ND STATE INVESTMENT BOARD MEETING

Friday, June 27, 2014, 8:30 a.m.
State Capitol, Peace Garden Room
Bismarck, ND

I. CALL TO ORDER AND ACCEPTANCE OF AGENDA

II. ACCEPTANCE OF MINUTES (May 23, 2014)

III. BOARD EDUCATION

A. Callan Manager Search Process (enclosed) (15 min)

IV. INVESTMENTS

A. Emerging Market Equity Interviews (Presentations Enclosed)
   1. Axiom (45 min)
   2. AQR (45 min)

B. Board Review/Discussion of Finalists - Staff Recommendation to Follow (20 minutes) **(Board Action)**

C. Westridge/WG Trading - Ms. Kelsch (10 min)
   Possible Executive Session for Attorney Consultation
   N.D.C.C. §44-04-19.1(5) and N.D.C.C. §44-04-19.2

D. Manager Catalog - Ms. Flanagan (enclosed) (5 min) **(Board Action)**

E. Asset and Investment Performance Review - Mr. Hunter (enclosed) (10 min)

V. GOVERNANCE

A. Administration

1. Legislative Update - Mr. Hunter/Ms. Flanagan (5 min)
2. Audit Committee Liaison Report - Mr. Gessner (enclosed) (5 min) **(Board Action)**
3. Survey Discussion - Mr. Sandal (15 min)
4. Annual Agenda FY 2015 - Mr. Hunter (enclosed) (15 min) **(Board Action)**
5. Staff Update - Mr. Hunter (5 min)

VI. OTHER

Next SIB Meeting - July 25, 2014, 8:30 a.m. - State Capitol, Peace Garden Room
SIB Audit Committee meeting - September 26, 2014, 1:00 p.m. - State Capitol, Peace Garden Room

VII. ADJOURNMENT

Any individual requiring an auxiliary aid or service, please contact the Retirement and Investment Office (701) 328-9885 at least three (3) days prior to the scheduled meeting.

NORTH DAKOTA STATE INVESTMENT BOARD
MINUTES OF THE
MAY 23, 2014, BOARD MEETING

BOARD MEMBERS PRESENT: Drew Wrigley, Lt. Governor, Chair
Mike Sandal, Vice Chair
Lance Gaebe, Land Commissioner
Mike Gessner, TFFR Board
Adam Hamm, Insurance Commissioner (TLCF)
Rob Lech, TFFR Board
Howard Sage, PERS Board
Kelly Schmidt, State Treasurer
Cindy Ternes, WSI designee
Kim Wassim, PERS Board

BOARD MEMBERS ABSENT: Clarence Corneil, Parliamentarian, TFFR Board

STAFF PRESENT: Connie Flanagan, Fiscal & Invt Op Mgr
Bonnie Heit, Assist to the SIB
David Hunter, ED/CIO
Fay Kopp, Deputy ED/CRO
Cody Schmidt, Compliance Officer
Darren Schulz, Deputy CIO

OTHERS PRESENT: Weldee Baetsch, former PERS/SIB trustee
Paul Erlendson, Callan Associates
Bryan Reinhardt, PERS

CALL TO ORDER:

Lt. Governor Wrigley called the State Investment Board (SIB) meeting to order at 8:30 a.m. on Friday, May 23, 2014, at the State Capitol, Peace Garden Room, 600 E Boulevard, Bismarck, ND.

A quorum was present for the purpose of conducting business.

AGENDA:

IT WAS MOVED BY MR. SANDAL AND SECONDED BY MS. TERNES AND CARRIED ON A VOICE VOTE TO APPROVE THE AGENDA FOR THE MAY 23, 2014, MEETING AS DISTRIBUTED.

AYES: COMMISSIONER GAEBE, TREASURER SCHMIDT, MR. SANDAL, COMMISSIONER HAMM, MS. TERNES, MR. GESSNER, MS. WASSIM, MR. LECH, MR. SAGE, AND LT. GOVERNOR WRIGELY
NAYS: NONE
MOTION CARRIED
ABSENT: MR. CORNEIL

MINUTES:

IT WAS MOVED BY MR. LECH AND SECONDED BY MR. GESSNER AND CARRIED ON A VOICE VOTE TO APPROVE THE APRIL 25, 2014, MINUTES AS DISTRIBUTED.

AYES: MR. GESSNER, COMMISSIONER GAEBE, MR. SAGE, MS. TERNES, TREASURER SCHMIDT, MR. LECH, COMMISSIONER HAMM, MS. WASSIM, MR. SANDAL, AND LT. GOVERNOR WRIGLEY
NAYS: NONE
MOTION CARRIED
ABSENT: MR. CORNEIL

INVESTMENTS:

Asset and Performance Overview – Mr. Hunter provided statistics for the period ending March 31, 2014. Client assets under management grew by $1.45 billion (19.5%) between June 30, 2013 and March 31, 2014. The market value of client assets approximated $8.9 billion (based on preliminary valuations). Net investment income was responsible for gains of over $500 million (12%) for the Pension Trust and $184 million (5.6%) for the Insurance Trust. The Legacy Fund assets increased by over $735 million (61%) primarily due to tax collections.

Current fiscal year to date excess returns were positive for all non-liquidating Pension Trust clients and ranged from 0.17% to 0.47% with the Public Employees Retirement System (PERS) at 0.38% and the Teachers' Fund for Retirement at 0.47%. All Pension Trust clients generated positive excess returns for the 1, 3, and 5 year periods ended March 31, 2014 with two exceptions. PERS returns for the last 5 years were 0.18% below the policy benchmark (13.9% vs 14.1%). The Grand Forks Park District returns for the last 3 years were 0.1% below the policy benchmark (9.3% vs. 9.4%).

The Insurance Trust clients generated positive excess returns for the 1, 3, and 5 year periods ended March 31, 2014. Current fiscal year to date excess returns were generally positive and ranged from 1.0% to 1.9% with two exceptions. PERS Retiree Health and PERS Group Insurance were both below policy benchmark (0.03%). The Legacy Fund generated 1.18% of excess return (vs. policy benchmark) for the current fiscal year to date (4.2% vs. 3.0%), while Workforce Safety & Insurance posted 1.4% of excess return (8.3% vs. 6.9%).

Callan Associates – Mr. Erlendson provided a domestic economic update for the period ending March 31, 2014, and also provided performance analysis of the Pension Trust and Insurance Trust for the period ending March 31, 2014.

The Board recessed at 10:09 and reconvened at 10:20 am

Return Definitions – Mr. Schulz reviewed various ways to calculate performance measurement and where each method is applicable and where it is not applicable. Mr. Schulz also reviewed some enhancements staff is contemplating utilizing with respect to performance reporting.

GOVERNANCE:

Workforce Safety & Insurance – Mr. Hunter and Ms. Ternes presented a revised Investment Policy Statement for the Workforce Safety & Insurance Fund as a result of the asset allocation study completed in April 2014.

IT WAS MOVED BY MS. TERNES AND SECONDED BY MR. SANDAL AND CARRIED BY A ROLL CALL VOTE TO ACCEPT THE INVESTMENT POLICY STATEMENT FOR THE WORKFORCE SAFETY & INSURANCE FUND.

AYES: MS. WASSIM, COMMISSIONER GAEBE, MR. GESSNER, COMMISSIONER HAMM, MR. SAGE, MR. SANDAL, TREASURER SCHMIDT, MS. TERNES, MR. LECH, AND LT. GOVERNOR WRIGLEY
NAYS: NONE
MOTION CARRIED
ABSENT: MR. CORNEIL

Staff Update – Mr. Hunter provided an update on office staff. Mr. Richard Nagel assumed the role of Information System's Supervisor effective April 1, 2014, and Mr. Michael DeWitt assumed the role of Data Processing Coordinator effective April 28, 2014.

Applications for the Audit Supervisor position were reviewed after the closing date of March 18, 2014. After reviews and interviews, the position will be posted again in June 2014.

Staff is working with HRMS on the proper classification for the Investment Analyst position which is scheduled to be posted in June.

Board Education – Mr. Hunter reviewed proposed educational topics for the SIB which will be incorporated into the regularly scheduled meetings of the SIB.

OTHER:

Mr. Sage stated the May 23, 2014, meeting will be his last meeting representing PERS on the SIB. Mr. Sage's term concludes on June 30, 2014, and he has decided to not seek reappointment. Mr. Sage has served on the SIB since July 19, 1989, representing the PERS active members and then retired members. The SIB thanked Mr. Sage for his many years of service and wished him well.

The next SIB meeting is scheduled for June 27, 2014, at 8:30 am in the Peace Garden Room, State Capitol, Bismarck, ND.

The next SIB Audit Committee meeting is scheduled for May 23, 2014, at 1:00 pm in the Peace Garden Room, State Capitol, Bismarck, ND.

ADJOURNMENT:

With no further business to come before the SIB, Lt. Governor Wrigley adjourned the meeting at 11:03 a.m.

_____
Lt. Governor Wrigley, Chair
State Investment Board

_____
Bonnie Heit
Assistant to the Board

AGENDA ITEM III.A.

Callan

Manager Search Process

June 27, 2014

Manager Search

Why Do Most Plan Sponsors Use a Consultant in Their Manager Search Projects?

- Independent and objective third party.
- Adherence to a consistent search process that maintains clear, written guidelines to govern the search, which helps plan sponsor reduce fiduciary liability.
- Consistency will allow for a fair, repeatable process that will serve the organization as a whole, no matter the individuals involved at certain time periods.
- A resource that is committed to conducting manager due diligence.
  - Computer database availability.
  - Continuity over time.
  - Help ensure ERISA safe harbor protection.

Factors in the Search Process

- Every search should be unique.
- Client defined search specifics will narrow candidate universe (plan type, size, continuing managers, risk preferences, etc.).
- Searches are conducted through a series of steps:
  - Client-Driven Considerations
  - Screening Criteria
  - Quantitative review
  - Qualitative Assessment
  - Search Review by Senior Policy Committee
  - Document semi-finalist candidates for Client
  - Identify Finalists
  - Interview Finalists
  - Select Firm

How do Consultants Collect the Data?

General Information

- Organizational statistics
- Product specific information
- Annual questionnaire

Performance Database

- Quarterly rates of return
- 1,049 organizations; 4,082 different funds; all mutual funds
- Updated quarterly from money managers

Money Manager Visit Reports – On-site

- Qualitative impressions of money manager's philosophy, style, investment process
- Verification of Information
- Visits to money manager's offices by Global Manager Research staff and consultants
- Average of 500 visits per year

Money Manager Visit Reports – In-House

- Qualitative impressions of money manager's philosophy, style, investment process
- Verification of Information
- Visits by money managers to Callan's four offices
- Average of 1,000 visits per year

Mutual Client Relationships

- Qualitative impressions of money manager's philosophy, style, investment process
- Verification of Information
- Active evaluation of Callan's performance evaluation work with clients

Step No. 1: Client-Driven Considerations in a Search

Search considerations are client-specific and depend on a variety of items:

- Purpose (i.e., search rationale)
- Active vs. Passive
- Choice of Benchmark
- Acceptance of Style Drift
- Size Spectrum
- Risk Tolerance
  - Benchmark Aware/Unaware
  - Concentration
- Specialty Management
  - Small Cap
  - Currency
  - Distressed Debt

Step No. 2: Develop Appropriate Screening Criteria

- Manager Type
- Investment Style
- Investment Vehicle
- Managed Assets
- Size of Professional Staff
- Years of Experience
- Geographic Location
- Involvement With Other Businesses
- Flexibility of Individual Portfolio Managers
- Security Analysis Orientation
- Risk Levels
- Capitalization Levels
- In-House Research Emphasis
- Use of Cash Equivalents
- Use of ADRs, 144As, and futures and/or options
- Historical Performance Criteria
- Experience and Education of Professionals
- Financial Well Being of Firm
- Client-Servicing Capabilities
- Fees
- Organizational Ownership
- Informational Technology

Investment Manager Evaluation

A Combination of Qualitative and Quantitative Analysis

- Quantitative research:
  - Consistency of investment performance
  - Analyzing the portfolios
    - *Return-based style analysis*
    - *Traditional holdings based analysis*
    - *MSCI's "Z-score" methodology*
- Qualitative research: Kicking the tires
  - Requires ongoing interaction with managers to understand their philosophy, process and people.
  - It is instructive to know how managers view themselves.
  - Observe how the "key" people interact with one another.
  - Confirm that the "marketing" pitch and confirms to "reality."

Objectives of Quantitative and Qualitative Screens

- Compare/contrast candidate information.
- Weigh quantitative and qualitative factors to find the appropriate balance.
- Take into account recent developments.
- Identify approximately 10 to 12 surviving candidates.

Step No. 3: Perform Quantitative Screening Analysis

Conduct Quantitative Screening from Available Database

- Many consultants maintain their own proprietary database.
  - Only available through a consultant/client relationship.
- Shared Databases are available.
  - eVestment Alliance, PSN, Mobius, Morningstar (especially of DC related Searches)

Callan's "Universe" of Managers

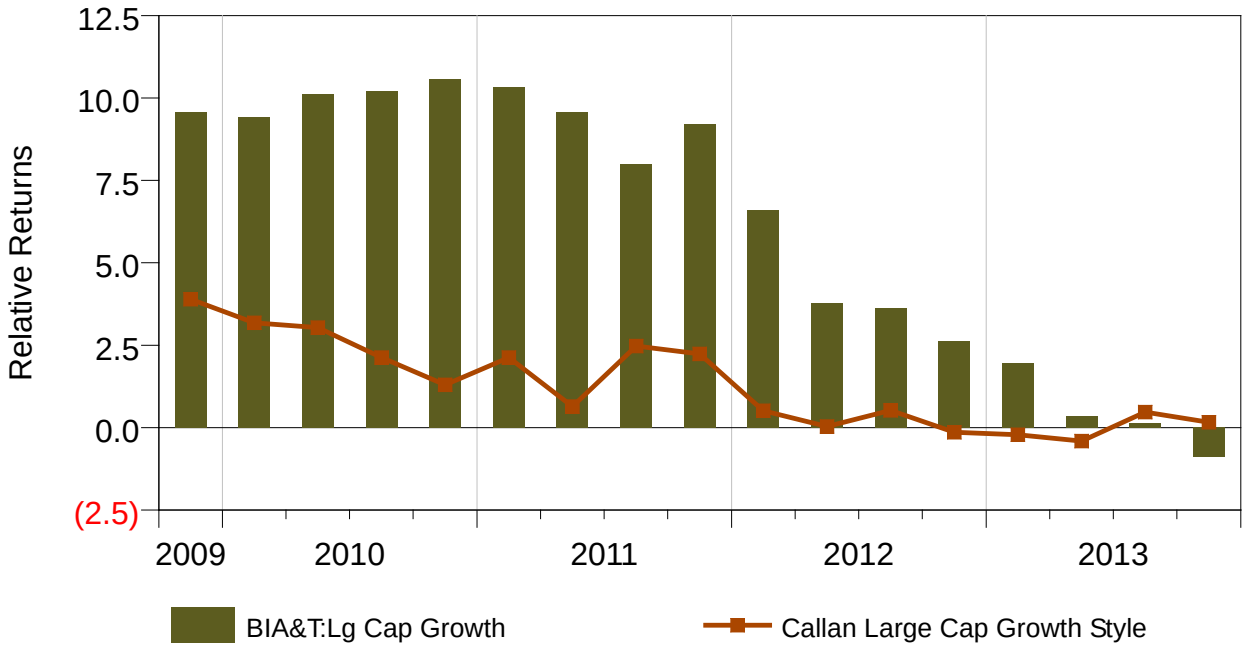
Database Groups	Organizations	Products
Domestic Equity	706	2,896
Domestic Fixed-Income	294	1,467
Domestic Balanced	80	422
International Equity	287	903
Global Equity	237	509
Emerging Market Equity	172	407
International Fixed-Income	38	70
Global Fixed Income	71	209
Emerging Market Debt	67	166
International /Global Balanced	33	64
Currency	22	45
Real Estate	62	194
Hedge Funds	122	270
Derivatives / Alternative Investments	24	26
Total	**1485**	**7648**

As of December 31, 2013

Historical Performance Assessment

- GIPS compliant composite return data
- Benchmark and Style-Group Comparisons
- Annual, cumulative, rolling three-year (**consistency**) return data
- Rising and falling market-cycle returns—**expectations**
- Risk-adjusted returns (e.g., Sharpe Ratios)
- Other risk measures (e.g., Information ratio, downside risk, alpha, standard deviation)

Rolling Three Year Relative Returns vs S&P 500 Index



Step No. 4: Conduct Qualitative Screening

What Qualitative Factor Matters the Most

PEOPLE!!!

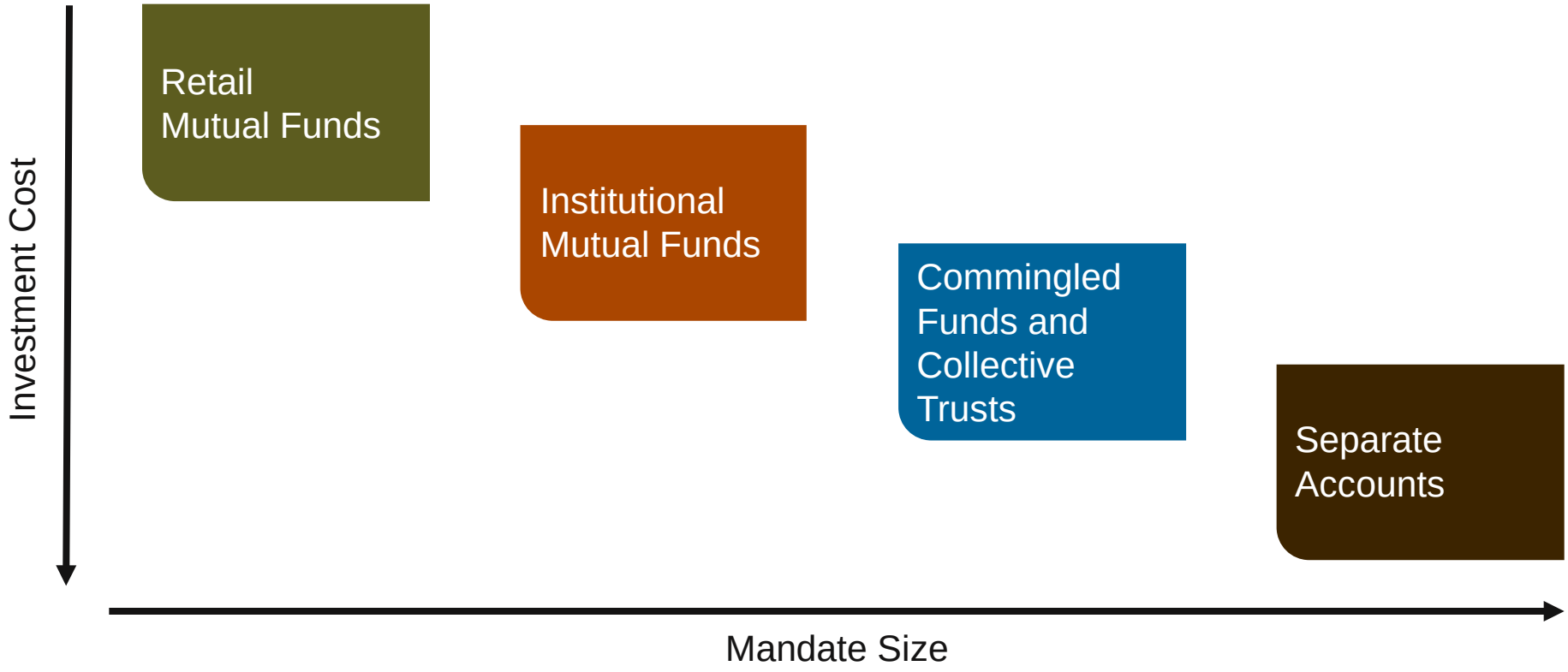
1. Who are the “idea generators?”
2. Intelligence, creativity, and innovation
3. Tenure working together
4. Depth of resources – “star” system or team effort
5. Integrity
6. Stability
7. Organizational culture

Other Important Qualitative Factors

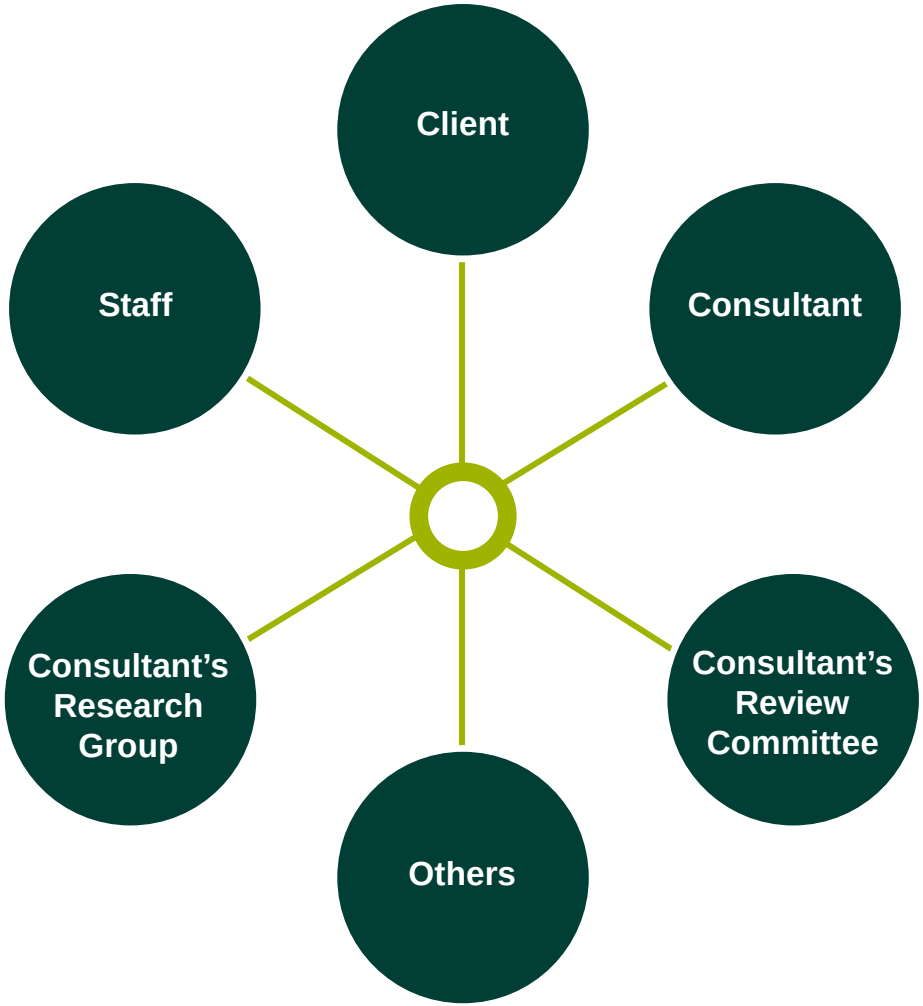
- Investment Philosophy:
  - Clearly articulated?
  - Based on sound theory and empirical evidence?
- Investment Strategies:
  - Top down? Bottom up?
  - Sector based? Thematic?
- Research Orientation:
  - Quantitative? Qualitative?
  - Fundamental price/value framework?
- Decision-Making Process:
  - Central Research? Committee/PM Team-driven? Star PM? “Blackbox?”
- Cultural and Environmental Values
- Risk Controls:
  - What tools or strategies does the manager use to control risk?

Speaking of Fees…Vehicle Expense Comparison

Vehicle Decisions Can Have Important Cost Impacts to the Client



Step No. 5: Review by Senior Decision Makers



Objective is to identify approximately four to six Semi-Finalists.

Step No. 6: Prepare Search Review Book for Client

- Contains detailed information about each semi-finalist and comparative performance information.
- Book serves as tool to help identify the finalists.

Step No. 7: Identify Finalists

- Field consultant works with client to select finalist managers (typically three to four) for consideration.
- Schedule interviews.

Step No. 8: Interview Finalists

- Schedule interview in client's office or on site and conduct manager due diligence on site.
- What to look for during a finalist interview:
  - Enthusiasm and energy
  - Understanding of client's specific situation
  - Focus on client's specific interests and needs
  - Cogent description of investment process—who makes what decisions when?
  - Excellent listening skills
  - Excellent Q&A skills
  - Excellent time-management skills
  - Harmony among multiple presenters

Step No. 9: Manager Selection

- Development of written plan that assigns accountabilities during the transition.
- Discretion is the client's responsibility (with a possible assist from a consultant).
- Execute a contract and make sure manager receives a copy of the investment policy statement including a clear understanding of benchmarks and peer expectations.
- Develop transition plan:
  - Date by which transition will be complete.
  - Identity of transition broker (if any).
  - Create documentation of process for files.
- Establish reporting and client service protocol.

Why was a manager hired is the best question to keep in mind when monitoring a portfolio?

Cost Considerations for Manager Termination and Transitions

What explicit (and hidden) costs are associated with manager terminations and transitions?

- Portfolio transfers can be costly.
- Accountabilities need to be placed with specific parties.
- Primary direct costs, primary indirect costs, and primary timing risks.
- Benefits of a well-developed transition (portfolio restructuring) plan.

MEMO

TO: **SIB**
FROM: **David Hunter**
DATE: **June 27, 2014**
SUBJ: **Emerging Market Equity Mandate**

Staff and Callan Associates have selected two firms for the SIB's consideration to fill the emerging market equity mandate in the Pension Trust. The SIB, Callan, and staff will interview Axiom International Investors and AQR Capital Management. Both firms are based out of Greenwich, CT.

North Dakota State Investment Board

Axiom International Investors LLC

Emerging Markets Equity Management

June 27, 2014

Marketing Contact:
Shane McMahon
Vice President, Client Service and Marketing
(203) 422-8036
smcmahon@axinvest.com

Firm Overview

- Axiom was founded on September 1, 1998 when a team of investment professionals separated from Columbus Circle Investors, an affiliate of PIMCO Advisors Holdings, LP.
- Active, fundamental, all-cap, all-country, growth equity manager
- $10.1 Billion in assets under management utilizing a consistent investment process across all strategies since inception
- Experienced team - Lead Portfolio Managers have over 20 years average experience in the industry and have collaborated as partners at Axiom for over 10 years on average
- 100% Employee Owned; Employees Co-Invest alongside clients

Investment Strategies

Long Only Equities: $9,730 MM

International (Non-U.S.) Equity

Assets: $2,612 MM
Inception: 7/1/1996

Lead Portfolio Manager:
Andrew Jacobson, CFA

Co-Portfolio Manager:
Bradley Amoils

Global Equity

Assets: $4,715 MM
Inception: 7/1/2004

Lead Portfolio Manager:
Bradley Amoils

Co-Portfolio Manager:
Andrew Jacobson, CFA

U.S. Small-Cap Equity

Assets: $123 MM
Inception: 9/1/2006

Lead Portfolio Manager:
David Kim, CFA

Co-Portfolio Manager:
Matthew Franco, CFA

Emerging Markets Equity

Assets: $2,280 MM
Inception: 8/1/2007

Lead Portfolio Manager:
Christopher Lively, CFA

Co-Portfolio Manager:
Donald Elefson, CFA

Long-Short Equities: $384 MM

International All-Cap Opportunity Fund

Assets: $233 MM
Inception: 1/1/1999

Lead Portfolio Manager:
Andrew Jacobson, CFA

Co-Portfolio Manager:
Bradley Amoils

International Micro-Cap Fund

Assets: $113 MM
Inception: 9/1/2004

Lead Portfolio Manager:
Matthew Franco, CFA

Co-Portfolio Manager:
David Kim, CFA

Global Micro-Cap Fund

Assets: $38 MM
Inception: 2/1/2007

Lead Portfolio Manager:
Matthew Franco, CFA

Co-Portfolio Manager:
David Kim, CFA

Total Assets Under Management as of March 31, 2014: $10,114 MM

The Axiom International Investors Team

International / Global

ANDREW JACOBSON, CFA
Portfolio Manager, CIO
Years Experience: **26**
Years at Axiom: **16**

Education: Princeton, B.A.
Wharton School, M.B.A.

Founding Member of Axiom

Prior Affiliations: Columbus Circle (PIMCO), Booz Allen, Apax

BRADLEY AMOILS
Portfolio Manager
Years Experience: **23**
Years at Axiom: **12**

Education: University of Witwatersrand, South Africa, B.Sc., and M.D.
Columbia University, M.B.A.

Prior Affiliations: American Century, OppenheimerFunds

Emerging Markets

CHRISTOPHER LIVELY, CFA
Portfolio Manager
Years Experience: **26**
Years at Axiom: **6**

Education: Harvard University, B.A.
Georgetown University, M.S.
UCLA, M.B.A.

Prior Affiliations: Clay Finlay, Citigroup

DONALD ELEFSON, CFA
Portfolio Manager
Years Experience: **31**
Years at Axiom: **2**

Education: University of Washington, B.A.

Prior Affiliations: Harding Loevner, U.S. Trust

Small / Micro-Cap

MATTHEW FRANCO, CFA
Portfolio Manager
Years Experience: **18**
Years at Axiom: **16**

Education: Saint John's University, B.S.
Founding Member of Axiom
Prior Affiliations: Columbus Circle (PIMCO)

DAVID KIM, CFA
Portfolio Manager
Years Experience: **15**
Years at Axiom: **9**

Education: Georgetown University, B.S.

Prior Affiliations: Pinnacle Associates

YOGESH BORKAR, CFA
Portfolio Manager
Years Experience: **24**
Years at Axiom: **1**

Education: University of Bombay, B.Com.
Yale University, M.B.A

Prior Affiliations: Fidelity/Pyramis

6 Research Analysts **4 Research Associates** **5 Traders**

Operations & Compliance

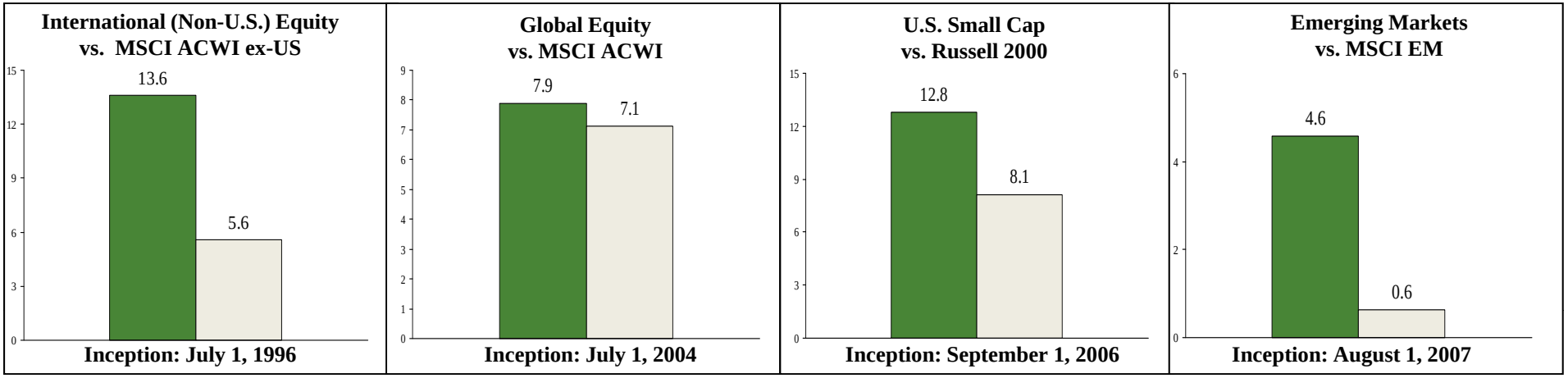
Donald Miller, Chairman Bart Tesoriero, Chief Operating Officer Denise Zambardi, Chief Compliance Officer
7 Additional Operations & Compliance Professionals

Client Service & Marketing

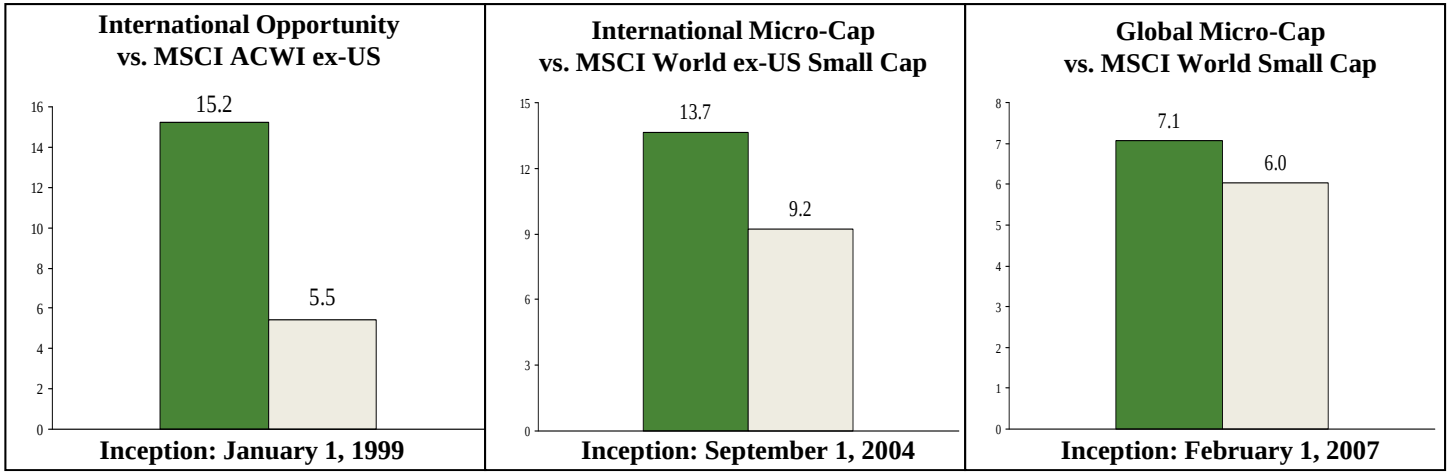
Drew Zielinski Shane McMahon William Bonner Lindsay Chamberlain
4 Additional Client Service/Marketing Associates

Inception-to-Date Returns (Net of Fees, Annualized)

Long Only Equity Strategies as of March 31, 2014



Long-Short Equity Strategies as of March 31, 2014



Axiom Portfolio Benchmark

•All numbers are preliminary. Net of fee calculations are net of highest management fees, and where applicable, performance fees, and do not include individualized client administrative expenses. See disclosures in the back of the presentation for additional information.

