88

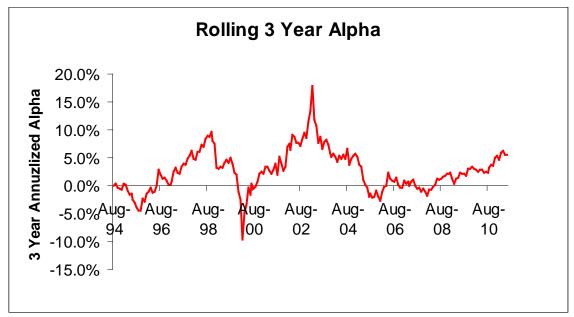
Efficiency Measures	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr	SI
Tracking Error	3.87	3.96	4.03	4.3	5.79	9.03
Information Ratio	1.76	1.38	0.87	0.55	0.57	0.31
Sharpe Ratio	2.13	0.46	0.25	0.31	0.38	0.51
Upside Market Capture	117.33	110.72	105.43	99.29	95.56	84.2
Upside Market Return	109.52	107.82	73.17	67.97	67.15	55.15
Downside Market Capture	103.44	97.25	95.65	93.19	87.92	76.49
Downside Market Return	-31.65	-61.32	-52.73	-44.59	-41.86	-34.01

Meketa Investment Group Public Markets Manager Analysis Performance

Factor Rating: 4

• Over the last ten years Manager A has outperformed in 81% of three-year rolling periods. The average manager has outperformed in 76% of periods.





Meketa Investment Group Public Markets Manager Analysis Fees & Investment Vehicles

Factor Rating: 4

- Separate account schedule (Negotiable for MIG clients): 1% on the first \$10M; 90% on next \$15M; .80% on next \$25M; .70% on assets over \$50M.
- Minimum: \$10 million, but willing to come lower for MIG clients
- A mutual fund is also available with an expense ratio of 1.05%.
- Relative to the small cap universe, for a \$25 million mandate stated fees rank in the 47th percentile. For a \$50 million mandate, in the 42nd percentile.
- · Manager A clearly stated they are willing to negotiate for MIG clients.

5 - Excellent: Manager has all the qualities that the Public Markets Research Team is

looking for. One of our highest conviction names in the sector. This manager should be seriously considered in all applicable searches.

manager shourd be seriously considered in an applicable scarciles.

4 - Good: Manager has many of the qualities that the Public Markets Research Team

is looking for along with a few identifiable concerns. This manager should

be considered in all applicable searches.

3 - Average: Manager is acceptable and may be retained by the client, but better options

may be available.

2 - Below Avg: Manager has a number of areas of concern to us, and replacement may be

advisable.

1 - Weak: Manager should be replaced.



BOSTON

MIAMI

SAN DIEGO

MEKETA INVESTMENT GROUP

PUBLIC MARKETS MANAGER ANALYSIS

INTERNATIONAL FIXED INCOME

APRIL 2012

Portions of this document have been redacted to ensure the security of certain confidential or sensitive information.

www.meketagroup.com



Clients: Company A, Company B, Company C

MANAGER A

Firm: Manager A **Overall Manager Rating:** 3 **Eastern United States Factor Ratings Summary:** Organization: 3 3 **Investment Team: Primary Contact: Investment Philosophy:** 3 Mr. A **Investment Process:** 4 XXX-XXX-XXXX Performance: xxx@xxx.com 4 3 Fees: **Product:** International Fixed Income MIG Analyst: Colleen Clardy Portfolio Manager: Mr. B **Date:** April 5, 2012 Strategy Synopsis: Developed Non-U.S. **Original or Update:** Original Fixed Income

EXECUTIVE SUMMARY & CONCLUSIONS

- Manager A's International Fixed Income strategy is an acceptable option for a client looking to diversify their fixed income investments by adding non-U.S. fixed income. I believe Manager A to be a good option in the broader international fixed income asset class. Additionally, I prefer the opportunistic strategy to the investment grade as it allows more degrees of freedom and the inclusion of emerging markets.
- · Manager A is wholly owned by Manager B, but has had a long, stable relationship with the parent company. The portfolio managers and analysts appear to be well compensated and have been with the firm for over 15 years.
- Manager A employs a top-down, benchmark agnostic approach to global fixed income management. The strategy focuses on undervalued currencies and real yield, and could be a good diversifier to a portfolio of U.S. bonds.
- Manager A's international fixed income strategies are favorable to others in the space and should be considered in searches for clients considering this type of allocation.



MANAGER A IMPORTANT ISSUES AND RISKS

- Manager A's ownership by Manager B is not ideal, but some of the organizational risk is mitigated by the fact that the portfolio managers have been with Manager A/B since the 1990s. This leads me to believe that the relationship is mutually beneficial, and that the risk of either entity becoming dissatisfied is low.
- The portfolio managers all seem to be a bit quirky. I don't believe this to be a huge risk or issue, but is something to keep in mind when considering putting the strategy in front of clients.
- Manager A takes a benchmark-agnostic approach to international fixed income investing, which may not be appropriate for all clients. The performance may differ from that of the index.

MANAGER A ORGANIZATION FACTOR RATING: 3

Product	Assets (mm)
International Fixed Income – Investment Grade	\$2,087.1
International Opportunistic Fixed Income	\$1,212.3
Global Fixed Income- Investment Grade	\$7,004.3
Global Opportunistic Fixed Income	\$12,544.1
Global Investment Grade Sovereign Fixed Income	\$601.4
Global Credit	\$4.4
Global High Yield	\$39.2

- Manager A is a mid-size "boutique" firm owned by Manager B. They run equity and fixed income strategies.
- Manager B purchased Manager A in yyyy. Manager B takes 15-20% of top-line revenues, but allows Manager A to operate autonomously.
- Total assets under management were over \$3 billion as of December 31, 2011. Fixed income products account for \$24 billion of assets. Manager A also offers large cap equity, diversified equity, absolute value, and balanced strategies.
- The focus of this analysis is the International Fixed Income Investment Grade strategy. Half of the assets (about \$1 billion) in the come from one sovereign wealth fund.
- · Manager A employs 150 people worldwide, with headquarters in the Eastern United States, an office on the West Coast, a subsidiary in Asia, and an operating unit in Europe. The firm continues to add resources to the Asia office and believes it is important to have boots on the ground in Asia.

MANAGER A INVESTMENT TEAM FACTOR RATING: 3

Key Professional(s)	Investment Role	Tenure with this Strategy (in Years)	Industry Experience
Mr. B, CFA	Portfolio Manager, Sr. Research Analyst	14	25
Mr. C	Managing Director & Portfolio Manager	17	37
Mr. D	Managing Director & Portfolio Manager	21	44
Mr. E	Associate Portfolio Manager, Sr. Research Analyst	9	10
Mr. F	Director of Global Macro Research	6	35

- The investment team includes three portfolio managers, an associate portfolio manager, a director of global macro research, two analysts, and five members of a trading/implementation group. Mr. B was promoted to Portfolio Manager at the beginning of yyyy, but has worked alongside Mr. C and Mr. D since he started at Manager A in yyyy. The team can also draw on Manager A's high yield and credit analysts.
- The team manages global and international bond portfolios under one large umbrella, and makes allocation decisions based on the particular product/strategy as necessary. The team is on the smaller side, but the process has been designed to be repeatable and scalable.
- Mr. C and Mr. D are still very engaged in the research process. Mr. D is 65, but has no plans to retire. Mr. C seemed youthful and mentioned that a recent divorce made it financially imprudent for him to stop working quite yet. However, he seemed to be engaged in the process, well versed in the portfolio, and keenly aware of macro trends affecting global and international bonds.
- Mr. F, Director of Global Macro Research, lives in Canada, but visits the main office in the Eastern United States twice per month. He was a bank credit analyst and his role is to build models that are used as a roadmap for portfolio construction. The models are only used as a framework, but as the investment grade universe expands it is increasingly necessary to use models to screen for investment opportunities. Mr. F worked with the team in a consulting role pre-yyyy, performing many of the same functions.
- The Portfolio Managers are the decision makers, and if they can't reach an agreement then a position won't be added to the portfolio. This tends to lead toward lower turnover.



MANAGER A INVESTMENT PHILOSOPHY & STRATEGY FACTOR RATING: 3

- Manager A's philosophy is a value-driven, strategic, active approach. The strategy is very focused on top-down macro analysis, but the top-down decisions are created by looking at real yields across the globe.
- In the international fixed income bucket, Manager A manages two types of portfolios: investment grade and opportunistic. Current MIG clients are invested in opportunistic, but investment grade is under consideration by another client. The investment grade strategy is fairly self-explanatory: non-U.S., developed markets fixed income. The investable universe is limited to countries in the Citigroup World Government Bond Index ex-U.S. The opportunistic strategy allows up to 15% of the portfolio to be invested in emerging markets debt.

\mathbf{M}

MEKETA INVESTMENT GROUP PUBLIC MARKETS MANAGER ANALYSIS

MANAGER A INVESTMENT PROCESS FACTOR RATING: 4

- Manager A applies a top-down, value-driven process when structuring international fixed income portfolios. The first step is to use models as a starting point for determining where valuation opportunities exist, where price risk exists, and what the intrinsic value is. Additionally, they try to determine the catalyst that drives the mean-reverting cycle. Alongside of bond valuation, the portfolio managers are also assessing the macro environment and determining where risk and opportunities may present themselves. Macro factors such as each country's business and liquidity cycle, as well as secular and political factors, are evaluated to help establish investment themes.
- Real yield is the primary measure of value. Manager A analyzes high real yield, inflation expectations, default risk, and internal valuation models. Currency valuation is next in importance, as the real yield must be captured in the investor's local currency. Manager A analyzes PPP (purchasing power parity), REER (real effective exchange rate), real rates, and other models.
- Manager A focuses on appreciating, undervalued currencies, and overvalued currencies that can be hedged. Inflation trends, political risks, monetary trends and business cycle and liquidity measures are also considered. Investments are typically concentrated in 8-16 countries that are believed to provide the best value and total return potential.
- Manager A is benchmark agnostic for all the right reasons. Bond indexes are created based on debt issuance, and overvalued currencies and excessive debt issuance push the benchmark's weighting toward countries with strong currencies and larger debt issuance, and away from weaker currencies and low debt issuance. For instance, Japan makes up almost half of the index, but Manager A has zero exposure to Japan, and hasn't had an allocation there in several years due to the fundamentals.
- · After analyzing the universe, establishing investment themes, and identifying attractive countries, the portfolio mangers then make decisions on currencies, duration, and credit. They will invest in credit if compensated for the risk, but if not will just invest in sovereign debt. If something looks cheap, the first reaction is to try to identify what is wrong with the bond. From there, they may decide whether the fundamentals are attractive.
- Manager A estimates that currency decisions account for 25% of alpha. They approach currency investing as long-term investors, and look for currency valuation extremes. They will hedge currencies if they are so overvalued as to change economic behavior. Typically, they invest in undervalued currencies with the potential to appreciate. Historically, they have hedged 0-50% of the foreign currency exposure back to the U.S. dollar.

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MEKETA INVESTMENT GROUP PUBLIC MARKETS MANAGER ANALYSIS

MANAGER A INVESTMENT PROCESS FACTOR RATING: 4

- As a benchmark-agnostic manager, Manager A may look dramatically different from its peers and the benchmark. This leads to a variance in returns, as evidenced by 2008 performance. The strategy underperformed in large part due to their avoidance of Japan and the Yen. However, they maintained this relative underweight (lack of exposure) and it has helped performance in 2012. Additionally, they took positions in other Asian currencies with better potential than the Yen.
- Portfolio managers and analysts are all generalists. The flow of investment ideas into and out of the portfolio is a two way process and revolves around the team research approach. Often, ideas are generated by Mr. C and Mr. D who come up with broad investment ideas, which are then passed down to the analyst team for further research and investigation to determine if they should be included in the portfolio (or whether any existing investments should be reduced or removed from the portfolio).
- Cash and USD exposure are used tactically. At the end of 2011, the strategy held approximately 25% in cash, which has subsequently come down. The rationale for this positioning was that current positions were rolling off and the team decided to hold exposure to USD as it was more attractive than other opportunities in the developed world. The large cash holding is atypical, but possible.



MEKETA INVESTMENT GROUP PUBLIC MARKETS MANAGER ANALYSIS

MANAGER A INVESTMENT PERFORMANCE FACTOR RATING: 4

	4Q11	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	SI
International Fixed Income Investment Grade	1.64	5.47	7.39	6.94	5.05	10.01	8.06
Citigroup Non-U.S. WGBI Unhedged	-0.48	5.17	4.92	7.23	4.67	8.36	6.05
Excess Returns	2.11	0.30	2.47	-0.29	0.38	1.65	2.01

	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
International Fixed Income Investment Grade	5.47	7.04	9.69	3.38	9.23	5.18	-4.01	14.74	23.26	30.00
Citigroup Non-U.S. WGBI Unhedged	5.17	5.21	4.39	10.11	11.45	6.94	-9.20	12.14	18.52	21.99
Excess Returns	0.30	1.84	5.31	-6.73	-2.22	-1.76	5.19	2.61	4.74	8.01

	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	SI
Tracking Error	2.94	4.44	5.11	4.59	4.21	4.99
Information Ratio	0.10	0.56	-0.06	0.08	0.39	0.40
Sharpe Ratio	0.78	0.83	0.65	0.39	1.01	0.64
Treynor Ratio	5.79	8.98	7.40	3.97	10.19	6.75
Sortino Ratio	1.30	1.26	1.00	0.57	1.80	1.10
Calmar Ratio	1.48	0.92	0.69	0.50	1.00	0.80
Upside Market Capture	88.66	91.73	79.85	80.17	90.31	88.78
Upside Market Return	16.56	24.32	23.93	22.41	26.52	26.43
Downside Market Capture	78.36	71.38	74.77	72.88	68.03	65.76
Downside Market Return	-13.64	-19.87	-18.68	-16.11	-14.36	-12.92
Batting Average	0.50	0.50	0.50	0.50	0.54	0.55

- Gross of fees performance as of December 31, 2011.
- · Inception date mm, dd, yyyy.
- · Investment performance ranks in the first 28^{th} percentile for the 1-year period ending 12/31/11, 47^{th} for the 3-year period, 53^{rd} for the 5-year period, and 18^{th} for the 10-year period.



MEKETA INVESTMENT GROUP PUBLIC MARKETS MANAGER ANALYSIS

5 - Excellent:

1 - Weak:

MANAGER A FEES & INVESTMENT VEHICLES FACTOR RATING: 3

Investment Vehicle	Minimum Investment	Fee
Separate Account	\$50 million	0.45% on the first \$50 million, 0.40% on the next \$50 million, 0.35% on the balance
Commingled Fund	\$1 million	0.45% on the first \$50 million, 0.40% on the next \$50 million, 0.35% on the balance
Mutual Fund	NA	NA

- Separate account fees rank in the 81st percentile for All EAFE Fixed Income, while commingled fund fees are right at the median.
- Fees are not negotiable. I recommend a commingled fund investment to MIG clients due to operational issues and expenses related to opening accounts in each country.
- · Company A and Company B both pay 0.45% as they are invested in the commingled fund. Company C pays the standard separate account fee schedule.

looking for. One of our highest conviction names in the sector. This manager should be seriously considered in all applicable searches.

4 - Good: Manager has many of the qualities that the Public Markets Research Team is looking for along with a few identifiable concerns. This manager should be considered in all applicable searches.

3 - Average: Manager is acceptable and may be retained by the client, but better options may be available.

2 - Below Avg: Manager has a number of areas of concern to us, and replacement may be advisable.

Manager has all the qualities that the Public Markets Research Team is

Rating Scale: 5-Excellent, 4-Good, 3-Average, 2-Below Average, 1-Weak.

Manager should be replaced.

The information, assessments and conclusions contained in this document are the sole opinion of the author, and may not be wholly accurate or complete. Further, this document may be revised, corrected or updated at any time. This document has been prepared for internal discussion purposes only, and does not reflect the recommendation or opinion of Meketa Investment Group.

APPENDIX G

MEKETA INVESTMENT GROUP

SAMPLE INVESTMENT POLICY STATEMENT



BOSTON MIAMI SAN DIEGO

CLIENT RETIREMENT SYSTEM

SAMPLE

INVESTMENT POLICY STATEMENT

Presented January 2011

The purpose of this document is to set forth the goals and objectives of the «Client_Name», and to establish guidelines for the implementation of investment strategy.

Any revisions to this document may be made only with the approval of the Board of the Retirement System.