Currency: USD

Axiom Representative Clients

Bryn Mawr College

Jewish Federation of Cleveland

Kaiser Permanente

NCR Corporation

Southern Methodist University

The Williams Companies

University of Cincinnati

University of Oklahoma Foundation

University of Ottawa

West Virginia Investment Management Board

This list is intended to represent a broad cross section of clients of Axiom International Investors. None of the clients were selected on the basis of performance criteria and it is not known whether they approve of or disapprove of Axiom International Investors or the investment advisory services provided.

Investment Philosophy & Approach

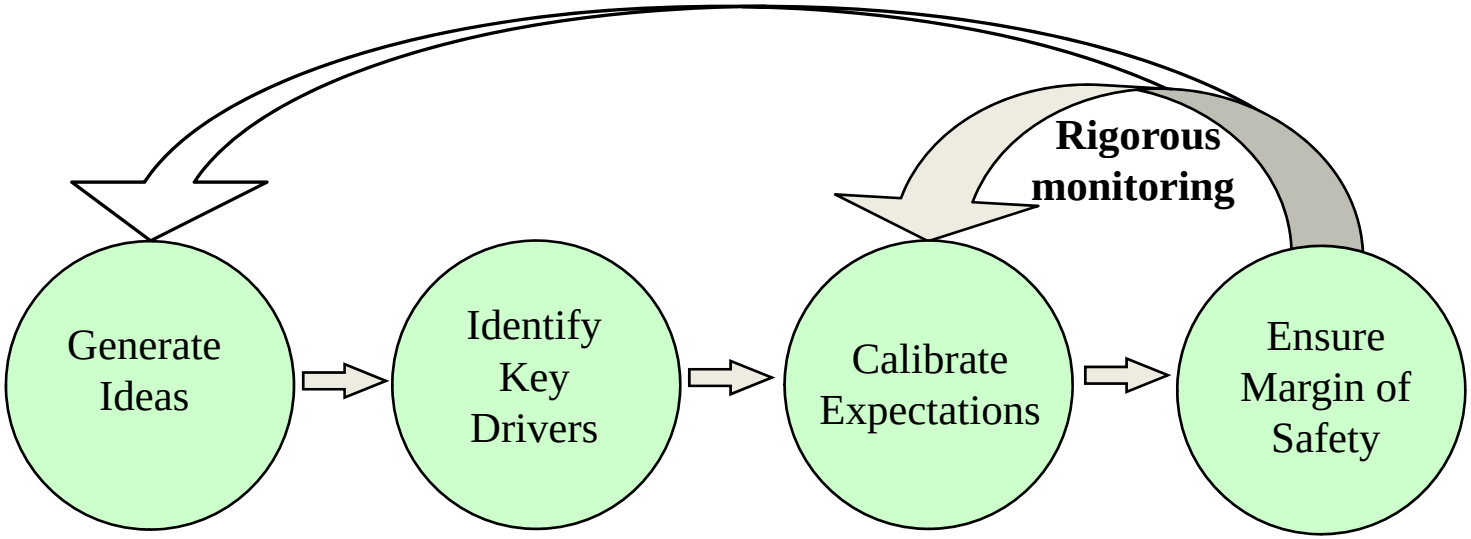
Forward Looking

Focused **Nimble**

Prudent

Axiom seeks to invest in quality companies that are growing and changing for the better more rapidly than generally expected and where the positive changes are not yet reflected in expectations or valuation.

Investment Process



- Focus on operating data
- Leading indicators/ anticipate earnings

- **Company**
- **Industry**
- Trends
- Macro
- Country

- Global/Local Analysts
- Management
- Competitors
- Suppliers/Customers
- Media/Trade Press
- Valuation

- Positive Surprises
- Attractive Valuation
- Healthy Balance Sheet/Cash Flow
- Reputable Organization

Axiom Emerging Markets Equity Strategy
Portfolio Construction using the Axiom Rating System

Company Position
- -Market capitalization
- -Competitive position
- -Daily liquidity
- -Index inclusion
- -Balance sheet
- -Credit rating
- -Profitability
- -Volatility
- -Country rating

Dynamism Factors
- -Leading Indicators
  - -Number
  - -Quality
  - -Success against expectations
  - -Magnitude of acceleration
- -Earnings dispersion
- -Earnings revisions
- -Analyst upgrades
- -Valuation
- -Earnings growth

		Established A	B	C	D	Emerging E
Most Dynamic	3			1 (Kroton)	1 (Hermes Microvision)	
	2	3 (e.g. Taiwan Semiconductor)	12 (e.g. Cemex)	22 (e.g. Zee Entertainment)	12 (e.g. Ülker)	
	1	4 (e.g. Petrobras)	8 (e.g. Anglo American)	18 (e.g. Magnit)		
	0					
	-1					
	-2					
Most Disappointing	-3					

Green shading represents ideal universe of buy candidates.

Axiom Analysis as of 03/31/14.

Risk Control – Emerging Markets Equity Strategy

- ***Diversified All-Cap, Growth Portfolios***
  - 70 to 85 holdings
  - Position sizes limited to 5%
  - Maximum weighting guidelines:*

Sectors	0 – 40%
Countries	0 – 30%

- ***Company Selection***
  - Strong balance sheets
  - Positive cash flow
  - Solid management reputation and transparency
  - Environmental, Social, Governance (ESG)

- ***Valuation***
  - Absolute and relative to history, global peers
  - Measures: P/E, P/CF, P/BV, P/S, EV/EBITDA, etc.
  - Relative to the magnitude of outperformance in leading indicators

- ***Continuous Monitoring***

*Exceptions: Financial Sector 0 – 50%

Axiom Emerging Markets Equity Strategy
Portfolio Characteristics as of March 31, 2014

Holdings	81
Market Capitalization (Average)	$ 26.4 B
Market Capitalization (Median)	$ 12.7 B
Daily Trading Volume	$ 68.7 M
Debt Equity Ratio	26.1 %
Price Earnings Ratio (2014 Estimated, Consensus)	16.0
Earnings Growth (2014 Estimated, Consensus)	18.9 %
PEG Ratio	0.85
Percent of Portfolio Holdings w/Analysts' Earnings Revisions Up (3 mo.)	41 %
Percent of Portfolio Holdings w/Analysts' Earnings Revisions Down (3 mo.)	59 %

Sources: Axiom analysis, MSCI and Bloomberg.
All values, except where noted, are Average, excluding the top and bottom 5% outlying values.

Currency: USD

Axiom Emerging Markets Equity Strategy
Top Ten Holdings as of March 31, 2014

Security	***Country***	***Sector***	**Position Size**
Samsung Electronics	*South Korea*	*Info. Technology*	3.8
Taiwan Semiconductor	*Taiwan*	*Info. Technology*	3.3
Naspers	*South Africa*	*Consumer*	2.6
Tencent Holdings	*China*	*Info. Technology*	2.2
Lukoil	*Russia*	*Energy*	2.1
Hyundai Motor	*South Korea*	*Consumer*	2.0
MediaTek	*Taiwan*	*Info. Technology*	2.0
Itau Unibanco	*Brazil*	*Financials*	2.0
Cemex	*Mexico*	*Materials*	2.0
Cognizant	*India*	*Info. Technology*	1.9

It should not be assumed that recommendations made in the future will be profitable or will equal the performance of the securities on this list.

Axiom Emerging Markets Equity Strategy
Top Ten Holdings as of March 31, 2014

Samsung Electronics (Info. Technology) - South Korean manufacturer of consumer and industrial electronic equipment.

Taiwan Semiconductor (Info. Technology) - Manufacturer and marketer of integrated circuits.

Naspers (Consumer) - Holding company operating in the electronic and print media industries, based in South Africa.

Tencent Holdings (Info. Technology) - Provides Internet, mobile, and telecommunication value-added services in China.

Lukoil (Energy) - Russian explorer, producer, refiner and transporter of oil and gas.

Hyundai Motor (Consumer) - Manufactures, sells, and exports passenger cars, trucks, and commercial vehicles, based in South Korea.

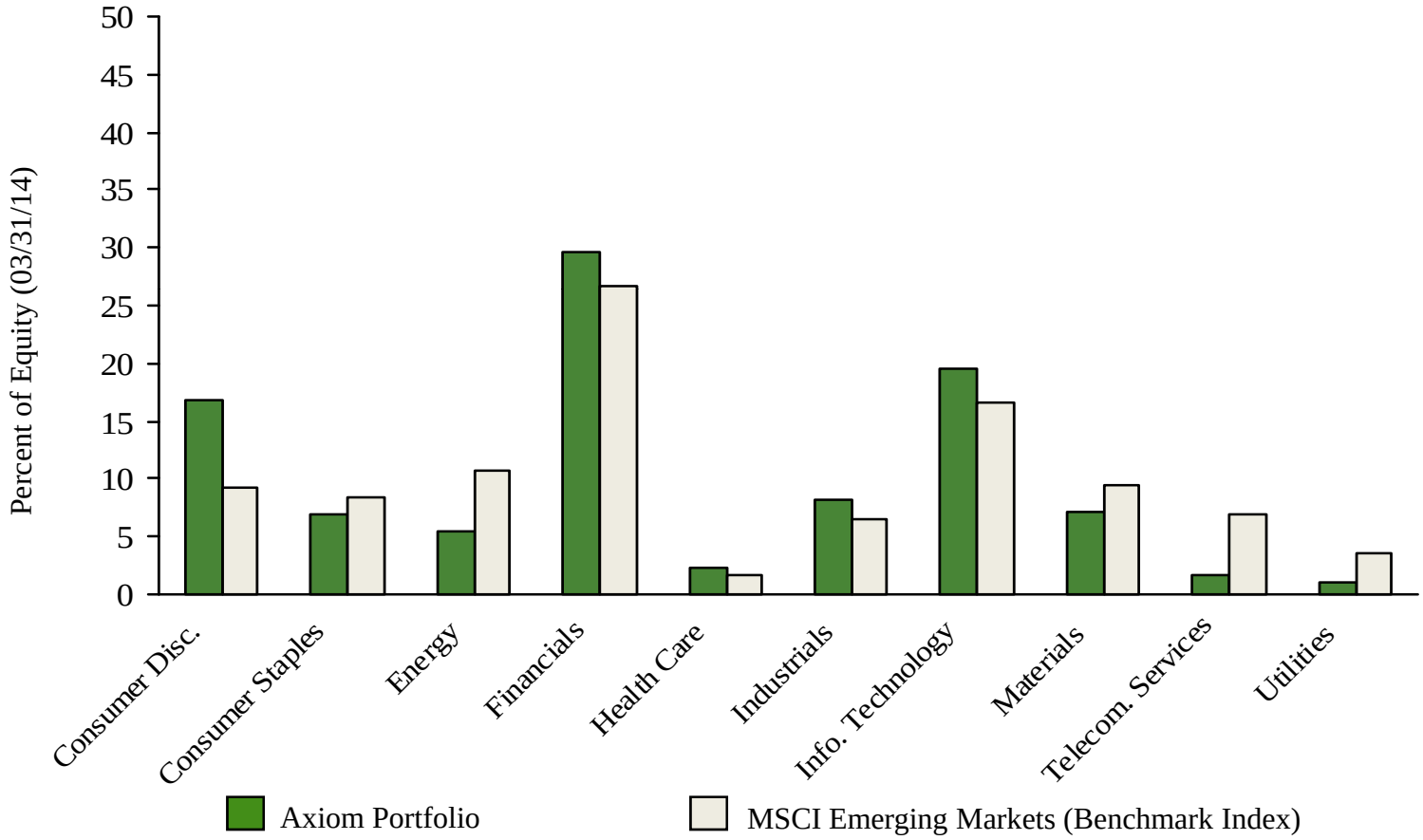
MediaTek (Info. Technology) - Semiconductor company for wireless communications and digital media solutions, based in Taiwan.

Itau Unibanco (Financials) - Financial services provider, based in Brazil.

Cemex (Materials) - Building materials, construction supplier and cement company, based in Mexico.

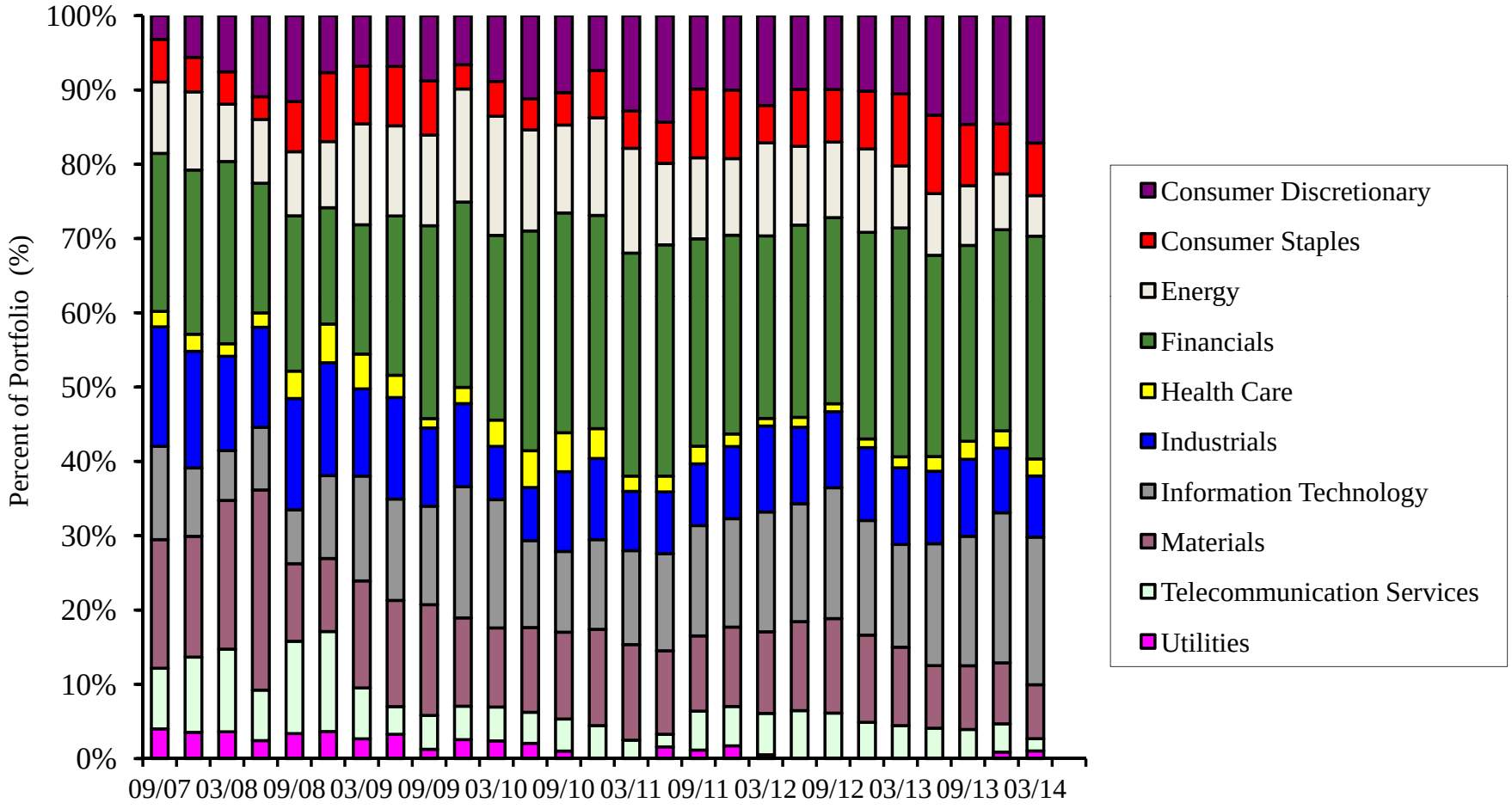
Cognizant (Info. Technology) - Information technology consulting and systems firm, based in India.

Axiom Emerging Markets Equity Strategy
Sector Allocations versus Benchmark



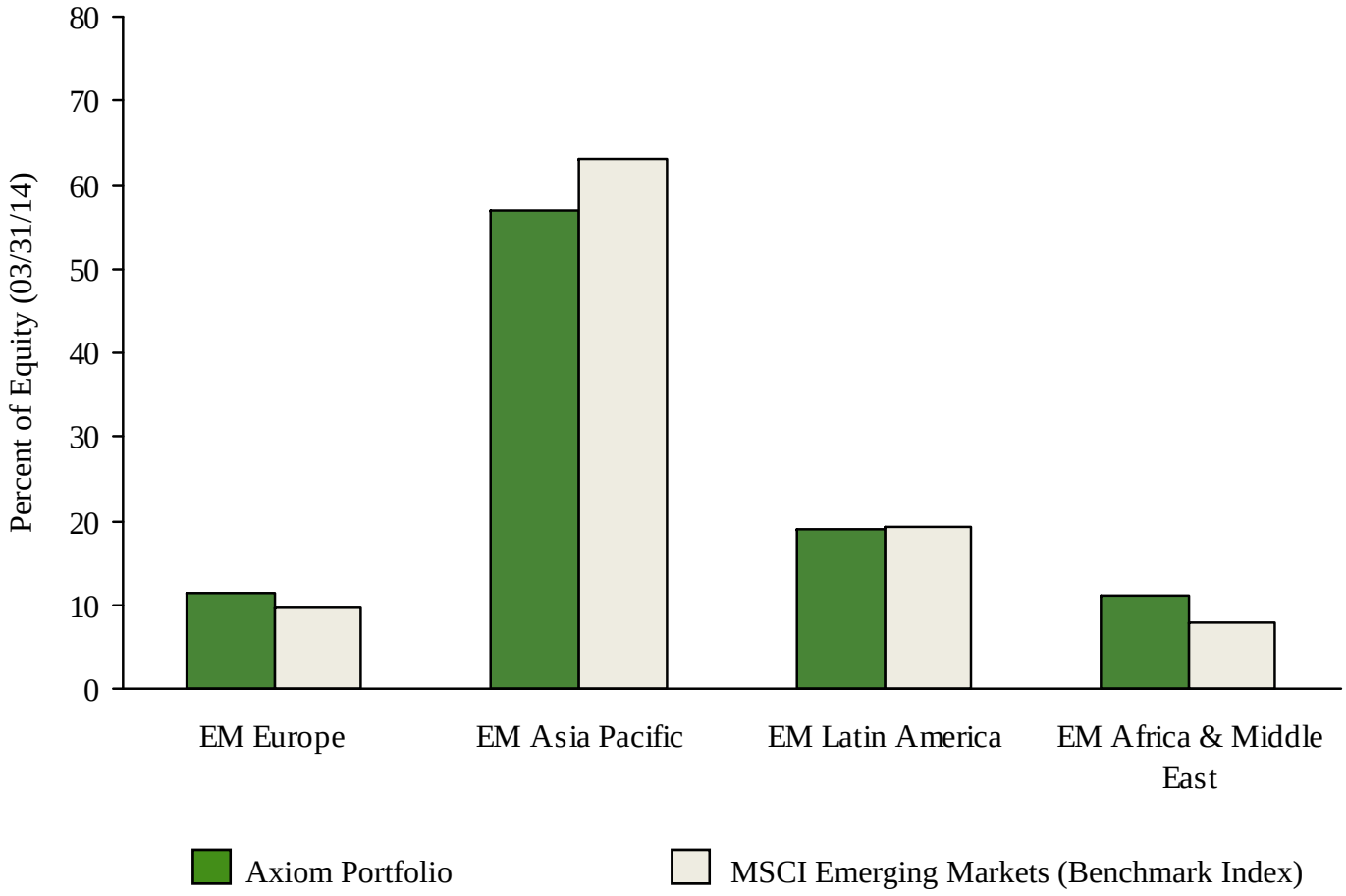
Axiom analysis including data from MSCI as of 03/31/14.

Axiom Emerging Markets Equity Strategy
Sector Allocations Since Inception



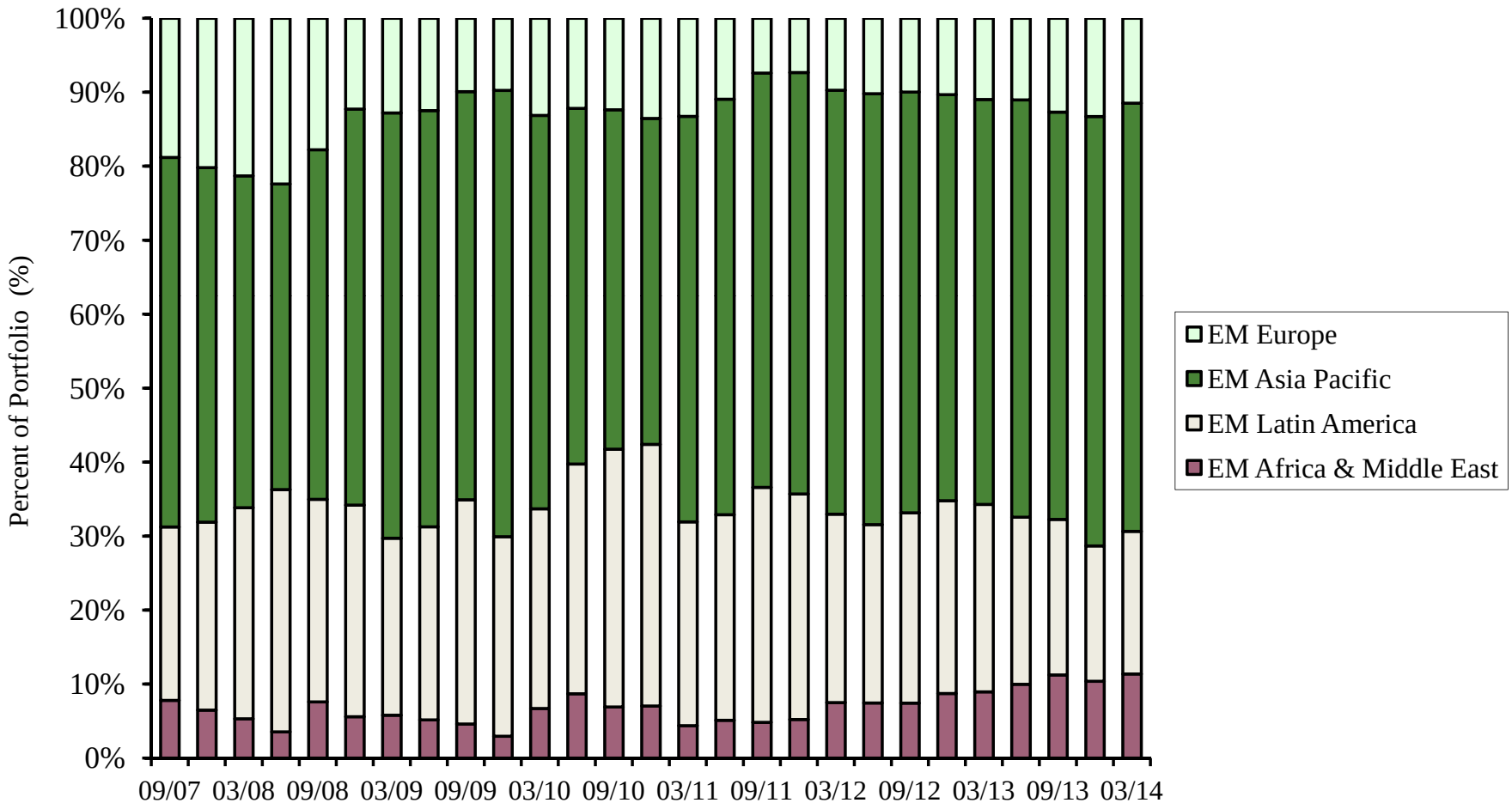
Source: Factset and Bloomberg Data Service and Axiom analysis from inception July 31, 2007 through March 31, 2014.

Axiom Emerging Markets Equity Strategy
Region Allocations versus Benchmark



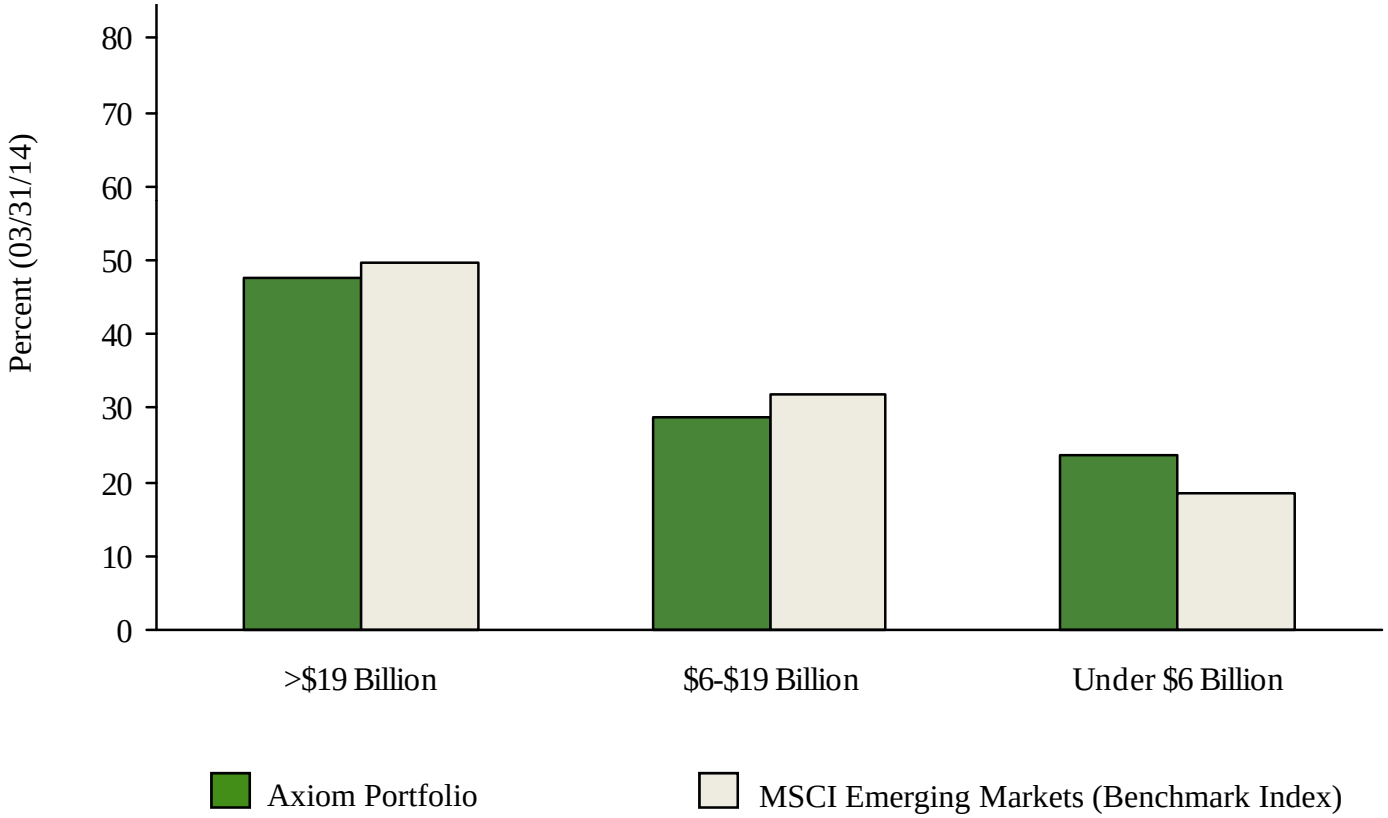
Axiom analysis including data from MSCI as of 03/31/14.

Axiom Emerging Markets Equity Strategy
Region Allocations Since Inception



Axiom quarter-end regional allocation from inception on July 31, 2007 through March 31, 2014.

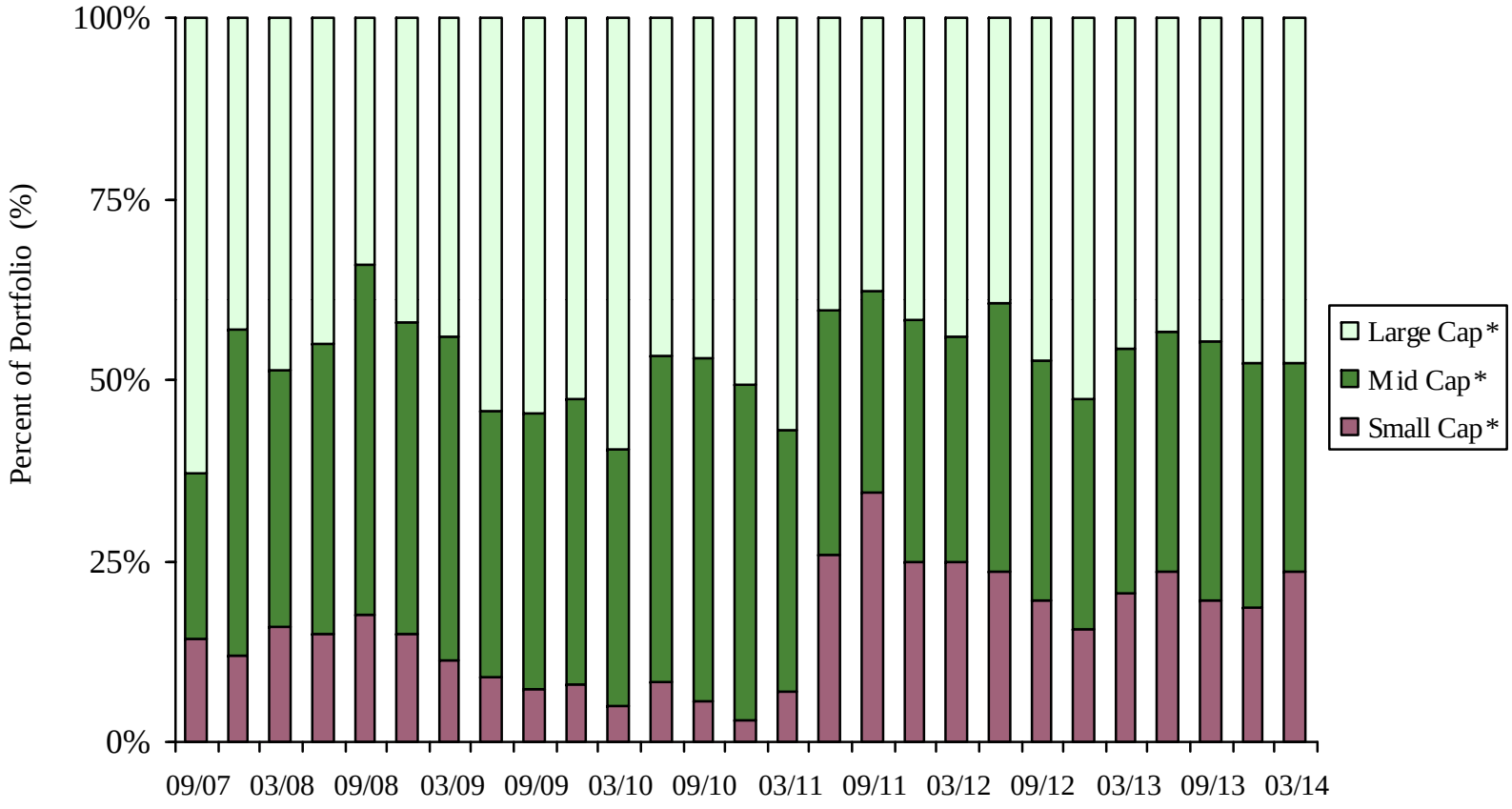
Axiom Emerging Markets Equity Strategy
Market Capitalizations versus Benchmark



Axiom analysis including data from MSCI as of 03/31/14; highest market capitalization sizes as defined by MSCI.