The Board of the "Client_Short_Name" recognize that a stable, well-articulated investment policy is crucial to the long-term success of the "Client_Short_Name". As such, the Board has developed this Investment Policy Statement with the following goals in mind:

- To clearly and explicitly establish the objectives and constraints that govern the investment of the «Client_Short_Name»'s assets,
- To establish a long-term target asset allocation with a high likelihood of meeting the "Client_Short_Name" objectives given the explicit constraints, and
- To protect the financial health of the «Client_Short_Name» through the implementation of this stable long-term investment policy.

«Client_Name» Goals

The «Client_Name» was established to provide income to retirees, spouses, surviving spouses, and eligible dependents into perpetuity.

II. Investment Objectives

The investment strategy of the «Client_Name» is designed to ensure the prudent investment of funds in such a manner as to provide real growth of assets over time while protecting the value of the assets from undue volatility or risk of loss.

A. Risk Objectives

- 1. To accept the minimum level of risk required to achieve the Fund's return objective as stated immediately below.
- 2. To minimize the likelihood of experiencing a loss over any five-year period (with 90% certainty).
- 3. To use diversification to minimize exposure to company and industry-specific risks in the aggregate investment portfolio.

B. Return Objective [Select One of the following]

- 1. In a manner consistent with the goals stated in Section I above, to manage the Fund's assets so as to achieve the highest, reasonably prudent real return possible.
- 2. In a manner consistent with the goals stated in Section I above, to manage the Fund's assets so as to achieve a high likelihood of attaining a x.x% nominal return over long periods of time.
- 3. In a manner consistent with the goals stated in Section I above, to manage the Fund's assets so as to target a X.X% nominal return over long periods of time.
- 4. In a manner consistent with the goals stated in Section I above, to manage the Fund's assets so as to "immunize" liabilities by matching the timing and amount of asset cash flows with the timing and amount of liabilities due.

III. Investment Constraints

A. Legal and Regulatory

The Board intends that the assets of the «Client_Name» at all times are invested in accordance with the provisions of the Employee Retirement Income Security Act (ERISA) and Department of Labor regulations. The Board will retain legal counsel when appropriate to

review contracts and provide advice with respect to applicable statutes and regulations.

B. Time Horizon

The "Client_Short_Name" will be managed on a going-concern basis. The assets of the "Client_Short_Name" will be invested with a long-term time horizon (twenty years or more), consistent with the participant demographics and the purpose of the "Client_Short_Name".

C. Liquidity

The Board intends to maintain sufficient liquidity to meet at least x years of anticipated beneficiary payments (see Appendix D).

Further, the Board intends to invest no more than x% of the «Client_Short_Name»'s assets in illiquid vehicles.¹

D. Tax Considerations

The «Client_Short_Name» is a tax-exempt entity. Therefore, investments and strategies will be evaluated on a basis that is indifferent to taxable status, except where the prospect of Unrelated Business Taxable Income (UBTI) is a concern.

IV. Risk and Return Considerations

The Board accepts the risks associated with investing in the capital markets (market risks), but will minimize wherever possible those risks for which the «Client_Short_Name» is unlikely to be compensated (non-market or diversifiable risks).

V. Diversification

The Board of the «Client_Name» recognizes that an important element of risk control is diversification. Therefore, investments will be allocated across multiple classes of assets, chosen in part for the expected correlation of their returns. Within each asset type, the Board will seek to distribute investments across many individual holdings, thus expecting to further reduce volatility. In addition, each investment manager's guidelines will specify the largest permissible investment in any one asset, and will set other diversification requirements.

¹ Illiquid vehicles are defined as those vehicles that do not allow withdrawals to occur on at least a monthly basis.

VI. Asset Allocation

The Board recognizes that the allocation of monies to various asset classes will be the major determinant of the "Client_Short_Name" is return and risk experience over time. Therefore, the Board will allocate investments across those asset classes that, based on historical and expected returns and risks, provide the highest likelihood of meeting the "Client_Short_Name" investment objectives.

A. Permissible Asset Classes

Because investment in any particular asset class may or may not be consistent with the objectives of the «Client_Short_Name», the Board has specifically indicated in Appendix A those asset classes that may be utilized when investing the «Client_Short_Name»'s assets.

B. Expected Returns, Risks, and Correlations for Permissible Asset Classes

The risk and return behavior of the "Client_Short_Name" will be driven primarily by the allocation of investments across asset classes. In determining the appropriate allocation, the expected return and risk behavior of each asset class and the likely interaction of various asset classes in a portfolio are to be considered. Appendix B lists the expected return, volatility, and correlations for each permissible asset class.

C. Long-Term Target Allocations

Based on the investment objectives and constraints of the "Client_Short_Name", and on the expected behavior of the permissible asset classes, the Board will specify a long-term target allocation for each class of permissible assets. These targets will be expressed as a percentage of the "Client_Short_Name" overall market value, surrounded by a band of permissible variation resulting from market forces.

The long-term target allocations are intended as strategic goals, not short-term imperatives. Thus, it is permissible for the overall «Client_Short_Name»'s asset allocation to deviate from the long-term target, as would likely occur during manager transitions, asset class restructurings, and other temporary changes in the «Client_Short_Name». Deviations from targets that occur due to capital market changes are discussed below.

The «Client_Short_Name»'s target allocations for all permissible asset classes are shown in Appendix C.

D. Rebalancing

In general, cash flows to and from the «Client_Short_Name» will be allocated in such a manner as to move each asset class toward its target allocation.

The Board recognizes that, periodically, market forces may move the "Client_Short_Name" s allocations outside the target ranges. The Board also recognizes that failing to rebalance the allocations would unintentionally change the "Client_Short_Name" s structure and risk posture. Consequently, the Board has established the following process to rebalance the allocations periodically.

On at least an annual basis, if any strategic allocation is outside the specified target range, assets will be shifted to return the strategy to within the target range. The specific plan for rebalancing will identify those assets that can be shifted at the lowest possible risk and cost, if the rebalancing cannot be accomplished solely by allocating contributions and withdrawals.

VII. Review of Investment Policy, Asset Allocation, and Performance

The Investment Policy Statement will be reviewed at least annually to ensure that the objectives and constraints remain relevant. However, the Board recognizes the need for a stable long-term policy for the «Client_Name», and major changes to this policy statement will be made only when significant developments in the circumstances, objectives, or constraints of the «Client_Short_Name» occur.

The asset allocation of the "Client_Short_Name" will be reviewed on an on-going basis, and at least annually. When necessary, such reviews may result in a rebalancing of asset allocations. In general, the Board intends that the "Client_Short_Name" will adhere to its long-term target allocations, and that major changes to these targets will be made only in response to significant developments in the circumstances, objectives, or constraints of the "Client_Short_Name" or in the capital market opportunities.

The Board will specifically evaluate the performance «Client_Short_Name» relative to its objectives and to the returns available from the capital markets during the period under review. In general, the Board will utilize relative, rather than absolute, benchmarks in evaluating performance. The total performance of the «Client_Short_Name» will be evaluated relative to the investment objectives and constraints identified in this investment policy statement. Specifically, the total Fund performance will be evaluated relative to a "custom benchmark" that weights the returns of available market indices on the basis of the «Client_Short_Name»'s target investment structure, to assess the implementation of the «Client_Short_Name»'s investment strategy.

VIII. Investment Costs

The Board intends to monitor and control investment costs at every level of the «Client_Name».

- Professional fees will be negotiated whenever possible.
- Where appropriate, passive portfolios will be used to minimize management fees and portfolio turnover.
- If possible, assets will be transferred in-kind during manager transitions and «Client_Short_Name» restructurings to eliminate unnecessary turnover expenses.
- Managers will be instructed to minimize brokerage and execution costs.

IX. Voting of Proxies

The "Decision_Makers" recognize that the voting of proxies is important to the overall performance of the "Client_Short_Name". The "Decision_Makers" have delegated the responsibility of voting all proxies to the investment managers. The "Decision_Makers" expect that managers will execute all proxies in a timely fashion. Also, the "Decision_Makers" expect the managers to provide a full accounting of all proxy votes, and upon request, a written explanation of individual voting decisions. The "Decision_Makers" intend to review the managers' proxy voting on at least an annual basis.

X. Forbidden Assets and Strategies

Within their investment guidelines, each investment manager will be furnished with a list of asset types and investment strategies that are forbidden.

APPENDIX A

PERMISSIBLE ASSET CLASSES

Asset Class

Public Domestic Equity

Public Foreign Equity

Emerging Market Equity

Private Equity

Real Estate

Investment Grade Bonds

TIPS

High Yield Bonds

Natural Resources

Infrastructure

Commodities

Hedge Funds

APPENDIX B

TWENTY-YEAR, SINGLE ASSET CLASS AND SUB-ASSET CLASS FORECAST

Asset Class / Sub-Asset Class	Expected Return	Standard Deviation of Expected 20-Year Annual Return
Cash Equivalents	2.0%	1.5%
Stable Value	3.4	2.0
Short-Term Investment Grade Bonds	2.7	2.5
TIPS	5.3	6.5
Investment Grade Bonds	4.0	6.0
High Yield Bonds	8.5	11.0
Bank Debt	7.0	9.0
Foreign Bonds (hedged)	3.6	6.0
Foreign Bonds (unhedged)	4.1	11.5
Emerging Market Bonds	6.6	12.0
Emerging Market Bonds (local)	5.2	17.0
Core Private Real Estate	7.5	11.5
Public Real Estate (REITs)	7.5	18.0
Natural Resources	11.0	21.0
Timber	6.0	14.0
Commodities	6.6	22.0
Infrastructure	9.6	14.0
Public Domestic Equity	9.4	16.0
Public Domestic Equity (Large)	9.2	16.0
Public Domestic Equity (Mid)	9.5	18.0
Public Domestic Equity (Small)	9.8	21.5
Public Domestic Equity (Micro)	10.5	23.0
Public Foreign Equity (Developed)	9.9	18.0
Public Foreign Equity (Small)	11.1	23.0
Public Foreign Equity (Emerging)	11.6	24.0
Private Equity	11.9	24.0
Hedge Funds	6.2	10.5

APPENDIX B

EXPECTED CORRELATIONS AMONG ASSET CLASSES AND SUB-ASSET CLASSES

Asset Class/ Sub Asset Class	Short-Term Investment Grade Bonds	Investment Grade Bonds	TIPS	High Yield Bonds	Public Domestic Equity	Public Foreign Equity (Dev.)	Public Foreign Equity (Em.)	Real Estate	Infrastructure	Private Equity	Hedge Funds
Short-Term Investment Grade Bonds	1.00										
Investment Grade Bonds	0.90	1.00									
TIPS	0.65	0.80	1.00								
High Yield Bonds	0.15	0.35	0.30	1.00							
Public Domestic Equity	-0.05	0.25	0.00	0.65	1.00						
Public Foreign Equity (Dev.)	-0.05	0.20	0.10	0.55	0.80	1.00					
Public Foreign Equity (Em.)	-0.10	0.00	0.10	0.50	0.75	0.80	1.00				
Real Estate	0.10	0.25	0.10	0.50	0.40	0.35	0.30	1.00			
Infrastructure	0.20	0.35	0.30	0.45	0.40	0.35	0.35	0.45	1.00		
Private Equity	0.00	0.15	0.00	0.65	0.80	0.70	0.60	0.45	0.50	1.00	
Hedge Funds	0.10	0.25	0.10	0.50	0.60	0.55	0.50	0.20	0.30	0.55	1.00

APPENDIX C

ASSET ALLOCATION TARGETS

	Target	Range
Public Domestic Equity	31%	26% to 36%
Public Foreign Equity	20%	15% to 25%
Private Equity ¹	5%	3% to 7%
Real Estate	13%	10% to 16%
High Yield Bonds	5%	3% to 7%
Investment Grade Bonds	21%	16% to 26%
TIPS	5%	3% to 7%
Cash	0%	< 5%

Based upon the expected asset returns, risks, and correlations cited in Appendix B, this target allocation exhibits an expected annual return of x.x% and an expected annual standard deviation of x.x%.

¹ The uncalled portion of the Fund's private equity portfolio will be invested in public domestic equities.

APPENDIX D

LIQUIDITY PROJECTIONS¹

Current net cash outflows are approximately x.x million per year, and are expected to rise to approximately x.x million in the near term. This pattern results in a net negative cash flow of x% to x% of Retirement System's assets, based on the Retirement System's year-end 20XX asset value and on the actuarial assumed rate of return of x.x% per year.

¹ Liquidity projections provided by the Retirement System's actuary as of January 1, 20XX.

APPENDIX H

MEKETA INVESTMENT GROUP

SAMPLE WHITE PAPERS



ABSTRACT

In this document, we highlight the ineffectiveness of the professional investment management industry in achieving superior returns. Further, we investigate the use of concentrated portfolios as a way to use investment managers to better achieve investor objectives.

BACKGROUND

Several events have conspired in the recent past that make this topic particularly important at this moment in time. First, notwithstanding a few hiccups along the way, the world's capital markets have experienced a prolonged "bull run" for the last twenty-five years, driven by declining worldwide inflation and interest rates, sustained economic growth, liberalization of capital markets and trade barriers, and the collapse of socialism as a viable alternative to the capitalist economic model. As a consequence, driven by continually rewarded investor optimism, nearly all types of assets are priced dearly today, and expected future returns are, therefore, markedly lower than at any point in the recent past.

Second, the investment manager marketplace, as a whole, has failed to generate substantial value for institutional investors. Driven largely by the real-world business demands imposed on them by consultants and institutional investors, investment managers have increasingly oriented their strategies with a single goal in mind: minimizing benchmark risk. Consequently, institutional portfolios are increasingly diversified and structured to look like a benchmark index. These structures generally do not produce returns weak enough to cause investors to terminate a manager, but rarely produce returns strong enough to help investors better achieve their objectives.

Finally, investment management fees have failed to decline over time. While the number of investment managers has increased substantially over the past twenty years, and competition is fierce, prices for investment management services have not declined. In fact, fees have actually increased in several areas. Further, the "asset-based" fee structure that remains the de facto standard in the marketplace has encouraged managers to elevate the goal of gathering assets above that of producing superior returns.

So, at a time when the general condition of the capital markets is less likely to enable investors to achieve their goals, the active management industry has failed to produce a solution to navigate the course with more success.

This paper examines the three trends summarized above in some detail. Further, it examines an alternative method to using active managers, one more likely to add value to an investor's portfolio over long periods of time.

WHY WILL THE TRADEWINDS DIMINISH?

In the late fifteenth century, European explorers began sailing from the western shores of Europe to the New World. The trip was hastened by the discovery of consistent tropical tradewinds that drove ships westward in the lower Atlantic latitudes, and arctic tradewinds that drove ships homeward in the higher Atlantic latitudes. The magnitude and consistency of these tradewinds jumpstarted the development of the New World and greatly increased the wealth of most of Europe for several hundreds of years.

Like late fifteenth century explorers, late twentieth-century investors, as a group, were the beneficiaries of warm, consistent tradewinds. These more recent tradewinds, however, did not enrich explorers, merchants, and European aristocracy but, rather, money managers, traders, and investors.

After a decade marked by rising oil prices, spiraling inflation, political instability, and high unemployment, by the early 1980s most financial assets (e.g., stocks and bonds) were priced cheaply worldwide. For example, in 1982, a twenty-year Treasury bond was yielding 14% – quite a healthy guaranteed return. The U.S. stock market was priced at a price-earnings multiple of 10X, on depressed earnings. With prices depressed, those investors with the courage to place a stake in the out-of-favor financial markets stared at very high long-term expected returns.

What followed over the next twenty-five years was a tremendous improvement in the worldwide economy. First, austere monetary authorities began squeezing out the systemic inflation that had worked its way into the global economy. With inflation tamed, bond investors piled money into fixed income instruments, driving yields down significantly. Equity markets, in turn, experienced expanding price multiples as capital began seeking riskier assets again. And, all of these events were reinforced by strong and stable economic growth. Over the course of less than twenty-five years, the yield on long-term Treasuries declined from 14% to 5%. The price-earnings multiple of the U.S. stock market expanded from 10X to 25X. Foreign markets previously thought of as uninvestable (e.g., Russia, China, India) became the target of "hot money" everywhere. The debt issues of several "emerging market" countries, like Mexico, were given investment grade ratings, with yields less than half those of U.S. Treasuries just twenty-five years earlier.

Warm tradewinds benefited all investors, skilled ones, as well as those not so skilled. Below is a table of the average annual returns of several broad asset classes over the twenty-five years ending in 2006.

Asset Class Annualized Total Return Cash (30-day T-bills) 5.3% Inv. Grade Bonds (Lehman Aggregate) 9.5 High Yield Bonds (Lehman HY/lbbotson HY) 11.1 Real Estate (NCREIF) 8.9 US Large Cap Equities (Russell 1000) 13.3 US Small Cap Equities (Russell 2000) 11.8 Foreign Equities (MSCI EAFE) 12.2		
Inv. Grade Bonds (Lehman Aggregate) 9.5 High Yield Bonds (Lehman HY/Ibbotson HY) 11.1 Real Estate (NCREIF) 8.9 US Large Cap Equities (Russell 1000) 13.3 US Small Cap Equities (Russell 2000) 11.8	Asset Class	
High Yield Bonds (Lehman HY/Ibbotson HY) Real Estate (NCREIF) US Large Cap Equities (Russell 1000) 13.3 US Small Cap Equities (Russell 2000) 11.8	Cash (30-day T-bills)	5.3%
Real Estate (NCREIF) 8.9 US Large Cap Equities (Russell 1000) 13.3 US Small Cap Equities (Russell 2000) 11.8	Inv. Grade Bonds (Lehman Aggregate)	9.5
US Large Cap Equities (Russell 1000) 13.3 US Small Cap Equities (Russell 2000) 11.8	High Yield Bonds (Lehman HY/Ibbotson HY)	11.1
US Small Cap Equities (Russell 2000) 11.8	Real Estate (NCREIF)	8.9
· · · · · · · · · · · · · · · · · · ·	US Large Cap Equities (Russell 1000)	13.3
Foreign Equities (MSCI EAFE) 12.2	US Small Cap Equities (Russell 2000)	11.8
	Foreign Equities (MSCI EAFE)	12.2

There are two items of significant note from the table above. First, the returns for most of these asset classes over the past twenty-five years are significantly higher than their longer-term returns. Second, for this twenty-five-year period, even an investor making bad decisions would have quite easily produced the roughly 7.5% - 8.5% return required by most pension plans and endowments today.

Unfortunately, while oceanic tradewinds persist for millennia, capital market tradewinds are more fickle. And, with worldwide interest rates at low levels, price multiples of most financial assets near historically high levels, and economies worldwide largely operating at near-optimal levels, the fuel for the tradewinds machine has largely run dry.

While today's environment does not necessarily mean that investors will face headwinds in the future, at a minimum it means that investors should expect returns from asset classes in general that are no higher than long-term historical averages. During the twentieth century, these averages were about 11% per year for equities and 5% per year for government bonds.

The table below shows Meketa Investment Group's expected returns for asset classes over the next twenty years, based on the current market environment and the long-term intrinsic earning power of these assets.

Asset Class	Expected Annual Return 2007 - 2026
Cash	4.0%
Investment Grade Bonds	5.3
High Yield Bonds	6.7
Real Estate	7.5
U.S. Large Cap Equities	8.9
U.S. Small Cap Equities	9.7
Foreign Equities	9.3

Two conclusions can be drawn from the table above. First, to have a fighting chance at achieving a 7.5% to 8.5% annual return, plan sponsors must place a high percentage of their assets in equities. Second, the "average" investor, without the benefit of strong active management, may very well not achieve the return necessary to balance the needs of most plan sponsors. Only the strongest investors will be able to achieve the results they desire over the next twenty years.

To sail to the New World of financial markets without the benefit of tradewinds, explorers will have to much more skillfully and opportunistically navigate the open ocean that awaits them.

THE FAILURE OF ACTIVE MANAGEMENT PART ONE: FAILURE TO BEAT BENCHMARKS

It is a truism that, after the costs of investing are taken into consideration, the majority of investors will underperform the market in which they invest. Why is this? All of the outstanding shares of financial assets are held somewhere, by someone, who is an investor. If one investor outperforms the average of all others, by necessity another investor must equally underperform the average of all others. Thus, the "average" investor can expect the "market" return. After trading costs, even the "average" investor will underperform the market.

Thus, it is not surprising that most investors underperform the market after fees and trading costs are taken into account.

What is surprising is that most professional investment managers underperform the "market" after fees. Investors in company stock, or holders of various types of bonds, can be individual investors, company employees, the proverbial grandmother who has held 100 shares of IBM for half of a century, or even other companies. None of these investors get paid exclusively to outperform the market. What is surprising is that those investors who do get paid to outperform (i.e., the investment management industry) cannot do so consistently at the expense of those who are not paid.

Many studies have examined the efficacy of active management. All have the same conclusion: on average, professional active investment managers fail to outperform the market over long periods of time, after all costs are taken into consideration. The table below shows the results for just one of these studies.¹

Average outperformance of large cap mutual funds versus the S&P 500 index through April 2006				
3 Years	0.0%			
5 Years	-0.6%			
10 Years	-1.2%			
15 Years	-0.9%			

WHY DO PROFESSIONAL MONEY MANAGERS FAIL TO ADD VALUE?

There are many possible reasons why professional money managers fail to add value, on average, over long periods of time. The following reasons are perhaps the most salient.

First, and most importantly, markets are very efficient over the long term. Strategies that work well for a few years often stop working as soon as other investors identify the inefficiency that has been exploited. Due to the sheer number of professional money managers that spend most of their time scouring an informationally efficient market for opportunities, most inefficiencies are identified and corrected fairly quickly. Thus, even

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 $^{^{\}rm 1}\,$ Data Source: Morningstar. Study conducted by Meketa Investment Group.

smart, well motivated investors will have a difficult time outperforming markets. However, this very difficult game is often made more difficult by the managers themselves, as explained below.

Second, most professional investment managers handicap themselves by managing so much money they can no longer effectively execute a strategy to exploit inefficiencies in the market, even if that inefficiency still exists. A stereotypical story of a successful investment manager is one that begins with a prolonged period of strong returns, usually three to five years, followed by an aggressive marketing effort to notify the world of the manager's "skill." The marketing campaign is usually successful in attracting assets to the manager. As assets grow, the manager is forced to increase the number of securities held, reduce the volume of trading, change the types of the securities in which they invest, or some combination of these that serve to distort the original strategy that effectively exploited an opportunity. Thus, the quest to increase their own profits by increasing the amount of money they manage reduces the managers' ability to produce profits for their clients.

The third and fourth reasons that money managers fail to add value are interrelated. As successful investment managers grow in size, a goal of maximizing their business profits causes a shift in goals from producing the strongest returns for clients to producing returns that are least likely to cause a client to terminate the manager. This causes a manager to become more "index like." Causing and reinforcing the shift in goals, traditional investment managers are generally paid asset-based fees, encouraging this conservative behavior.

A related factor is the generally over-diversified nature of many investment management strategies. These strategies have evolved to become overly diversified because most consultants and clients hold investment managers to unrealistic short-term performance standards, given the random nature of the capital markets. Diversifying portfolios thoroughly minimizes the likelihood of a manager ever producing returns so weak over short periods of time that a client will terminate them.

The following table shows the average return over the past ten years of large cap equity funds that, at the end of 2005, held more than 100 stocks (excluding index funds), and those that held fewer than 30 stocks. This comparison is somewhat crude, though it is a fair generalization that strategies that invest in more stocks are more benchmark-like than those that invest in fewer stocks.

Average "outperformance" of strategies with fewer than 30 stocks over those with more than 100 stocks ²				
3 Years	1.4%			
5 Years	1.2			
7 Years	3.6			
10 Years	1.9			

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² Data source: eVestment Alliance

Additionally, managers of "sector" funds tend not to be as benchmark conscious as managers of market portfolios. One would suspect that, as a result, sector fund managers may be able to outperform their sector indexes better. This is illustrated in the following table.

Average "outperformance"	of sector strategies ³
5 Years	4.1%

In a recent study conducted by Martijn Cremers and Antti Petajisto of the Yale International Center for Finance, titled "How Active is Your Fund Manager? A New Measure That Predicts Performance," the authors calculated that mutual funds with the highest "active share" (more concentrated portfolios) outperform those with the lowest "active share" (closet indexers) by approximately 3% per year. This study found persuasive evidence that investors are much better off investing with managers whose portfolios look less like the indexes they are benchmarked against.⁴

The thesis that managers have failed to outperform because of the traditional asset-based fee schedule is more difficult to test. Most investment products in the marketplace today that charge performance-based fees invest in "alternative" strategies – hedge fund strategies, private equity, and real estate. By their nature, these strategies are not very benchmark conscious. Further, there are few strategies in these areas that charge fees with no performance incentives. Thus, isolating fees as a cause of weak returns is very difficult.

EXPLAINING THE DATA

When most investment managers start out, their business goal is simple: produce a return series strong and persistent enough to attract investors. Very simply, investors buy performance. During this early stage of an investment manager's development, a manager's goals are well aligned with their clients' goals.

Generally speaking, only managers with superior initial track records of three to five years "survive" to attract investor assets. The "non-survivors" generally go out of business. After a long enough track record is established, a strategy is then marketed aggressively to investors through a variety of different channels. If returns continue to be strong, these marketing efforts will be successful, and assets will pile into the investment strategy.

At a certain point, most entrepreneurial managers reach a size where the equation determining success or failure changes. When a manager has few client and few assets to manage, taking "business risk" has nearly unlimited upside rewards and limited downside consequences. In other words, producing truly superior returns will likely lead to

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³ Data source: eVestment Alliance

⁴ Cremers, Martijn and Petajisto, Antti, Yale School of Management, International Center for Finance, "How Active is Your Fund Manager? A New Measure that Predicts Performance," Yale IFC Working Paper No. 06-21.

significantly more clients and much higher profits. Producing very weak returns will cause an unprofitable business to remain unprofitable.

However, as assets increase into the billions of dollars, presumably after a prolonged period of superior performance that attracts new clients, an entrepreneur's equation changes. Now, the "business risk" taken by managing portfolios for the highest return outweighs the potential rewards of adding new clients and assets.

The reason the equation changes is that, while investors tend to "buy superior performance," they tend not to "sell mediocrity." Thus, a manager with a very strong track record has an incentive to change its strategy to produce more benchmark-like returns. Producing benchmark-like returns ensures a manager that over a standard reporting period of a quarter or a year, their strategy will be unlikely to produce returns that look bad enough to cause them to get fired. The corollary to this behavior is that a strategy producing benchmark-like returns is equally as unlikely to produce the superior returns that attracted investors to the strategy to begin with. In short, managers, as they grow, have an incentive to produce returns closer to the index that they are compared against by clients.

When professional asset managers use strategies that have the potential to significantly outperform or underperform a benchmark, it is less likely that most of those managers will underperform a benchmark. The reason is that asset-based management fees, which are subtracted from all professional investment manager returns, comprise a far larger fraction of the outperformance of the successful investment managers that manage benchmark-like portfolios.

THE FAILURE OF ACTIVE MANAGERS PART TWO: FEES THAT MISALIGN INTERESTS

The law of supply and demand in economics is universal, but it does not apply to all products and industries equally.

Over the past twenty-five years, active management fees have generally increased, despite an explosion in the supply of professional investment managers. One significant reason for this is that consumers of professional investment management services are generally not price sensitive. Other factors, such as historical performance, "brand" image, and relationships, play a large role in the selection of professional investment managers. From 1978 to 2006, average mutual fund expenses increased from 0.91% to 1.36%. Note that one area void of most non-fee factors, indexing, has experienced a significant decline in fees over the past twenty-five years.

As most asset classes produced strong results over the past twenty-five years, most investors were willing to pay lofty fees, which represented a small fraction of total returns.

What lessons have professional investment managers learned from consumer behavior over the past few decades? There are two. First, there is little benefit in lowering fees to attract assets. Consumers appear somewhat indifferent to the fees they pay, judging by the pricing behavior of managers. Second, if fees and revenues remain high simply as a function of gathering and maintaining assets, the profit-maximizing goal of a professional asset manager is not to produce the strongest returns, but to attract the most assets (without risking losing assets).

In this way, the asset-based fee schedule has conspired with the increasingly benchmark-like strategies of managers to create an environment highly profitable for professional investment managers, but largely ineffective in achieving investor goals.

A BETTER WAY TO MANAGE MANAGERS

As there appear to be several shortcomings in the current model of using investment managers, there must be several enhancements that can be made. The current model suffers, at its core, from a misalignment of the interests of the investment manager and those of institutional investors. This misalignment has driven managers to structure portfolios designed to better achieve their own goals, not those of the plan sponsors for whom they manage assets.

Changes in the way managers are managed must focus around changing these incentives. These changes fall into five broad categories: utilizing more concentrated portfolios, allowing broader portfolio mandates, utilizing performance-based fees, evaluating managers over longer periods, and encouraging other incentives to align interests.

CONCENTRATED PORTFOLIOS

Most large institutions today hire multiple investment managers to ensure full exposure to the various areas of the capital markets. In essence, institutional investors are already ensuring diversification at the aggregate level. Further, many plan sponsors blend active management strategies with indexing strategies, to ensure full diversification. Thus, the diversification afforded by active strategies is often duplicative and expensive.

If a plan sponsor can construct a multiple-manager portfolio, and attain the exposure and diversification required, then there is no need to pay an active manager to provide diversification. The only function an investment manager should serve in this construct is that of being the strongest "stock picker," "bond picker," or, in the recent parlance of institutional management, the strongest provider of "alpha."

What constitutes a concentrated portfolio? Clearly, there is a spectrum of more or less concentrated strategies. The appropriate level of concentration is one that allows a manager to invest in the number of stocks or bonds that they can understand with the highest degree of conviction. In a concentrated portfolio, diversification should not justify holding a security.

Further, the nature of the market in which securities are being evaluated makes a difference. For example, within large cap U.S. stocks, where there are approximately 500 stocks that fall into most manager universes, a concentrated portfolio may consist of 15 stocks. But, in the microcap stock space, where there are thousands of stocks to choose from, a concentrated portfolio may consist of 50 names.

Thus, for some managers, a concentrated portfolio may consist of 10 to 15 names. For others, a concentrated portfolio may consist of 40 to 50 names. The important factor is that the portfolios not be structured to mirror structurally the market they are attempting to outperform. Rather, they should be structured to take best advantage of a manager's ability to identify individual securities likely to outperform the market.

BROADER PORTFOLIO MANDATES

In addition to more concentrated portfolios, some managers are likely to be better able to take advantage of inefficiencies with broader portfolio mandates.

Often, in an effort to control the short-term risk in a portfolio, consultants and plan sponsors will create very limited roles for active managers. For some managers, with a focused expertise, this is appropriate. But for others, mandates with a very limited scope could constrain the value that could be added to a portfolio.

Take, for example, the case of a manager that has very successful products in the mid cap, small cap, and microcap areas. Most clients hire the manager to manage portfolios in one, or several of these areas. However, each portfolio has a narrow scope. If the manager is truly skilled at finding inefficiencies in all three sectors of the market, then it may make more sense to hire the manager and allow them to select stocks from all three areas. In essence, the manager would be taking its "best ideas" from all three portfolios. This broader portfolio would concentrate the skill of the manager much more than simply hiring the manager to invest in only one of the three sectors.

PERFORMANCE-BASED FEES

At the root of the problem with professional investment managers is the asset-based fee. The asset-based fee encourages managers to produce mediocre results. However, many performance-based fees used today encourage an even more damaging behavior: short-term risk taking.

Most performance-based fees used in the institutional investment management arena are structured over short time periods (one to three years), and are designed to give managers a very large fee if performance is better than the benchmark. There are two problems with this model. First, the performance-based fee is "relative" to a benchmark. Consequently, it encourages the same benchmark-seeking structures as the asset-based fee. Second, the fees are generally short-term. It is well established that most markets exhibit price behavior that

is so random that evaluating any investment strategy over periods as short as one to three years is more likely to be crediting or penalizing a manager for "market noise" than for the ability to exploit market inefficiencies.

Ideally, performance-based fees should be structured to align the long-term interests of the manager with those of the plan sponsor. Therefore, performance-based fees should have several components. First, to minimize excessive "risk taking" with performance incentives, even performance-based fees should have a small asset-based component. The size of the asset-based fee should be commensurate with allowing the manager to invest in the resources necessary to successfully manage the portfolio. The asset-based component is not meant to reward the manager, but simply to keep the manager's operations going.

Second, the performance-based fee should provide for rich upside potential for the manager. Conceptually, all of the manager's profits (and the investor's, for that matter) should come from the performance incentive. The performance incentive, often approximately 20% of "excess return," should only be granted once an absolute benchmark return is achieved.

Third, the performance-based fee should have a long measurement period – at least 7 years. This period is sufficiently long enough to begin separating investment skill from luck for most investment strategies. Thus, managers begin to get paid not based on the random noise of the market, but on their true skill in identifying inefficiencies.