Currency: USD

Axiom Emerging Markets Equity Strategy
Market Capitalizations Since Inception



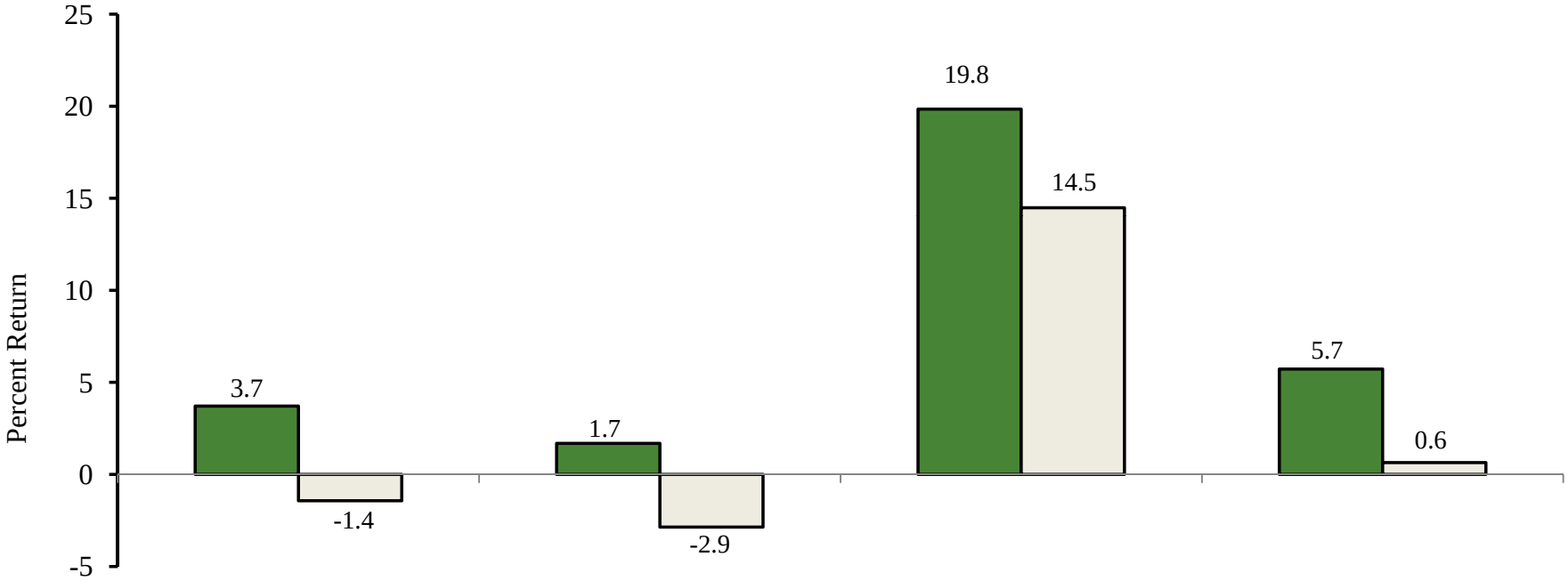
*As of 06/30/11, Axiom defines large cap as >$19 billion, mid cap as $6-$19 billion and small cap as under $6 billion. Prior to 6/30/11, large cap defined as >$10 billion, mid cap as $2-$10 billion and small cap as under $2 billion.

Source: Factset and Bloomberg Data Service and Axiom analysis from August 1, 2007 through March 31, 2014.

Currency: USD

Axiom Emerging Markets Equity Composite
As of March 31, 2014

Annualized Returns Before Fees: US Dollar Terms

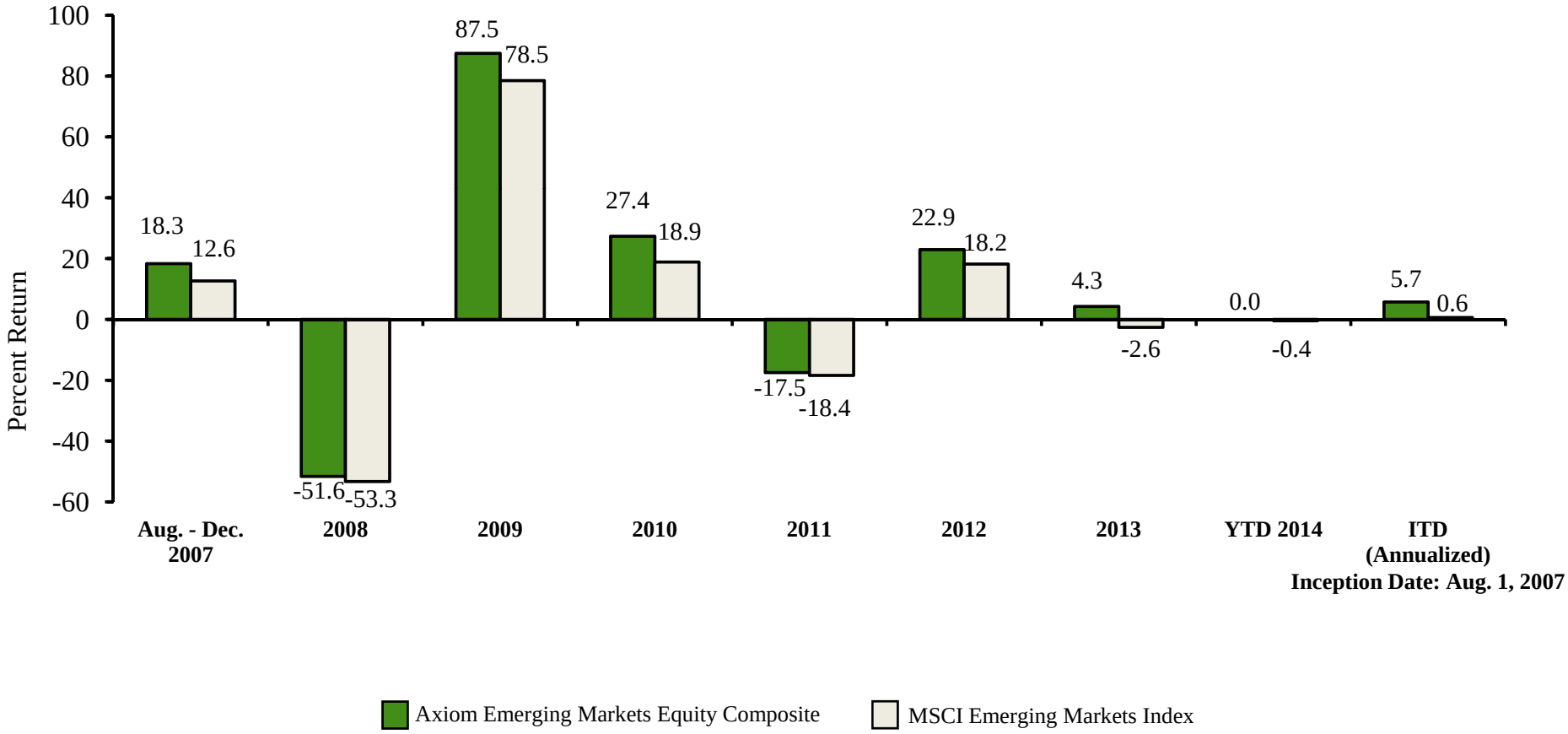


	1 Year	3 Years	5 Years	ITD (Annualized) Inception Date: August 1, 2007
Relative Value Added (%):	+5.1%	+4.6%	+5.3%	+5.1%

Axiom Emerging Markets Equity Composite MSCI Emerging Markets Index

Axiom Emerging Markets Equity Composite
As of March 31, 2014

Composite cumulative total return before fees from inception 08/01/07 – 03/31/14 = 44.8%
MSCI Emerging Markets Index cumulative return 08/01/07 – 03/31/14 = 4.3%



Returns Before Fees: US Dollar Terms

Axiom International Investors
Axiom Emerging Markets Long Only Fee Schedule

The fees for our services are based on the market value of capital under supervision. Fees are ordinarily billed quarterly and are computed at one-fourth of the annual fee rates detailed below:

Annual Fee Rates:

1.00%	On the first $25 million
0.90%	On the next $75 million
0.80%	On the next $25 million
0.70%	On the next $50 million
0.60%	On the balance

Minimums :

$75 million	Separate Account
$1 million	Commingled Trust

Portfolio Managers

Bradley Amoils
Portfolio Manager, *Axiom International Investors, 2002-Present*
VP, Portfolio Manager, *American Century Investors, 1997-2002*
Equity Research Analyst, *OppenheimerFunds, 1995-1997*
M.B.A., *Columbia Business School, New York*
B.Sc., M.D. equivalent, *University of the Witwatersrand Johannesburg*

Yogesh Borkar, CFA
Portfolio Manager, *Axiom International Investors, 2013-Present*
Associate Portfolio Manager, *Fidelity/Pyramis, 2005-2012*
Senior Research Analyst, *DuPont Capital Management, 2001-2005*
Portfolio Manager/Senior Research Analyst, *ValueQuest/TA, 1996-2001*
Author, *Rising Stars in Emerging Markets, Published November 2013*
M.B.A., *Yale University*
B.Com., Business Management, *University of Bombay*

Donald Elefson, CFA
Portfolio Manager, *Axiom International Investors, 2012-Present*
Portfolio Manager, *Harding Loevner, 2008 -2012*
Portfolio Manager, *U.S. Trust, 1999-2007*
Portfolio Manager, *Smith Barney Asset Management, 1994-1998*
Analyst, *Merrill Lynch Asset Management, 1989-1994*
B.A., Economics, *University of Washington*

Matthew A. Franco, CFA
Portfolio Manager, *Axiom International Investors, 1998-Present*
Research Analyst, *Columbus Circle Investors, 1997-1998*
Research Analyst, *R.L. Renck & Co., 1996-1997*
B.S., Finance, *summa cum laude, Saint John's University*

Andrew H. Jacobson, CFA
Portfolio Manager, CIO, *Axiom International Investors, 1998-Present*
Executive VP, Portfolio Manager, *Columbus Circle Investors, 1993-1998*
Business Analyst, *Booz Allen Hamilton, 1989-1991*
Analyst, *Apax Associates, 1988-1989*
M.B.A., *The Wharton School, University of Pennsylvania*
A.B., Molecular Biology, *cum laude, Princeton University*

David S. Kim, CFA
Portfolio Manager, *Axiom International Investors, 2005-Present*
Analyst, *Pinnacle Associates, 2002-2005*
Associate, *Morgan Stanley, 2000-2002*
Associate, *DLJ International- London/Pershing, 1998-2000*
B.S., Finance & International Business, *Georgetown University*

Christopher D. Lively, CFA
Portfolio Manager, *Axiom International Investors, 2008-Present*
Portfolio Manager, *Clay Finlay, 2006-2008*
Portfolio Manager, *Legg Mason (formerly Citigroup), 2000-2006*
Portfolio Manager and Analyst, *The Pioneer Group, 1993-2000*
M.B.A., *Anderson Graduate School of Management, UCLA*
M.S., Foreign Service, *Georgetown University*
B.A., East Asian Studies, *cum laude, Harvard University*

Other Investment Professionals

Eva Antoniewski
Research Associate, *Axiom International Investors, 2007-Present*
Analyst, *BNY Convergex, 2005-2007*
Relationship Manager, *JPMorgan, 2003-2005*
B.A./B.S., Economics & Molecular Biology, *University of Arizona*

Dean Bumbaca, CFA
Research Associate, *Axiom International Investors, 2012-Present*
Trading Assistant, *Axiom International Investors, 2012*
Operations Associate, *Axiom International Investors, 2010-2012*
B.B.A., *School of Business, University of Wisconsin-Madison*

Patrick A. Chute
Trader, European Equities, *Axiom International Investors, 2006-Present*
Auditor, *Ernst & Young, 2004-2006*
B.S., Accounting, *summa cum laude, Sacred Heart University*

Michael DeCarlo
Trader, Asian Equities, *Axiom International Investors, 2008-Present*
Trader, Director of Operations, *North Sound Capital, 2004-2008*
Vice President, Equity Financing Services, *Morgan Stanley, 1993-2004*
M.B.A., Global Finance, *Fordham Graduate School of Business*
B.S., *University of Southern California*

Jonathan S. Ellis, CFA
Senior Research Analyst, *Axiom International Investors, 2011-Present*
Director, Senior Equity Analyst, *Bank of America Merrill Lynch, 1999-2011*
Associate, *Pershing LLC, 1998-1999*
M.B.A., *Columbia Business School, Columbia University*
B.A., Economics, *with honors, Lafayette College*

Steven Espinosa, CFA
Research Analyst, *Axiom International Investors, 2013-Present*
Equity Research Analyst, *Neuberger Berman, 2007-2013*
Financial Advisor, *Merrill Lynch, 2003-2005*
Senior Banking Analyst, *JPMorgan, 2000-2003*
M.B.A., *The Stern School of Business, New York University*
B.S., Business Administration, *University of California, Berkeley*

Tyler Gaylord
Research Analyst, *Axiom International Investors, 2012-Present*
Equity Research Analyst, *Fidelity Management and Research, 2006-2012*
Fund Accountant, *Bank of New York, 2002-2004*
M.B.A., *The Stern School of Business, New York University*
B.S., Business Administration, *cum laude, University of Colorado*

Salvatore LoCascio
Trader, *Axiom International Investors, 2007-Present*
Financial Analyst, *JPMorgan, 2007*
Financial Analyst, *Morgan Stanley, 2006*
B.S., Finance, *magna cum laude, La Salle University*

Melinda Luc
Head Trader, Senior VP, *Axiom International Investors, 1998-Present*
Head Trader, VP, *Newport Pacific Management, 1994-1998*
B.A./B.S., International Business & Finance, *American University*

Kenneth McCabe
Trader, *Axiom International Investors, 2004-Present*
VP, International Equities Trader, *Citigroup Global Markets 1997-2004*
M.B.A., Finance, *University of Connecticut*
B.A., Finance, *Pace University*

Other Investment Professionals, continued

Timothy S. Messina
Research Analyst, *Axiom International Investors, 2010-Present*
Investment Banking Analyst, *Citigroup, 2008-2010*
B.S., Finance & Accounting, *Boston College*

Michael Olsen
Research Associate, *Axiom International Investors, 2010-Present*
Operations Associate, *Axiom International Investors, 2009-2010*
B.S., Finance, *magna cum laude, Fairfield University*

Barney H. Rosen, M.D.
Research Analyst, *Axiom International Investors, 2013-Present*
Research VP, Sector Portfolio Manager, *GE Asset Management, 2006-2012*
Senior Analyst & Partner, *Ridgemark Capital Management, 2004-2006*
Senior Analyst, *Satoha Management, 2003-2004*
Senior Analyst, *European Investors, 2000-2003*
Senior Analyst, *Agrus Research, 1997-1998*
Medical Officer, *United States Navy, 1994-1997*
M.D., *New York Medical College*
M.B.A., *Campbell University*
B.A., Business Administration, *Franklin & Marshall College*

Mathew Sawin
Research Associate, *Axiom International Investors, 2010-Present*
Investment Banking Analyst, *Credit Suisse, Summer 2007, 2008-2010*
Accounting Intern, *Encana Corporation, Summer 2006*
B.B.A., Finance, *magna cum laude, University of Iowa*

David R. Schneider, CFA
Research Analyst, *Axiom International Investors, 2007-Present*
Senior Associate, *PricewaterhouseCoopers LLC, 2004-2006*
B.S., Finance & International Business, *with honors, Penn State University*

Compliance & Operations

Evan Johnson
Operations Associate, *Axiom International Investors, 2012-Present*
A.B., Economics & Political Science, *Brown University*

Johanna Josefsson
Executive Assistant, *Axiom International Investors, 2013-Present*
Auction Administrator, *Christie's Auction House, 2011-2013*
B.S., Art Administration, *Wagner College*

Kyle McDonald
Operations Associate, *Axiom International Investors, 2013-Present*
Finance Intern, *Attend Charity, 2011-2013*
B.S., Finance & International Business, *cum laude, Villanova University*

Jennifer McMackin
Operations Manager, *Axiom International Investors, 2001-Present*
Certificate in Management Development, *Cornell University*
B.S., Marketing/Management, *Southampton College, LIU*

Michael Miley, IACCP
Compliance Specialist, *Axiom International Investors, 2006-Present*
Operations, *Legg Mason Asset Management, 2005-2006*
IACCP Certified Compliance Professional
B.S., Finance, *magna cum laude, University of New Hampshire*

Donald K. Miller
Chairman, *Axiom International Investors, 1998-Present*
Chairman/CEO, *Thomson Advisory Group LP, Asset Management, 1990-1993*
Chairman, *Greylock Financial Inc., Private Equity, 1986-1994*
Chairman, *Christensen Boyles Corporation, Mining Services, 1986-1994*
Board of Directors, *RPM International Inc., 1972-2012*
Board of Directors *Huffy Corporation, 1986-2002*
Board of Directors, *Layne Christensen Company, 1994-2012*
Board of Directors, *PIMCO Advisors L.P, 1994-1997*
M.B.A., *Harvard Business School*
B.S., *Cornell University*

Marlyn Morris
Senior Operations Associate, *2004-Present*
Private Client Administrator, *Sanford C. Bernstein & Co., 2002-2004*
B.S., Business & Technology, *University of Connecticut*

Bartholomew Tesoriero, CPA, CGMA
COO, *Axiom International Investors, 2007-Present*
CFO/CCO, *TQA Investors LLC 1993-2007*
Audit Senior Manager, *Grant Thornton LLP 1988-1993*
Audit Manager, *Ernst & Young 1983-1988*
CGMA, Chartered Global Management Accountant
B.B.A., Accounting, *cum laude, Pace University*

Jason R. Tilchen
Operations Associate, *Axiom International Investors, 2013-Present*
B.S., Finance, *cum laude, Indiana University*

Denise M. Zambardi, IACCP
CCO, SVP, Controller, *Axiom International Investors, 2002-Present*
CFO, *Red Wolf Capital, 2000-2002*
VP, Operations, *Greenwich Partners, LLC, 1993-2000*
IACCP Certified Compliance Professional
Certification in Human Resource Studies, *Cornell University*
B.B.A., Finance, *Iona College*

Client Service & Marketing

William E. Bonner, CFA
VP, Client Service/Marketing, *Axiom International Investors, 2013-Present*
Head of New Business Development, *HomeField Capital, 2005-2012*
VP, Fixed Income & Equities, *JPMorgan, 1992-2005*
Captain, Pilot, *United States Air Force, 1986-1992*
B.S., Finance, *University of Maryland*

Lindsay R. Chamberlain
VP, Client Service/Marketing, *Axiom International Investors, 2013-Present*
Director, Institutional Investments, *Artio Global Investors, 2008-2013*
Investor Relations, *JPMorgan, 2007-2008*
Sales Assistant, *Bank of America, 2006-2007*
Project Manager, *General Electric, 2004-2006*
B.S., Business Information Technology, *magna cum laude, Virginia Tech*

Stephanie Collura
Marketing Associate, *Axiom International Investors, 2011-Present*
Marketing Analyst, *Sterling Stamos Capital Management LP, 2008-2011*
M.A., Museum Studies, *The Fashion Institute of Technology*
B.A., History, *magna cum laude, Western Connecticut State University*

Sanja Kraljevic
Marketing Associate, *Axiom International Investors, 2008-Present*
B.B.A., International Business & Spanish, *cum laude, James Madison University*

Shane C. McMahon, CFA
VP, Client Service/Marketing, *Axiom International Investors, 2008-Present*
Director, Institutional Sales, *New York Life Investment Management, 2005-2008*
VP, Institutional Client Development, *BNY Asset Management, 2001-2005*
VP, Client Management, *Deutsche Bank/Bankers Trust, 1995-2001*
Analyst, *Mercer Investment Consulting, 1992-1995*
B.A., Mathematics & Sociology, *Boston University*

Sarah Papsun
Marketing Associate, *Axiom International Investors, 2005-Present*
Assistant Media Strategist, *Omnicom, 2004-2005*
Management Trainee, *Enterprise Rent-A-Car, 2003-2004*
B.S., Marketing, *Quinnipiac University*

Kristen M. Troy
Marketing Associate, *Axiom International Investors, 2013-Present*
Executive Assistant, *Axiom International Investors, 2012-2013*
M.A., Teaching, *summa cum laude, Sacred Heart University*
B.S., Marketing, *University of Connecticut*

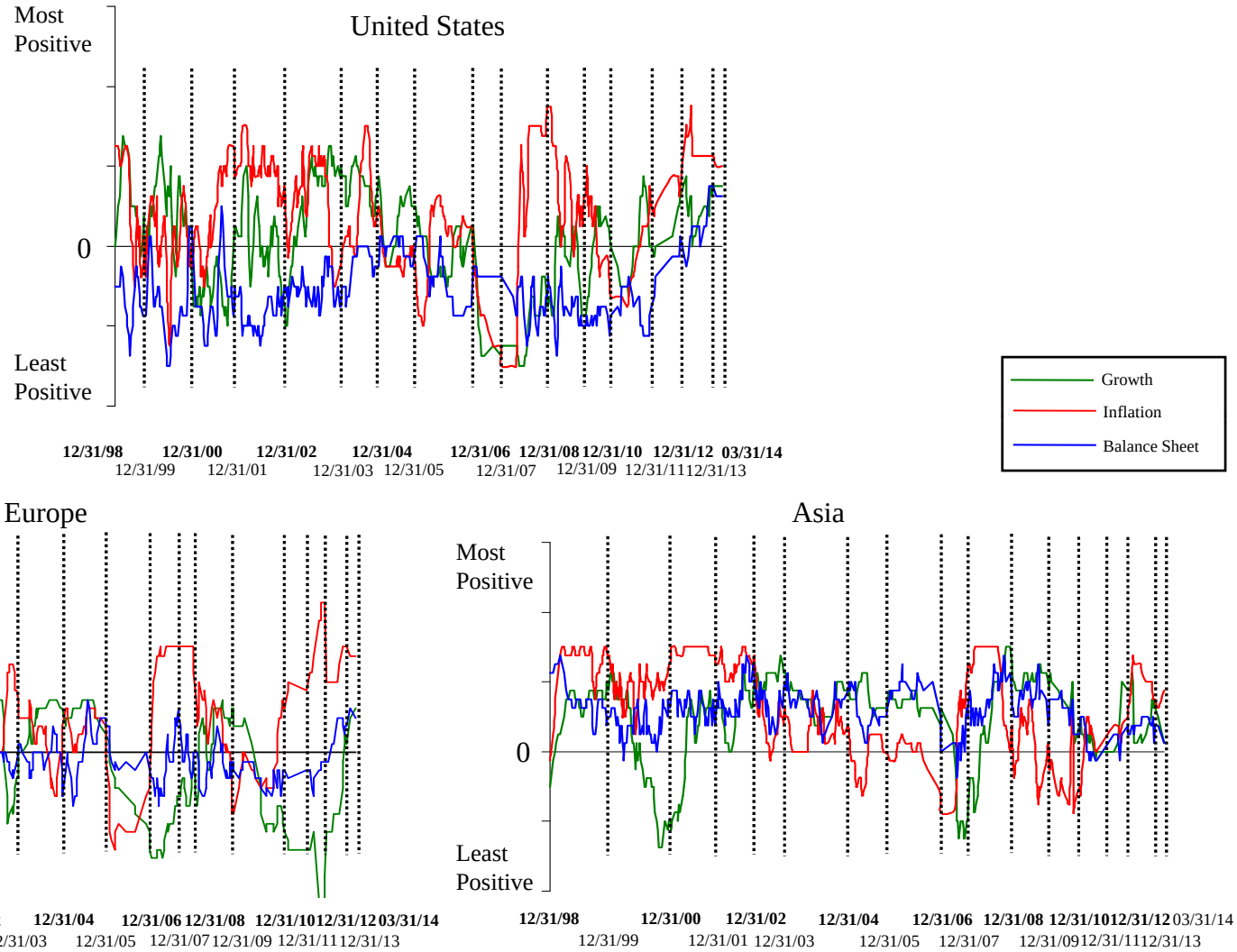
Drew L. Zielinski
VP, Client Service/Marketing, *Axiom International Investors, 2004-Present*
Director of Consultant Relations, *Fred Alger Management, 2002-2004*
Institutional Marketing Manager, *Ark Asset Management, 1995-2002*
M.B.A., *with Distinction, University of Connecticut*
B.S., Finance & Economics, *magna cum laude, Boston College*

Axiom's Rigorous Monitoring Process is Differentiating

Daily	*Weekly*	*Monthly*
Company	*Market Returns*	*Review Aggregate Market Characteristics*
Industries	*Countries/Regions/World*	
Markets	*Growth*	
Economic Data	*Balance sheets*	*Compilation and review of consensus macroeconomic expectations/revisions*
Political Events	*Inflation*	
	Individual Holdings	
New Ideas	*Earnings*	
	Portfolio Characteristics	
	New Ideas Roster	

Macroeconomic Trends (page 1 of 2)

December 1998 through March 2014[1]



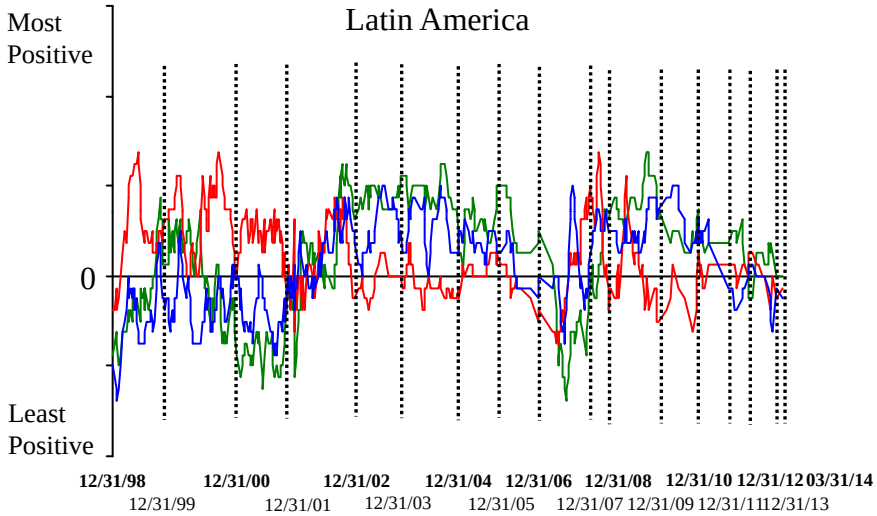
Axiom Analysis as of 03/31/14

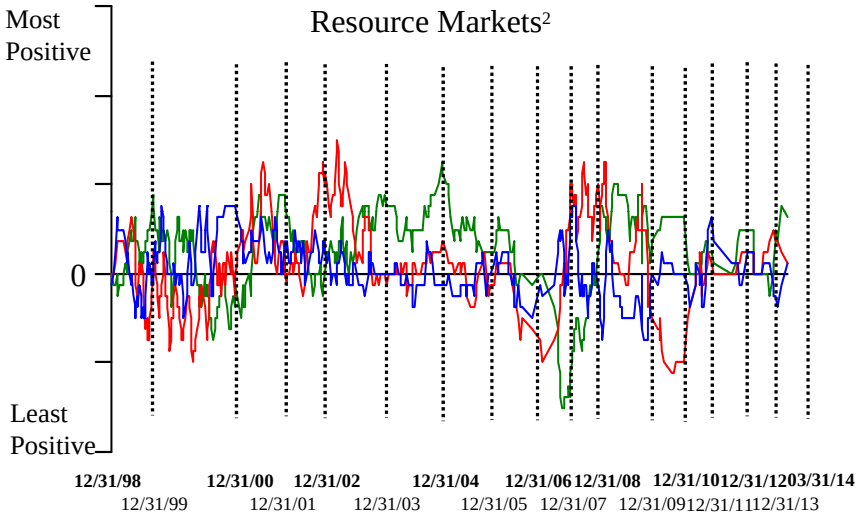
(1) Summary ranking of data points relating to growth, inflation and national balance sheets. Data points plotted weekly. Low inflation ranked positively.

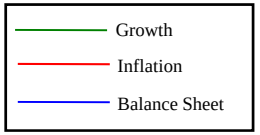
(2) Resource markets include Australia, New Zealand, Canada and South Africa.

Macroeconomic Trends (page 2 of 2)

December 1998 through March 2014[1]







Axiom Analysis as of 03/31/14

(1) Summary ranking of data points relating to growth, inflation and national balance sheets. Data points plotted weekly. Low inflation ranked positively.

(2) Resource markets include Australia, New Zealand, Canada and South Africa.

International Equity Performance Footnotes (Page 1 of 2)

THIS OVERVIEW DOES NOT CONSTITUTE AN OFFERING OF SECURITIES, WHICH CAN ONLY BE MADE BY DELIVERY OF AXIOM'S CONFIDENTIAL OFFERING MEMORANDUM TO QUALIFIED INVESTORS.

1. Axiom International Investors, LLC (Axiom) was founded on September 1, 1998 when a team of investment professionals separated from Columbus Circle Investors, an affiliate of PIMCO Advisors Holdings, LP.

2. As of March 31, 2014, the International Equity Long Only Composite Performance is for a composite of 7 tax-exempt portfolios (two are commingled funds) totaling $2,611.7 million in assets, which represents approximately 25.82% of overall firm assets. This composite (the "Axiom Composite") has been managed by Axiom since September 1, 1998 and is invested primarily in international equity securities. For the period July 1, 1996 through August 31, 1998 the composite consisted of five or fewer portfolios of Columbus Circle Investors an affiliate of PIMCO Advisors Holdings that were managed by Andrew Jacobson with the assistance of other members of the Axiom investment team. From September 1, 1998 through February 20, 2000 Axiom continued to manage two portfolios as a sub-advisor to the Circle Trust Company, an affiliate of PIMCO Advisors Holdings LP. The Axiom Composite is as of March 31, 2014 and valuation is based on trade date. Cash levels vary depending on a variety of factors including market conditions and investor activity. It should not be assumed that the cash levels presented here will necessarily be maintained in the future.

3. Top 10 holdings are for the Axiom International Equity Long Only Composite as of March 31, 2014. It should not be assumed that the investment in the securities listed were or will be profitable or that recommendations made in the future will be profitable or equal the performance of the securities on this list.

4. The results presented here reflect historical performance and are not a guarantee of future performance. Investment return and principal value will fluctuate and may be worth more or less than the original amount when liquidated. In addition you should be aware that:
    a) Unless otherwise noted, performance results are presented before management fees but net of brokerage commissions.
    b) Results assume the reinvestment of dividends and other earnings.
    c) Returns shown comply with GIPS Performance Presentation Standards for all periods presented and are verified thru 12/31/12.
    d) Performance results are shown after foreign withholding taxes on dividends, interest and capital gains.
    e) The Prior Composite and the Axiom Composite consist of investments in countries included in the Morgan Stanley Capital International (MSCI) All Country World Index Ex US. The MSCI All Country World Index Ex US includes: the MSCI Europe, Australasia and Far East Index (MSCI EAFE Index), the MSCI Emerging Market Index (the MSCI EM Index) and the MSCI Canada Index.
    f) The performance of the benchmark indices represented are Gross Dividends for years prior to 2001 and Net Dividends for years 2001 to present.
    g) The composite was created on July 1, 1996.

International Equity Performance Footnotes (Page 2 of 2)

THIS OVERVIEW DOES NOT CONSTITUTE AN OFFERING OF SECURITIES, WHICH CAN ONLY BE MADE BY DELIVERY OF AXIOM'S CONFIDENTIAL OFFERING MEMORANDUM TO QUALIFIED INVESTORS.