Finally, the performance-based fee should have an "absolute return" benchmark. Since the evaluation period is long enough to smooth out much cyclicality in capital markets, and consistent in time horizon with most plan sponsors' objectives, the benchmark for the manager should be an absolute return (e.g., 8% per annum). Because most plan sponsors have long-term absolute return objectives, it is appropriate to incentivize a manager to produce the strongest absolute returns over longer-term periods. This will relieve a manager from necessarily mirroring the structure of a market index benchmark to satisfy the shorter-term evaluation periods of many clients and consultants. "Relative" benchmarking is necessary over short to intermediate-term periods to assess manager performance in light of highly volatile markets. Longer-term, relative benchmarking can misalign interests.

OTHER INCENTIVES

Plan sponsors should also look for other ways to align the interests of managers with their own. For example, plan sponsors can demand that managers invest a certain portion of their own capital alongside their clients'. This structure has worked well with many private investment vehicles. A sizable commitment by the manager should better align the interests of both parties.

Further, plan sponsors should consider having longer-term contracts with managers. These contracts could be drafted with many investor-friendly components, such as limiting assets under management, restricting changes in personnel, limiting "new strategies" offered by the investment team, etc., in exchange for the greater security afforded the manager with longer contracts. For example, in the private equity and real estate arenas, ten-year agreements are quite common.

DEVELOPING A CONCENTRATED MANAGER PROGRAM

All of the suggestions above have a degree of logic associated with them. However, simply beginning to hire managers structured as above will not lead to a successful investment program. In fact, it could cause much harm.

Remember, institutional investment managers evolved to where they are today for a reason. Most institutional investors are very short-term focused. Most consultants or Boards of Trustees cannot tolerate extended periods of weak returns. The result is a preference for more diversified portfolios.

By concentrating portfolios and, thereby, eliminating the diversification inherent in many active strategies, an investor will be subjecting himself to even more short-term volatility in relation to an index, heightening the need for self control in monitoring managers. To protect against this, it is important to utilize concentrated portfolios within a controlled framework.

A concentrated manager program should have three goals:

- Achieve stronger returns from active management
- Achieve stronger returns per dollar of management fees paid
- Control interim volatility by using multiple managers

The appeal of concentrated portfolios is the enhanced likelihood of achieving superior results. Further, by placing greater emphasis on performance-based fees, and less emphasis on asset-based fees, it is likely that returns per dollar of management fees paid will also be enhanced. Controlling interim volatility becomes the most challenging goal.

By hiring concentrated managers, a plan sponsor is implicitly acknowledging that they, not the manager, will be responsible for controlling diversification and short-term volatility vis-à-vis an index. These are objectives that most investment managers share in structuring their traditional investment management products. In a concentrated manager program, managers are being utilized only to exploit market opportunities, not to provide benchmark tracking or diversification. These latter functions must be satisfied by the plan sponsor.

Clearly, concentrated portfolios are likely to be more volatile than diversified portfolios, on both an absolute and relative basis. To moderate this volatility, it is important to utilize multiple concentrated portfolios, well chosen and structured. In choosing concentrated portfolios, plan sponsors should utilize managers with varied styles and strategies, to maximize the diversification benefit of using multiple managers.

The right number of portfolios to use in a program will vary based on the goals of the program. For example, to focus a concentrated manager program on small cap U.S. stocks, you may only require four to six concentrated managers to provide broad enough exposure to the small cap market. However, to focus a concentrated manager program on the entire U.S. equity market, 10 to 15 managers may be more appropriate.

Further, index funds can be used in conjunction with a concentrated manager program to govern the amount of relative volatility in the program in a very cost effective way. For a rough example, consider a plan sponsor that wishes to have a "tracking error" to the Russell 3000 index of 5% on an annual basis and wishes to use concentrated portfolios. The plan sponsor could place half its capital in a group of concentrated managers with a predicted "tracking error" of 10% and the other half in a broad market index fund that has no tracking error. This allows the plan sponsor to more precisely govern the amount of relative volatility it accepts, while maintaining much lower management fees than simply hiring more diversified active managers.

MONITORING

Once a concentrated portfolio is developed, Trustees still carry the obligation to monitor the program regularly. Further, because the program can consist of dozens of investment managers, this oversight can be burdensome.

For plan sponsors with investment professionals on staff, monitoring the many concentrated portfolios can be achieved more easily. For those without an investment staff, Trustees will have to rely on investment consultants to monitor the details of the program, on an advisory or discretionary basis.

In both cases, Trustees should spend their time monitoring the "program," not the many investment strategies employed within the program. The program should have its own parameters and guidelines that Trustees develop and review regularly, such as minimum number of investments, sector and industry constraints, and constraints on derivatives, leverage, and short-selling.

Because Trustees, not individual managers, are creating the necessary diversification, it is important to have constant position-level oversight of the program and investment guidelines for each of the program's managers. It is important to know at all times both what risks are in the program and what risks could be in the program. Thus, whether the program is overseen by internal investment staff, an investment consultant, or a manager of managers, the degree of oversight is heightened as compared with that for diversified portfolios.

CONCLUSIONS

The institutional marketplace finds itself at a unique point in time. At the precise time when active management is needed to assist in achieving institutional investors' goals, active management has become overly diluted and broadly unsuccessful.

The world has experienced a quarter century of extraordinarily strong capital market returns, driven by declining interest rates, strong economic growth, and global economic integration. Over this time, investors have navigated the capital markets with these strong tailwinds at their backs. Going forward, these tailwinds will not exist as they have, making it far more difficult for plan sponsors to achieve their goals.

While traditional active management has evolved to be largely ineffective in materially helping plan sponsors achieve their long-term goals, investors can still use the skills of active managers as a tool to achieve their goals. By using active managers that invest "concentrated" portfolios, invest broader mandates, are given incentives to maximize long-term returns, and charge performance-based fees, plan sponsors can design "concentrated manager programs" that have a higher likelihood of contributing strongly toward reaching their goals.



Written: 12/2010 Last Revised: 3/2011

INTRODUCTION

Most institutional investors have an investment return target that is well above the returns available from the safest investment grade bonds. As a result, sizable strategic investments in higher-returning equities are necessary to meet plan goals. Based on the research presented below, Meketa Investment Group believes that a U.S. equity portfolio tilted towards higher quality, higher stability, and higher income stocks can significantly increase risk-adjusted returns for equity-oriented investors.

In some environments, investors may expect to be extremely well compensated for equity risk. In others, such as at the end of 2010, investors may expect to be less well compensated for equity risk. Figures 1 and 2 depict two important predictors of long-term equity returns over time: the ten-year normalized price-to-earnings ratio and the dividend yield.¹

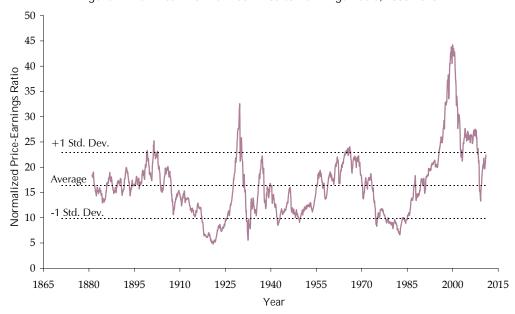


Figure 1. Ten-Year Normalized Price-to-Earnings Ratio, 1880-2010

Source: Shiller, Global Financial Data, S&P, Meketa Investment Group

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¹ Other well-known predictors, such as the Q measure, paint a similar picture of less-than-satisfactory long-term equity returns.

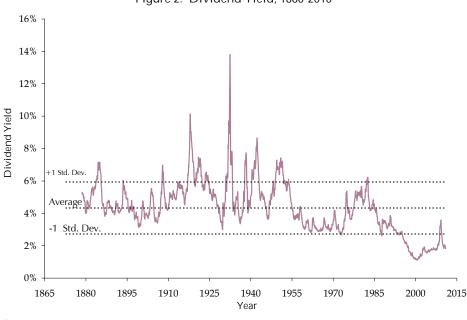


Figure 2. Dividend Yield, 1880-2010

Source: S&P

When the ten-year normalized price-to-earnings ratio is high compared with its historical average, long-term returns to equities tend to be low compared with their historical average (see Figure 3). As shown in Figure 1, the normalized price-to-earnings ratio is currently almost one standard deviation above average, implying a sub-standard long-term return. Similarly, when the dividend yield is low, future long-term returns to equities tend to be low (see Figure 4). Figure 2 indicates that the current dividend yield is close to historic lows, again implying equity returns that may be significantly below the average historical experience.

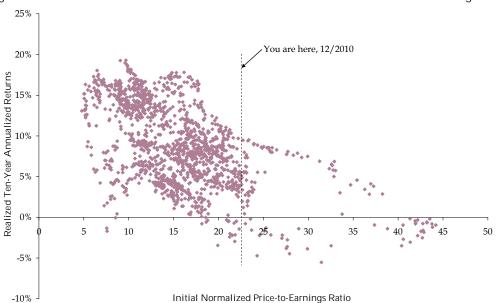


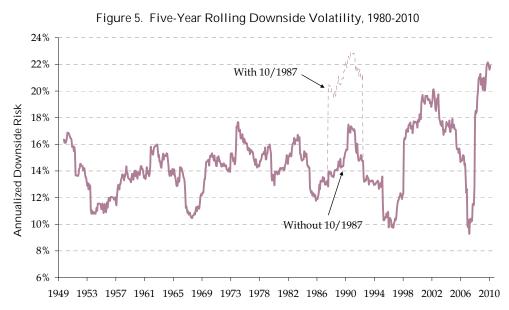
Figure 3. Realized Ten-Year Annualized Return and Initial Normalized Price-to-Earnings Ratio

Source: Shiller, Global Financial Data, S&P, Meketa Investment Group

Figure 4. Realized Ten-Year Annualized Return and Initial Dividend Yield

Source: Shiller, Global Financial Data, S&P, Meketa Investment Group

If equity risk were expected to be low, these currently muted expectations for equity returns would be acceptable for many investors. In such a case, equity investors would expect to be modestly compensated for the modest risk they have assumed. But it is hard to imagine that equity risk will in fact be low: unemployment is still high, debt at the government and household level is historically high and deleveraging is ongoing, Europe is struggling with insolvency, global trade imbalances have not been resolved, and global central bank policy is in uncharted territory. Furthermore, realized downside volatility has generally been increasing over recent history (see Figure 5). Therefore, plan sponsors are rightly concerned that they are not being fairly compensated for equity risk. As a result, plan sponsors may wish to control downside equity risk.



Source: Shiller, Global Financial Data, S&P, Meketa Investment Group

A PROPOSED APPROACH

Based on our research, plan sponsors should consider an investment in high quality stocks with high dividends that perform relatively well in adverse economic environments. Such an investment should help mitigate downside risk and improve the risk-adjusted return of an equity allocation.

Quality

In industry parlance, high quality stocks are those issued by companies that—among other related things—display relatively consistent earnings, strong balance sheets, low leverage, and have positive or stable growth outlooks. Quality as an important factor in equity investing is not new, but it has been garnering increased attention among managers and index providers.² Some managers now refer to quality as an additional factor after style (i.e., value or growth) and capitalization (i.e., small or large), referencing factors that have historically improved risk-adjusted equity returns.

The following three figures show how high quality stocks have historically provided better shelter during difficult environments. Figure 6 summarizes the performance of high quality stocks relative to the broad equity market from 1982 through 2009, as separated into "down" and "up" markets.³ During down markets, a basket of high quality stocks outperformed the market by 5.5% on an annualized basis. And while they lagged by 0.7% during up markets, high quality stocks outperformed by 1.6% over the entire period.

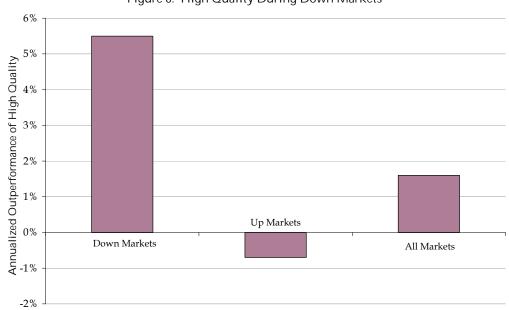


Figure 6. High Quality During Down Markets

Source: Bernstein Research; Market represents the largest 1,500 U.S. stocks on an equal-weighted basis from January 1982 to September 2009. Up/down markets are those months in which an equal-weighted portfolio of the largest 1,500 stocks increases/decreases in value during the month.

² See references section for a list of relevant publications.

³ "Down" markets are defined as months in which the market lost value; "Up" markets are defined as months in which the market gained value.

Figure 7 provides another related view into the benefits of high quality stocks. In this case, performance is broken down into rising and falling volatility environments from 1997 through 2010. In rising volatility environments, high quality stocks outperform low quality stocks by 9.2%—providing better protection in adverse conditions. The cost of this protection is that high quality stocks underperformed during more benign, falling volatility environments by 3.4%. This pattern repeats when focusing on more recent history, as depicted in Figure 8. In 2008, high quality stocks provided a safer haven than low quality stocks, but failed to keep up during the rally of 2009. Nevertheless, avoiding the downside in 2008 proved to be all that was necessary to provide greater returns over the combined period.

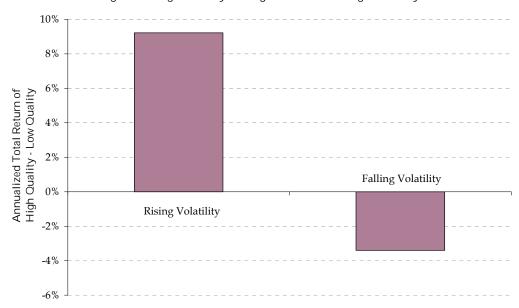


Figure 7. High Quality during Periods of Rising Volatility

Source: S&P Research; Rising/falling volatility quarters are those quarters during which the CBOE VIX increases/decreases from May 1997 to May 2010. High quality is defined as those stocks assigned an S&P quality ranking of A- or above.

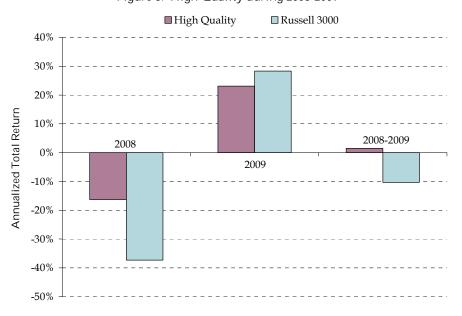


Figure 8. High Quality during 2008-2009

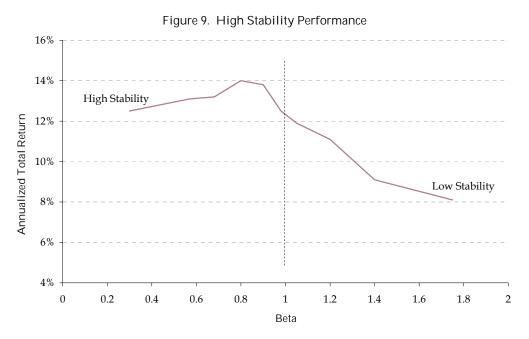
Source: Meketa Investment Group; High quality is defined as those stocks assigned an S&P quality ranking of A- or above, and returns are calculated on an equal-weighted basis.

Stability

Stability refers broadly to stocks that exhibit low price or market volatility. While sharing several characteristics with quality, stability is considered to be distinct enough to have begun to generate separate lines of research.⁴ Currently, there is growing recognition that stability may be another important factor that may contribute to higher risk-adjusted equity returns (Baker et al., 2011; De Silva, 2010; Ang et al., 2008; Blitz and van Vliet, 2007). This is an especially interesting finding, because one of the basic assumptions of conventional financial theory is that stocks with greater price or market risk should give greater return. Many theories have been proposed to explain the anomaly, including behavioral biases that prompt investors to invest in lower-returning, risky stocks (see Kumar, 2009) and leverage or benchmarking constraints that make arbitrage difficult (see Baker et al., 2011).

The figures below summarize some findings on stability as a factor. Figure 9 breaks down stocks by "beta," which measures how a stock moves with the broader equity market and is one measure of stability. Over the period from 1986 through 2007, those stocks that have low betas—which implies high stability—have significantly higher annualized returns than those with high betas.

⁴ See references section for a list of relevant publications.



Source: SSgA; Deciles are composed of equal-weighted Russell 3000 stocks as broken down by beta from December 1986 to October 2007.

Figure 10 shows how high stability stocks perform relative to low stability stocks during recessions and expansions. From the period 1968 through 2005, high stability stocks generated a 6.2% annualized return during recessions—compared with -4.7% for low stability stocks. Of note, high stability stocks outperformed low stability stocks during expansions, too. And, similar to quality stocks, high stability stocks performed well during the 2008-2009 period as shown in Figure 11—outperforming during 2008's crash and subsequently underperforming during 2009's rally, but outperforming overall.