4. (cont.)

h) A client's return will be reduced by the advisory fees and any other expenses incurred in the management of the investment advisory account.

i) Investment advisory fees are described in Part II of Axiom's Form ADV.

j) An Axiom International client's return will be reduced by the investment advisory fee and any other expenses the client may incur in the management of its investment advisory account. As a representative example of the effect an investment advisory fee, compounded over a period of years, could have on the total value of a client's portfolio, consider a $20 million portfolio earning 10% annually. The following figures would represent the hypothetical value of the portfolio at the end of the indicated period, presented gross and net of investment advisory fees (all figures in millions): First Year: Gross $22.00, Net $21.81. Third Year: Gross $26.62, Net $25.95. Fifth Year: Gross $32.21, Net $30.88. The current quoted fee schedule for International Equity portfolios (which is used in the representative example) is as follows: 0.85% on the first $25.0 million; 0.75% over $25.0 million.

5. Results for the "Prior Composite" are for a composite of five or fewer portfolios of Columbus Circle Investors, then an affiliate of PIMCO Advisors Holdings, that were managed by Andrew Jacobson with the assistance of other members of the Axiom investment team.

6. Results for the "Axiom Composite" are for a composite of the International Equity Long Only Composite (described in #2 above) of Axiom International Investors, formed as an independent entity on September 1, 1998.

7. Dispersion of returns within the Axiom International Equity Long-Only Composite, as of December 31, 2012, is 0.33 on an average annual basis since inception, July 1, 1996.

Global Equity Performance Footnotes (Page 1 of 2)

THIS OVERVIEW DOES NOT CONSTITUTE AN OFFERING OF SECURITIES, WHICH CAN ONLY BE MADE BY DELIVERY OF AXIOM'S CONFIDENTIAL OFFERING MEMORANDUM TO QUALIFIED INVESTORS.

1. Axiom International Investors, LLC (Axiom) was founded on September 1, 1998 when a team of investment professionals separated from Columbus Circle Investors, an affiliate of PIMCO Advisors Holdings, LP.

2. As of March 31, 2014, the Axiom Global Equity Composite Performance is for a composite of 10 tax-exempt portfolios (two are commingled funds) totaling $2,922.8 million in assets, which represents approximately 28.90% of total firm assets; and 4 taxable portfolios totaling $1,225.2 million which represents 12.11% of total assets; for a total of $4,148.0 million, representing 41.01% of overall firm assets. Accounts not held for an entire period and Axiom's Global ex-Japan portfolio are not included in the composite calculations. There are no material philosophical or procedural differences in the manner in which the model and live portfolios were/are managed. This composite (the "Global Composite") has been managed by Axiom since October 1, 2002 and is invested primarily in global equity securities. The Global Composite is as of March 31, 2014 and valuation is based on trade date. Cash levels vary depending on a variety of factors including market conditions and investor activity. It should not be assumed that the cash levels presented here will necessarily be maintained in the future.

3. Top 10 holdings are for the Axiom Global Equity Composite as of March 31, 2014. It should not be assumed that the investment in the securities listed were or will be profitable or that recommendations made in the future will be profitable or equal the performance of the securities on this list.

4. The results presented here reflect historical performance and are not a guarantee of future performance. Investment return and principal value will fluctuate and may be worth more or less than the original amount when liquidated. In addition you should be aware that:
   a) Unless otherwise noted, performance results are presented before management fees but net of brokerage commissions.
   b) Results assume the reinvestment of dividends and other earnings.
   c) Returns shown comply with GIPS Performance Presentation Standards for all periods presented and are verified thru 12/31/12.
   d) Performance results are shown after foreign withholding taxes on dividends, interest and capital gains.
   e) The Axiom Global Equity Composite consists of investments in countries included in the Morgan Stanley Capital International (MSCI) All Country World Index. The MSCI All Country World Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets. As of March 2014 the MSCI All Country World Index consisted of the following 44 developed and emerging market country indices: Australia, Austria, Belgium, Brazil, Canada, Chile, China, Colombia, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Hong Kong, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Malaysia, Mexico, Netherlands, New Zealand, Norway, Peru, Philippines, Poland, Portugal, Russia, Singapore, South Africa, [South] Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, the United Kingdom and the United States.

Global Equity Performance Footnotes (Page 2 of 2)

THIS OVERVIEW DOES NOT CONSTITUTE AN OFFERING OF SECURITIES, WHICH CAN ONLY BE MADE BY DELIVERY OF AXIOM'S CONFIDENTIAL OFFERING MEMORANDUM TO QUALIFIED INVESTORS.

4. (cont.)

f) The performance of the benchmark indices represented are Net Dividends.

g) The model portfolio composite was created on October 1, 2002. The live portfolio composite launched July 1, 2004.

h) A client's return will be reduced by the advisory fees and any other expenses incurred in the management of the investment advisory account.

i) Investment advisory fees are described in Part II of Axiom's Form ADV.

j) An Axiom International client's return will be reduced by the investment advisory fee and any other expenses the client may incur in the management of its investment advisory account. As a representative example of the effect an investment advisory fee, compounded over a period of years, could have on the total value of a client's portfolio, consider a $20 million portfolio earning 10% annually. The following figures would represent the hypothetical value of the portfolio at the end of the indicated period, presented gross and net of investment advisory fees (all figures in millions): First Year: Gross $22.00, Net $21.82. Third Year: Gross $26.62, Net $25.99. Fifth Year: Gross $32.21, Net $30.95. The current quoted fee schedule for Global Equity portfolios (which is used in the representative example) is as follows: 0.80% on the first $25 million; 0.70% on the next $50 million; 0.60% on the next $150 million; 0.50% on the next $250 million; 0.30% on the balance as described in Part II of Form ADV.

U.S. Small Cap Equity Performance Footnotes

THIS OVERVIEW DOES NOT CONSTITUTE AN OFFERING OF SECURITIES, WHICH CAN ONLY BE MADE BY DELIVERY OF AXIOM'S CONFIDENTIAL OFFERING MEMORANDUM TO QUALIFIED INVESTORS.

1. Axiom International Investors, LLC (Axiom) was founded on September 1, 1998 when a team of investment professionals separated from Columbus Circle Investors, an affiliate of PIMCO Advisors Holdings, LP.

2. As of March 31, 2014, the Axiom U.S. Small Cap Equity Portfolio Performance is for a composite of 3 tax-exempt portfolios (one a commingled fund) totaling $123.1 million in assets, representing 1.22% of overall firm assets. This composite (the "U.S. Small Cap Equity Portfolio") has been managed by Axiom since September 1, 2006 and is invested primarily in U.S. Small Cap equity securities. The Axiom U.S. Small Cap Equity Composite is as of March 31, 2014 and valuation is based on trade date. Cash levels vary depending on a variety of factors including market conditions and investor activity. It should not be assumed that the cash levels presented here will necessarily be maintained in the future.

3. Top 10 holdings are for the Axiom U.S. Small Cap Equity Portfolio as of March 31, 2014. It should not be assumed that the investment in the securities listed were or will be profitable or that recommendations made in the future will be profitable or equal the performance of the securities on this list.

4. The results presented here reflect historical performance and are not a guarantee of future performance. Investment return and principal value will fluctuate and may be worth more or less than the original amount when liquidated. In addition you should be aware that:
   a) Unless otherwise noted, performance results are presented before management fees but net of brokerage commissions.
   b) Results assume the reinvestment of dividends and other earnings.
   c) Performance presented is representative of a composite of IPO eligible investors. Axiom calculates a second composite for non-IPO eligible investors.
   d) Returns shown comply with GIPS Performance Presentation Standards for all periods presented and are verified thru 12/31/12.
   e) The performance of the benchmark represented is gross dividends.
   f) The composite was created on September 1, 2006.
   g) A client's return will be reduced by the advisory fees and any other expenses incurred in the management of the investment advisory account.
   h) Investment advisory fees are described in Part II of Axiom's Form ADV.
   i) An Axiom International client's return will be reduced by the investment advisory fee and any other expenses the client may incur in the management of its investment advisory account. As a representative example of the effect an investment advisory fee, compounded over a period of years, could have on the total value of a client's portfolio, consider a $20 million portfolio earning 10% annually. The following figures would represent the hypothetical value of the portfolio at the end of the indicated period, presented gross and net of investment advisory fees (all figures in millions): September 1, 2006 - March 31, 2014: Gross $41.20, Net $38.88. The current quoted fee schedule for the U.S. Small Cap Equity portfolio (which is used in the representative example) is as follows: 0.80% on the first $10 million; 0.75% on the next $15 million; 0.70% over $25 million.

Emerging Markets Equity Performance Footnotes

THIS OVERVIEW DOES NOT CONSTITUTE AN OFFERING OF SECURITIES, WHICH CAN ONLY BE MADE BY DELIVERY OF AXIOM'S CONFIDENTIAL OFFERING MEMORANDUM TO QUALIFIED INVESTORS.

1. Axiom International Investors, LLC (Axiom) was founded on September 1, 1998 when a team of investment professionals separated from Columbus Circle Investors, an affiliate of PIMCO Advisors Holdings, LP.

2. As of March 31, 2014, the Axiom Emerging Markets Equity Composite Performance is for a composite of 11 portfolios for a total of $2,280.2 million, representing 22.55% of overall firm assets; 4 portfolios (one of which is a commingled fund) are tax-exempt totaling $496.3 million in assets, which represents approximately 4.91% of total firm assets; and 7 portfolios are taxable totaling $1,783.9 million in assets, which represents approximately 17.64% of total firm assets. This composite (the "Axiom Emerging Markets Equity Long Only Composite") has been managed by Axiom since August 1, 2007 and is invested primarily in Emerging Markets Equity Long Only securities. The Axiom Emerging Markets Equity Long Only Composite is as of March 31, 2014 and valuation is based on trade date. Cash levels vary depending on a variety of factors including market conditions and investor activity. It should not be assumed that the cash levels presented here will necessarily be maintained in the future.

3. Top 10 holdings are for the Axiom Emerging Markets Equity Fund (Long Only) as of March 31, 2014. It should not be assumed that the investment in the securities listed were or will be profitable or that recommendations made in the future will be profitable or equal the performance of the securities on this list.

4. The results presented here reflect historical performance and are not a guarantee of future performance. Investment return and principal value will fluctuate and may be worth more or less than the original amount when liquidated. In addition you should be aware that:
   a) Unless otherwise noted, performance results are presented before management fees but net of brokerage commissions.
   b) Results assume the reinvestment of dividends and other earnings.
   c) Returns shown comply with GIPS Performance Presentation Standards for all periods presented and are calculated by Axiom utilizing their internal portfolio management accounting system. Composite returns for the Axiom Emerging Markets Equity Long Only Composite will be audited at the end of each calendar year.
   d) Performance results are shown after foreign withholding taxes on dividends, interest and capital gains.
   e) The performance of the benchmark indices represented are Net Dividends.
   f) The composite was created on August 1, 2007.
   g) A client's return will be reduced by the advisory fees and any other expenses incurred in the management of the investment advisory account.
   h) Investment advisory fees are described in Part II of Axiom's Form ADV.
   i) An Axiom client's return will be reduced by the investment advisory fee and any other expenses the client may incur in the management of its investment advisory account. The current quoted fee schedule for Axiom Emerging Markets Equity Fund (Long Only) is as follows: 1.00% on the first $25 million; 0.90% on the next $75 million; 0.80% on the next $25 million; 0.70% on the next $50 million and 0.60% on the balance.

Long-Short Equity Strategies Performance Footnotes

THIS OVERVIEW DOES NOT CONSTITUTE AN OFFERING OF SECURITIES, WHICH CAN ONLY BE MADE BY DELIVERY OF AXIOM'S CONFIDENTIAL OFFERING MEMORANDUM TO QUALIFIED INVESTORS.

1. For the Axiom International Opportunity Fund, calculations reflect fees of 1% management fee and 10% incentive fee from 01/01/1999-12/31/2000 and fees of 1% management fee and 20% incentive fee from 01/01/2001-09/30/2005. From 10/01/2005 through 12/31/2013, net of fee calculations reflect fees of 2% management fee and 20% incentive fee (if applicable). From 01/01/2014 forward, the calculations reflect fees of 1% management fee and a 10% incentive fee.

2. For the Axiom International Micro-Cap Fund, from 9/1/2004-9/30/2005, 1.5% management fee and 20% incentive fee. From 10/1/2005-12/31/2013, 2% management fee and 20% incentive fee (if applicable). From 01/01/2014 forward, the calculations reflect fees of 1.75% management fee and 20% incentive fee (if applicable) for investments with less than five million dollars of invested assets, and 1.5% management fee and 20% incentive fee (if applicable) for investments with five million dollars in assets under management or more.

3. For the Axiom Global Micro-Cap Fund, from 02/01/2007-12/31/2013, 2% management fee and 20% incentive fee (if applicable). From 01/01/2014 forward, the calculations reflect fees of 1.75% management fee and 20% incentive fee (if applicable) for investments with less than five million dollars of invested assets, and 1.5% management fee and 20% incentive fee (if applicable) for investments with five million dollars in assets under management or more.

4. Past performance is no guarantee of future results.

5. Returns are computed on a compounded cumulative basis and reflect the use of leverage.

6. The Partnership is audited annually as of the end of each calendar year (12/31).

7. Net returns for any specific investor may and do vary depending on the date of limited partner's admittance into the Fund.

8. Returns do not reflect the accrual of any prime brokerage expenses, interest expenses, professional fees, and other miscellaneous expenses.

9. The index that the Axiom International Opportunity Fund utilizes for performance comparison purposes is the MSCI All Country World Ex-US (with dividends reinvested net of withholding taxes). The Bloomberg Ticker for this index is MXWDU.

10. The index that the Axiom International Micro-Cap Fund utilizes for performance comparison purposes is the MSCI World Ex US Small Cap (with dividends reinvested net of withholding taxes). The Bloomberg Ticker for this index is NCUDWXUS.

11. The index that the Axiom Global Micro-Cap Fund utilizes for performance comparison purposes is the MSCI World Small Cap (with dividends reinvested net of withholding taxes). The Bloomberg Ticker for this index is MXWOSC.

12. Portfolio Statistics, Portfolio Summary, Top 10 Holdings, and Sector and Region Exposure are as of March 31, 2014.

AQR Emerging Equity Management

Prepared for North Dakota State Investment Board

Private and Confidential

June 27, 2014

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The information in this presentation may contain projections or other forward-looking statements regarding future events, targets, forecasts or expectations regarding the strategies described herein, and is only current as of the date indicated. There is no assurance that such events or targets will be achieved, and may be significantly different from that shown here. The information in this presentation, including statements concerning financial market trends, is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. Performance of all cited indices is calculated on a total return basis with dividends reinvested.

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Today's Presenters

Jacques Friedman
Principal, Head of Global Stock Selection

Jacques is the head of AQR's Global Stock Selection team and is involved in all aspects of research, portfolio management and strategy development for the firm's equity products and strategies. Prior to AQR, he developed quantitative stock-selection strategies for the Asset Management division of Goldman, Sachs & Co. Jacques earned a B.S. in applied mathematics from Brown University and an M.S. in applied mathematics from the University of Washington. Before joining Goldman, he was pursuing a Ph.D. in applied mathematics at Washington, where his research interests ranged from mathematical physics to quantitative methods for sports handicapping.

Matthew Chilewich
Vice President, Client Strategies

Matt is a senior member of AQR's Client Strategies team, collaborating with institutional investors and consultants throughout the Midwestern U.S. and Canada. In this role, he is responsible for communicating AQR's investment philosophy and process across a range of traditional and alternative investment strategies. Prior to AQR, Matt was a vice president on the consultant relations team at JPMorgan Asset Management and an investment-banking associate at Bear, Stearns & Co. Matt earned a B.A. in psychology from the University of Michigan and an M.B.A. from the Fuqua School of Business at Duke University, where he focused his studies on finance and accounting.

Executive Summary

Experienced Long-Only Equity Manager

- Unique business model combines long-only equity and alternatives
- 14 years managing long-only equity portfolios for institutional clients
- Global, cross-asset class research provides distinctive insights

Investment Philosophy

- Systematic implementation of fundamental investment themes
- Unique investment process integrating separate stock, country, and currency views
- Implementation and risk management draw on experience from alternatives

Performance Objectives*

- Long-term average tracking error target of 4%
- Long-term expected excess return of approximately 3%
- Strong diversification to other long-only equity managers

* The Emerging Equities strategy is benchmarked to the MSCI Emerging Markets Index (Net). Tracking error is subject to changes at any time without notice. Excess returns are in excess of the benchmark. Diversification does not eliminate the risk of experiencing investment losses. There is no guarantee, express or implied, that long-term return targets will be achieved. Realized returns may come in higher or lower than expected. Please read important disclosures in the Appendix.

Firm Overview

Our Firm

AQR is a global investment management firm built at the intersection of financial theory and practical application. We strive to deliver superior, long-term results for our clients by looking past market noise to identify and isolate what matters most, and by developing ideas that stand up to rigorous testing. Our focus on practical insights and analysis has made us leaders in alternative and traditional strategies since 1998.

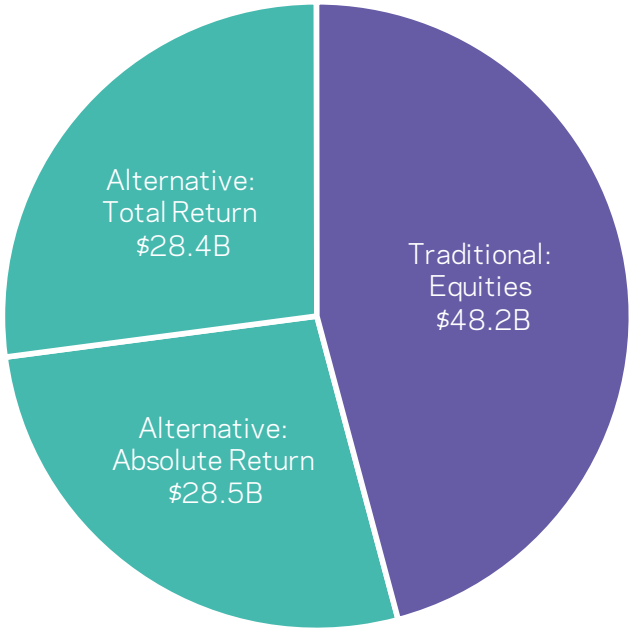
At a Glance

- AQR takes a systematic, research-driven approach to managing alternative and traditional strategies
- We apply quantitative tools to process fundamental information and manage risk
- Our clients include institutional investors, such as pension funds, insurance companies, endowments, foundations and sovereign wealth funds, as well as financial advisors
- The firm has 21 principals and 411 employees; over one-third of employees hold advanced degrees
- Based in Greenwich, Connecticut, with offices in Chicago, Los Angeles, London, Sydney and Bermuda
- $105.1 billion in assets under management as of April 1, 2014*

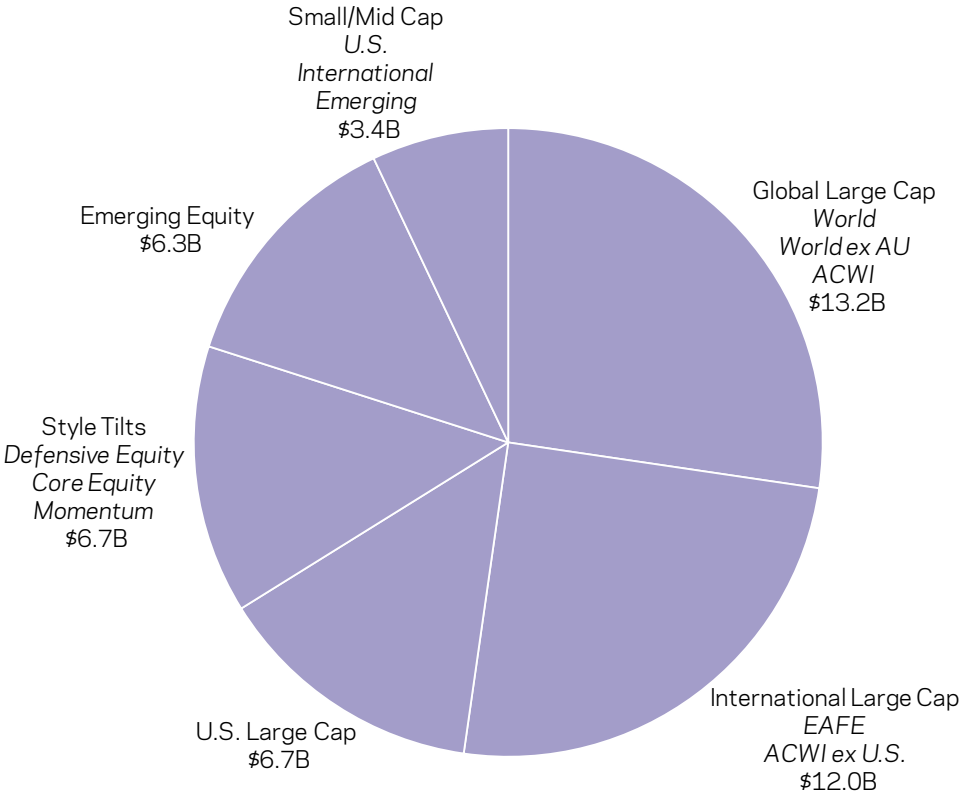
* Approximate as of 4/1/2014, includes assets managed by CNH Partners, an affiliate of AQR.

Assets Under Management

Total Assets
$105.1B*



Traditional Equity Strategies
$48.2B*



* Approximate as of 4/1/2014, includes assets managed by CNH Partners, an affiliate of AQR.

Who We Are

Cliff Asness, Ph.D.*
Managing and Founding Principal

Portfolio Management, Research, Risk Management and Trading
(Total Team: 162)

John Liew, Ph.D.*
Founding Principal

Portfolio Management and Research

Andrea Frazzini, Ph.D.
Principal

Jacques Friedman
Principal

Brian Hurst
Principal

Ronen Israel*
Principal

Michael Katz, Ph.D.
Principal

Oktay Kurbanov
Principal

Michael Mendelson*
Principal

Lars Nielsen*
Principal

Yao Hua Ooi
Principal

Lasse Pedersen, Ph.D.
Principal

Mark Mitchell, Ph.D.
Principal (CNH)

Todd Pulvino, Ph.D.
Principal (CNH)

Rocky Bryant
Principal (CNH)

Kevin Wood
Principal (CNH)

John Lummis
Chief Executive (AQR Re)

Risk Management

Aaron Brown
Managing Director

Counterparty Risk

Lauralyn Pestritto
Vice President

Trading

Hitesh Mittal
Managing Director

Business Development
(Total Team: 72)

David Kabiller, CFA*
Founding Principal

Client Solutions

Gregor Andrade, Ph.D.
Principal

Jeff Dunn
Principal

Jeremy Getson, CFA
Principal

Marco Hanig, Ph.D.
Principal

Portfolio Solutions

Antti Ilmanen, Ph.D.
Principal

Marketing

Marge Wyrwas
Managing Director
Chief Marketing Officer

Business Strategy

Eric Levy
Vice President

Corporate Infrastructure
(Total Team: 149)

Finance

John Howard*
Principal
Chief Finance Officer and Chief Operating Officer

Fund Accounting, Operations and Client Administration

Steve Mellas
Principal

Human Resources

Margaret Belden
Managing Director
Chief Human Resources Officer

Systems Development and IT

Neal Pawar
Managing Director
Chief Technology Officer

Compliance And Legal
(Total Team: 28)

Compliance

H.J. Willcox
Managing Director
Chief Compliance Officer

Legal

Bradley Asness
Principal
Chief Legal Officer

Brendan Kalb
Managing Director
General Counsel

Personnel as of 3/31/2014, Total = 411
*Member of Strategic Planning Committee (SPC)

Global Stock Selection Team

Cliff Asness, Ph.D.
Managing and Founding Principal

Global Stock Selection Team

Andrea Frazzini, Ph.D. Principal	**Jacques Friedman** Principal	**Ronen Israel** Principal	**Lars Nielsen** Principal

Portfolio Management and Senior Research Team

Michele Aghassi, Ph.D., CFA Managing Director	**Georgi Georgiev, Ph.D.** Vice President	**Sarah Jiang** Vice President	**Laura Serban, Ph.D.** Vice President
Navraj Bhardwaj Vice President	**Paul Giordano, CFA** Vice President	**Hoon Kim, Ph.D., CFA** Managing Director	**Rohit Shrivastava** Vice President
Gabriel Feghali, CFA Product Specialist	**Eric Greenhut** Vice President	**Alla Markova** Vice President	**Billy Woods** Vice President
Shaun Fitzgibbons Vice President	**Tarun Gupta, Ph.D.** Vice President	**Scott Metchick** Vice President	**Jessica Yeh** Vice President

Total Global Stock Selection Team: 38

AQR

Personnel as of 3/31/2014

Global Asset Allocation Team

Cliff Asness, Ph.D.
Managing and Founding Principal

Global Asset Allocation Team

Brian Hurst Principal	**Michael Katz, Ph.D.** Principal	**Oktay Kurbanov** Principal	**John Liew, Ph.D.** Principal	**Lars Nielsen** Principal	**Yao Hua Ooi** Principal	**Lasse Pedersen, Ph.D.** Principal

Portfolio Management and Senior Research Team

Gunner Arnson Vice President	**Swati Chandra, CFA** Vice President	**Todd Hazelkorn, Ph.D.** Vice President	**David Kupersmith** Vice President	**Avneesh Saxena, CFA** Vice President
Attakrit Asvanunt, Ph.D. Vice President	**Gene D'Avolio, Ph.D.** Vice President	**John Huss** Vice President	**Ari Levine** Vice President	**Ashwin Thapar** Vice President
Craig Austin Vice President	**Christian Doheny, CFA** Vice President	**Roni Israelov, Ph.D.** Vice President	**Greg Otto** Vice President	**Harsha Tummala** Vice President
Jordan Brooks, Ph.D. Vice President	**Mac Hatamleh** Vice President	**Johnny Kang, Ph.D.** Vice President	**Jonathan Peress, CFA** Vice President	**Yue Yang** Vice President

Total Global Asset Allocation Team: 59

Personnel as of 3/31/2014

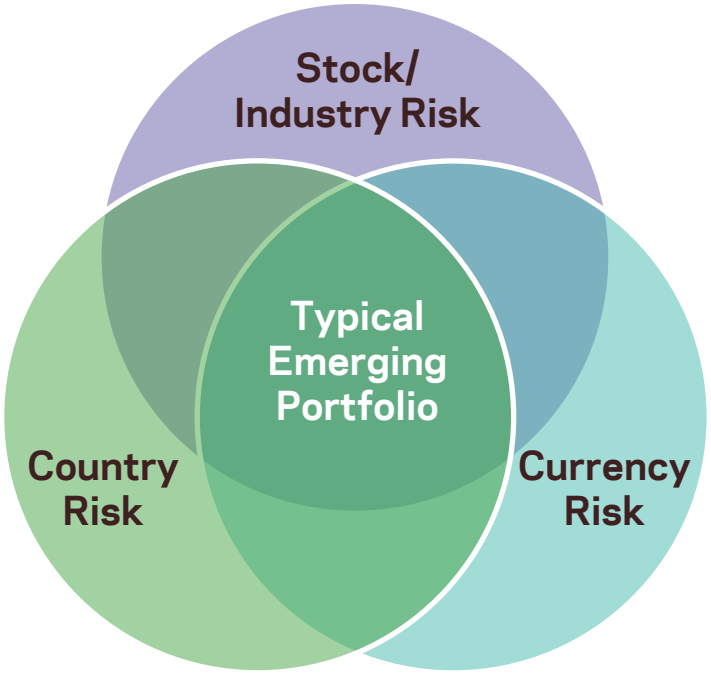
Investment Philosophy

Our Investment Approach

Risk-managed, Multistrategy Investment Approach

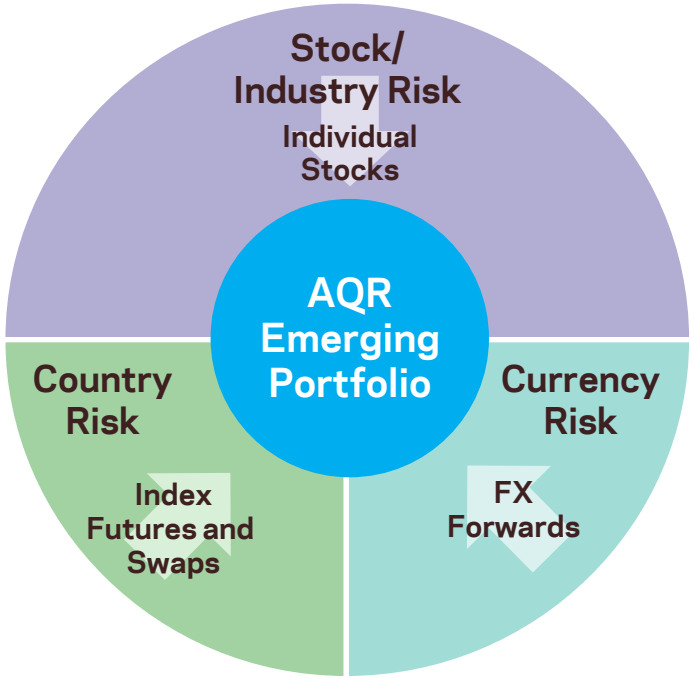
Typical Approach

Multiple risks
embedded in one instrument



AQR Approach

AQR seeks to separate these risks,
managing each proactively
to avoid unintended bets



Source: AQR. For illustrative purposes only. Please read important disclosures in the Appendix.

Multi-Strategy Approach

Strategy Diversification May Lead to Higher Risk-adjusted Portfolio Returns

Diversification Characteristics

Correlation of Monthly Contribution to Gross Excess Return*
June 2008–May 2014

	Stock	Country	Currency
Stock Selection	1.00		
Country Selection	0.27	1.00	
Currency Selection	0.04	-0.01	1.00

Portfolio Construction

Preservation of alpha from multiple sources

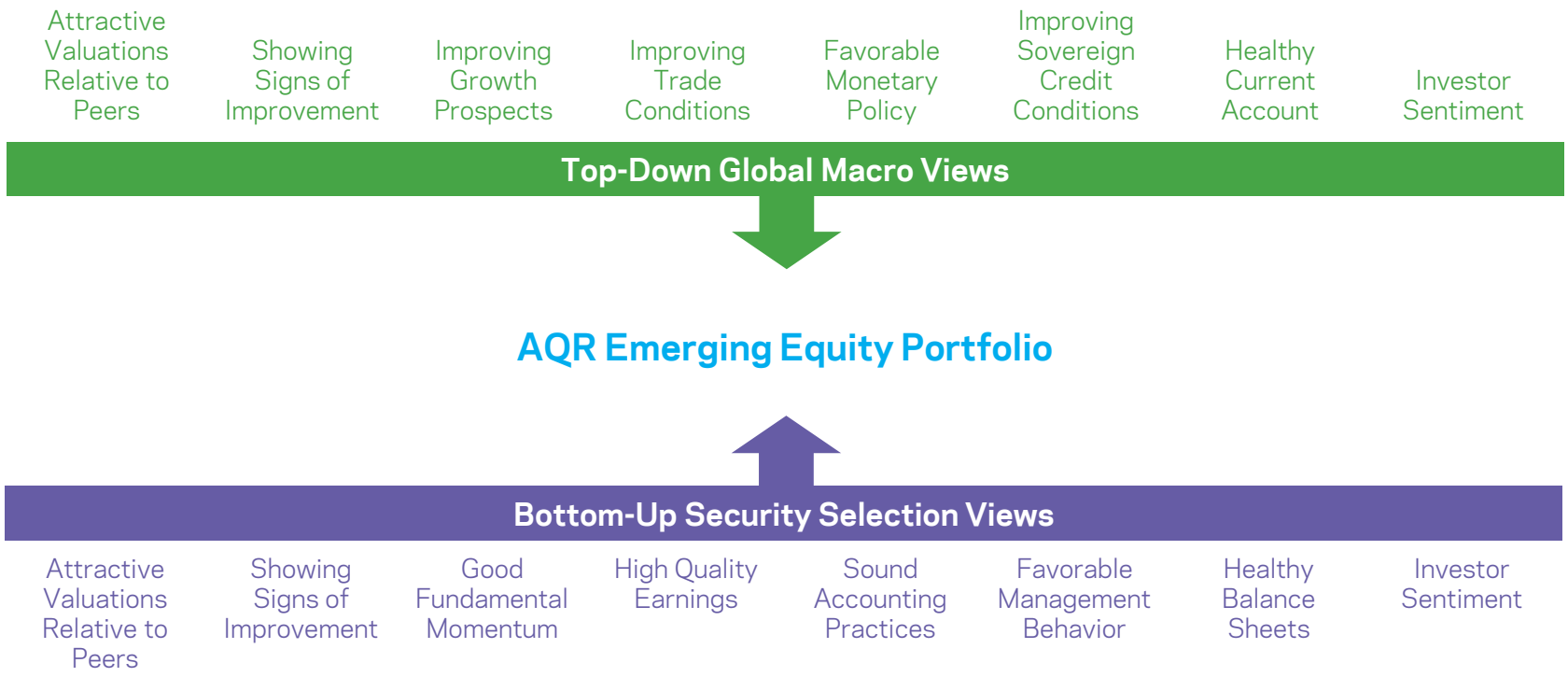
Clear investment process

Management of separate risks – minimize unintended bets

* Source: AQR. Excess returns are in excess of the benchmark: the MSCI Emerging Markets Index (Net Dividends). Represents our Emerging Equity Composite performance. The data presented herein is supplemental to the GIPS® compliant presentation for the Emerging Equity Composite included in the Appendix . Diversification does not eliminate the risk of experiencing investment losses. Please read important disclosures in the Appendix.