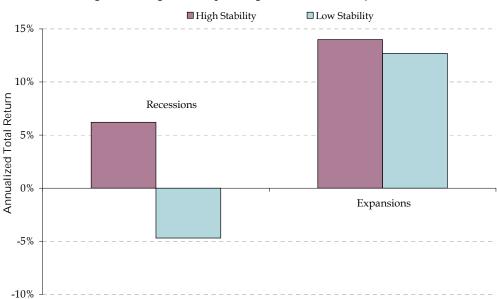
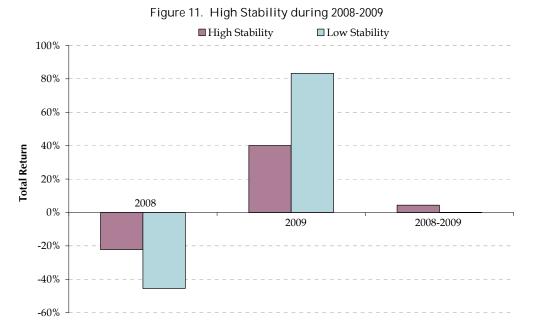


Figure 10. High Stability during Recessions and Expansions

Source: Clarke, de Silva, and Thorley; annualized average monthly return for the lowest/highest quintile of return volatility during NBER-declared recessions and expansions from 1968 through 2005.



Source: Meketa Investment Group; High stability is defined as those Russell 3000 stocks below median beta, and returns are calculated on an equal-weighted basis.

Income

As Figure 12 shows, dividends have historically been a major contributor to equity returns; however, in recent history, dividends have constituted a smaller percentage of total return. Those companies who still offer high dividends tend to share many characteristics with high quality and high stability companies: consistency of dividends and earnings, stable operating models, and positive outlooks. It is no surprise, therefore, that investments in high income stocks have provided downside protection in tough markets (see Figure 13). Though high income stocks generally lagged the market during up years, risk-adjusted returns were higher over the entire period.

\$10,000

Total Return — Price Return

\$1,000

\$100

\$100

\$10

\$100

\$100

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Figure 12. Dividends' Contribution to Total Return

Source: S&P 500, Global Financial Data

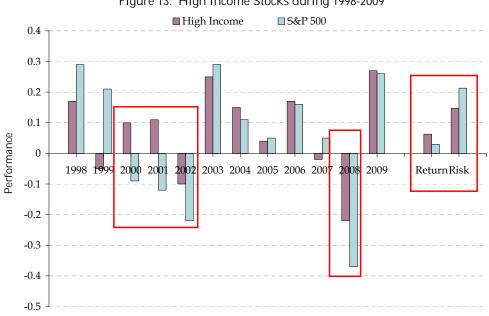


Figure 13. High Income Stocks during 1998-2009

Source: S&P; High Income is defined as those stocks which have above average and increasing dividends. Risk is defined as the standard deviation of annual returns.

THE VALUE OF QUALITY, STABILITY, AND INCOME

Our research into quality, stability, and income was prompted by our desire to find options to mitigate downside equity risk in a still fragile market environment without giving up a significant portion of the upside potential that equities usually possess. By conducting econometric tests on domestic stock performance during 2008 and 2009, we discovered that three factors representing quality, stability, and income had substantial and statistically significant effects on performance during those years. These results prompted a review of outside research on similar factors, which highlighted the value of a few additional QSI metrics that we believe may be valuable in some difficult markets prospectively.

At this point in our research, we felt that the investment approach was worth pursuing further. Therefore, from the Russell 3000 we developed a cap- and sector-neutral portfolio of stocks that were selected based on several factors related to quality, stability, and income (QSI) for backtesting purposes. Some characteristics of the 2010 QSI portfolio are presented in Tables 1 and 2.

Table 1. 2010 QSI Portfolio Capitalization Structure

Capitalization Structure:5	QSI Portfolio June 2010	Russell 3000 June 2010
Number of issues	244	2,974
Weighted Average Market Cap. (US\$ billion)	52.0	58.8
Large (% over US\$10 billion)	69	69
Medium (% US\$1.5 billion to US\$10 billion)	24	24
Small (% under US\$1.5 billion)	7	7

Table 2. 2010 QSI Portfolio Summary Statistics

Fundamental Structure:	QSI Portfolio June 2010	Russell 3000 June 2010
Average Quality	A-	B+
Beta	0.78	1.0
Dividend Yield (%)	2.8	2.0
Price-to-Earnings	15	20
Price-to-Book	2.9	2.9
Debt-to-Equity (%)	49.8	129.6

As can be seen from Table 1, the QSI portfolio of 2446 stocks is cap-neutral, but is currently slightly skewed toward smaller issues (i.e., the weighted average market cap is lower than the benchmark). Table 2 indicates that the QSI portfolio is higher quality, higher stability (i.e., lower beta), and higher income than the Russell 3000 index. The QSI portfolio also has a slight value tilt given its lower price-to-earnings ratio (but the same price-to-book ratio).

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⁵ Portfolio is designed to be approximately cap- and sector-neutral at time of reconstitution, and will deviate throughout the year.

⁶ The number of stocks will vary from year to year, but should generally be between 200 and 250.

Next, we backtested the QSI portfolio for as long a period as we felt we had useful data, which started in calendar year 2002. The backtested performance of the QSI portfolio methodology is shown in Figure 14.

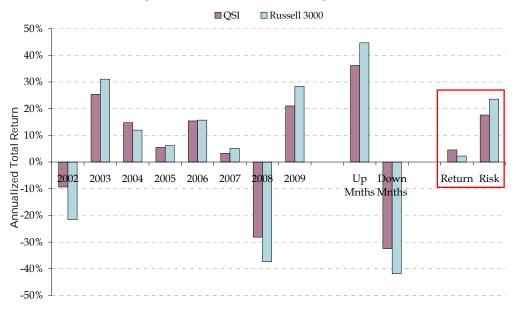
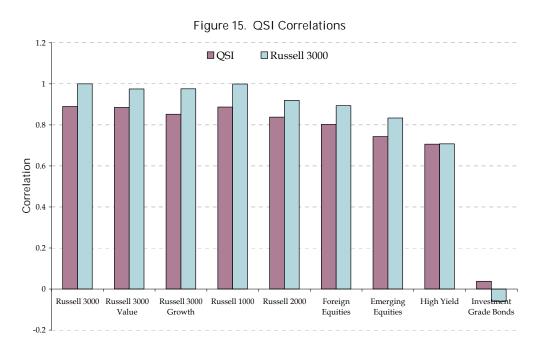


Figure 14. QSI Performance during 2002-2009

Source: Meketa Investment Group QSI portfolio backtest; risk is defined as the standard deviation of annual returns.

Backtested performance was as expected: the results demonstrated downside protection (76% downside capture) at the cost of sacrificing some upside (80% upside capture). Importantly, the QSI provided a better return over the combined period—4.5% versus 2.3%—with less risk. We do not believe that achieving a higher return should be a necessary expectation for an investor in a QSI portfolio, as they should (theoretically) be willing to accept modestly lower returns for a reduced risk level (as they do with an allocation to bonds).

As an added benefit, correlations with other risky asset classes were lower than for the Russell 3000 (see Figure 15). While the QSI portfolio's correlation with the Russell 3000 value was higher than with the Russell 3000 growth (0.89 vs. 0.85), the difference was not significant enough for us to be concerned that we had essentially replicated a value index. Furthermore, what slight value effect is present is arguably not enough to explain the risk-adjusted return we witnessed (see Clarke, de Silva, and Thorley, 2006; Thomas and Shapiro, 2009).



Source: Meketa Investment Group QSI portfolio backtest. Full period monthly correlations, July 2001 through June 2010.

Lower correlations with other risky assets imply that a QSI allocation may increase a portfolio's risk-adjusted returns not only through the potentially better characteristics of the QSI portfolio, but also through its dampening of portfolio-wide volatility.

RISKS

While portfolios that focus on quality, stability, or income factors may reduce equity risk, they are not riskless. For example, although the QSI portfolio substantially outperformed the market in 2008, it still declined 28%. And quality, stability, or income portfolios tend to lag substantially during up markets—and almost surely during major liquidity operations or "easy money" policies by the central bank. The rationale is simple: high quality companies do not need "easy money," but low quality companies do. Therefore, the valuation of the lowest quality companies increases much more than quality companies when the central bank (and risk-taking, generally) drive the market.

This return behavior means that portfolios focused on quality, stability, or income have high tracking errors—in the range of 8-10%—similar to the tracking error of an actively managed small cap manager's portfolio. Comfort with substantial market deviations should be taken into consideration by any plan sponsor interested in implementing this type of strategy.

IMPLEMENTATION

Quality, stability, and income factors, while not new, are receiving increased attention by the investment community. Currently, there are several reasonable active and passive options; however, as far as we know, there are no options that combine all three factors into one product. Active strategies focused on one or more of these approaches will typically charge an active management fee ranging between 0.5% and 1.0%, as well as any attendant transaction and operational costs.

Passive strategies are primarily attractive because they are less expensive than active strategies. Furthermore, these strategies could serve as a benchmark for an active quality, stability, or income strategy. A sample of related passive strategies, including the QSI Index, is presented in Table 3.

	Factors				Det	ails	
	Q	S	1	Number of Stocks	Sector Neutral?	Cap Neutral?	Inception
S&P High Quality	X		X	100-200	No	No	6/2010
S&P Dividend Aristocrats		X	X	~50	No	No	11/2005
MSCI Minimum Volatility		Χ		Varies	No	No	4/2008
MSCI High Dividend Yield			X	Varies	No	No	9/2006
Russell Dividend Achievers		X	X	200-250	No	No	6/2009
Meketa QSI Index	X	X	X	200-250	Yes	Yes	11/2010

Table 3. Passive Options

The QSI approach is attractive relative to some related passive options for several reasons. First, it is the only passive approach to combine all three factors. Second, it is broadly diversified, holding more than 200 stocks. Finally, because it is both cap and sector neutral, investors can take comfort that performance will not be driven by some other, unintended factor.

SUMMARY

Investing in high quality stocks that provide high income and perform well in adverse environments may be an attractive option for plan sponsors who wish to lessen their overall equity risk without sacrificing equity returns. There is substantial evidence that a focus on quality, stability, and income will limit the downside risk of an equity allocation. And, in today's environment characterized by relatively low expected risk-adjusted returns and elevated risk, investments in these stocks appear especially attractive. Nevertheless, such portfolios will experience a relatively high tracking error and will likely lag in up markets.

Provided that such an allocation fits within the overall objectives and constraints of their Funds, Meketa Investment Group recommends a strategic allocation to quality, stability, and income portfolios.

THE VALUE OF QUALITY, STABILITY, AND INCOME

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ABSTRACT

In this paper, we address how much of an investment fund's portfolio should be strategically allocated to Treasury Inflation Protected Securities (TIPS). Overall, Meketa Investment Group recommends that for (a) moderately risky or balanced portfolios, TIPS should constitute 5 to 15% of the entire portfolio, or roughly 15 to 35% of the bond sub-portfolio, and for (b) conservative portfolios, TIPS should constitute approximately 30 to 50% of the entire portfolio, or roughly 40 to 60% of the bond sub-portfolio.

INFLATION-LINKED BONDS

Unlike nominal bonds, inflation-linked bonds guarantee an inflation-adjusted return if held to maturity. The expected nominal yield for a government bond consists of three components: the expected rate of inflation, the inflation risk premium, and the real interest rate. Because an inflation-linked bond eliminates the risk associated with uncertainty over inflation, its yield does not include the inflation risk premium. Consequently, the expected nominal yield provided by an inflation-linked bond consists of only the expected rate of inflation and the real interest rate.¹

History of Inflation-Linked Bonds

The U.S. government first issued Treasury Inflation-Protected Securities (TIPS) in 1997. However, the U.S. was not the first country in modern times to issue inflation-linked bonds. For example, the U.K. first issued "linkers," as they are commonly called, in 1981, while Australia and Canada followed suit in 1985 and 1991, respectively. Presently, more than twenty countries now offer some form of inflation-linked bonds. Though the mechanics of each country's inflation-linked bonds differ, the concept is the same: investors are guaranteed an inflation-adjusted return. Notably, as of the end of 2007 roughly 10% of the outstanding value of world government debt was inflation-linked, up from 3% in 1997 (Mauro and Hopkins, 2008).

U.S. TIPS

With one important difference, TIPS are identical to traditional U.S. Treasury securities. Traditional U.S. Treasuries pay a specified rate of income (via a coupon payment) and return the owner's principal at the stated maturity date. Likewise, TIPS also pay income and return the owner's principal at the stated maturity date. And, as with traditional Treasuries, the full faith and credit of the U.S. government backs TIPS. However, unlike that of a traditional Treasury, the principal value—and thus the coupon payment—of TIPS is adjusted to reflect inflation at the consumer price level, as measured by the Consumer Price Index (CPI-U).²

¹ Note that at their introduction, inflation-linked bonds are usually far less liquid than their nominal counterparts. This implies that there is a liquidity premium associated with inflation-linked bonds relative to their nominal counterparts (Carlstrom and Fuerst, 2004).

² For more information regarding the computation of the inflation adjustment, see Gürkaynak, Sack, and Wright (2007). For more information regarding the CPI-U, see the Bureau of Labor Statistics (www.bls.gov).

CHARACTERISTICS OF TIPS

Expected Nominal Returns

A simple way to estimate the expected nominal return for an inflation-protected security is to add its present yield to the expected rate of inflation over its maturity. For example, on July 1^{st} , 2008 the real yield for the 10-year TIPS was approximately 1.39%. At that time, the Survey of Professional Forecasters predicted that the CPI-U would average 2.50% over the next ten years.³ Therefore, a buyer of a 10-year TIPS could expect a nominal return of (1.39 + 2.50 =) 3.89% over the subsequent ten years.

In contrast, a buyer of a 10-year traditional Treasury bond would receive a nominal return of 3.95% over ten years. The 0.06% difference in yield can be attributed to the net effect of both an inflation risk premium for Treasuries and a liquidity premium for TIPS (see footnote 1). In this example, it appears as though the inflation risk premium dominates the liquidity premium by 0.06%. This is roughly in line with academic work which suggests that the inflation and liquidity premiums are equal to 0.6% and 0.5%, respectively (Durham, 2006; Campbell and Shiller, 1996; D'Amico et al., 2007).

As the market for TIPS becomes deeper (i.e., more liquid) the liquidity premium TIPS enjoy relative to Treasuries should diminish.⁴ However, the inflation risk premium will remain as a structural feature of traditional Treasuries. Therefore, as time goes on, the difference in nominal yields between Treasuries and TIPS of the same maturity should approach the inflation risk premium.

Inflation Risk Premium

Since over the longer term the only difference in nominal yields between Treasuries and TIPS should be the inflation risk premium, it makes sense to consider what might increase or decrease this premium. This is because changes in the amount investors are willing to pay for inflation protection will directly affect the relative pricing of TIPS and Treasuries: when the inflation risk premium goes up (down), then Treasuries should lose (gain) value relative to TIPS, all else equal. Furthermore, the inflation risk premium appears to vary considerably with investor sentiment: studies have found that volatility in the inflation risk premium is substantial, ranging from 0.3% to 1.0% (Campbell and Shiller, 1996; Durham, 2006; D'Amico et al., 2007).

Intuitively, investors should be willing to pay a higher inflation risk premium when they expect future inflation to be especially volatile; or, more specifically, when they believe that likelihood of having inflation exceed their expectation is high. Behavioral finance suggests that periods of rising (falling) inflation will cause investors to overestimate the likelihood of further increases (decreases), with a commensurate increase (decrease) in the inflation risk premium. This intuition is corroborated by the fact that, globally, the inflation risk premium

³ Survey of Professional Forecasters, 2nd Quarter 2008. Federal Reserve Bank of Philadelphia, www.philadelphiafed.org/files/spf/survq208.html.

⁴ For evidence that suggests the liquidity premium for TIPS has dropped substantially, see D'Amico et al. (2007).

has gradually shrunk for countries that have issued inflation-linked bonds. This decline accompanied a marked decrease in inflation over most of the developed world, indicating that investors may have become accustomed to stable and gradually declining inflation.

Volatility

At first blush, one would expect TIPS to be less volatile than Treasuries, whose prices must reflect investors' expectations about inflation and their willingness to assume inflation risk. However, actual returns have indicated otherwise: the annualized standard deviation of monthly returns is 5.1% for TIPS versus 4.5% for Treasuries during the period from March 1997 through June 2008.⁵ What's more, sub-samples of the time period reveal the same counterintuitive relationship.

The conundrum may be resolved by noting that expectations regarding the future real interest rate and inflation rate are probably negatively correlated. That is, a high (low) expected real interest rate may serve as a brake on economic growth, thereby discouraging (encouraging) inflation. To the extent that the inflation risk premium does not vary drastically, this negative correlation serves as a dampening mechanism that may cause Treasuries to be less volatile than TIPS.

For example, assume that initially investors expect future real interest rate of 2% and inflation of 3%, for a nominal yield of 5%. (For the sake of simplicity, also assume that the inflation risk premium is 0%.) In this case, TIPS are priced at a 2% yield and Treasuries at a 5% yield. After a shock to the economy, investors now expect a future real interest rate of 1%, which they believe will stoke future inflation to 4%. Now, TIPS are priced higher at a 1% yield and Treasuries remain at a 5% yield. Based on this simple price history, TIPS are more volatile. Therefore, in consideration of history and this theoretical example, we set the expected annual standard deviation for TIPS at approximately 0.5% more than that for nominal Treasuries.

One would also expect TIPS to be more volatile than cash, as prices for TIPS must reflect investors' expectations about future real interest rates. This has indeed been the case since their introduction: the annualized standard deviation of monthly returns was 5.1% for TIPS versus 0.5% for cash during the period from March 1997 through June 2008.6

Correlations

The correlation of monthly returns between TIPS and various other asset classes are shown in the following table.

-

⁵ Source: Merrill Lynch TIPS Index; Lehman Treasury Index.

⁶ Source: Merrill Lynch TIPS Index; 30-day T-Bill Index.

Correlation Matrix (March 1997 - June 2008)7

	TIPS	Bonds	Stocks	Inflation
TIPS	1.00			
Bonds	0.77	1.00		
Stocks	-0.24	-0.14	1.00	
Inflation	0.05	-0.12	-0.10	1.00

From 1997 to 2008, TIPS exhibited a positive correlation with bonds. This makes intuitive sense because both are similarly affected by changes in expectations about future real interest rates. (Note that changes in the inflation outlook prevent the correlation from being perfect.)

Next, TIPS exhibited a negative correlation with stocks. This also makes intuitive sense, because fixed-income securities generally perform better (worse) than stocks in times of economic weakness (strength), hence the negative correlation between both TIPS and bonds with stocks.

Finally, TIPS exhibited a slight positive correlation with inflation.⁸ Although it is too slight to draw firm conclusions, this positive correlation may make intuitive sense. In times of rising inflation, investors should be willing to pay more for inflation insurance. An increase in this premium should be directly manifested in decreased demand for nominal fixed-income securities, hence the negative correlation of bonds and inflation. The money slated for nominal bonds must go somewhere, and TIPS may be the logical alternative investment. Thus, TIPS may benefit from the rotation out of nominal fixed-income securities during times of increasing inflation.

Relative Performance in Various Economic Scenarios

Regarding the relative performance of TIPS compared with those of nominal bonds and stocks, there are six economic scenarios worth considering. Given the factors that influence the yield on TIPS and its counterparts, two economic dimensions are especially relevant for categorizing these scenarios: inflation and growth. Different instances of these two dimensions help define six relevant economics scenarios, as seen in the following table. For the sake of this discussion, "high/stable" and "low" growth means growth above or equal to and below the real growth potential of the economy, respectively. In the U.S., real GDP growth potential is often assumed to be 3%.9 Using theory and intuition, one can rank the performance of each asset class under each of the six scenarios.

⁷ Source: Merrill Lynch TIPS Index; Lehman Aggregate Index; Wilshire 5000 Index; CPI-U.

⁸ This result holds true even when lagging CPI-U for 3 and 6 months.

⁹ For this discussion, assume that GDP growth is a reliable proxy for the business cycle.

Scenario	TIPS	Bonds	Stocks
Increasing inflation and High/Stable growth Low growth	2 1	3 2	1 3
Stable inflation and High/Stable growth Low growth	3 2	2 1	1 3
Decreasing inflation and High/Stable growth Low growth	3 2	2 1	1 3

- 1. Increasing inflation and stable-to-high growth describes a strong but possibly "overheating" economy. During these periods, stocks should perform the best as excellent productivity gains lead to superb earnings growth. As real interest rates may also be increasing, fixed-income securities should suffer. In addition, increasing inflation should prompt investors to pay increasingly more for inflation insurance, thereby further eroding the returns of nominal bonds. Hence, stocks should perform best, followed by TIPS, then nominal bonds.
- 2. Increasing inflation and low growth describes a weak, "stagflationary" economy. During these periods, stocks should perform the worst as low or declining productivity gains lead to substandard earnings growth. As real interest rates are probably decreasing, fixed-income securities overall should benefit. In addition, increasing inflation should prompt investors to pay increasingly more for inflation insurance, thereby attenuating the returns of nominal bonds. Hence, TIPS should perform best, followed by nominal bonds, then finally stocks.
- 3. Stable inflation and stable-to-high growth describes a strong economy. During these periods, stocks should perform the best as excellent productivity gains lead to superb earnings growth. As real interest rates may also be increasing, fixed-income securities overall should perform less well. What's more, stable inflation may indicate a stable inflation risk premium. Hence, stocks should perform best, followed by nominal bonds, and then finally TIPS.
- 4. Stable inflation and low growth describes a moderately weak economy. During these periods, stocks should perform the worst as low or declining productivity gains lead to substandard earnings growth. As real interest rates are probably decreasing, fixed-income securities overall should benefit. Additionally, stable inflation may indicate a stable inflation risk premium. Hence, nominal bonds should perform best, followed by TIPS, then finally stocks.
- 5. Decreasing inflation and stable-to-high growth describes a strong, "goldilocks" economy. During these periods stocks should perform the best as excellent productivity gains lead to superb earnings growth. As real interest rates are probably also increasing, fixed-income securities overall should perform less well. In addition, declining inflation should prompt investors to pay increasingly less for inflation insurance, thereby boosting the returns of nominal

- bonds relative to TIPS. Hence, stocks should perform best, followed by nominal bonds, and then finally TIPS.
- 6. Decreasing inflation and low growth describes a weak, "deflationary" economy. During these periods, stocks should perform the worst as low or declining productivity gains lead to substandard earnings growth. As real interest rates are probably decreasing, fixed-income securities overall should benefit. In addition, declining inflation should prompt investors to pay increasingly less for inflation insurance, thereby boosting the returns of nominal bonds. Hence, nominal bonds should perform best, followed by TIPS, then finally stocks.

Note that periods of unstable (or volatile) inflation have not been included. This is because periods of volatile inflation should generate rankings similar to that of increasing inflation. Both periods should be associated with an increase in inflation risk premiums, as investors forecast a higher probability of inflation exceeding their initial expectations.

Since the introduction of TIPS, the U.S. economy has experienced most of the above economic scenarios lasting at least six months. These scenarios, including the total returns of each of the above three asset classes, are presented below.

Period	Scenario	TIPS	Bonds	Stocks	Predicts?
March 1997 - April 1998	Decreasing Inflation/ High Growth	2.78%	11.33%	42.89%	Y
May 1998 - January 1999	Stable inflation/ High Growth	4.40%	7.22%	11.66%	Y
February 1999 - July 2000	Increasing Inflation/ High Growth	9.09%	3.32%	15.77%	Y
August 2000 - February 2001	Stable Inflation/ Low Growth	9.15%	9.07%	- 13.79%	N
March 2001 - March 2002	Decreasing Inflation/ Low Growth	5.46%	5.87%	-4.36%	Y
July 2002 - March2003	Increasing Inflation/ Low Growth	11.67%	7.71%	- 13.07%	Y
April 2003 - March 2004	Decreasing Inflation/ Stable Growth	10.93%	5.40%	39.37%	N
April 2004 - July 2006	Increasing Inflation/ Stable Growth	6.01%	4.76%	20.41%	Y
December 2006 - May 2008	Increasing Inflation/ Low Growth	12.53%	7.63%	3.62%	Y

The last column indicates that in seven of the nine cases, the model accurately predicts the relative performance of the three asset classes. Admittedly, these period categorizations are rough, though changing the beginning and end months do not affect the results in general. And, of course, several exogenous factors may have affected relative returns, such as a sustained decrease in the liquidity premium for TIPS and the "flight to quality" during the

debt crises of the late 1990s and the bear market of the early 2000's. Nevertheless, these results give confidence in the hypothesized relative performance described above.

Putting it all together, over their history TIPS have been much more volatile than cash and slightly more volatile than Treasuries. In addition, TIPS have been more negatively correlated with stocks than nominal bonds, while having maintained a slight positive correlation with inflation. Theoretically, TIPS should outperform their nominal counterparts during periods of increasing (or unstable) inflation, while still enjoying the benefits of fixed-income securities during periods of low economic growth or flights to quality. Thus, TIPS as an asset class should provide meaningful portfolio diversification.

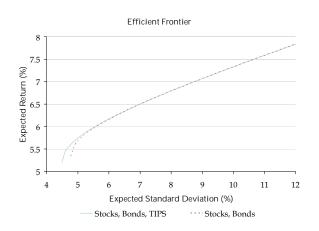
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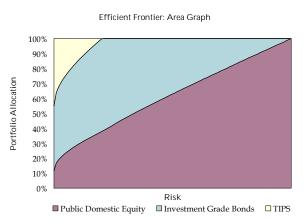
Total Portfolio Context

In diversified investment programs, traditional bonds mitigate equity volatility and provide a predictable level of income. Over most time periods, high quality bonds provide a modest return in excess of the rate of inflation. However, when actual inflation significantly exceeds investor expectations of inflation, nominal bond returns may suffer. As discussed above, it is in these cases where TIPS can benefit investors the most.

In the following figure, the chart on the left compares an efficient frontier of a portfolio comprised solely of U.S. stocks and nominal bonds to an efficient frontier of a portfolio comprised of U.S. stocks, nominal bonds, and TIPS.¹⁰ Note that the efficient frontier including TIPS is upward and to the left of the efficient frontier excluding TIPS, suggesting that TIPS may help achieve more efficient portfolios. This is especially true for more risk adverse investors. The chart on the right shows the allocation to each of the three asset classes for every portfolio on the efficient frontier. The mean-variance optimization indicates that TIPS play a prominent role in less risky portfolios, but that their role diminishes as risk increases.

¹⁰ The efficient frontier analysis uses inputs from Meketa Investment Group's 2008 Annual Asset Study combined with the historical correlations among the three asset classes contained in this paper.





Impact in Balanced and Conservative Portfolios

Shifting assets from higher yielding nominal bonds to TIPS will make most portfolios more efficient, though its impact will be greater the more conservative the portfolio. As shown in the following table, a moderately risky or balanced portfolio – loosely defined as a 60-40 mix of U.S. stocks and bonds – benefits from increasing allocations to TIPS in its bond sub-portfolio. However, the ratio of expected return to expected annual standard deviation increases only mildly, from 0.742 for a 60-40-0 allocation to 0.760 for a 60-0-40 allocation. This represents a total efficiency change of ((0.760 - 0.742)/0.742 =) 2.4%.

At the same time, an investor gives up a 7.28% expected return for a 60-40-0 allocation for a 7.08% return for a 60-0-40 allocation. Thus, the efficiency gains come at a "cost": for example, the 0.4% gain in efficiency moving from a 60-40-0 portfolio to a 60-35-5 portfolio costs (7.28% - 7.25% =) 3 basis points (bp). Dividing the return cost by the percentage efficiency change gives an average efficiency cost, which indicates how many basis points must be spent to increase efficiency by 1% by an investor who moves from a 60-40-0 portfolio to a given mix with TIPS. Note that average return cost is susceptible to rounding errors, so direct comparisons across the different portfolio mixes should be taken lightly.

Stocks-Bonds-TIPS (%):	60-40-0	60-35-5	60-30-10	60-25-15	60-20-20	60-0-40
U.S. Stocks	60%	60%	60%	60%	60%	60%
Bonds	40%	35%	30%	25%	20%	0%
TIPS	0%	5%	10%	15%	20%	40%
Expected Return	7.28%	7.25%	7.23%	7.20%	7.18%	7.08%
Expected Std. Dev.	9.81%	9.73%	9.67%	9.60%	9.54%	9.32%
Return-Risk Ratio	0.742	0.745	0.748	0.750	0.753	0.760
Efficiency Change (%)		0.4%	0.8%	1.1%	1.5%	2.4%
Avg. Return Cost (bp/%)		7.5	6.3	7.3	6.7	8.3

Increasing allocations to TIPS within an already conservation portfolio – loosely defined as a 20-80 mix of U.S. stocks and bonds – has a larger impact on efficiency. As the following table shows, increasing the allocation of TIPS from 0% of the full portfolio to 40% (or half of the

bond sub-portfolio) raises the ratio of expected return to standard deviation from 1.12 to 1.18 – a 5.4% gain in efficiency. This compares favorably with the meager efficiency gains attained in the balanced portfolio case. This increase in efficiency comes at a cost of only 20 basis points in expected return, yielding an average return cost of 3.7 bp/%. Again, this compares favorably with the relatively expensive average return costs in the balanced portfolio cases.

However, note that increasing the TIPS allocation beyond 40% of the full portfolio diminishes efficiency relative to the 20-40-40 portfolio. Hence, as opposed to the balanced portfolio case, it does not appear advisable to increase a TIPS allocation beyond roughly 40% (or half of a conservative fund's bond sub-portfolio).

Stocks-Bonds-TIPS (%):	20-80-0	20-60-20	20-40-40	20-60-20	20-0-80
U.S. Stocks	20%	20%	20%	20%	20%
Bonds	80%	60%	40%	60%	0%
TIPS	0%	20%	40%	20%	80%
Expected Return	5.76%	5.66%	5.56%	5.46%	5.36%
Expected Std. Dev.	5.12%	4.87%	4.72%	4.69%	4.78%
Return-Risk Ratio	1.12	1.16	1.18	1.16	1.12
Efficiency Change (%)		3.6%	5.4%	3.6%	0%
Avg. Return Cost (bp/%)		2.8	3.7	8.3	infinite

In sum, we recommend that; a) for moderately risky or balanced portfolios, TIPS constitute 5 to 15% of the entire portfolio, or roughly 15 to 35% of the bond sub-portfolio, and b) for conservative portfolios, TIPS constitute approximately 30 to 50% of the entire portfolio, or roughly 40 to 60% of the bond sub-portfolio. In the first case, we believe that 5 to 15% is the appropriate allocation because the cost of the efficiency gains is relatively high in balanced portfolios. In the second case, we believe that 30 to 50% is the appropriate allocation because this represents the range of peak efficiency, and efficiency is relatively cheap.

Inflation Hedge

Over long-term periods, investments in real assets such as equities and real estate will likely protect investors from inflation by appreciating in value in excess of the rate of inflation. This is because as the prices of goods and services increase, the prices of these assets will also increase. However, over the short term inflation produces major dislocations that can result in very unpredictable investment returns. Thus, while equities have proven to be a good long-term hedge against inflation, in the short-term equity prices usually react negatively to inflation. Since TIPS react positively to inflation, an investor may consider TIPS as a hedge against inflation for all time periods.

Furthermore, since TIPS guarantee an inflation-adjusted income, they may be the most appropriate asset for investors who have at least a portion of their liabilities exposed to inflation. There are many such investors. Defined benefit plans offer a cost of living

adjustment possess liabilities that are explicitly linked to inflation. Similarly, endowments and foundations must adjust to rising salaries and other relevant costs. By owning TIPS, these funds can more closely match their assets to their real liabilities.

It may be argued that investors in the U.S. have become desensitized to the effects of inflation as a result of the extended environment of disinflation since the early 1980s. During this period, the central bank has made it their primary objective to constrain inflation. However, circumstances since the middle of this decade suggest that the U.S. central bank is less focused on controlling inflation. Furthermore, structural features of the global economy may indicate rising dollar inflation in the longer term. Thus, an investor must be ever wary of inflation risks.

It is also important to note that the inflation adjustment is based on changes in the CPI-U, which is a price index corresponding to the average market basket of goods and services purchased by U.S. urban consumers. The urban consumers' basket may not be directly relevant to a specific investor's basket. For example, a university may spend more annually on real estate development than the average urban consumer. In these cases, the inflation adjustment will only be approximate—indeed, real purchasing power could be eroded considerably to the extent that the investor's basket differs markedly from the urban consumers' basket.