Our Investment Philosophy

We Believe Fundamentals Drive Asset Returns



Source: AQR. Investment process is subject to change at any time. Please read important disclosures in the Appendix.

Investment Process

Two Hallmarks of Our Process

Systematic Application of Fundamental Investment Philosophy

Research

We believe fundamentals drive returns

Multi-asset class global research process

Regional nuances incorporated based on economic intuition

Implementation

Investment process that incorporates risk management at every stage

Proprietary, robust optimization techniques

Direct market access using proprietary algorithms

Source: AQR. Please read important disclosures in the Appendix.

AQR

Key Portfolio Characteristics

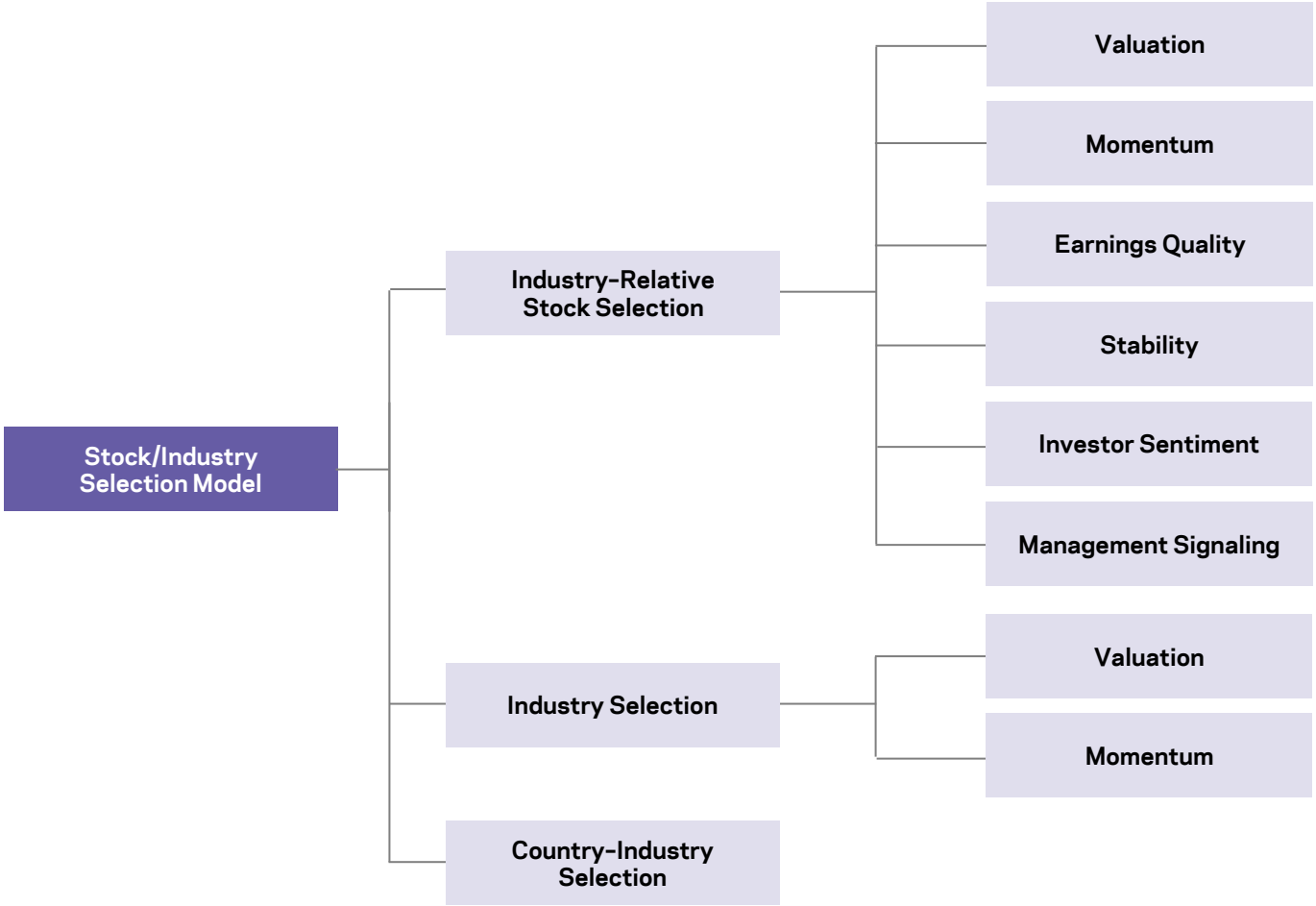
Diversified Portfolio That Seeks to Avoid Taking Unintended Risks*

	Stock/Industry Selection	Country Selection	Currency Selection
Target Risk Allocation	50%	25%	25%
Instruments Traded	Equities	Equity Index Futures, Equity Index Swaps	Currency Forwards
Universe	~800	14	18
Average Holdings	150 - 300	14	18
Typical Maximum Deviation	Stock: +/- 2.5% Industry: +/- 7%	+/- 10%	+/- 15%
Net Shorting Allowed	No	Optional	Optional

* Source: AQR. Characteristics and weights are subject to change at any time without notice. Deviations will vary by level of tracking error, benchmark and/or other investment guidelines. There is no guarantee, express or implied, that risk targets will be achieved. The above is for a 4% tracking error account benchmarked against the MSCI Emerging (Net Dividends) Index. Please read important disclosures in the Appendix.

AQR

Stock/Industry Selection



Source AQR. The investment process above is for illustrative purposes and is subject to change without **notice.** Please read important disclosures in the Appendix.

Stock/Industry Selection: Investment Process

Evaluating a Stock: South Korean Construction Sector

- The below example shows values and ranks (percentiles) based on ***a small subset*** of our signals:

Industry-Relative Stock Selection

	Data Value	Percentile
Valuation: Price / Earnings (ex cash)	5.1x	93%
Momentum: Price Change Last 12 Months*	-18.4%	31%
Earnings Quality: Change in Accounts Receivable	-7.4%	81%
Stability: 3-year Return on Equity	9%	50%
Investor Sentiment: Change in % of Shares Shorted	0.6%	31%
Management Signaling: % Change in Shares Outstanding	0.0%	81%
Percentile of Stock A vs. EMG Construction		94%

Percentile of Stock A vs. EMG 97.7%

Stock A
Active Weight:
82bps

Weight in Portfolio: ***87bps***
Weight in Benchmark: ***5bps***

Industry Selection

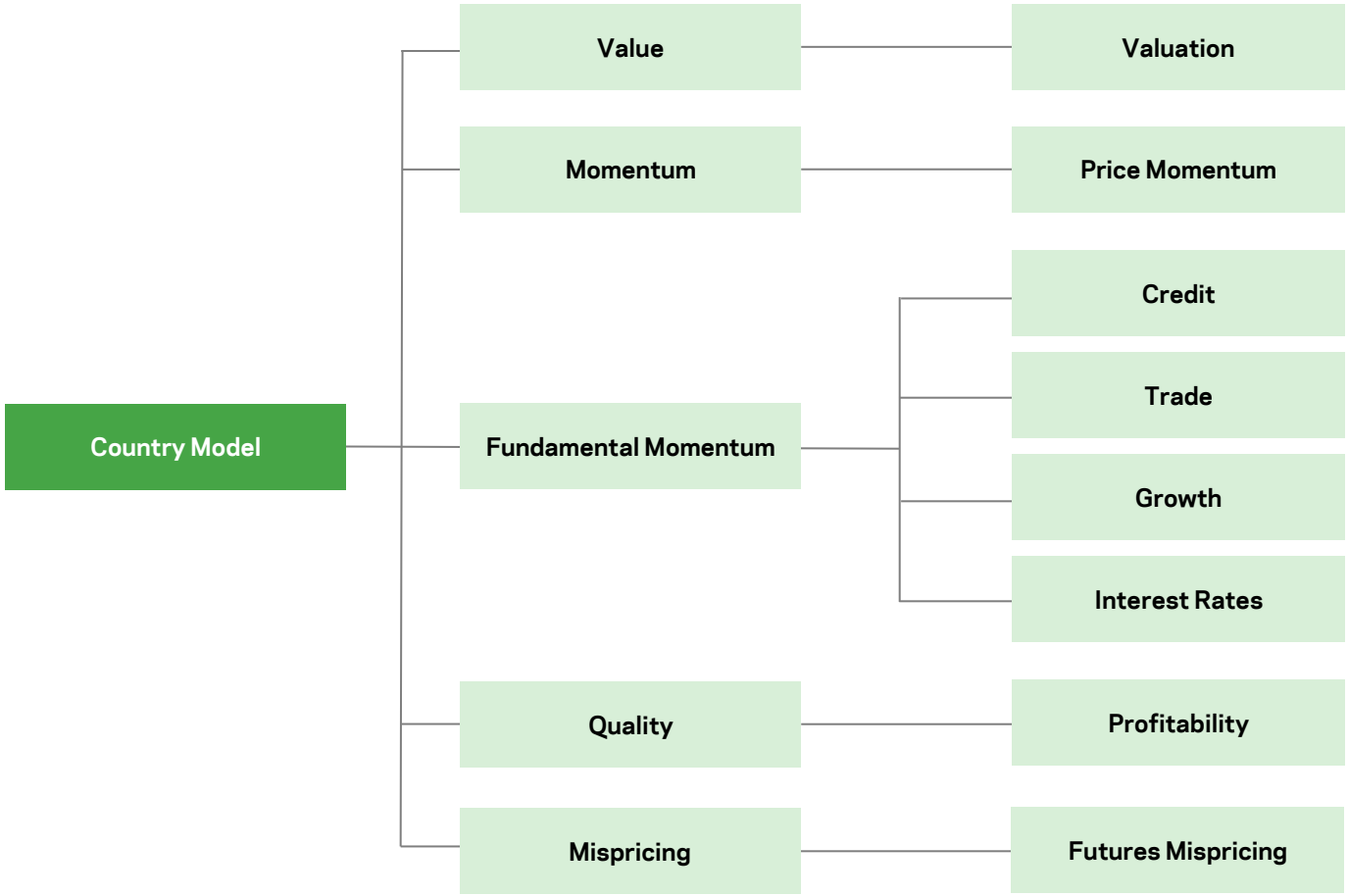
	Data Value	Percentile
Industry Valuation 5 Year Price Change	-2%	85%
Industry Momentum Industry Price Change Last 12 Mo.	1.1%	35%
Percentile of EMG Construction vs. EMG		69%

Country-Industry Pair Selection

	Data Value	Percentile
Country Industry Momentum Price Change Last 12 Months*	-20.5%	17%
Percentile of Korean Constr. vs. EMG Constr.		17%

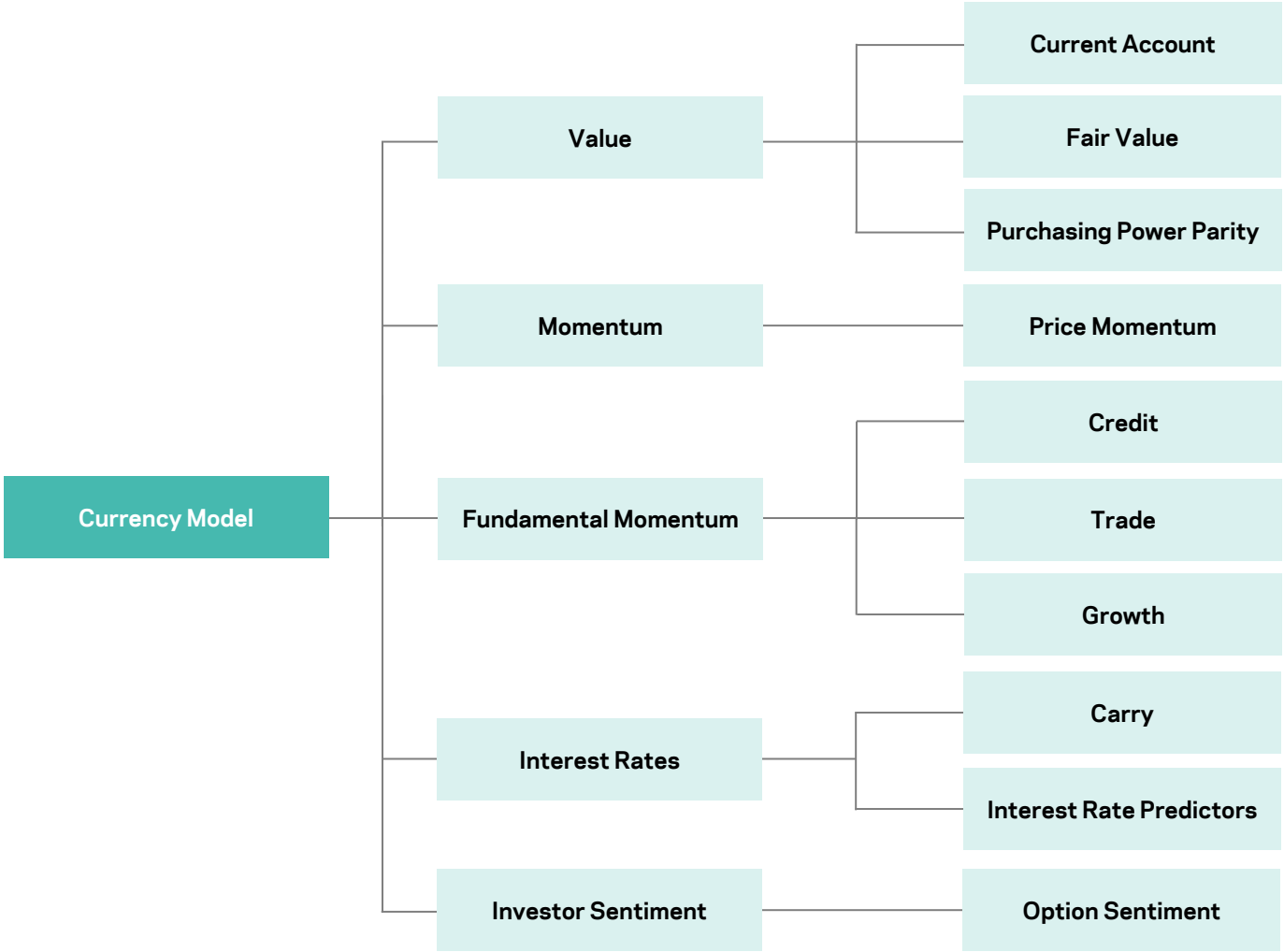
* Does not include most recent month's return.
The elements of AQR's investment process presented herein do not indicate the possibility of profits or losses within a portfolio and are subject to change at any time. These representative security signals were randomly selected merely to illustrate our investment process. Past performance is not an indication of future performance.

Country Selection



Source AQR. The investment process above is for illustrative purposes and is subject to change without **notice.** Please read important disclosures in the Appendix.

Currency Selection



Source AQR. The investment process above is for illustrative purposes and is subject to change without **notice.** Please read important disclosures in the Appendix.

Implementation

Proprietary Trading and Risk Management May Enhance Portfolio Returns

Trading

- Extensive electronic trading systems utilizing algorithms built in-house
  - Lower commissions costs, lower impact costs, better risk management
  - Synchronize the speed of execution to the speed of our alpha decay
- Trading costs model incorporated in optimizations
- Actively minimizing custodial ticket charges
- Extensive utilization of depository receipts

Risk Management

- Systematic monitoring and management of risk with oversight by senior portfolio management team
- Portfolio construction and optimization
  - Target tracking error using distinct equity, country and currency risk models
  - Optimization constraints include:
    - Position limits on country, industry and sector as well as stock
    - Portfolio dollar and beta exposures
    - Portfolio style exposures

Investment process subject to change at any time. Please read important disclosures in the Appendix.

AQR

Since Inception Performance

Performance Since Inception

AQR Emerging Equities Composite Performance*

As of May 31, 2014

	AQR Gross Composite Return	MSCI EM (Net)	Excess Return	Contributions to Excess Returns		
				Stock	Country	Currency
2008 (Starting 6/1/2008)	-53.6%	-52.4%	-1.2%	-1.4%	1.8%	-1.6%
2009	90.6%	78.5%	12.1%	7.5%	2.1%	2.5%
2010	23.1%	18.9%	4.2%	3.0%	2.0%	-0.8%
2011	-16.6%	-18.4%	1.8%	1.9%	1.1%	-1.2%
2012	22.6%	18.2%	4.4%	1.9%	0.0%	2.5%
2013	2.7%	-2.6%	5.3%	2.1%	0.5%	2.7%
2014 YTD	3.1%	3.4%	-0.3%	0.4%	-1.0%	0.4%
Summary						
1 Year	7.5%	4.3%	3.2%	1.0%	-0.4%	2.7%
3 Year	0.6%	-1.8%	2.4%	1.6%	-0.4%	1.2%
5 Year	12.2%	8.4%	3.9%	2.4%	0.8%	0.7%
Since Inception (Annl)	2.8%	-0.3%	3.1%	1.8%	0.8%	0.5%
Tracking Error			**4.0%**	**2.1%**	**2.0%**	**2.2%**
Information Ratio**			**0.8**	**0.8**	**0.4**	**0.2**

*Source: AQR. Gross composite returns of the Emerging Equities Composite. Performance for the month ending 5/31/14 is a preliminary estimate and subject to change. Please see the Appendix for important risk and performance disclosures. Excess Returns are in excess to the benchmark. Benchmark: MSCI Emerging Markets Index (Net dividends). The data presented herein is supplemental to the GIPS® compliant presentation for the Emerging Equity Composite included in the Appendix. Past performance is not a guarantee of future performance. Please read important disclosures in the Appendix.
**Information Ratio is calculated as the Annualized Excess Return of the Fund divided by its Tracking Error.

Portfolio Characteristics

Equity Exposure as of May 31, 2014

Portfolio Statistics
Stock Selection Portfolio

	Emerging Rep Acc.	MSCI Emerging
Number of Stocks	276	823
Average Market Cap ($M)	48,242	47,202
Median Market Cap ($M)	7,120	5,691
P/E (trailing)	11.0	12.1
P/E (forcast)	9.8	10.7
P/B	1.4	1.5
Sales/EV	0.8	0.6
12 Month Return	16.0%	11.1%

Sector Exposure
Stock Selection Portfolio

	Emerging Rep Acc.	MSCI Emerging	Active Weight
Consumer Discretionary	9.6%	9.0%	0.6%
Consumer Staples	4.9%	8.4%	-3.5%
Energy	10.2%	10.8%	-0.6%
Financials	22.7%	26.9%	-4.2%
Health Care	2.3%	1.7%	0.6%
Industrials	6.9%	6.5%	0.4%
Information Technology	21.1%	17.2%	3.9%
Materials	6.8%	8.9%	-2.1%
Telecommunication Services	9.6%	7.0%	2.5%
Utilities	5.8%	3.5%	2.3%
Total	**100.0%**	**100.0%**	**0.0%**

Portfolio characteristics provided for a representative account. Sources: AQR, Compustat, Datastream, Bloomberg, Worldscope and IBES. Characteristics are from the representative account with unique tracking error and account guidelines and may not be fully representative of other Emerging Equity portfolios AQR may manage. Data includes the stock selection portfolio only – country and currency overlays are not included. Average P/E ratios of the stocks in the portfolios exclude individual stock price-to-earnings ratios that are negative and the top and bottom 1 percentile of the remaining. Average P/B ratios of the stocks in the portfolios exclude individual stock price-to-book ratios that are negative and the top and bottom 1 percentile of the remaining. Average Sales/EV ratios of the portfolios exclude individual stocks that have sales-to-enterprise values that are negative and the top and bottom 1 percentile of the remaining. Portfolio holdings are subject to change. Benchmark: MSCI Emerging Markets Index (Net).

Portfolio Characteristics

Country Exposure as of May 31, 2014*

Region	Country	AQR Notional Stocks	AQR Notional Futures/Swaps	AQR Notional Total	Benchmark	AQR - Benchmark
Pacific Rim	China	18.1%	3.7%	21.9%	18.4%	3.5%
	Indonesia	3.1%	0.0%	3.1%	2.6%	0.4%
	India	4.2%	-3.2%	1.0%	6.9%	-6.0%
	South Korea	16.6%	-4.4%	12.2%	16.1%	-3.9%
	Malaysia	4.0%	0.8%	4.8%	3.8%	1.0%
	Philippines	0.0%	0.0%	0.0%	1.0%	-1.0%
	Singapore	0.0%	-1.1%	-1.1%	0.0%	-1.1%
	Thailand	2.4%	-0.9%	1.5%	2.1%	-0.6%
	Taiwan	12.5%	2.4%	14.8%	12.0%	2.8%
EMEA	Czech Republic	0.0%	0.0%	0.0%	0.2%	-0.2%
	Egypt	0.0%	0.0%	0.0%	0.2%	-0.2%
	Greece	0.0%	0.0%	0.0%	0.6%	-0.6%
	Hungary	0.1%	0.0%	0.1%	0.2%	-0.1%
	Israel	0.0%	1.0%	1.0%	0.0%	1.0%
	Poland	2.1%	0.1%	2.2%	1.7%	0.5%
	Russia	5.5%	4.1%	9.6%	5.4%	4.2%
	Turkey	2.1%	-0.9%	1.2%	1.8%	-0.5%
	South Africa	6.1%	2.1%	8.2%	7.8%	0.4%
LATAM	Brazil	6.3%	5.4%	11.6%	11.0%	0.7%
	Chile	1.6%	0.0%	1.6%	1.6%	0.1%
	Colombia	0.0%	0.0%	0.0%	1.1%	-1.1%
	Mexico	5.4%	-1.6%	3.8%	5.1%	-1.3%
	Peru	0.4%	0.0%	0.4%	0.4%	0.0%
	Total	**90.5%**	**7.5%**	**98.0%**	**100.0%**	**-2.0%**

* Portfolio characteristics are provided for a representative account. Exposure weights are subject to change at any time without notice. Actual portfolio weights will vary from model weights. Benchmark: MSCI Emerging Markets Index (Net).

Portfolio Characteristics

Currency Exposure as of May 31, 2014*

Region	Currency	AQR Notional Stocks	AQR Notional Forwards & Spot	AQR Notional Total	Benchmark	AQR - Benchmark
Pacific Rim	China	18.1%	0.2%	18.3%	18.4%	-0.1%
	Indonesia	3.1%	1.3%	4.4%	2.6%	1.7%
	India	4.2%	10.1%	14.3%	6.9%	7.4%
	South Korea	16.6%	3.2%	19.8%	16.1%	3.7%
	Malaysia	4.0%	2.2%	6.2%	3.8%	2.4%
	Philippines	0.0%	-3.2%	-3.2%	1.0%	-4.2%
	Singapore	0.0%	-14.0%	-14.0%	0.0%	-14.0%
	Thailand	2.4%	-0.2%	2.1%	2.1%	0.0%
	Taiwan	12.5%	-0.9%	11.6%	12.0%	-0.4%
EMEA	Czech Republic	0.0%	0.5%	0.5%	0.2%	0.3%
	Egypt	0.0%	0.0%	0.0%	0.2%	-0.2%
	European Union	0.0%	0.0%	0.0%	0.6%	-0.6%
	Hungary	0.1%	5.9%	6.0%	0.2%	5.8%
	Israel	0.0%	-3.5%	-3.5%	0.0%	-3.5%
	Poland	2.1%	4.2%	6.3%	1.7%	4.6%
	Russia	5.5%	-4.1%	1.4%	5.4%	-4.0%
	Turkey	2.1%	8.7%	10.8%	1.8%	9.1%
	South Africa	6.1%	2.8%	8.9%	7.8%	1.1%
LATAM	Brazil	6.3%	9.6%	15.9%	11.0%	5.0%
	Chile	1.6%	-9.3%	-7.7%	1.6%	-9.2%
	Colombia	0.0%	3.9%	3.9%	1.1%	2.8%
	Mexico	5.4%	-6.8%	-1.4%	5.1%	-6.5%
	Peru	0.4%	0.0%	0.4%	0.4%	0.0%
United States	United States	0.0%	-1.1%	-1.1%	0.0%	-1.1%
	Total	**90.5%**	**9.5%**	**100.0%**	**100.0%**	**0.0%**

* Portfolio characteristics are provided for a representative account. Exposure weights are subject to change at any time without notice. Actual portfolio weights will vary from model weights. Benchmark: MSCI Emerging Markets Index (Net).

Conclusion

Experience and Research

- Industry thought leaders widely published in top academic/professional journals
- Substantial expertise in all aspects of portfolio and risk management
- Commitment to transparency and knowledge-sharing

Philosophy and Process

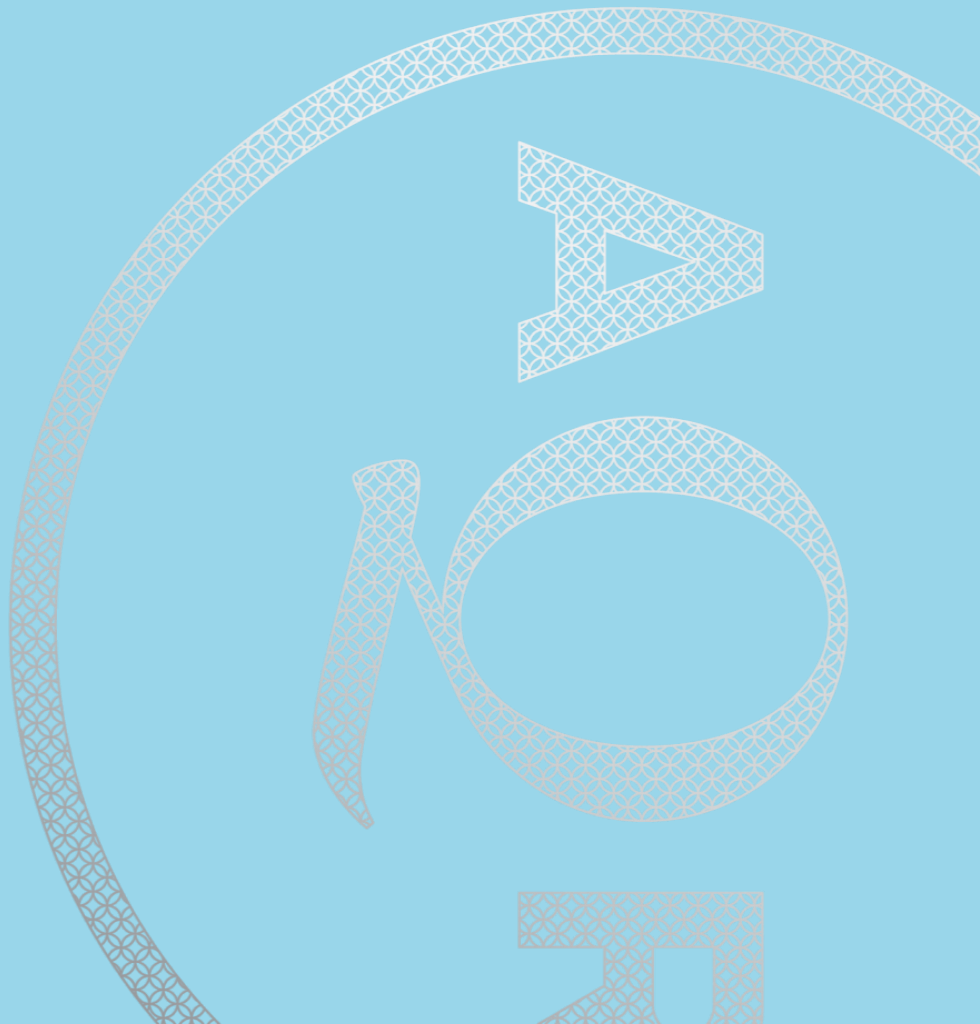
- Fundamentally grounded, systematic investment process
- Global, cross-asset class research yields unique insights
- Seek to deliver diversifying returns relative to other active managers

Implementation and Trading

- Robust process for portfolio optimization and rebalancing
- Direct-to-market, liquidity-providing execution capabilities, low transaction costs
- Implementation and risk management draw on experience from alternatives

AQR

Appendices



A1. Emerging Universe Coverage

Country	Benchmark Weight	Stock Selection	Country Selection	Currency Selection
China	18.6%	●	●	○
South Korea	16.1%	●	●	●
Taiwan	12.1%	●	●	●
Brazil	10.8%	●	●	●
South Africa	7.7%	●	●	●
India	7.0%	●	●	●
Russia	5.3%	●	●	●
Mexico	5.1%	●	●	●
Malaysia	3.8%	●	●	●
Indonesia	2.6%	●		●
Thailand	2.2%	●	●	○
Turkey	1.8%	●	●	●
Poland	1.7%	●	●	●
Chile	1.5%	●		●
Colombia	1.1%			●
Philippines	1.0%			●
Greece	0.6%			
Peru	0.4%	○		○
Czech Republic	0.3%			●
Hungary	0.2%	○		●
Egypt	0.2%			
Israel	0.0%		X	X
Singapore	0.0%		X	X
Total	**100.0%**	**96.9%**	**92.0%**	**99.2%**

● Traded for both benchmark exposure and active management ○ Traded only for benchmark exposure X Traded only for active management

Source: AQR. Data is as of May 31, 2014. We hold liquid depository receipts in place of locally-traded stocks in Peru and Russia. We implement stock selection in Chinese companies via Hong Kong listed stocks, which comprise the majority of MSCI Emerging Markets index constituents with country designation China. In China we trade the Hong Kong Dollar to track the benchmark. Portfolio exposures are subject to change at any time. Please read important disclosures in the Appendix.

A2. Principal Biographies

Clifford S. Asness, Ph.D., *Managing and Founding Principal*
Cliff is a Founder, Managing Principal and Chief Investment Officer at AQR Capital Management. He is an active researcher and has authored articles on a variety of financial topics for many publications, including *The Journal of Portfolio Management*, *Financial Analysts Journal* and *The Journal of Finance*. He has received three Bernstein Fabozzi/Jacobs Levy Awards for best paper in *The Journal of Portfolio Management*, in 2004, 2005 and 2014. *Financial Analysts Journal* has twice awarded him the Graham and Dodd Award for the year's best paper, as well as a Graham and Dodd Excellence Award, the award for the best perspectives piece, and the Graham and Dodd Readers' Choice Award. In 2006, CFA Institute presented Cliff with the James R. Vertin Award, which is periodically given to individuals who have produced a body of research notable for its relevance and enduring value to investment professionals. Prior to cofounding AQR Capital Management, he was a Managing Director and Director of Quantitative Research for the Asset Management Division of Goldman, Sachs & Co. He is on the editorial board of *The Journal of Portfolio Management*, the governing board of the Courant Institute of Mathematical Finance at NYU, the Board of Directors of the Q-Group and the Board of the International Rescue Committee. Cliff received a B.S. in economics from the Wharton School and a B.S. in engineering from the Moore School of Electrical Engineering at the University of Pennsylvania, graduating *summa cum laude* in both. He received an M.B.A. with high honors and a Ph.D. in finance from the University of Chicago, where he was Eugene Fama's student and teaching assistant for two years (so he still feels guilty when trying to beat the market).