MISCELLANEOUS

Duration

Duration is often defined as a bond's sensitivity to a change in (nominal) interest rates. Theoretically, duration can be broken into two primary components: sensitivity to changes in real interest rates and sensitivity to changes in the expected inflation rate. Since TIPS provide an inflation-adjusted return, their sensitivity to the latter is zero. Hence, the duration for inflation-linked bonds measures their sensitivity to a change in real interest rates only. The aggregate TIPS market exhibited a duration of approximately seven years in mid-2008 when evaluated in terms of real interest rates.

Duration is not as meaningful a tool for TIPS portfolios as it is for nominal bonds, because an investor cannot discern the root cause of a shift in nominal rates. Hence, the nominal duration for TIPS can range between zero and their duration in real terms. In other words, it is impossible to accurately predict the sensitivity of a portfolio of TIPS to a change in nominal interest rates (Roll, 2003).

Thus, incorporating the duration of a TIPS portfolio into the calculation of duration for an aggregate bond portfolio is misleading because it conflates two different constructs. Therefore, an investor who has a dedicated allocation to TIPS should consider excluding them when calculating the duration of their aggregate bond portfolio.

Yield

Because TIPS are quoted in terms of a real yield, it is similarly misleading to compare them to the nominal yields of an aggregate bond portfolio. If it is imperative to estimate a nominal yield for TIPS, the investor can do so by adding the most appropriate long-term inflation expectation to the real yield. Note that this involves some estimation error.

TIPS should generally offer a lower nominal yield than mortgage-backed securities, corporate debt, or other fixed income securities that possess credit risk. Hence, an increased allocation to TIPS will reduce the nominal yield of a diversified bond portfolio.

Quality

Because TIPS are issued and backed by the U.S. government, they possess no credit risk and are considered to be of the same quality as nominal Treasuries. Hence, an increased allocation to TIPS will increase the quality of a diversified bond portfolio.

IMPLEMENTATION ISSUES

Market Liquidity

As of June 2008, the market value of the twenty-seven outstanding TIPS issues was roughly \$450 billion, representing about 16% of the total outstanding issuance of the U.S. Treasury. TIPS are currently auctioned four times per year. The TIPS market is not as liquid as that for nominal Treasury bonds, which is the most liquid market in the world. This is due to several causes: the smaller size of the TIPS market, the fact that TIPS constitute a non-benchmark investment for many bond managers, and Tips' attractiveness as a buy-and-hold investment. Consequently, it is slightly more expensive to trade TIPS than it is to trade Treasuries. On the other hand, the TIPS market is more liquid than that for most investment grade corporate bonds.

Historically, the trading spread has been approximately 0.06% ($1/16^{th}$) of principal value for TIPS, versus approximately 0.03% ($1/32^{nd}$) for Treasuries (Sack and Elsasser, 2004). Therefore, for every trade, Treasuries have a one-time 0.03% advantage. On the other hand, TIPS have a significant trading advantage over high quality corporate bonds, which usually trade with a bid-ask spread of at least 0.25% ($1/4^{th}$) (Chen et al., 2007). Of course, it is possible that during periods of high volatility the spreads for TIPS could widen, but if this occurs it would likely be a temporary phenomenon.

¹¹ For more information on recent and future auctions, see www.savingsbonds.gov/instit/annceresult/press/press_secannpr.htm.

Passive and Active Management

Passive investors in TIPS resign themselves to the income due to them by the Treasury. They may either buy an individual issue at auction, or invest in a TIPS index. In the latter case, the passive investor accepts the term structure of the TIPS indexes. Or, a passive investor may design a term structure better suited to the term structure of their liabilities.

On the other hand, active investors in TIPS seek to consistently augment a passive return by intelligent trading. These active managers are almost always measured against the TIPS benchmark indexes, discussed below.

An active TIPS manager may try to outperform a TIPS benchmark by managing the term structure of his portfolio. Hence, a manager may employ a bullet or barbell strategy or may make modest real interest rate bets through changes to the portfolio's real duration.

Another means of adding value includes making a relative value decision between TIPS and nominal Treasuries, swapping between these instruments accordingly. However, note that too much exposure to nominal Treasuries would defeat the purpose of a strategic allocation to TIPS.

Finally, a manager may try to add value by investing in other inflation-linked bonds, such as those issued by U.S. corporations or foreign governments. Investments in the former may offer additional yield at the expense of credit risk and limited liquidity. Investment in the latter may be a relative value decision between real rates in the U.S. versus those in foreign countries. However, while foreign real rates may look attractive, it is important to note that these inflation-linked bonds track inflation in those countries, which can differ significantly from U.S. inflation. This would be undesirable to an investor seeking to hedge their U.S. dollar-denominated liabilities.

In our opinion, there is little potential for an active manager to add value; at best, outperformance may equal 50 basis points.

Benchmark

There are several benchmarks appropriate for TIPS investors. The two most commonly used are the Merrill Lynch U.S. Treasury Inflation-Linked Securities index and the Lehman Brothers U.S. TIPS index. The differences in methodology between these indices are subtle and should result in return dispersion of only a few basis points per month. The Merrill Lynch U.S. Treasury Inflation-Linked Securities index is rebalanced on the last calendar day of the month, as is the Lehman TIPS index. Both indices only include TIPS that have at least one year remaining to final maturity.

Alternatively, if an investor is structuring a custom TIPS portfolio, a custom index may be constructed using the appropriate issues. For example, an investor concerned only about near-term inflation may invest only in TIPS maturing in the next five years and would construct a benchmark accordingly.

Timing

Even sophisticated investors frequently err in presuming that the recent past will persist indefinitely. During the first year that TIPS were issued, the U.S. inflation rate fell from 2.8% to 1.4%. Because TIPS tend to underperform Treasuries when the rate of inflation declines, early TIPS investors experienced relatively weak performance (see earlier table).

More broadly, the annual rate of inflation fell from 13.3% in 1979 to 2.1% in 2003. This sustained decline in inflation surely led some to expect persistently falling inflation. These expectations may have depressed the prices of TIPS to unusually attractive levels early in their existence.

More recently, TIPS have proven their attractiveness during inflationary times. Though the long-run forecast for inflation remains around 2.5% according to the Survey of Professional Forecasters, there are sound reasons to believe that inflation could get significantly worse. This should cause TIPS to be more attractive than Treasuries going forward. Indeed, during the period of rising inflation from December 2006 to June 2008, TIPS have returned 12.5% compared to 7.6% for Treasuries.

Note that because TIPS exhibit lower volatility than most asset classes, the risk of mistiming an entry into the TIPS market is not as high as it would be with most other assets.

Vehicle

Investors willing to accept the term structure offered by the market (or the Treasury) may invest in a commingled vehicle that is charged with matching or slightly outperforming the index, net of fees. Because the potential to add value is minimal, low fees are essential to meeting this goal.

Alternatively, if an investor seeks a custom portfolio, a separate account structure must be utilized. In this case, the investment manager would construct a portfolio to match the liability or inflation requirements of the investor. This portfolio could be actively traded or treated as a buy-and-hold portfolio.

SUMMARY AND RECOMMENDATION

TIPS have risk and return patterns that differ from those of stocks or traditional bonds, and thus provide valuable diversification to both long-term and short-term investment funds. An investment in TIPS would likely produce very attractive gains in a rising or unstable inflation environment, offsetting any losses in stocks and traditional bonds. Furthermore, they provide investors the ability to match their assets with their real liabilities. TIPS ultimately benefit investors by acting as an insurance policy against unexpectedly high inflation.

In summary, Meketa Investment Group recommends that for (a) moderately risky or balanced portfolios, TIPS constitute 5 to 15% of the entire portfolio, or roughly 15 to 35% of the bond sub-portfolio, and for (b) conservative portfolios, TIPS constitute approximately 30 to 0% of the entire portfolio, or roughly 40 to 60% of the bond sub-portfolio.

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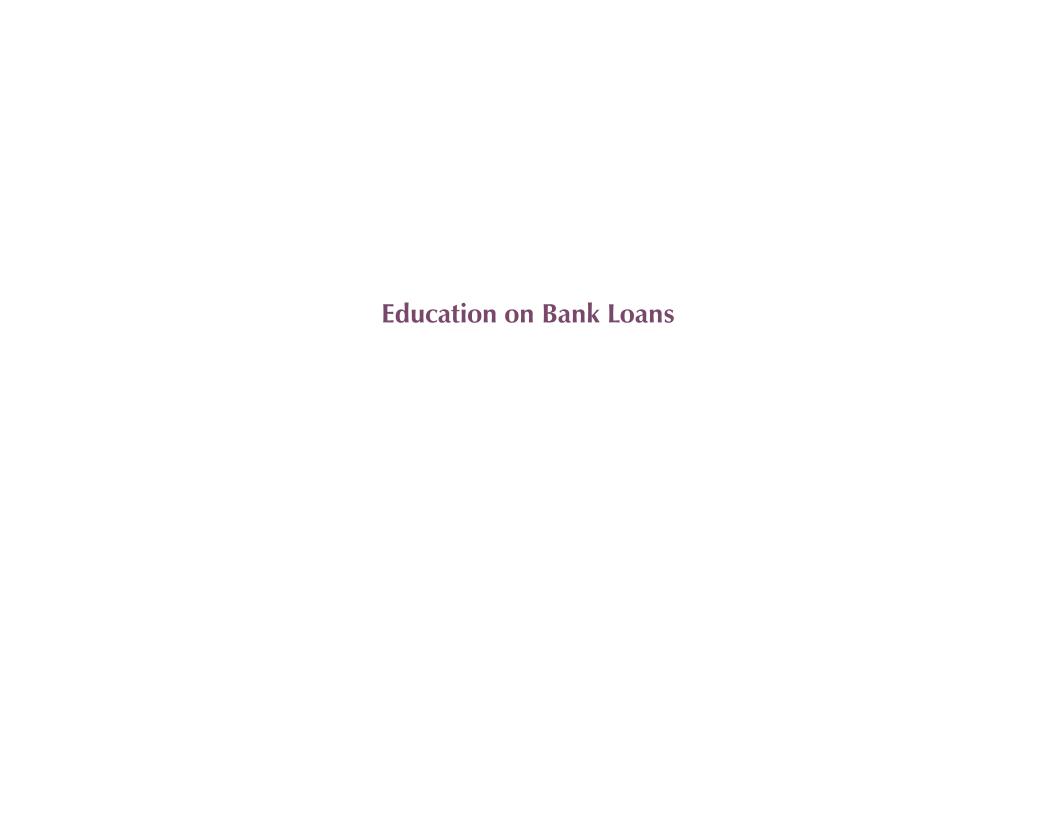
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APPENDIX I

MEKETA INVESTMENT GROUP

SAMPLE PRESENTATION ON

INVESTMENT EDUCATION



History of Bank Loans

- Bank loans emerged in the 1980s and were typically held by banks on their balance sheets and not traded.
- In 1995, the industry established a trade association, the Loan Syndications and Trading Association (LSTA), to develop and govern market standards.
- The LSTA helped create stability in the asset class, causing the secondary market to flourish.
- The par amount of issuance rose from \$200 billion in 1990 to over \$1 trillion in the mid-2000s.
- The bank loan buyer profile has changed dramatically. Originally, only banks purchased and held loans. Today, bank loan buyers include high yield managers, mutual funds, hedge funds, leveraged closed end funds (CLOs), and other institutional investors.

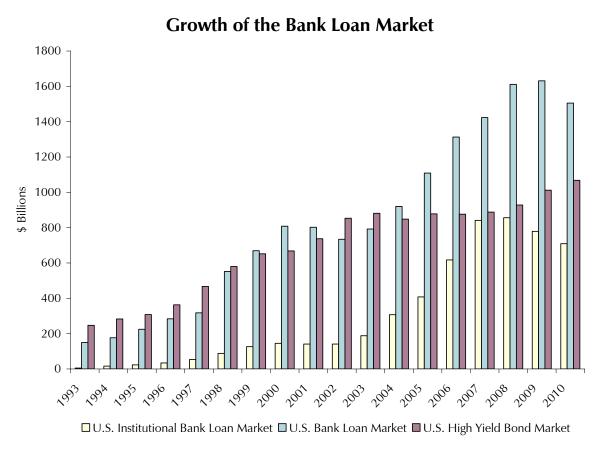


Education on Bank Loans

Bank Loan Terminology

- **Bank Loan** Debt issued to corporations that has the first priority of the company's cash flows, before bonds and equity (stock). Bank loans are typically secured by collateral or specific company assets to ensure that lenders get some of their investment back if the company becomes insolvent.
- Floating Rate Bank loan coupons "float" based on a predetermined short-term market interest rate, typically LIBOR.
- LIBOR Floor A "floor" or lower limit on the floating rate. Bank Loans are issued with LIBOR floors when interest rates are low and investors demand a higher interest payment.
- **Spread** With bank loans, the term "spread" refers to the interest payment in excess of the floating rate.
- Collateralized Loan Obligation ("CLO") A securitized investment vehicle that is a leveraged buyer of bank loans. CLOs were the dominant buyer of bank loans from 2004-2008, and contributed to the rapid growth of the bank loan asset class.
- **Covenants** Provisions in the bank loan document that protect investors and give them the ability to renegotiate loan terms if the company is unable to pay interest or if the company's financial health meaningfully changes.
- **Discount Margin** A commonly used yield measurement for bank loans that assumes the loan(s) is called at after a specified period of time. The discount margin is used instead of yield to maturity or yield to worst because bank loans do not have call protection.
- **Default** Bank loans default if the company fails to make an interest or principal payment, or if covenants tied to financial health are breached.
- **Recovery** The amount the investor recovers on their investment after a default.



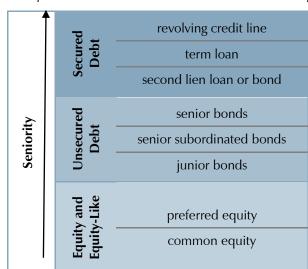


- As investors became more comfortable with bank loans, the secondary market flourished, and the par amount of issuance rose from \$200 billion in 1991 to over \$1.6 trillion today.
- The institutional bank loan market has grown substantially in the past 10 years. This subset of the bank loan market excludes all non-traded bank loans (held by banks) and revolvers. It shows the portion of the market that institutions commonly invest in.



What are Bank Loans?

- Bank loans are typically senior secured, floating-rate loans made to corporations with below investment grade ratings.
- The most common reason a company issues loans are to finance an acquisition or new corporate project, a leveraged buyout, or refinance existing bank loans.
- Similar to high yield bonds, investment banks underwrite and syndicate bank loans, working with investment managers on pricing and structure. Bank loans typically have three tranches: (1) revolver, (2) term loan-A, and (3) institutional tranches. Revolver and term loan-A tranches are both typically owned by banks. Institutional tranches are sold to institutional investors.
- Bank loan managers invest primarily in institutional bank loan tranches.



Typical Capital Structure of a Below Investment Grade Company



Bank Loans vs. High Yield Bonds

	Bank Loans	High Yield Bonds
Coupon	Floating Rate	Fixed Rate
Ranking	Senior	Senior Subordinated
Security ¹	Secured	Unsecured
Covenants	Maintenance and Incurrence	Incurrence
Callability ²	Callable	Not Callable
Average Spread ³	2.5%	5%

- Relative to high yield bonds, bank loans have a more senior position in the capital structure, are secured by company assets and cash flows, and have maintenance covenants. As a result, they are considered less risky than high yield bonds.
- Historically, the recovery rate for defaulted bank loans has averaged 66%, while the recovery rate for high yield bonds has averaged 41%.
- Most bank loans carry a floating interest rate based on LIBOR (London Interbank Offered Rate) plus a spread, where the spread is based on the risk of the loan.
- Spreads typically range from 1.5% to 3.0% over LIBOR.

Spread is relative to LIBOR for bank loans and a Treasury bond with a similar duration for high yield bonds.



Occasionally companies will issue unsecured bank loans or secured high yield bonds.

² Typically bank loans are callable for the life of the loan. High yield bonds generally have a maturity of 8 to 10 years and are non-callable for the first 3 to 5 years.

Potential Risks

- Company Specific Credit Risk
 - Risk that the borrower will not meet the terms of the loan due to insufficient cash flow or covenant violations.
- Industry Risk
 - A company's financial health is tied to the industry in which it operates, and highly leveraged companies are more vulnerable to negative industry trends.
- Capital Market Risk
 - Companies often pay the principal of maturing loans by issuing new loans. If the availability of credit in the markets is scarce, companies may find it difficult to refinance their debt.
- Liquidity Risk
 - Bank loans do not trade on an exchange, and tend to be less liquid than other forms of debt.