David G. Kabiller, CFA, *Founding Principal*
David is a Founder and the Head of Client Strategies at AQR, overseeing client relationships, business development and strategic initiatives. He initiated AQR's international growth and its introduction of mutual funds and reinsurance as well as the creation of the "AQR University" symposia series and the AQR Insight Award for outstanding innovation in applied academic research. David has co-authored papers on topics including derivatives, enhanced indexation, securities lending, insurance-linked securities, hedge funds and the secret of Warren Buffett's investing acumen. He is a member of Northwestern University's Board of Trustees and has been a guest lecturer at the Kellogg Graduate School of Management and Harvard Business School. He also is a member of the Board of Trustees for the Terra Foundation for American Art. Prior to AQR, he was a vice president at Goldman, Sachs & Co., where he established and maintained relationships with the chief investment officers of many of the largest pension and endowment funds in North America. He earned a B.A. in economics and an M.B.A. from Northwestern, where he received an athletic scholarship to play tennis and was named to the Big Ten's Academic All-Conference team.

John M. Liew, Ph.D., *Founding Principal*
John, a Founder and the head of the Global Asset Allocation team at of AQR, overseeing the research, portfolio management and trading associated with that strategy. Prior to AQR, he worked at Goldman, Sachs & Co. as a portfolio manager in the Asset Management Division where he developed and managed quantitative trading strategies. He began his career at Trout Trading, developing quantitative market-neutral stock-selection strategies. John has published articles in *The Journal of Portfolio Management* and *Financial Analysts Journal*, and has received the Bernstein Fabozzi/Jacobs Levy award and the Graham and Dodd award for his articles. John is a member of the University of Chicago's Board of Trustees and sits on the university's investment committee. He earned a B.A. in economics, an M.B.A. and a Ph.D. in finance from Chicago.

A2. Principal Biographies

Gregor M. Andrade, Ph.D., *Principal*
Gregor is a senior member of AQR's Client Strategies team, overseeing client relations in the western half of the United States as well as all of Asia and the Middle East. He has been at AQR since 2003, a time of rapid growth in assets under management at the firm. Prior to AQR, Gregor was an assistant professor of finance at Harvard Business School after having worked as a mergers and acquisitions analyst at Wasserstein Perella. He has been published in academic journals and won a Smith Breeden Prize for an article in *The Journal of Finance*. Gregor earned a B.S. in economics from the Massachusetts Institute of Technology and a Ph.D. in finance from the University of Chicago's Graduate School of Business.

Bradley D. Asness, J.D., *Principal*
Brad is AQR's Chief Legal Officer, overseeing the firm's legal department as it deals with matters ranging from fund creation to corporate finance to new rules and regulations. Prior to AQR, which he joined at its inception in 1998, Brad worked at Donaldson, Lufkin & Jenrette on public and private debt and equity offerings, asset sales and merger and acquisition transactions for real estate investment trusts and home-building companies. Brad earned a B.A. from Brandeis University, a J.D. from New York Law School, where he was a member of the law review, and an M.B.A. with distinction from New York University's Stern School of Business. He is a member of the New York State Bar.

Jeffrey Dunn, *Principal*
Jeff heads AQR's Australasian business, focused on building the firm's presence in the region. Prior to AQR, Jeff was the research manager for the international equity division at QIC, one of Australia's largest institutional investment managers, where he was responsible for researching external asset management firms and developing portfolio and risk management infrastructure. While at QIC, Jeff also worked in a secondment role with the quantitative strategies group at Goldman Sachs Asset Management in New York. Jeff earned a B.Sc. (mathematics) and a B.Bus. (banking and finance) from the Queensland University of Technology.

Andrea Frazzini, Ph.D., Principal
Andrea is a senior member of AQR's Global Stock Selection team, focusing on research and portfolio management of the Firm's Long/Short and Long-Only equity strategies. He has published in top academic journals and won several awards for his research, including Bernstein Fabozzi/Jacobs Levy Award, the Smith Breeden award, the Fama-DFA award, the BGI best paper award and the PanAgora Crowell Memorial Prize. Prior to AQR, Andrea was an associate professor of finance at the University of Chicago's Graduate School of Business and a Research Associate at the National Bureau of Economic Research. He also served as a consultant for DKR Capital Partners and JPMorgan Securities. He earned a B.S. in economics from the University of Rome III, an M.S. in economics from the London School of Economics and a Ph.D. in economics from Yale University.

Jacques A. Friedman, *Principal*
Jacques is the head of AQR's Global Stock Selection team and is involved in all aspects of research, portfolio management and strategy development for the firm's equity products and strategies. Prior to AQR, he developed quantitative stock-selection strategies for the Asset Management division of Goldman, Sachs & Co. Jacques earned a B.S. in applied mathematics from Brown University and an M.S. in applied mathematics from the University of Washington. Before joining Goldman, he was pursuing a Ph.D. in applied mathematics at Washington, where his research interests ranged from mathematical physics to quantitative methods for sports handicapping.

A2. Principal Biographies

Jeremy M. Getson, CFA, *Principal*
Jeremy is a senior member of AQR's Client Strategies team, working with and advising clients in the eastern half of the United States and all of Canada. Prior to AQR, he was a vice president of Allstate Financial and a consultant with Mercer Investment Consulting, advising pension plans on asset allocation and investment-manager selection. Jeremy earned an A.B. in politics from Princeton University, graduating *cum laude*, and an M.B.A. with high honors from the University of Chicago's Graduate School of Business, where he was named a Siebel Scholar as one of the top 25 M.B.A. students annually.

Marco Hanig, Ph.D., *Principal*
Marco is President of AQR Funds, leading the firm's entry into the mutual funds business. In this role, he is responsible for oversight of AQR's mutual funds and executing the firm's distribution strategy. Prior to joining AQR, Marco was a principal with William Blair & Company, where he served as President of the William Blair Funds and Chief Operating Officer of the Investment Management Department. Before that, he worked at First Chicago Corporation as Managing Director, Mutual Funds. He began his career as a management consultant with Bain & Company. Marco earned a B.A. in mathematics from the University of Chicago, graduating *cum laude*, and a Ph.D. in economics from the Massachusetts Institute of Technology.

John B. Howard, CPA, *Principal*
John is AQR's Chief Operating Officer and Chief Financial Officer. In those roles, he oversees much of the firm's infrastructure functions. Earlier in his career, John was Chief Financial Officer of the global asset management firm AllianceBernstein and before that he held various senior financial positions at Knight Capital Group, including group controller and chief financial officer of Knight Equity Markets International Ltd. based in London; he ultimately was CFO of the entire firm. John began his career at Price Waterhouse, rising to become a senior manager in the securities industry practice. He earned a B.S. in accounting from Lehigh University and is a Certified Public Accountant.

Brian K. Hurst, *Principal*
Brian is a portfolio manager for two of AQR's macro strategies: managed futures and risk parity. He has more than 15 years of experience managing money for institutional investors in both traditional and alternative investment strategies, and has been at AQR since its founding. He was named the 2013 Alternatives Fund Manager of the Year by Morningstar for his work on managed futures. Before AQR, Brian was an original member of the quantitative research group in the Asset Management division of Goldman, Sachs & Co. He began his career as a sell-side investment banking analyst at Donaldson, Lufkin & Jenrette. Brian earned a B.S. in economics from the Wharton School of the University of Pennsylvania.

Antti Ilmanen, Ph.D., Principal
Antti manages AQR's Portfolio Solutions Group, which advises institutional investors and sovereign wealth funds, and develops the firm's broad investment ideas. Before AQR, Antti spent seven years as a senior portfolio manager at Brevan Howard, a macro hedge fund, and a decade in a variety of roles at Salomon Brothers/Citigroup. He began his career as a central bank portfolio manager in Finland. Antti earned M.Sc. degrees in economics and law from the University of Helsinki and a Ph.D. in finance from the University of Chicago. Over the years, he has advised many institutional investors, including Norway's Government Pension Fund Global and the Government of Singapore Investment Corporation. Antti has published extensively in finance and investment journals and has received a Graham and Dodd award and Bernstein Fabozzi/Jacobs Levy awards for his articles. His book Expected Returns (Wiley, 2011) is a broad synthesis of the central issue in investing. Antti recently scored a rare double in winning the best-paper and runner-up award for best articles published in 2012 in The Journal of Portfolio Management (co-authored articles "The Death of Diversification Has Been Greatly Exaggerated" and "The Norway Model").

A2. Principal Biographies

Ronen Israel, *Principal*
Ronen's primary focus is on portfolio management and research. He was instrumental in helping to build AQR's Global Stock Selection group and its initial algorithmic trading capabilities, and he now also runs the Global Alternative Premia group, which employs various investing styles across asset classes. He has published in *The Journal of Financial Economics* and elsewhere, and sits on the executive board of the University of Pennsylvania's Jerome Fisher Program in Management and Technology. He has been a guest speaker at Harvard University, Columbia University and New York University, and is a frequent conference speaker. Prior to AQR, Ronen was a senior analyst at Quantitative Financial Strategies Inc. He earned a B.S. in economics from the Wharton School at Penn, a B.A.S. in biomedical science from Penn's School of Engineering and Applied Science, and an M.A. in mathematics, specializing in mathematical finance, from Columbia.

Michael Katz, Ph.D., Principal
Michael is a researcher and portfolio manager heading AQR's macro and fixed-income team as well as AQR's inflation-related strategies. Prior to AQR, he was a teaching fellow and research assistant at Harvard University, a teaching and research assistant at Tel Aviv University, and a consultant for Trigger Ltd. (now Trigger-Foresight Ltd.). He also served as an intelligence officer in the Israeli Defense Forces, achieving the rank of Major. His research on how long-term investors can use short-term information has been published in *Financial Analysts Journal*. Michael earned a B.A. in economics and Middle East history, with honors, at Tel Aviv University, and a Ph.D. and an A.M. in economics from Harvard University.

Oktay Kurbanov, *Principal*
Oktay is a key member of AQR's Global Asset Allocation group, where he runs the portfolio management team that applies the firm's strategies to each portfolio. He also oversees development of research and optimization software and works with other departments to streamline account management. Prior to joining AQR at its inception, Oktay was a quantitative analyst in the asset management division of Goldman, Sachs & Co. He earned a B.S. in physics and mathematics from the University of Michigan and an M.B.A. with concentration in finance and statistics from New York University's Stern School of Business.

Stephen J. Mellas, *Principal*
Steve oversees both firm-wide operations and client administration at AQR. Prior to joining the firm, Steve was a managing director at Goldman Sachs & Co., where he was responsible for the Investment Management Division's asset management operations worldwide. Before that, he managed fixed-income trading operations at Morgan Stanley. Steve was a founding member of the Securities Industry and Financial Markets Association's Asset Managers Forum and currently teaches management-communications courses at New York University's Stern School of Business and Stanford University's Graduate School of Business. Steve earned a B.A. in economics from Villanova University and an M.B.A. from Pace University.

Michael A. Mendelson, *Principal*
Michael is portfolio manager of AQR's risk parity strategies and a member of both the firm's strategic planning and risk committees. Prior to AQR, Michael was a Managing Director at Goldman Sachs & Co., where he founded the quantitative trading group. He is a member of the Managed Funds Association's board of directors and chairman of its Trading and Markets Committee. Michael earned an S.B. in mathematics, an S.B. in management, an S.B. in chemical engineering and an S.M. in chemical engineering, all from the Massachusetts Institute of Technology, and an M.B.A. from the University of California at Los Angeles.

A2. Principal Biographies

Lars N. Nielsen, *Principal*
Lars oversees research in AQR's Global Stock Selection and Global Asset Allocation teams, and is a part of the portfolio management teams for a number of AQR's multistrategy hedge funds as well as long-only equity portfolios. Prior to AQR, Lars was a visiting graduate student at Cornell University, where his research interests were finance and econometrics. Before that, he was a quantitative equity analyst at Danske Invest, the largest asset-management firm in Denmark. Lars earned a B.Sc. and an M.Sc. in economics from the University of Copenhagen.

Yao Hua Ooi, *Principal*
Yao Hua is a Principal on AQR's Global Asset Allocation team, focusing on research and portfolio management of macro-related strategies that include commodities, risk parity and managed futures. His research has been published in the *Journal of Financial Economics* and the *Journal of Investment Management*. He was named the 2013 Alternatives Fund Manager of the Year by Morningstar for his work on managed futures, and shared the 2013 Whitebox Prize for his work on time series momentum. Yao Hua is an alumnus of the Jerome Fisher Program in Management and Technology at the University of Pennsylvania, where he earned a B.S. in economics and a B.S. in engineering, graduating *summa cum laude* in both.

Lasse H. Pedersen, Ph.D., *Principal*
Lasse is a Principal at AQR in the Global Asset Allocation team, leading research on proprietary quantitative forecasting models to identify opportunities in equities, fixed income, currencies and commodities. He is also the John A. Paulson Professor of Finance and Alternative Investments at New York University's Stern School of Business and a professor at Copenhagen Business School. He has served on the board of the American Finance Association, the Economic Advisory Boards of NASDAQ OMX and FTSE, and the Federal Reserve Bank of New York's Monetary Policy Panel. Lasse won the 2012 Bernácer Prize for the best European economist under 40. His research has been published in leading journals and cited by central bank governors. Lasse has served on the editorial boards of several journals, including *The Journal of Finance*, and was a research associate at the National Bureau of Economic Research and the Centre for Economic Policy Research. He earned a B.S. and an M.S. in mathematics-economics from the University of Copenhagen and a Ph.D. in finance from Stanford University.

A2. Principal Biographies

CNH Partners

CNH Partners is an affiliate of AQR

Mark L. Mitchell, Ph.D., *Co-Founder and Principal, CNH Partners*
Mark is a co-founder and principal at CNH Partners, the arbitrage affiliate of AQR that trades merger arbitrage, convertible arbitrage and other strategies related to corporate events. Prior to CNH, he was a finance professor at Harvard University and the University of Chicago. In the late 1980s, he worked in the Office of the Chief Economist at the Securities and Exchange Commission, where he wrote several research papers on mergers and acquisitions. Mark publishes frequently and has won four paper-of-the-year awards from research journals: a Smith Breeden Prize, a Merton Miller Prize, a Graham and Dodd Scroll and a Roger F. Murray Prize. Mark also received five teaching awards at the University of Chicago. He joined the board of directors at TD-Ameritrade in 1996 and currently chairs the risk committee. Mark earned a B.B.A. in economics from the University of Louisiana at Monroe, and an M.A. in economics and a Ph.D. in applied economics from Clemson University.

Todd C. Pulvino, Ph.D., *Co-Founder and Principal, CNH Partners*
Todd is a co-founder and principal at CNH Partners, the arbitrage affiliate of AQR that trades merger arbitrage, convertible arbitrage and other strategies related to corporate events. Prior to CNH, Todd was a tenured associate professor of finance at Northwestern University's Kellogg School of Management, where his research focused on the risks and returns in event arbitrage. Earlier, he was a consultant at two fund-of-fund firms, Collins Associates and Grosvenor Capital Management, and a visiting professor at Harvard Business School. He began his career as an aerospace engineer. He has published in finance journals, winning two Smith Breeden awards for his research, and teaches at the Kellogg School. Todd earned a B.Sc. in mechanical engineering from the University of Wisconsin-Madison, an M.S. in the same field at the California Institute of Technology, and an A.M. and a Ph.D. in business economics from Harvard University.

Rocky Bryant, *Principal, CNH Partners*
Rocky heads the event-driven desk at CNH Partners, the arbitrage affiliate of AQR. His team invests in opportunities created by corporate actions like mergers and other market events. He developed a database of convertible bonds issued since 1984 and maintains CNH's legacy merger arbitrage data going back to 1963, and he has used those tools to help develop several new strategies. Prior to CNH, Rocky was a research associate at Harvard Business School, where he worked with finance professors Erik Stafford and Lisa Meulbroek. He earned a B.S. in computer science and electrical engineering from the Massachusetts Institute of Technology.

Kevin M. Wood, *Principal, CNH Partners*
Kevin heads the front office risk management and portfolio management systems and tools group at CNH Partners, the arbitrage affiliate of AQR. He created CNH's proprietary portfolio and risk management tools. Prior to CNH, Kevin was a research associate at Harvard Business School where he designed financial market simulation software with finance professors Erik Stafford and Joshua Coval. He began his career as a software engineer at Teradyne Inc. Kevin earned a B.S. in computer science from Cornell University.

A3. Selected AQR Papers

Aghassi, M., D. Bertsimas, and G. Perakis, *Solving Asymmetric Variational Inequalities via Convex Optimization*, Operations Research Letters, 2005.
Aghassi, M., D. Bertsimas, *Robust Game Theory*, Mathematical Programming, Series B, Special Issue on Robust Optimization 2005.
Aghassi, M., D. Bertsimas, and G. Perakis, *Robust Transportation Network Design*, Working Paper Operations Research Center MIT, 2005.
Aghassi, Michele, Cliff Asness, Oktay Kurbanov, and Lars N. Nielsen. *Avoiding Unintended Country Bets in Global Equity Portfolios*, 2011.
Aghassi, M., *Robust Optimization, Game Theory, and Variational Inequalities*, Operations Research Center MIT, 2005.
Andrade, Gregor, *Do Appearances Matter? The Impact of EPS Accretion and Dilution on Stock Prices*, Harvard Business School Working Paper Series, No. 00-007, 1999.
Andrade, Gregor M., Stuart C. Gilson, and Todd C. Pulvino, *Seagate Technology Buyout*, Harvard Business School Case 201-063.
Andrade, Gregor, and Steven Kaplan, *How Costly is Financial (Not Economic) Distress? Evidence from Highly Leveraged Transactions That Became Distressed*, Journal of Finance (October 1998), Smith-Breeden First Prize Award, 1998.
Andrade, Gregor, Mark Mitchell and Erik Stafford, 2001, *New Evidence and Perspectives on Mergers*, Journal of Economic Perspectives.
Andrade, Gregor, and Erik Stafford, *Investigating the Economic Role of Mergers*, Harvard Business School Working Paper Series, No. 00-006, 1999.
Andrade, Gregor M., and Peter Tufano, *Free Cash Flow Valuation Methods: Weighted Average Cost of Capital (WACC) and Adjusted Present Value (APV)*, Harvard Business School Case 201-094.
Arnott, Robert D. and Cliff Asness, *Surprise! Higher Dividends = Higher Earnings Growth*, Financial Analysts Journal, Jan/Feb 2003, AIMR Graham and Dodd Award.
Asness, Cliff, *Momentum in Japan: The Exception that Proves the Rule*, The Journal of Portfolio Management, Forthcoming.
Asness, Cliff, *Changing Equity Risk Premia and Changing Betas over the Business Cycle and January*, University of Chicago, 1992.
Asness, Cliff, *Negative Expected Equity Returns and the Business Cycle*, University of Chicago, 1992.
Asness, Cliff, *The Term Structure of Expected Equity Returns and the Business Cycle*, University of Chicago, 1992.
Asness, Cliff, *OAS Models, Expected Returns, and a Steep Yield Curve*, Journal of Portfolio Management, Summer, 1993.
Asness, Cliff, *Fundamental Differences Between Agency and Non-agency Mortgage-backed Securities*, Whole Loan CMOs, eds. Frank Fabozzi, et al., 1995.
Asness, Cliff, *The Power of Past Stock Returns to Explain Future Stock Returns*, Goldman Sachs Asset Management, 1995.
Asness, Cliff, *Global Tactical Asset Allocation*, Goldman Sachs Pension and Endowment Forum, September, 1996.
Asness, Cliff, *One Reason not to Avoid Market Timing*, AQR Capital Management working paper, 1996.
Asness, Cliff, *Why not 100% Equities*, Journal of Portfolio Management, Winter, 1996.
Asness, Cliff, *The Interaction Between Value and Momentum Strategies*, Financial Analysts Journal, March/April, 1997.
Asness, Cliff, *Market-neutral Investing: Putting the 'Hedge' in 'Hedge Funds*, AQR Capital Management working paper, 1998.
Asness, Cliff, *Bubble Logic: Or, How to Learn to Stop Worrying and Love the Bull*, AQR Capital Management working paper, 2001.
Asness, Cliff, *Stocks vs. Bonds: Explaining the Equity Risk Premium*, Financial Analysts Journal, March/April, AIMR Graham and Dodd Excellence Award, 2000.
Asness, Cliff, *Fight the Fed Model*, Journal of Portfolio Management, Fall, 2003.
Asness, Cliff, *An Alternative Future. An Exploration of the Role of Hedge Funds*, Journal of Portfolio Management 30th Anniversary Issue, 2004.
Asness, Cliff, *An Alternative Future: Part II. An Exploration of the Role of Hedge Funds*, Journal of Portfolio Management, Fall 2004.
Asness, Cliff, *Stock Options and the Lying Liars Who Don't Want to Expense Them*, Financial Analysts Journal, July/August 2004
Asness, Cliff, *Rubble Logic: What Did We Learn from the Great Stock Market Bubble?*, Financial Analysts Journal, November/December 2005
Asness, Cliff, Frazzini Andrea, and Pedersen, Lasse, *Leverage Aversion and Risk Parity*, 2011.
Asness, Cliff, and Jonathon Beinner, *Forward rates and CMO portfolio management*, CMO Portfolio Management, ed. Frank Fabozzi, 1994
Asness, Cliff, Jacques Friedman, Robert Krail and John Liew, *Style Timing: Value vs. Growth, Journal of Portfolio Management*, Spring, 2000.
Asness, Cliff, Robert Krail and John Liew, *Do Hedge Funds Hedge?*, Journal of Portfolio Management, Fall 2001, Journal of Portfolio Management Best Paper Award.
Asness, Cliff, John Liew and Ross Stevens, *Parallels Between the Cross-sectional Predictability of Stock and Country Returns*, Journal of Portfolio Management, 1997.
Asness, Clifford S., Tobias Moskowitz, and Lasse H. Pedersen, *Value and Momentum Everywhere*, 2009.
Asness, Cliff, R. Burt Porter and Ross Stevens, *Predicting Stock Returns Using Industry-Relative Firm Characteristics*, On Review with the Journal of Finance, 2000.
Asness, Cliff, and Michael Smirlock, *Valuation of PAC bonds without complex models*, CMO Portfolio Management, ed. Frank Fabozzi, 1994.
Berger, Adam, *Loosening the Long-Only Leash: Relaxed Constraints Offer a Practical Alternative to Portable Alpha*, AQR Capital Management working paper, 2008.

A3. Selected AQR Papers

Berger, Israel, and McLennan, *Building a Better Alternatives Portfolio: The AQR Multi-Strategy Approach*, AQR Capital Management, 2011
Berger, Nielson, and Villalon, *Chasing Your Own Tail (Risk): Five Alternatives to the High Cost of Tail-Hedging*, AQR Capital Management, 2011
Carhart, Mark, Robert Krail, Ross Stevens and Kelly Welch, *Testing the Conditional CAPM*, University of Chicago, 1996.
Corrigan, Gerald, and David Kabiller, *Derivatives: Improved Asset Management or Risk Creation?*, Goldman Sachs Pension and Endowment Forum, 1994.
Diamonte, Robin, John Liew and Ross Stevens, *Political Risk in Emerging and Developed Markets*, Financial Analysts Journal, May/June, 1996.
Ehrlich, Alex, David Kabiller, Ken Miller, Kaysie Uniacke, *Securities Lending: Minimizing Risk, Maximizing Return*, Goldman Sachs Pension & Endowment Forum, 1996.
Frazzini, Andrea, and Lasse H. Pedersen. *Betting Against Beta*, 2010.
Hamada, Takehiro, and John Liew, *An Anomaly in the Topix-Nikkei Spread*, AQR Capital Management working paper, 2000.
Hurst, Johnson, and Ooi, *Understanding Risk Parity*, AQR Capital Management, 2011.
Hurst, Ooi, and Pedersen, *Understanding Managed Futures*, AQR Capital Management, 2011.
Israel, Ronen, and Tobias J. Moskowitz. *How Tax Efficient Are Equity Styles?*, 2011.
Israel, Ronen, and Tobias J. Moskowitz. *The Role of Shorting, Firm Size, and Time on Market Anomalies*, 2011.
Isrealov, and Katz, *To Trade or Not to Trade? Informed Trading with Short-Term Signals for Long-Term Investors*, Financial Analysts Journal, September/October 2011.
Jones, Bob, David Kabiller and Larry Kohn, *Enhanced Indexation*, Goldman Sachs Pension and Endowment Forum, 1995.
Kabiller, David, John O'Hara, Jacob Rosengarten and Blaine Tomlinson, *Hedge Funds Demystified: Their Potential Role in Institutional Portfolios*, Goldman Sachs Pension & Endowment Forum, July 1998 .
Kaplan, Steven, Mark Mitchell and Karen Wruck, *A Clinical Exploration of Value Creation and Destruction in Acquisitions: Organizational Design, Incentives, and Internal Capital Markets*, Mergers and Productivity, (National Bureau of Economic Research), 2000.
Kim, Hoon, *Dynamic Relation Between Stock Returns and Key Financial Ratios: A Variance Decomposition Approach*, Carnegie Mellon University, 2001.
Krail, Robert, *Bivariate GARCH Hedging*, University of Chicago, 1992.
Krail, Robert, *Global Momentum Strategies*, University of Chicago working paper, 1996.
Liew, John, *Stock Returns, Inflation, and Real Money Supply: Evidence from Emerging Markets*, University of Chicago, 1993.
Liew, John, *Stock Returns and the Real Money Supply*, University of Chicago, 1994.
Liew, John, *Global Return Variation*, University of Chicago, 1995.
Maloney, Michael, Mark Mitchell and Robert McCormick, *Managerial Decision Making and Capital Structure*, Journal of Business, April, 1993.
Meulbroek, Lisa, Mark Mitchell, Harold Mulherin, Jeffry Netter and Annette Poulsen, *Shark Repellents and Managerial Myopia: An Empirical Test*, Journal of Political Economy, October, 1990.
Mitchell, Mark, *The Value of Corporate Takeovers*, Financial Analysts Journal, Jan/Feb, Graham and Dodd Scroll Award, 1991.
Mitchell, Mark and Kenneth Lehn, *Do Bad Bidders Become Good Targets?*, Journal of Political Economy, April, 1990, Roger F. Murray Award, First Prize, 1989.
Mitchell, Mark and Michael Maloney, *Crisis in the Cockpit? The Role of Market Forces in Promoting Air Travel Safety*, Journal of Law and Economics, October, 1989.
Mitchell, Mark and Harold Mulherin, *The Stock Price Response to Pension Terminations and the Relation of Terminations with Corporate Takeovers*, Financial Management, 1989.
Mitchell, Mark and Harold Mulherin, *The Impact of Public Information on the Stock Market*, Journal of Finance, July, 1994.
Mitchell, Mark, and Harold Mulherin, *The Impact of Industry Shocks on Takeover and Restructuring Activity*, Journal of Financial Economics, June, 1996.
Mitchell, Mark and Jeffry Netter, *Stock Repurchases and Insider Transactions in the Wake of the October 1987 Stock Market Crash*, Financial Management,1989.
Mitchell, Mark and Jeffry Netter, *Triggering the 1987 Stock Market Crash: Antitakeover Provisions in the House Ways and Means Tax Bill?*, Journal of Financial Economics,1989.
Mitchell, Mark and Todd Pulvino, *Characteristics of Risk and Return in Risk Arbitrage*, Journal of Finance, December, 2001.
Mitchell, Mark, Todd Pulvino and Erik Stafford, *Limited Arbitrage in Equity Markets*, Journal of Finance, April, 2002, Smith-Breeden Award, First Prize 2002.
Mitchell, Mark, Todd Pulvino and Erik Stafford, *Price Pressure Around Mergers*, Journal of Finance, February, 2004.
Mitchell, Mark and Erik Stafford, *Managerial Decisions and Long-Term Stock-Price Performance*, Journal of Business, July, 2000, Merton Miller Award, First Prize 2000.
Pulvino, Todd, *Effects of Bankruptcy Court Protection on Asset Sales*, Journal of Financial Economics, 1999.
Pulvino, Todd, *Do Asset Fire-Sales Exist? An Empirical Investigation of Commercial Aircraft Transactions*, Journal of Finance, 1998, Smith-Breeden Distinguished Paper Award.

A4. Performance Disclosures

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There is a risk of substantial loss associated with trading commodities, futures, options, derivatives and other financial instruments. Before trading, investors should carefully consider their financial position and risk tolerance to determine if the proposed trading style is appropriate. Investors should realize that when trading futures, commodities, options, derivatives and other financial instruments one could lose the full balance of their account. It is also possible to lose more than the initial deposit when trading derivatives or using leverage. All funds committed to such a trading strategy should be purely risk capital.

A4. Performance Disclosures

AQR Capital Management, LLC
Emerging Equity Composite
5/31/08 - 12/31/12

Year	Gross Return %	Net Return %	Benchmark* Return %	Number of Portfolios	Dispersion %	Composite 3-Yr StDev***	Benchmark 3-Yr StDev	Composite Assets($ M)	Firm Assets($ M)	% of Firm Assets	% of Non - Fee Paying Assets
2008	-53.60	-53.91	-52.39	1	N/A	N/A	N/A	2.24	19,207.22	0.01	100.00
2009	90.56	88.76	78.51	1	N/A	N/A	N/A	4.15	23,571.55	0.02	100.00
2010	23.12	21.91	18.88	2	N/A	N/A	N/A	228.97	32,701.21	0.70	0.06
2011	-16.59	-17.44	-18.42	2	N/A	27.43	25.76	311.11	43,540.99	0.71	0.04
2012	22.49	21.28	18.22	3	N/A	23.04	21.50	908.09	71,122.42	1.28	0.14

AQR Capital Management, LLC ("AQR") has prepared and presented this report in compliance with the Global Investment Performance Standards (GIPS®).

This presentation cannot be used in a general solicitation or general advertising to offer or sell interest in its Funds. As such, this information cannot be included in any advertisement, article, notice or other communication published in any newspaper, magazine, or similar media or broadcast over television or radio; and cannot be used in any seminar or meeting whose attendees have been invited by any general solicitation or general advertising.

Notes:

Firm Information:

AQR is a Connecticut based investment advisor registered with the Securities and Exchange Commission under the Investment Advisors Act of 1940. AQR conducts trading and investment activities, specializing in global asset allocation and global stock selection involving a broad range of instruments, including, but not limited to, individual equity and debt securities, currencies, futures, commodities, fixed income products and other derivative securities.

For purposes of Firm wide compliance and Firm wide total assets, AQR defines the "Firm" as entities controlled by AQR that are registered as investment advisors with the Securities and Exchange Commission. The Firm is comprised of AQR and CNH Partners, LLC.

Upon request AQR will make available a complete list and description of all of Firm composites.

Past performance is not an indication of future performance.

* MSCI Emerging Markets Total Return Index (net dividends) un-hedged

A4. Performance Disclosures

Fees: AQR's asset based fees for portfolios within the composite may range up to 1.00% of assets under management, and are generally billed monthly** or quarterly at the commencement of the calendar month or quarter during which AQR will perform the services to which the fees relate. In addition, AQR funds incur administrative fees and may have a redemption charge of 2% based on gross redemption proceeds may be charged upon early withdrawals.

Please refer to the Fund's Private Offering Memoranda and AQR's ADV Part II, Schedule F for more information on fees.

Composite Characteristics: The Emerging Equities composite (the "Composite") was created in June 2008. The account included in this composite is an actively managed account investing in emerging markets. This strategy utilizes a set of valuation, momentum, economic and additional factors to generate the investment portfolio. The composite benchmark is the MSCI Emerging Markets Total Return Index (net dividends) Unhedged. New accounts that fit the composite definition are added at the start of the first full calendar month after the assets come under management, or after it is deemed that the investment decisions made by the investment advisor fully reflect the intended investment strategy of the portfolio. Composites will exclude terminated portfolios after the last full calendar month performance measurement period that the assets were under management. The Composite will continue to include the performance results for all periods prior to termination.

Calculation Methodology: Valuations and returns are computed and stated in U.S. dollars, and individual portfolios are revalued monthly. Portfolios also are revalued intra-month when cash flows occur. The firm links returns geometrically to produce an accurate time-weighted rate of return. Composite returns are asset-weighted. Gross of fees returns are calculated gross of management and custodial fees and net of transaction costs. Returns are calculated net of all withholding taxes on foreign dividends. Accruals for fixed income and equity securities are included in calculations. Net of fees returns are net of management fees of 1%. The dispersion measure is the equal-weighted standard deviation of accounts in the composite for the entire year. Dispersion is not considered meaningful for periods shorter than one year or for periods during which the composite contains five or fewer accounts for the full period.

Additional information regarding policies for calculating and reporting returns is available upon request.

Other Disclosures: AQR has received a firm-wide GIPS verification for the period August 1998 through 12/31/2012. A copy of the verification report is available upon request.