Examples of Companies that have utilized Bank Loans for financing

- Burger King
- Avis/Budget
- Dine Equity (Applebees/IHOP)
- Rite Aid



Historical Bank Loan Discount Margin and Average Price

As of March 31, 2012



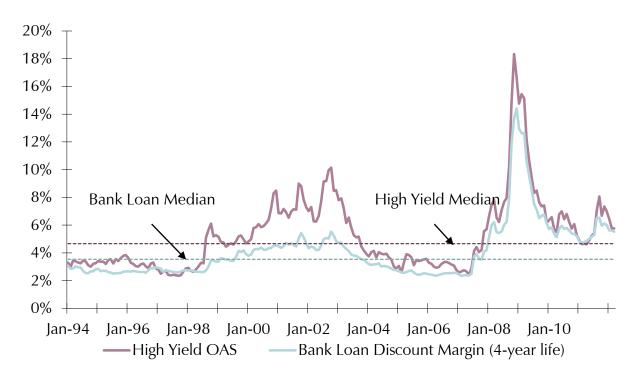
- Although yields have declined since 2009, bank loans continue to appear attractive, yielding approximately 5.4%1.
- Since 1992, the historical average and median yield has been 4.1% and 3.5%, respectively.

Yield measurement is the 4-year discount margin of the CSFB Leveraged Loan Index. The discount margin is a common yield measurement for loans.



Historical Bank Loan Discount Margin and High Yield Spreads

As of March 31, 2012



- High yield bond spreads are 50 basis points above their historic average, while bank loan spreads are 130 basis points above their historic average.
- Bank loans appear attractive relative to high yield bonds.



Historical Bank Loan Returns

As of March 31, 2012

Trailing Period Returns

Common Period¹ **Statistics (annualized)**

Annualized Returns:	3 YR Return	5 YR Return	10 YR Return	Common Period Return	Standard Deviation	Semi Deviation	Sharpe Ratio	Correlation to Bank Loans
CS Lev. Loan	16.1	3.6	4.9	6.0	5.9	4.5	0.46	-
Barclays High Yield	23.9	8.1	9.2	8.4	9.7	7.0	0.53	0.74
Barclays Aggregate	6.8	6.3	5.8	6.4	3.9	2.7	0.81	-0.03

	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Recent Calendar Year Returns:	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
CS Lev. Loan	1.8	10.0	44.9	-28.8	1.9	7.2	5.7	5.6	11.0	1.1	2.6	4.9
Barclays High Yield	5.0	15.1	58.2	-26.2	1.9	11.8	2.7	11.1	29.0	-1.4	5.3	- 5.9
Barclays Aggregate	7.8	6.5	5.9	5.2	7.0	4.3	2.4	4.3	4.1	10.3	8.4	11.6

 $^{^{\}rm 1}$ Common period is from January 1992 to March 2012.



Historical Correlations

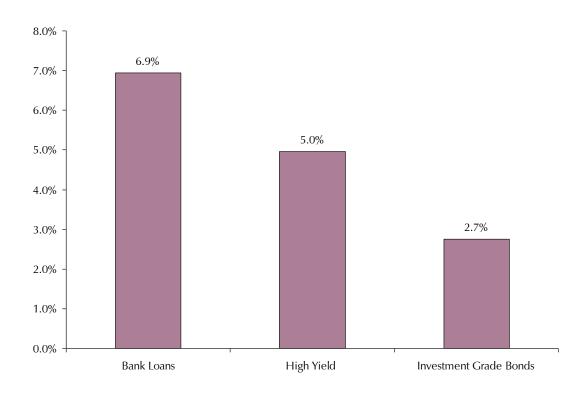
January 1992 – March 2012	Bank Loans	High Yield	Inv. Grade Bonds	Intermediate Treasuries	Stocks
Bank Loans	1.00				
High Yield	0.74	1.00			
Inv. Grade Bonds	-0.03	0.21	1.00		
Intermediate Treasuries	-0.35	-0.15	0.89	1.00	
Stocks	0.42	0.61	0.06	-0.16	1.00

Proxies used for Bank Loans, Inv. Grade Bonds, Intermediate Treasuries, High Yield, and Stocks are the CSFB Leveraged Loan index, Barclays Aggregate index, Barclays Intermediate Treasury index, Barclays High Yield index, and the S&P 500 index, respectively.

• Bank loans have historically offered a diversification benefit compared to other fixed income asset classes.



Average 1-Year Performance in Rising Rate Environments¹



^{*} Proxies for Bank Loans, High Yield, and Investment Grade Bonds are the CSFB Leveraged Loan index, Barclays High Yield index, and Barclays Aggregate index, respectively.

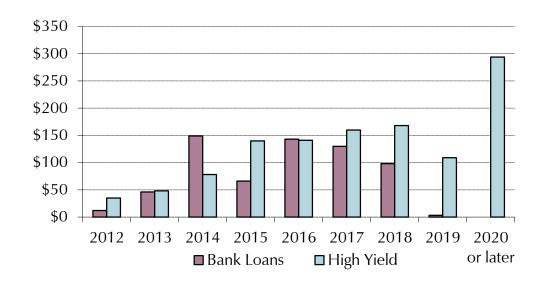
¹ January 1992 through March 2012. A rising rate environment was defined as a 12-month period in which the 3-month Treasury yield increased by one standard deviation more than average.



Technical Factors

- The new issue loan market continues to thrive. Approximately \$54 billion of new bank loans were issued in the first quarter of 2012.
- The large "maturity wall" of debt has shrunk substantially in the past three years, but still provides an opportunity for investors in the bank loan asset class.

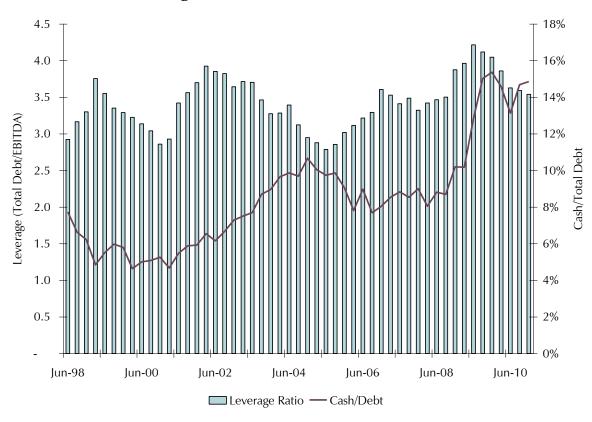
Debt Maturity Schedule¹ (\$ in billions)



¹ As of 12/31/2011 Source: JP Morgan.



Leveraged Issuer Financial Characteristics



• For speculative grade (high yield and bank loan) issuers, balance sheet leverage has decreased and cash has meaningfully increased since the financial crisis.

Over the past few years, more bank loan investors have required "floors" on the base rate that is used to determine loan interest coupons.

Loan Issue Year	% of issues with LIBOR floor	# of issues with LIBOR floors	# of total new issues
2011	76	423	558
2010	72	354	493
2009	54	85	157
2008	27	33	122
2007	3	23	669
2006	3	10	329

- Today, 51% of the entire loan index has LIBOR floors.
- The average coupon (issue spread plus LIBOR floor) of 2011 vintage bank loans was 5.8%.

Bank loan coupons have been increasing despite their base rate (LIBOR) staying fairly stable; this is due to higher lending standards set by bank loan investors.

Average Coupons ¹	3/31/2012	12/31/2011	12/31/2010	6/30/2010
High Yield	8.17%	8.27%	8.37%	8.41%
Bank Loans	4.84%	4.65%	4.30%	4.01%

Coupon measurements are the average coupon for the Barclays High Yield and CSFB Leverage Loan indices.



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Education on Bank Loans

The Case for Bank Loans as an Investment

Structure

- Unlike bonds that typically have fixed coupons, bank loan coupons float, and are tied to short-term interest rates.
- In the corporate capital structure, bank loans are senior and secured. Relative to bonds and equity, they have more protective covenants and a higher claim on company assets and cash flows in the event of default.

Diversified source of return

- Bank loans have exhibited lower correlations to other traditional asset classes and should lower total Fund standard deviation, increasing risk-adjusted returns.
- Bank loans have historically experienced less volatility than high yield bonds.

Current Opportunity

- The bank loan market has grown rapidly in the last decade. The market has become more investable by
 institutional investors due primarily to the establishment of governance standards and the popularity of bank
 loans as a source for financing mergers and acquisitions.
- CLOs, formerly the primary buyer of bank loans, are winding down and creating an opportunity for other investors in the asset class.
- Over the next five years, more than \$500 billion of bank loans need to be refinanced.



Education on Bank Loans

The Case for Bank Loans as a Component of the Retirement System

- Bank loans represent an alternative or complement to high yield bonds, both from an investor's and an issuer's standpoint.
- Although the performance history of the bank loan market is less robust than high yield bonds, bank loans represent an attractive way to diversify a portfolio and to attain a reasonable risk-adjusted return.
- There is no investable bank loan broad market index. An institutional investor must hire an active manager in order to gain exposure to the asset class.



APPENDIX J

MEKETA INVESTMENT GROUP

SAMPLE MARKETING BROCHURE

INVESTMENT CONSULTING AND ADVISORY SERVICES

About Us

Since 1978, Meketa Investment Group has served our clients as independent investment fiduciaries. Today, we are a full service investment consulting and advisory firm, providing creative investment solutions custom tailored to fit the unique circumstances of our clients. We work with clients on both a full retainer and project basis, and all of our services are available on a discretionary or non-discretionary basis.

Our Services

Our consulting and advisory services fall into two primary categories:

General Consulting Services

- Initial Fund Review
- Investment Policy Design
- Asset Allocation
- Liability & Liquidity Studies
- Manager Evaluation & Selection
- Fund Coordination
- Fund Reporting & Review

Private Markets Services

- Strategic Planning
- Investment Policy Design
- Pacing Analysis
- Partnership Analysis
- Legal Review
- Cash Flow Coordination
- Program Monitoring & Review

Research Coverage

Our research provides clients with expertise across all major asset classes:

- Global Equities
- Fixed Income
- Hedge Funds
- Commodities

- Private Equity/Debt
- Real Estate
- Infrastructure
- Natural Resources

Who We Serve

Plan Sponsors

- Taft-Hartley
- Public
- Corporate & Non-Profit
- High Net Worth/Family Offices

Plan Types

- Defined Benefit Plans
- Defined Contribution Plans
- Endowments & Foundations
- Health Plans, OPEBs & VEBAs

Why Meketa Investment Group?

Experienced Organization

Our firm has been in business for 34 years. The Managing Principals average 19 years at the firm and 22 years in the industry. We currently work with 78 clients, who oversee over 150 funds, representing over \$470 billion in aggregate assets.

Fiduciary Role & Complete Independence

We have served as independent fiduciaries to institutional plan sponsors since the firm's inception. We are 100% employee-owned and we derive no revenue from investment managers, commissions, or vendors.

Deep Team

We have a staff of over 100, including 60 investment professionals, of which 18 are CFA Charterholders and 13 are CAIA Charterholders. Each of our clients is supported by a dedicated team of professionals.

Research Focused

We strive to be thought leaders in our research, and we seek to provide clients with creative investment solutions. Additionally, our public and private markets investment committees lead our due diligence efforts and draw on the expertise of the firm's senior professionals.

Intensive Level of Client Service

Our primary goal is to serve our clients, recognizing each client has unique needs and circumstances. As a result, we look to be flexible in the services we provide, and we are staffed to provide clients with custom advice and client service.

As of September 1, 2012.

PRIVATE MARKETS SERVICES

About Us

Since 1978, Meketa Investment Group has served our clients as independent investment fiduciaries. Today, we are a full service investment consulting and advisory firm, providing creative investment solutions custom tailored to fit the unique circumstances of our clients. We work with clients on both a full retainer and project basis, and our Private Markets Services are available on a non-discretionary or discretionary basis.

Private Markets Services

We provide all of the necessary components for clients to successfully implement custom private markets programs, including:

Program Design

- Private Markets Education
- Strategic Planning
- Pacing Analysis
- Partnership Analysis
- Legal Review
- Negotiating Terms/Fees

Program Implementation

- · Cash Flow Coordination
- Program Monitoring & Review
- Annual GP Meeting Attendance
- Partnership Amendments
- Advisory Board Representation
- Client Reporting

Private Markets Research

Our research provides clients with expertise across the following private markets asset classes:

- Private Equity
- Private/Opportunistic Debt
- Infrastructure
- Real Estate
- Natural Resources

Due Diligence Process

Our three-stage due diligence process is conducted by our Private Markets teams.

Phase I

Phase II

Phase III

Commitments

- Phase I Initial Review of Partnerships
 - > Over 400 formal partnership reviews occur per year resulting in over 175 Phase I meetings with General Partners
- Phase II Thorough Analysis of Phase I Approved Partnerships
 - > Over 35 partnerships advance to Phase II and receive due diligence questionnaires, on-site visits, and reference checks
- Phase III Final Review of Phase II Approved Partnerships
 - Over 25 partnerships advance to Phase III and are subject to legal review, Investment Committee approval, and formal sponsor recommendations are developed
- Approximately 20 Partnerships are typically approved per year

Why Meketa Investment Group?

Experienced Organization

Meketa Investment Group has been investing in Private Markets for over a decade. We currently oversee \$19 billion in commitments to private markets for over 50 clients.

Fiduciary Role & Complete Independence

We are able to act as a Qualified Professional Asset Manager (QPAM) and an ERISA Fiduciary. We are 100% employee-owned and we derive no revenue from investment managers, commissions, or vendors.

Deep Private Markets Team

We have a staff of 61 investment professionals, of which 17 are CFA Charterholders and 13 are CAIA Charterholders. We have 24 professionals dedicated to private markets.

Research Focused

Our Private Markets research teams lead the firm's due diligence efforts. We typically review over 400 Private Markets opportunities per year. Prior to client commitments, each team must present candidates to the firm's Private Markets Investment Committee (PMIC) which is comprised of the firm's six most senior professionals. The PMIC must vote unanimously to approve all investments.

Strong Performance & Competitive Fees

We have delivered strong investment performance for our clients. We have outpaced both public and private market indices. Our custom programs are less costly than investing through a fund-of-funds, resulting in significant savings for our clients.

BOSTON OFFICE

FEES

PROPOSAL TO PROVIDE INVESTMENT CONSULTING SERVICES

SECTION IV: FEES

The proposed fees shall be guaranteed for the duration of the contract which shall be a period of five (5) years from the effective date of the Contract. The services listed in Section I under "Nature and Scope of Services" should form the basis for the proposed fees. The method of payment will be set forth in the Contract. Once the consultant is selected, the fee may be negotiated further depending on the variance from other proposals received. In no case will the negotiated fee be higher than the fee contained in this proposal.

Please use the following template as a guide in presenting your fee proposal:

A. All-Inclusive Flat Fee:

Year	Fees
Year 1	\$310,000
Year 2	310,000
Year 3	310,000
Year 4	325,000
Year 5	345,000
Total Fees (Years 1-5)	\$1,600,000

B. Additional Fees or Costs:

Please provide a fee quote for any services or expenses, including any additional fees associated with alternative asset classes, that would not be covered in the fees proposed in part A above. Please list fees as flat fees or hourly rates per consultant, as appropriate.

Type of Service	Fees	

- * The above proposed fee includes expenses such as reasonable travel, lodging and meals.
- ** For projects that fall outside of our standard scope of services, Meketa Investment Group provides project-consulting to our clients as requested. Due to the unique nature of each individual project or alternative asset class, Meketa Investment Group would work with the Boards to determine a fee that would be mutually agreeable with both parties.

CITY OF FRESNO RETIREMENT SYSTEMS

PROPOSAL TO PROVIDE INVESTMENT CONSULTING SERVICES

C. Additional Information:

Please also provide any other information that may assist us in more clearly understanding your fee proposal:

Meketa Investment Group has been providing investment consulting advice for thirty-four years. We routinely provide our clients with valuable services that other consultants do not offer. Our work has helped clients control costs, reduce risks, and achieve outstanding investment results. Meketa Investment Group would welcome the opportunity to provide the same service to the City of Fresno Retirement Systems.

We are pleased to offer the following consulting services:

General and Public Markets Consulting Services

Strategic Investment Advice	Fund Coordination
Initial Fund Review	Managing Cash Flows
Investment Policy Design	Negotiating Fees
Asset Allocation	Supervising Transitions
Liability & Liquidity Studies	Crisis Response Plan
Manager Evaluation & Selection	Risk Control
Fund Reporting & Analysis	Board Protection
Board Education	Retirement System/Staff Meetings

Meketa Investment Group, Inc.	September 7, 2012
Name of Firm	Date
Style Well	Managing Principal / Consultant
Signature	Title