** In May of 2010, AQR historically revised the Composite's management fee calculation from quarterly to monthly. This has not resulted in any material differences.

MEMO

TO: **SIB**
FROM: **David Hunter**
DATE: **June 27, 2014**
SUBJ: **Emerging Market Equity Interviews**

Staff recommendation to follow.

Executive Summary - Emerging Market Equity ("EME") Manager Search **June 27, 2014**

RIO Recommendation:

RIO recommends the State Investment Board approve an approximate $110 million Emerging Market Equity mandate with Axiom International Investors. This recommendation is based on extensive due diligence performed by RIO's CIO and Deputy CIO, as supported by Callan's investment consulting team, and included onsite interviews with the portfolio management team. The recommendation is subject to satisfactory negotiation of legal documentation including review and approval by designated counsel.

Background:

1. RIO developed a "Candidate Profile" by identifying the key characteristics which best suited our desired EME mandate. Specific qualities included an active manager with at least $2 billion in assets under management including $500 million in this strategy. We required at least five years of EME experience and strategies which avoided the use of short sales, extensive use of derivatives for non-hedging purposes, and candidates involved in significant litigation, merger or acquisitions or experiencing high turnover of investment professionals or management. These are minimum requirements.
2. Based on a quantitative review of approximately 400 EME strategies, RIO and Callan jointly identified 10 managers which best fit our "Candidate Profile". These 10 candidates were promoted for further consideration to the Callan manager search committee after detailed discussion with RIO.
3. Callan prepared a report for each of the top 10 managers while providing a quantitative comparison of historical return and risk metrics including excess return versus the MSCI EME benchmark over rolling 3-year (or more) periods; up and down market capture; and correlation with our existing EME strategy (with Dimensional Fund Advisors or "DFA").
4. After further discussion with Callan EME specialists to understand the qualitative strengths and weaknesses of each manager under consideration, RIO and Callan conducted interviews in person with two representatives from each of the top four ranked firms.
5. To complete the semi-finalist due diligence process, RIO met with the top three firms in their respective offices to gain a greater understanding of firm culture, investment style, risk management, compliance systems, size and client service capabilities.
6. The CIO and Deputy CIO ranked Axiom slightly ahead of AQR largely due to it being a better compliment to our existing DFA strategy (which was also highly ranked by RIO and Callan).

Summary:

Axiom has generated 4% of annualized excess return (versus benchmark) since inception, net of fees. Axiom is one of four firms assigned the highest ranking (along with AQR and DFA) by Callan based on consistency of excess returns and our "Candidate Profile". The return on estimated fees approximates a 4:1 ratio and deemed reasonable for this sector. Northern Trust is also the custodian for this commingled trust vehicle which should serve to minimize transition costs, while aiding operational efficiencies.

Investment Recommendation – Axiom International Investors

Executive Summary

Recommendation

Staff and Callan recently conducted a manager search to identify active emerging markets equity candidates to replace mandates formerly managed by UBS and PanAgora, which are currently being managed in a Northern Trust Asset Management MSCI Emerging Markets Index Collective Trust on an interim basis. The result of the search is a recommendation to replace the existing passive exposure with Axiom International Investors in the Pension Trust. Additionally, Staff recommends the termination of the existing JPMorgan Emerging Markets Focused mandate due to performance and the transition of the assets to Axiom International. As of April 30, 2014, Northern Trust and JPMorgan managed emerging market equity mandates totaled approximately $87 million (1.9% of total assets) and $24.6 million (0.5%), respectively, and the remaining emerging markets mandate resides with DFA Emerging Markets Small Cap at $35 million (0.8%).

Background

As part of an initiative to reduce the number of equity manager mandates within the Pension Trust so as to realize economies of scale and administrative and oversight efficiencies, three active emerging market mandates were terminated over the course of the past two years and the manager mandates were transitioned to Northern Trust Asset Management to be managed in a passive emerging market mandate on an interim basis: Blackfriars (terminated June 2012), PanAgora and UBS (both December 2013). In an asset class like emerging markets, where the alpha opportunities are comparatively greater and the opportunity costs of retaining a lower conviction manager are more apparent, Staff felt it prudent to conduct a search for an active emerging market equity manager to replace Northern Trust and JPMorgan and to complement the existing DFA Emerging Market Small Cap mandate.

Process

Staff and Callan Associates screened the pool of candidates to create a "shortlist" of potential candidates based on a variety of qualitative and quantitative factors, including:

- Staff and Callan knowledge and opinions regarding the firm and product;
- Team attributes, including consistency and depth;
- Firm attributes, including employee ownership, assets under management, and organizational culture;
- Portfolio attributes, including benchmark-relative risk, portfolio holdings, style characteristics, and correlation of returns relative to other Pension Trust equity managers; and,
- The history of relative performance including consistency and upside/downside capture.

Four firms – Axiom, AQR, Harding Loevner, and William Blair – were invited to make formal presentations to Staff at Callan's office in Denver. Staff reviewed all analysis and written materials and participated in a post-interview discussion with Callan to debate the relative merits of the firms. It is important to note

that emerging markets remains a capacity constrained asset class and capacity availability is an unavoidable impediment in any manager search. Onsite visits were conducted with AQR, Axiom and William Blair. While all three products were highly regarded, Axiom's product rose to the top.

Rationale

I. Organizational Overview

Axiom was founded in 1998 by CIO Andrew Jacobson. He and his team of research analysts left Columbus Circle where the group developed and managed the International Equity Strategy. With the exception of a US Small Cap product, the firm is dedicated to managing international assets. Axiom manages both long only and long/short portfolios. All portfolios are managed with the same investment process. Based in Greenwich, Connecticut, the firm is 100% employee owned with $10.1 billion in assets under management.

The Emerging Markets Equity strategy is co-managed by Chris Lively and Don Elefson. Supported by one dedicated research analyst, the two portfolio managers draw on the research of a broader group of analysts for macro research applicable to their companies. All analysts employ the same research methodology which allows for the development of themes and the cross fertilization of ideas across the firm.

II. Strategy and Performance Overview

With assets of $2.3 billion, the Axiom Emerging Markets Equity strategy can be described as having a fundamental and momentum driven philosophy. They seek to identify companies that are exceeding expectations by identifying key business drivers for each stock. A key component of their process is understanding the market's expectations for a given stock as it relates to the key drivers of that stock. Key business driver analysis begins with identifying the dozen or so key operational drivers for each of the companies being considered. They employ a combination of primary and secondary research in order to capture efficiently a comprehensive array of information on each company. Key drivers include company specific, industry, macroeconomic and political factors. For each of these drivers, they survey a wide variety of sources in order to determine investor expectations. They then continuously monitor the actual results being achieved to identify positive or negative developments. Ultimately, they seek to purchase companies where the key drivers are exceeding investor expectations and sell those companies where the drivers are falling short of expectations.

Axiom uses a proprietary rating/ranking system for stock selection and portfolio construction. Each stock under consideration is assigned a number and letter ranking. The letter ranking is a representation of how established or emerging an enterprise is, while the number ranking represents the degree to which a company's aggregate key business drivers are tracking ahead or behind consensus expectations. While they use this multi-factor screen to rank companies, most new ideas are identified as a consequence of specific positive fundamental developments

in a company's operations. Stocks are bought or sold when key business drivers are moving away from expectations. A proprietary database allows each new piece of information to be cataloged and monitored for trends in operational data.

Below is a summary of maximum common period returns and risk statistics of AQR, Axiom, and JPMorgan and DFA relative to the MSCI Emerging Markets Index (net of withholding taxes).

Common Period Returns and Risk Statistics
5 3/4 Years as of 3/31/14

	AQR	Axiom	JPMorgan	DFA EM SC
Returns	3.96%	5.31%	2.10%	7.84%
Excess Return	3.12%	4.47%	1.25%	7.00%
Standard Deviation	30.88%	29.87%	27.88%	28.83%
Tracking Error	2.71%	2.76%	3.01%	12.18%
Information Ratio	1.62%	1.67%	0.38%	0.60%
Batting Average	65.22%	86.96%	56.52%	65.22%
Alpha	3.37%	4.55%	1.08%	7.23%
Beta	1.06	1.03	0.96	0.91
Risk Adjusted Excess Return (ND)	2.89%	4.32%	1.33%	7.05%
Up Market Capture	128.86%	126.40%	91.53%	106.82%
Down Market Capture	100.50%	96.48%	93.78%	82.39%

As compared to AQR, the Axiom Emerging Market strategy has exhibited higher excess and risk-adjusted excess returns, greater consistency of outperformance as measured by batting average, and favorable up and down market capture ratios.

III. Manager Structure

Within the emerging markets sub-asset class, Axiom's growth and momentum orientation is complementary to DFA's value bias. Pairing the two mandates and observing rolling three year correlations of the active returns of the Axiom Emerging Markets strategy and DFA Emerging Markets, Staff has observed low correlation, thereby demonstrating diversification benefits.

Staff modeled global equity manager mixes comprised of all existing Pension Trust global equity manager mandates at their current target weights with the exception of the Northern Trust Emerging Markets and JPMorgan Global Emerging Markets Focused mandates. Separate allocations to AQR, Axiom and JPMorgan were modeled to assess the impact on the overall global equity manager. While the relatively small size of the allocation (4.6%) as compared to the total global equity allocation does dampen the effect at the aggregate portfolio level, favorable differences can be observed at the margin.

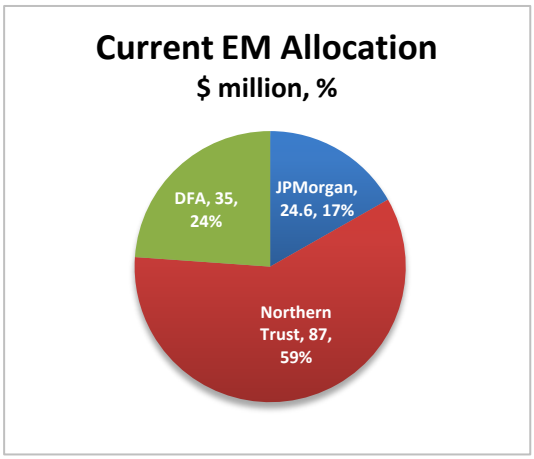
Common Period Returns and Risk Statistics

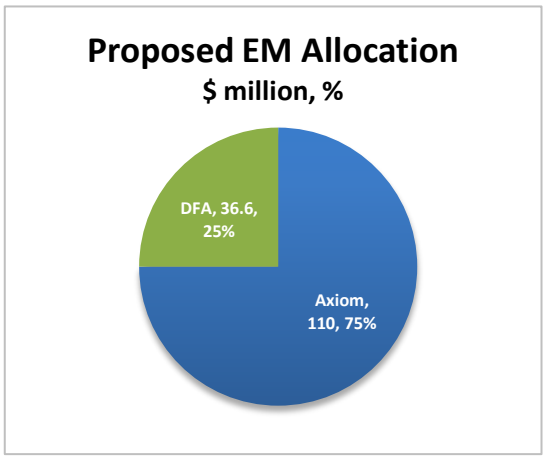
5 1/4 Years as of 3/31/14	ND Pen GE AQR	ND Pen GE Axiom	ND Pen GE JPMorgan	ND Pen GE Policy
Returns	17.50%	17.52%	17.25%	15.63%
Excess Return	1.86%	1.89%	1.62%	0.00%
Standard Deviation	18.53%	18.52%	18.46%	19.10%
Tracking Error	1.10%	1.12%	1.13%	0.00%
Information Ratio	2.17%	2.18%	2.04%	0.00%
Batting Average	66.67%	71.43%	66.67%	100.00%
Alpha	2.07%	2.11%	1.90%	0.00%
Beta	0.97	0.97	0.97	1.00
Risk Adjusted Excess Return (ND)	2.39%	2.44%	2.21%	0.00%
Up Market Capture	106.44%	106.46%	104.98%	100.00%
Down Market Capture	93.74%	93.54%	93.89%	100.00%

IV. Current and Proposed Allocation

Within the emerging markets asset class, the Pension Trust has historically maintained a strategic overweight to small cap emerging market equities as compared to a market capitalization weighted index in order to capture the size premium that exists in emerging market equities. Additionally, the value effect is even more pronounced in emerging markets as compared to developed market equities, making DFA an ideal manager to capture long-term size and value effects. Currently, emerging markets small equities comprise 12.5% of the MSCI Emerging Markets Investable Market Index, which covers all investable large, mid and small cap securities in emerging markets. Staff recommends maintaining the current DFA Emerging Markets Small Cap target weighting at 25% of the total emerging markets allocation.

In summary, current and proposed allocations are as follows:

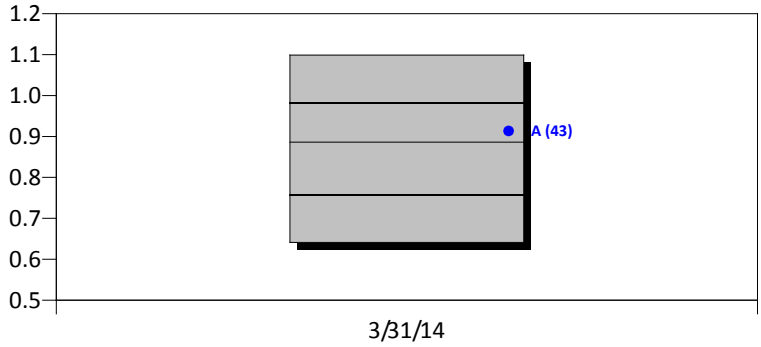




V. Fees and Capacity

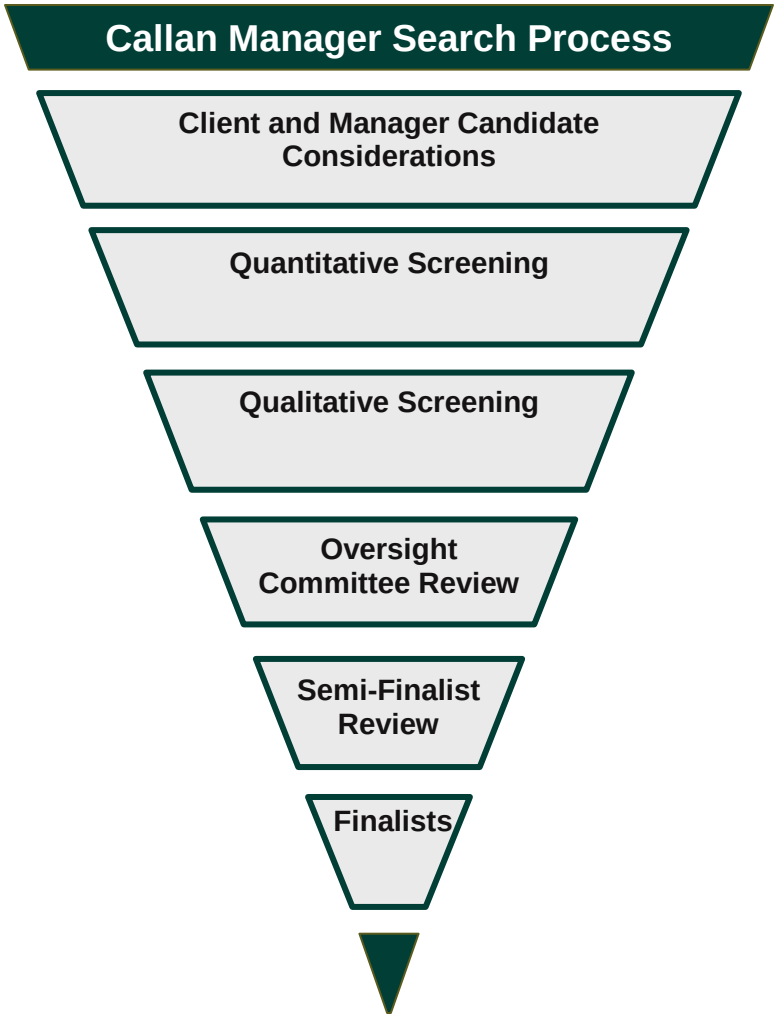
Axiom currently manages $2.3 billion in the Emerging Markets Equity strategy. Due to the nature of their investment process and their desire to focus on existing client assets, they have decided to close the product to new business once they reach approximately $2.5 billion in assets. Axiom's fees are generally in line with the median Emerging Markets equity manager. We do not expect them to negotiate fees because of the low level at which they plan to close the product.

Effective Annual Fee
for a $110,000,000 Mandate
for Periods Ended March 31, 2014
Group: CAI Emerging Markets Equity DB



10th Percentile	1.10
25th Percentile	0.98
Median	0.89
75th Percentile	0.76
90th Percentile	0.64
Member Count	300
Axiom:Emerg Mkts Eq Comp ● A	**0.91**

Manager Search Process



Manager Search Process Overview

Callan's investment manager searches are underpinned by a disciplined, six-step process:

I. Identify Client and Manager Candidate Considerations

At the onset of each search, Callan meets with the client to review and document any specific characteristics sought in an investment manager. This includes factors such as the manager's strategy and approach, organizational structure, minimum/maximum assets under management, performance criteria relative to an appropriate index and peer group, and risk tolerance. These factors serve as the basis for developing the appropriate quantitative and qualitative screening criteria.

II. Conduct Quantitative Screening

After beginning with the broadest possible universe of candidates, Callan narrows the field using client-specified screening criteria to screen our proprietary database. Screens examine numerous quantitative factors including performance, volatility, correlation with the existing structure, and assets under management. Callan screens performance across multiple time periods, market cycles, and statistical analyses so as to identify consistency of returns and avoid performance bias.

III. Perform Qualitative Screening

Qualitative screening concentrates the field even further. Qualitative screens examine manager type, organizational history, depth and experience of investment personnel, investment process and style, client servicing capability and resource allocation. Callan generates qualitative assessments based on manager research conducted by our dedicated asset class specialists and generalist consultants through regular in-house meetings, conference calls, and on-site manager due diligence.

IV. Oversight Committee Review of Preliminary Recommendations

Callan's Manager Search Committee—an oversight body that is comprised of approximately [18] senior consultants—reviews each search to thoroughly examine candidates and ensure Callan has met the client's specified criteria. Collectively, the Manager Search Committee vets the candidates and identifies semi-finalist candidates to present to the client.

V. Review Semi-finalist Candidates

A manager evaluation document comparing the semi-finalist candidates is prepared for the client. Callan reviews the report with the client to highlight important considerations in conducting the search, compare and contrast the manager candidates, and assist in the identification of finalist candidates.

VI. Interview Finalists

To gain additional insight, finalists are invited to present to the client. The presentations generally include an overview of the manager organization and a specific review of the product being considered. They also provide the opportunity for the client and/or consultant to address any outstanding issues. A winner is typically selected following these presentations.

North Dakota State Investment Board
Emerging Markets Equity Manager Search
Candidate Profile (revised)
March 28, 2014

The North Dakota State Investment Board ("SIB") is looking for emerging market equity candidates who can successfully manage tax exempt money for both qualified and non-qualified investment pools. Candidates should satisfy a majority of the following criteria:

1. **Manager Orientation**
   Emerging markets equity.

2. **Manager Type**
   Only qualified investment counselor organizations registered under the Investment Advisors Act of 1940 will be considered. This includes investment counselors and investment counseling subsidiaries of banks, brokerage houses and insurance companies.

3. **Investment Style**
   The SIB is searching for an active emerging markets equity manager. The selected manager may make tactical use of frontier markets (not to exceed 10% of the account's value), although this allocation is not expected to be a major source of value added. Both quantitative and fundamental strategies are open to consideration. Successful candidates will have the ability to manage both tax-exempt and non-qualified pools of capital in the same strategy.

4. **Investment Vehicle**
   An institutional collective fund is required as the SIB prefers not to establish local trust/custody accounts.

5. **Securities Lending**
   SIB will consider collective vehicles that employ securities lending on a case-by-case basis.

6. **Total Assets and Accounts Under Management**
   The SIB prefers to be less than 20% of the total strategy assets under management ("AUM") but will consider exceptions on a case-by-case basis for financially secure firms. SIB prefers that candidates' AUM in the relevant strategy be at least $500mm. SIB prefers that total assets under management at the firm be at least $2 billion. SIB may be willing to consider candidates on a case-by-case basis that do not meet the AUM standard.

7. **Size of Professional Staff**
   Investment staff should be of sufficient depth and breadth to perform ongoing duties of the firm. Additionally, there should be a sufficient number of client service and investment personnel relative to the firm's account load to ensure that the SIB has reasonable access to the firm and that the investment portfolios are well attended.

8. **Years of Experience in Managing Funds and Strategy Track Record**
   At least five years of experience by the investment team is preferred, with at least two key professionals having ten years or more of direct experience. Experience gained at another firm is permissible as long as the historical record is directly attributable to the investment team at the firm under consideration. Highly qualified teams not meeting this criterion may be considered on a case-by-case basis.

9. **Geographic Location**
   None specifically required.

10. **Flexibility of Individual Portfolio Manager**
    The dispersion of portfolio returns across accounts within the firm's product composite should be small. There should be a firm-wide investment process.

11. **Portfolio Risk Level**
    Returns generated by the portfolio will be evaluated in light of the portfolio risk. Risk will be evaluated relative to the benchmark and peer group through quantitative measures such as Sharpe Ratio, Standard Deviation, Tracking Error, Correlation, and R-Squared. Candidates should demonstrate risk-adjusted performance that compares favorably to the product's benchmark and peer group.

12. **Historical Performance Criteria**
    Performance screening will focus on consistency of returns relative to appropriate indexes and peer groups over time. Historical performance will be scored based on the following:

    - Cumulative 4, 5 and 7 year data relative to the MSCI Emerging Markets Index and Callan's Emerging Markets Broad Style Group.

    - Rolling 3-year periods based on quarterly data compared to the MSCI Emerging Markets Index and Callan's Emerging Markets Broad Style Group.

Performance will be evaluated relative to each criterion. There will be a maximum of 40 points possible (17 rolling 3-year periods and three other cumulative periods). Candidates will receive one point for each standard passed. The relative score will be considered for candidates with limited performance history. Performance at a prior employer may be utilized on a case-by-case basis.

13. **Client Servicing**

Qualified representatives will be expected to meet with the SIB's Board of Trustees at least annually and, as requested, with the SIB's investment staff within the Retirement and Investment Office staff. The selected manager's investment staff is expected to participate in quarterly telephonic reviews of investment results with SIB staff.

14. **Qualities to be Avoided**

- Strategies that use short sales;
- Extensive use of options/futures/swaps with the exception of unlevered currency adjustment, country management and other common and conventional uses;
- Long-term records that have been propelled by just a few block-buster years;
- Excessive recent growth in assets within the strategy;
- Allocations of greater than 10% to frontier markets; and
- Candidates currently involved in significant litigation, a merger or acquisition.

15. **Qualities Specifically Sought**

- Complement to the DFA Emerging Markets Small Cap strategy;
- Experienced investment professionals whose interests are aligned with those of their clients;
- Consistent and competitive risk-adjusted returns through time;
- Fully invested, well diversified portfolios;
- Well established organization with institutional focus;
- Disciplined investment process with risk controls;
- Depth of portfolio management and research;
- Effective communication skills and commitment to client service; and
- Low turnover of investment personnel.

16. **Business Plan and Financial Well-Being**

The SIB seeks emerging market equity managers who have been successful in the business of money management and are committed to continued delivery of above average product performance and client service. Candidates should be able to demonstrate their ongoing commitment to the investment management of comparable funds and possess the financial wherewithal to survive a poor business environment without significant changes to their investment process or organization.

17. **Fees**

Investment management fees should be competitive. SIB wants to be aware of any contribution and/or withdrawal transaction fees that will be associated with the emerging market equity investment vehicles.

18. **Assets to be Allocated**

The total target amount for this allocation is approximately $100 million. It is expected that that amount will include assets from the Pension Trust. Future funding from the non-qualified Insurance Trust may be made in the future.

19. **Client Requests**

The SIB's incumbent managers should be evaluated if they have appropriate investment products. These firms are to be evaluated pari passu with all other potential candidates.

# # #

AQR Capital Management
2 Greenwich Plaza 3rd Floor
Greenwich, CT 06830

History

AQR Capital Management, LLC is an investment management firm employing a disciplined multi-asset, global research process. The firm's principals, Clifford S. Asness, David G. Kabiller, Robert J. Krail, and John M. Liew founded AQR in January 1998. Each of the firm's principals was formerly at Goldman Sachs, & Co., where Asness, Krail, and Liew, comprised the senior management of the Quantitative Research Group at Goldman Sachs Asset Management. In November 2004, Affiliated Managers Group (NYSE: AMG) purchased a minority share (less than 25%) of the firm.

Structure

Founded: 1998
Ownership: Partnership
Errors and omissions insurance: Yes
In compliance with SEC and DOL: Yes
GIPS Compliant: Yes

Contact: Matthew Chilewich
1 N Wacker Drive, Suite 3620
Chicago, IL 60606
Phone: (773) 840-6602
Email: matthew.chilewich@aqr.com

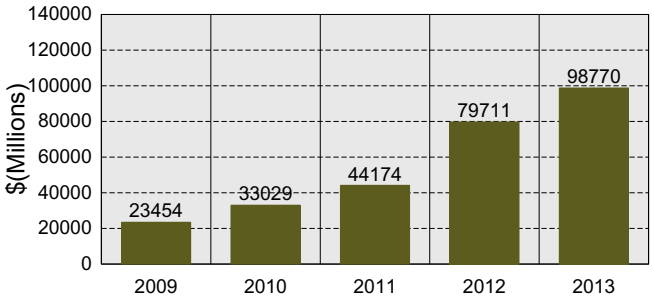
Key Professionals

	Joined Firm	Investment Experience
Cliff Asness - Managing Partner	1998	1998
David Kabiller - Dir of Client Services	1998	1989

Employee Structure

Administrative	17
Central Research Analyst	96
Client Services/Marketing	73
Dedicated Quantitative Analyst	6
Operations	49
Portfolio Manager	13
System/Information Technology	62
Trader	29
Total	**345**

Total Asset Growth



Total Asset Structure

Asset Type	$(mm)	
U.S. Tax-Exempt	50,365	51%
U.S. Taxable	656	1%
Non-U.S.	31,350	32%
Mutual Fund	16,399	17%
Total	98,770	100%

U.S. Tax-Exempt Separate/Commingled Assets as of December 31, 2013

Asset Class	$(mm)	
Domestic Broad Equity	2,235	4%
Intl Equity	21,475	43%
Intl/Global Balanced	19,182	38%
Other Alternatives	7,473	15%
Total	50,365	100%

Client Type	$(mm)	
Corporate	7,020	14%
Endowment/Foundation	2,774	6%
Multi-Employer	1,921	4%
Public	17,336	34%
High Net Worth	1	0%
Sub-Advised	16,024	32%
Other	5,289	11%
Total	50,365	100%

Note(s): Asset growth in 2011 was attributed to the gain of 135 accounts totaling roughly $8.5 billion. Asset increase in 2012 was due to the gain of an additional 235 accounts for approximately $20 billion. Further increase in 2013 was attributed to the gain of 271 accounts for $11.3 billion and market appreciation. 'Other' assets represent WRAP accounts.

AQR Capital Management
Emerging Markets Equity
As of December 31, 2013

Key Professionals

	Joined Firm	Investment Experience
Michele Aghassi - PM	2005	2001
Cliff Asness - PM	1998	1998
Jacques Friedman - PM	1998	1996
Ronen Israel - PM	1998	1991
John Liew - PM	1998	1995
Lars Nielsen - PM	2000	2000

Investment Professionals

Function	#	5 Years Gained	5 Years Lost
Central Research Analyst	87		
Dedicated Quantitative Analyst	6	3	3
Portfolio Manager	10	1	0

Portfolio Decision: Team Management

Product Highlights:

Investment Style: Emerging Equity

Benchmark: MSCI Emerging Mkts Free

Invest. Strategy: Quantitative (inc. Fundamental Based)

Investment Process:

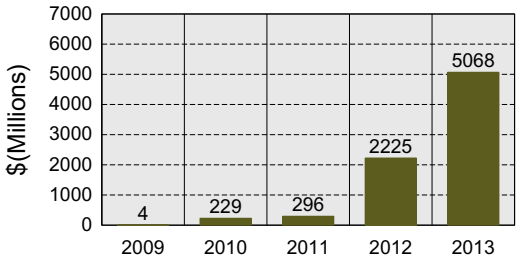
25% Country/Regional Allocation
25% Currency Decision
10% Industry/Sector Allocation
40% Security Selection

Portfolio Characteristics	Year End
Wtd Avg Market Cap ($M)	46,540
% Large Cap ($wgt) > $10B	63
% Mid Cap ($wgt) $1.5 - $10 B	35
% Small Cap ($wgt) < $1.5 B	2
Number of Holdings	298
Annual Percent Turnover	58

Total Asset Structure

Asset Type	$(mm)	
U.S. Tax-Exempt Commingled	446	9%
U.S. Tax-Exempt Sep Acct	1,216	24%
U.S. Taxable	3	0%
Non-U.S.	3,007	59%
Mutual Fund	396	8%
Total	5,068	100%

Total Asset Growth



U.S. Tax-Exempt Assets

Vehicle	Largest Acct	# of Accts	$(mm) Assets	3 Years Net Flows
Commingled	117	7	446	0
Separate	529	7	1,216	0

Fee Schedule:

Min Acct Size ($mm): 5

Account Size ($mm)	Fee (%)
First $50	0.85
Next $150	0.75
Balance	0.70
Client Allocation	
$50	0.85

Performance Composite:

Market Value ($mm): 650

Annual 2013 Return: 1.50%

Note(s): Performance represents the commingled fund, gross-of-fees. Asset growth in 2010 was attributed to the gain of two accounts for $200 million. Asset increase in 2012 was attributed to the gain of eight accounts for $987 million and market appreciation. Further gains in 2013 were attributed to the addition of 11 accounts for $1.3 billion and subsequent inflows. Only lead portfolio managers have been named above. Portfolio characteristics throughout this document represent only equity exposure. This strategy includes overlay components which adjust country and currency exposure and are shown at the end of this profile section. Country and currency exposure pages are as of March 28, 2014 because the fund experienced large cash inflows at month end, and as a result had more cash in the portfolio than normal. The numbers as of March 28, 2014 are more representative of the fund's normal positioning.

AQR Capital Management
Emerging Markets Equity

Investment Philosophy:
AQR considers themselves as fundamental investors who employ quantitative tools to build diversified portfolios which favor undervalued securities with good momentum characteristics - two negatively correlated categories. The strategy employs three models: stock selection, country selection and currency selection. The view from each model is implemented distinctly through stock selection and country/currency overlays, allowing each model to be fully expressed in the portfolio.

Research Process:
AQR's approach combines bottom-up security and industry selection decisions with top-down country and currency selection decisions to generate excess returns. Stocks, countries, and currencies are ranked from most to least attractive on that particular investment factor and portfolio weights are assigned to reflect each stocks degree of attractiveness. The dynamic strategy allocation model varies the active risk allocation among the primary alpha sources (stock/industry, country, and currency) based on the relative dispersion of, and agreement between the underlying factors in each model.

Country Strategy:
Country selection is one of three sources of alpha. Similar to currency selection, country selection seeks to identify differences in expected returns across equity markets and then tactically position the portfolio. The strategy makes relative country assessments and takes no view on absolute attractiveness (i.e., avoids market timing). A mix of fundamental and technical factors is considered for all markets. Fundamental factors such as valuation and yield vs. interest rates account for roughly half the weight in the model. The balance is spread over various momentum/growth/catalyst factors including price momentum and analyst estimate revisions.

Security Selection:
Each stock is ranked on its raw investment signal relative to its industry's average signal and stock selection views are designed to be industry-neutral. AQR's stock selection model consists of valuation, momentum (both price and fundamental, earnings quality, investor sentiment, stability, and management signaling. AQR utilizes a style-weighting model to tactically manage the allocation to value/momentum factors within each of the stock, country, and currency strategies. The weighting of value is dynamically managed within ranges. At no point does AQR have a negative bias towards value, but rather varies the degree of values impact within a range. The model inputs include valuation spreads, growth expectations, and the momentum of value. In simple terms the model favors value (as measured by their particular proprietary definition) when it looks cheaper than normal, is giving up less expected earnings growth than normal, and when it has had good recent performance.

Portfolio Construction:
For each factor within a signal, a baseline long-short portfolio is constructed on the basis of each asset's (country/currency/stock) relative factor ranking. A weighted average of these signals is created to form a baseline long-short portfolio. This portfolio represents the aggregate of all signals weighted by model views of their relative importance in forecasting future returns. This unconstrained long-short portfolio represents the active portfolio weights that would be held absent trading costs and constraints. This view can be implemented as an unconstrained market neutral, relaxed constraint or fully constrained long-only portfolio. AQR employs a proprietary modified optimizer which considers two alpha horizons (long and short-term). Since views are in the form of long-short portfolio weights and co-variance assumptions, rather than expected returns, the optimization, which considers costs and constraints, solves for expected returns relative to the unconstrained long-short portfolio rather than mean-variance.

Currency Strategy:
AQR actively manages currency as a distinct source of alpha. By managing the currency exposure through forward contracts, they separate the currency decision from stock and country decisions. AQR's currency selection model is driven by Real Short Rate, Yield Curve Shape, Modified Purchasing Power Parity, FX Momentum, Interest Rate Momentum, and Equity Momentum.

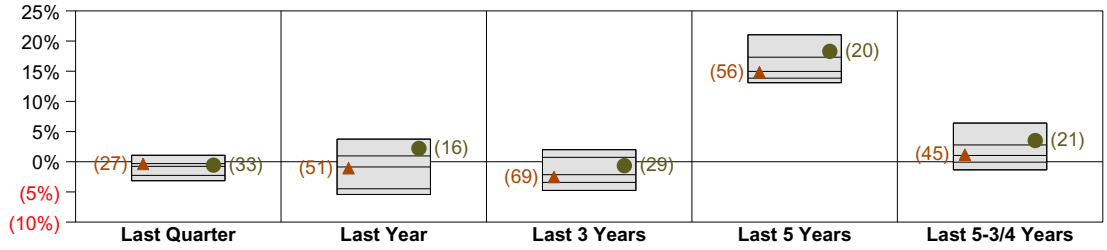
Sell Discipline:
Models are run daily while rebalancing occurs only when meaningfully drift away from target allocations justify the transaction costs required to rebalance and when costs are more than offset by the increase in expected return/alpha. Sell decisions are made within the optimization process. Given the high cost of trading in emerging markets, AQR utilizes short term arbitrage signals to adjust timing of buys and sells. These same signals are precluded from high frequency and arbitrage strategies due to the high trading cost hurdles and are only utilized when trading is required.

AQR Capital Management
Emerging Markets Equity
Return Analysis Summary

Return Analysis

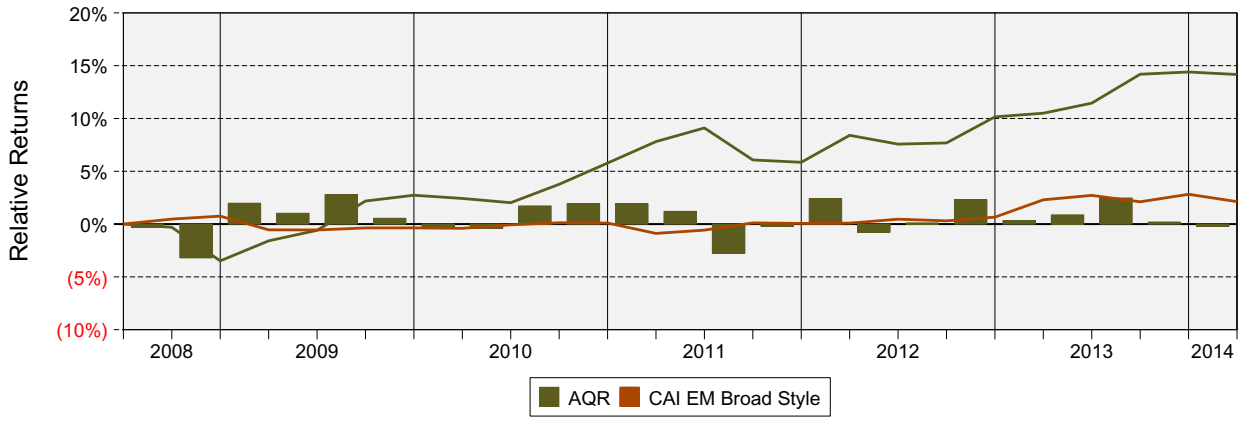
The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

Performance vs CAI Emerging Market Broad Style (Gross)
Periods ended March 31, 2014

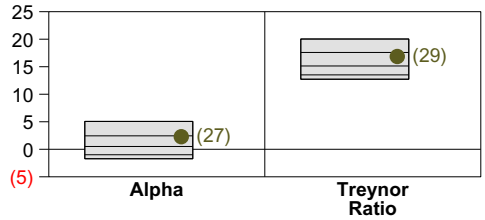


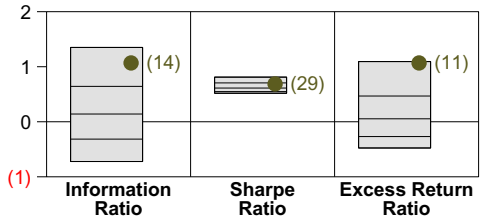
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 5-3/4 Years
10th Percentile	1.07	3.75	2.00	21.04	6.41
25th Percentile	(0.31)	0.96	0.73	17.33	2.79
Median	(0.77)	(0.86)	(2.15)	14.97	1.04
75th Percentile	(2.26)	(4.48)	(3.42)	13.85	(0.07)
90th Percentile	(3.15)	(5.43)	(4.75)	13.09	(1.35)
AQR ●	(0.57)	2.21	(0.66)	18.29	3.52
MSCI Emerging Mkts Idx ▲	(0.37)	(1.07)	(2.54)	14.83	1.16

Cumulative and Quarterly Relative Return vs MSCI Emerging Mkts Idx



Risk Adjusted Return Measures vs MSCI Emerging Mkts Idx
Rankings Against CAI Emerging Market Broad Style (Gross)
Five Years Ended March 31, 2014





	Alpha	Treynor Ratio
10th Percentile	5.06	20.03
25th Percentile	2.44	17.59
Median	0.51	15.13
75th Percentile	(0.99)	13.52
90th Percentile	(1.72)	12.73
AQR ●	2.28	16.86

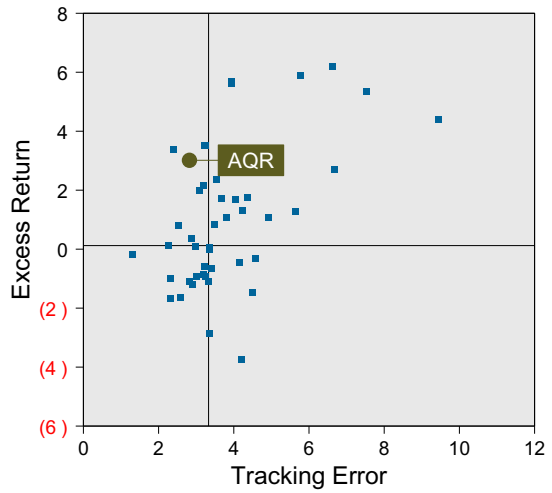
	Information Ratio	Sharpe Ratio	Excess Return Ratio
10th Percentile	1.35	0.81	1.09
25th Percentile	0.64	0.71	0.47
Median	0.14	0.61	0.05
75th Percentile	(0.32)	0.55	(0.27)
90th Percentile	(0.72)	0.52	(0.48)
AQR ●	1.07	0.69	1.07

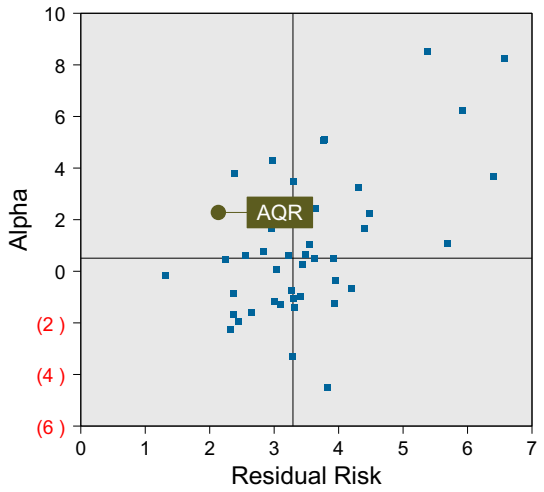
AQR Capital Management
Emerging Markets Equity
Risk Analysis Summary

Risk Analysis

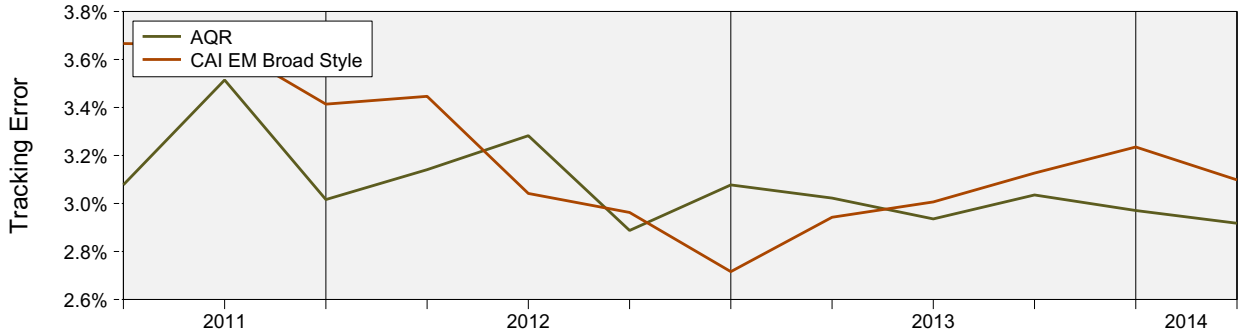
The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second scatter chart displays the relationship, sometimes called Information Ratio, between alpha (market-risk or "beta" adjusted return) and residual risk (non-market or "unsystematic" risk). The third chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

Risk Analysis vs CAI Emerging Market Broad Style (Gross)
Five Years Ended March 31, 2014

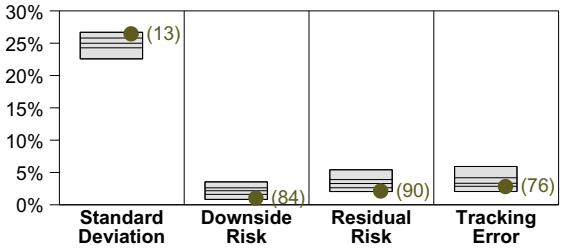




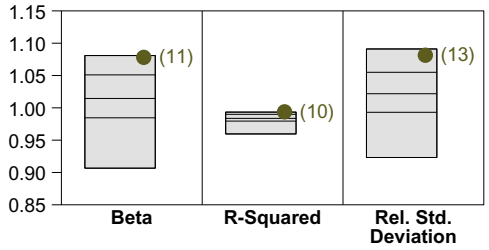
Rolling 12 Quarter Tracking Error vs MSCI Emerging Mkts Idx



Risk Statistics Rankings vs MSCI Emerging Mkts Idx
Rankings Against CAI Emerging Market Broad Style (Gross)
Five Years Ended March 31, 2014



	Standard Deviation	Downside Risk	Residual Risk	Tracking Error
10th Percentile	26.69	3.55	5.42	5.93
25th Percentile	25.80	2.63	3.90	4.18
Median	24.99	2.17	3.29	3.33
75th Percentile	24.29	1.61	2.64	2.86
90th Percentile	22.58	0.83	2.05	2.05
AQR ●	26.45	1.04	2.13	2.82



	Beta	R-Squared	Rel. Std. Deviation
10th Percentile	1.08	0.99	1.09
25th Percentile	1.05	0.99	1.05
Median	1.01	0.98	1.02
75th Percentile	0.98	0.98	0.99
90th Percentile	0.91	0.96	0.92
AQR ●	1.08	0.99	1.08

Axiom International Investors LLC
33 Benedict Place
Greenwich, CT 06830-6378

History

Axiom International was officially formed on September 1, 1998, as an independent investment advisor specialized in managing international equity portfolios by Andrew Jacobson and his current team of research analysts. Prior to forming Axiom, the investment team was responsible for developing and managing the international equity strategy at Columbus Circle Investors, where they managed the Columbus Circle International Commingled Tax-Exempt and Taxable Trusts from their inception in July 1996. When Axiom was formed, the complete team moved and continued to manage these trusts in a sub-advisory capacity.

Structure

Founded: 1998
Ownership: Employee Owned
Errors and omissions insurance: Yes
In compliance with SEC and DOL: Yes
GIPS Compliant: Yes

Contact: Shane McMahon
33 Benedict Place
Greenwich, CT 06830-6378
Phone: (203) 422-8036
Email: smcmahon@axinvest.com

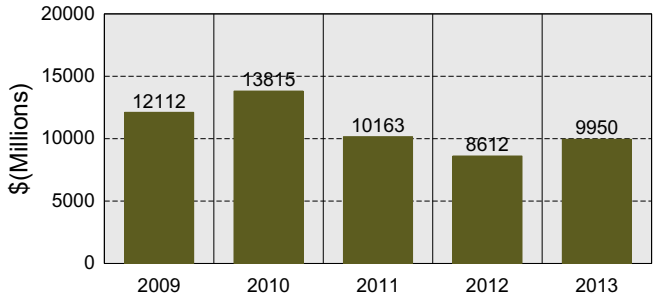
Key Professionals

	Joined Firm	Investment Experience
Donald Miller - Chairman	1999	1964
Andrew Jacobson - CIO	1998	1988

Employee Structure

Client Services/Marketing	9
Dedicated Fundamental Analyst	10
Operations	11
Portfolio Manager	7
Trader	5
Total	**42**

Total Asset Growth



Total Asset Structure

Asset Type	$(mm)	
U.S. Tax-Exempt	4,381	44%
U.S. Taxable	1,446	15%
Non-U.S.	4,123	41%
Total	9,950	100%

U.S. Tax-Exempt Separate/Commingled Assets as of December 31, 2013

Asset Class	$(mm)	
Domestic Broad Equity	124	3%
Intl Equity	4,257	97%
Total	4,381	100%

Client Type	$(mm)	
Corporate	1,290	29%
Endowment/Foundation	612	14%
Public	464	11%
High Net Worth	2,016	46%
Total	4,381	100%

Note(s): Asset decrese in 2011 was attributed to the loss of seven accounts for $563 million and net ouflows from existing accounts. Further decrease in 2012 was attributed to the loss of seven accounts for $911 million.

Axiom International Investors LLC
Axiom Emerging Markets Equity
As of December 31, 2013

Key Professionals

	Joined Firm	Investment Experience
Christopher Lively - PM	2008	1987
Donald Elefson - PM	2012	1983
Michael Olsen - Dedicated FA	2009	2008

Investment Professionals

Function	#	5 Years Gained	5 Years Lost
Dedicated Fundamental Analyst	1	1	1
Portfolio Manager	2	1	1

Portfolio Decision: Individual With Backup

Product Highlights:

Investment Style: Emerging Equity

Benchmark: MSCI Emerging Mkts Free

Invest. Strategy: Fundamental Research (100% Bottom Up)

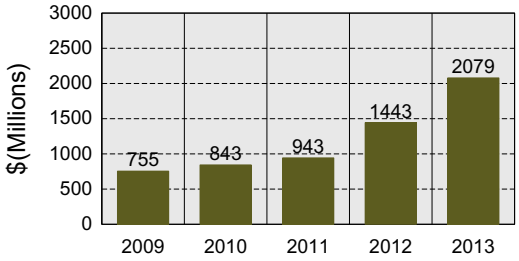
Investment Process:
100% Security Selection

Portfolio Characteristics	Year End
Wtd Avg Market Cap ($M)	39,851
% Large Cap ($wgt) > $10B	74
% Mid Cap ($wgt) $1.5 - $10 B	25
% Small Cap ($wgt) < $1.5 B	1
Number of Holdings	71
Annual Percent Turnover	50

Total Asset Structure

Asset Type	$(mm)	
U.S. Tax-Exempt Commingled	48	2%
U.S. Tax-Exempt Sep Acct	420	20%
U.S. Taxable	856	41%
Non-U.S.	755	36%
Total	2,079	100%

Total Asset Growth



U.S. Tax-Exempt Assets

Vehicle	Largest Acct	# of Accts	$(mm) Assets	2 Years Net Flows
Commingled	48	1	48	0
Separate	340	3	420	0

Fee Schedule:

Min Acct Size ($mm): 1

Account Size ($mm)	Fee (%)
First $25	1.00
Next $75	0.90
Next $25	0.80
Next $50	0.70
Balance	0.60
Client Allocation	
$50	0.95

Performance Composite:

Market Value ($mm): 48

Annual 2013 Return: 3.58%

Note(s): Performance represents the commingled fund, gross-of-fees. Asset increase in 2012 was attributed to the gain of one account for $106 million and market appreciation. Asset increase in 2013 was attributed to the gain of two accounts for $200 million. Portfolio manager Luiz Soares left the firm in 2011 and was subsequently replaced by Donald Elefson in first quarter of 2012. Developed market exposure on pages 6 and 7 represents companies domiciled in developed countries but who receive the majority of their revenues from emerging markets.

Axiom International Investors LLC
Axiom Emerging Markets Equity

Investment Philosophy:
Axiom begins with key business driver analysis and attempts to identify the dozen or so key business drivers for each company. The process is a combination of primary and secondary research in order to capture a comprehensive array of information on each company.

Research Process:
Key drivers include company specific, industry, macro-economic and political factors. For each of these drivers, Axiom surveys a wide variety of sources in order to determine investor expectations. They then continuously monitor the actual results being achieved to identify positive or negative developments. Ultimately, Axiom wants to purchase or own those companies' where the key drivers are exceeding investor expectations, and they want to sell or avoid those companies where the drivers are falling short of expectations. One of the many sources of data for the companies key drivers is outside sell-side research.

Country Strategy:
Country allocation is a consequence of stock selection. They monitor economic forecasts and developments in approximately fifty international markets including both developed and emerging markets. The focus is on key factors such as rising GDP, changing exchange rates, falling inflation or an improving political environment. By incorporating this information into stock selection, the portfolio is aligned with the general direction of growth and interest rates in markets around the world.

Security Selection:
The individual security weighting decisions within the portfolio are based primarily on the level of conviction, supported by validation, in the individual investment story. New positions generally start at 1%, and as the positive trend of better than expected results in the key business drivers continues to be validated, the size of the position is increased. In other words, continued validation of improving fundamentals leads to an increase in the level of conviction in the story by the investment team, which in turn leads to an increased position of the stock in the portfolio. Positions will generally be bought up to 3%. Positions are generally limited to 5% of the total portfolio.

Portfolio Construction:
Axiom is an active manager and opportunistically seeks to select a portfolio of approximately 2% of their investable universe. The universe is defined as companies with 1.) a minimum market capitalization of USD $250 Million, 2.) coverage by 3 or more third-party sell side analysts, and 3.) trading volume of at least USD $1 Million per day in the markets. Typical portfolios hold between 70-100 stocks, which allows for individual holdings to have an impact on portfolio performance, but not overly concentrated where undue risk is taken at the stock specific level.

Currency Strategy:
This Axiom product does not hedge currency.

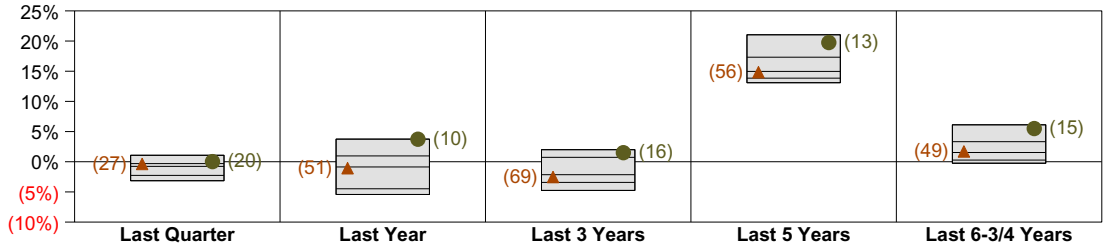
Sell Discipline:
Axiom's sell discipline is based on the same fundamental analysis that is performed on buy candidates. If the key business drivers of a particular holding are falling short of expectations then they become a sell candidate. Also, if the price appreciates to a point where the business results are effectively priced into the stock or the majority of the upside potential has been achieved, then they will reallocate to a new idea. Alternatively, a stock they continue to like may have appreciated to a portfolio position of over 5% and while still a viable investment, the position size will be reduced for diversification purposes. Finally, holdings are constantly monitored and the team attempts to find more attractive investment opportunities than what is currently in the portfolio.

Axiom International Investors LLC
Axiom Emerging Markets Equity
Return Analysis Summary

Return Analysis

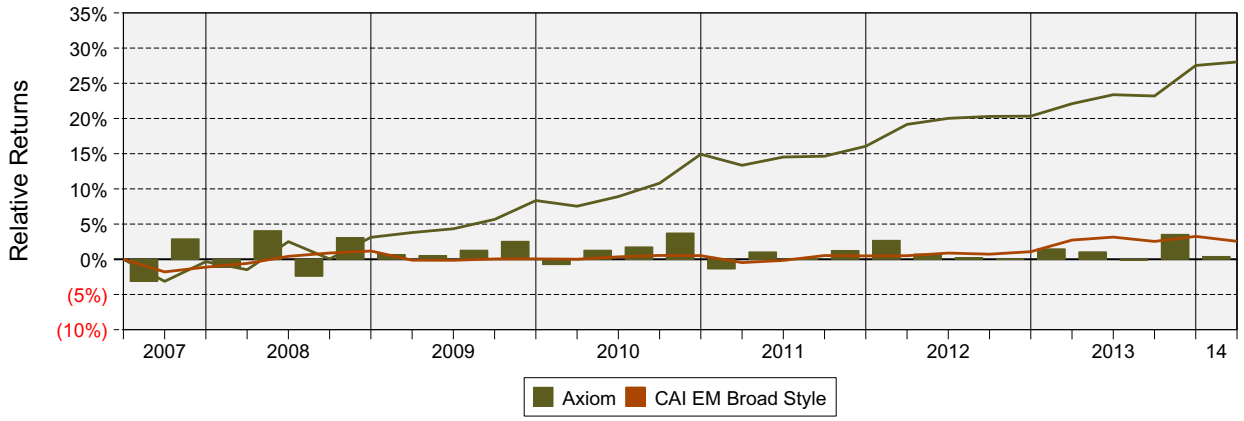
The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures.

Performance vs CAI Emerging Market Broad Style (Gross)
Periods ended March 31, 2014

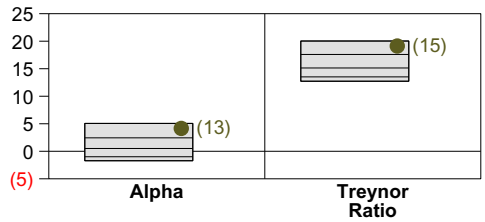


	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 6-3/4 Years
10th Percentile	1.07	3.75	2.00	21.04	6.12
25th Percentile	(0.31)	0.96	0.73	17.33	3.32
Median	(0.77)	(0.86)	(2.15)	14.97	1.53
75th Percentile	(2.26)	(4.48)	(3.42)	13.85	0.28
90th Percentile	(3.15)	(5.43)	(4.75)	13.09	(0.25)
Axiom ●	0.02	3.73	1.50	19.75	5.50
MSCI Emerging Mkts Idx ▲	(0.37)	(1.07)	(2.54)	14.83	1.71

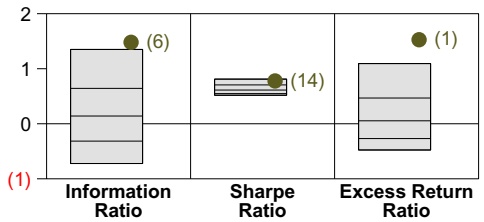
Cumulative and Quarterly Relative Return vs MSCI Emerging Mkts Idx



Risk Adjusted Return Measures vs MSCI Emerging Mkts Idx
Rankings Against CAI Emerging Market Broad Style (Gross)
Five Years Ended March 31, 2014



	Alpha	Treynor Ratio
10th Percentile	5.06	20.03
25th Percentile	2.44	17.59
Median	0.51	15.13
75th Percentile	(0.99)	13.52
90th Percentile	(1.72)	12.73
Axiom ●	4.15	19.12



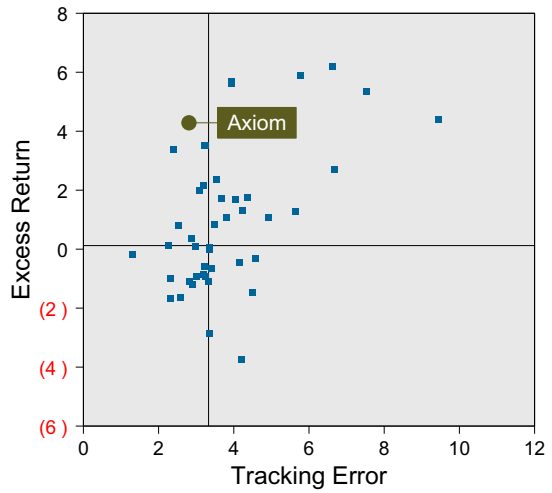
	Information Ratio	Sharpe Ratio	Excess Return Ratio
10th Percentile	1.35	0.81	1.09
25th Percentile	0.64	0.71	0.47
Median	0.14	0.61	0.05
75th Percentile	(0.32)	0.55	(0.27)
90th Percentile	(0.72)	0.52	(0.48)
Axiom ●	1.48	0.78	1.53

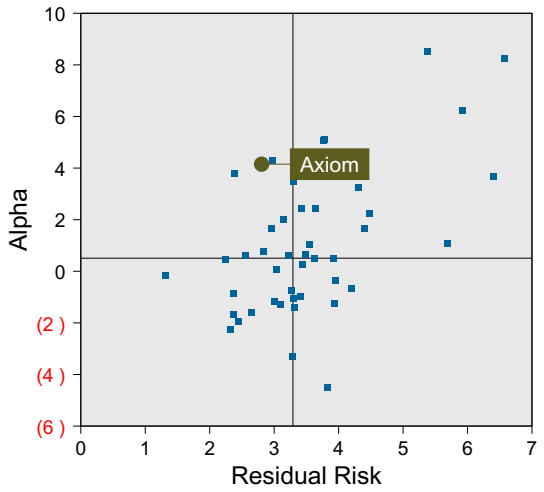
Axiom International Investors LLC
Axiom Emerging Markets Equity
Risk Analysis Summary

Risk Analysis

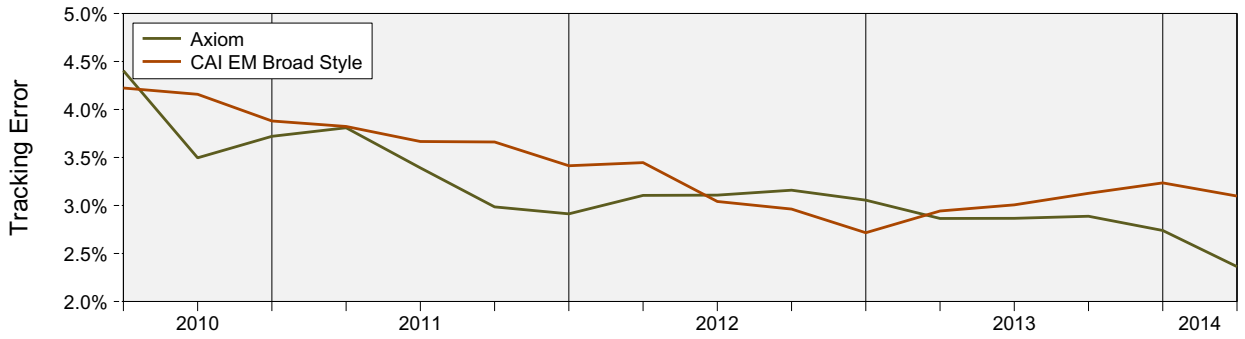
The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second scatter chart displays the relationship, sometimes called Information Ratio, between alpha (market-risk or "beta" adjusted return) and residual risk (non-market or "unsystematic" risk). The third chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

Risk Analysis vs CAI Emerging Market Broad Style (Gross)
Five Years Ended March 31, 2014

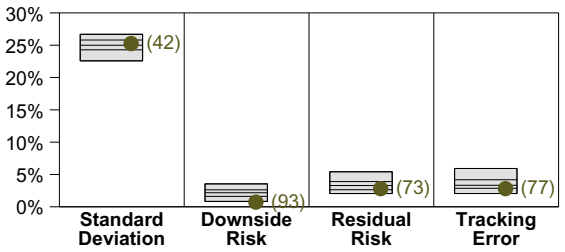


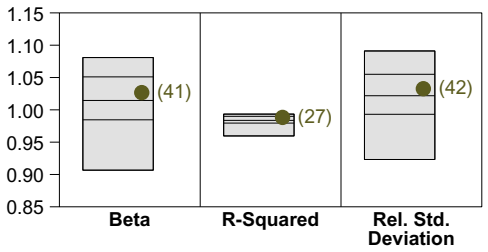


Rolling 12 Quarter Tracking Error vs MSCI Emerging Mkts Idx



Risk Statistics Rankings vs MSCI Emerging Mkts Idx
Rankings Against CAI Emerging Market Broad Style (Gross)
Five Years Ended March 31, 2014





	Standard Deviation	Downside Risk	Residual Risk	Tracking Error
10th Percentile	26.69	3.55	5.42	5.93
25th Percentile	25.80	2.63	3.90	4.18
Median	24.99	2.17	3.29	3.33
75th Percentile	24.29	1.61	2.64	2.86
90th Percentile	22.58	0.83	2.05	2.05
Axiom ●	25.26	0.71	2.81	2.81

	Beta	R-Squared	Rel. Std. Deviation
10th Percentile	1.08	0.99	1.09
25th Percentile	1.05	0.99	1.05
Median	1.01	0.98	1.02
75th Percentile	0.98	0.98	0.99
90th Percentile	0.91	0.96	0.92
Axiom ●	1.03	0.99	1.03

MEMO

TO: SIB
FROM: David Hunter
DATE: June 27, 2014
SUBJ: Westridge/WG Trading

Mary Kae Kelsch, Attorney General's Office, will provide an update on the Westridge/WGTC litigation matter.

North Dakota State Investment Board Managers

Investment Manager	Trust	Asset Class	Open to Close Date	Description
Adams Street Partners Miguel Gonzalo	Pension	Private Equity	various commitments since 1991	The Adams Street Partnership Fund Program ("ASP Fund Program") invests in private equity partnerships and portfolio companies, creating a portfolio diversified by time, manager and subclass. Investment commitments will typically be made over a three- to four-year period in venture capital, buyout and other partnerships, which include mezzanine/subordinated debt, restructuring/distressed debt and special situations. A portion of a participant's subscription to the ASP Fund Program may be used to opportunistically invest in secondary interests in private equity partnerships and/or their portfolio companies. All of the Adams Street Partner funds which North Dakota State Investment Board has invested in are based in U.S. dollars.
AllianceBernstein/ Clifton Liz Smith	Pension	Lg Cap Dom Equity	Jun-09 to Oct-10 capital returned	The AllianceBernstein Term Asset-Backed Securities Loan Facility ("TALF") Opportunities Fund is a bottom-up research driven investment strategy structured to take advantage of the opportunity extended to investors through the TALF. The strategy will primarily draw its research from the AllianceBernstein Special Situations Group, which, among other asset classes, covers secured credit sensitive securities (e.g., ABS), as well as non-credit sensitive prime residential mortgage securities. For credit sensitive securities, credit research is overlaid on structural analyses to develop a complete picture of expected loss content, resiliency of cash flows, risk and return. All holdings are closely followed within our proprietary database which contains a time series of investment credit metrics, repayment rates, cohort, and originator statistics. The TALF Opportunities Fund will invest in a concentrated leveraged portfolio of structured asset securities that are eligible for non-recourse lending from the NY Fed TALF. The Fund's goal is to generate high risk-adjusted returns created by the dislocations in asset-backed and other securitization markets. The Fund will invest in AAA/Aaa-rated asset-backed securities as well as other TALF-eligible securities defined by the NY Fed. The TALF program limits the investment universe to US dollar-denominated securities whose underlying collateral is primarily based in the United States. Owing to the high credit quality of the underlying investments, we expect the majority of the Fund's return to be generated by the income in excess of the TALF loans' fees and interest. The Clifton Group is charged with applying the S&P 500 "beta" exposure for the AllianceBernstein "alpha" exposure. The overall goal of the account is to get the return of the S&P 500 index plus an additional alpha amount provided by the TALF fund.
Babson Capital Management Chad Strean	Insurance Budget Stabilization Legacy Fund	Short Term Fixed Inc	 Sep-11 Dec-11	The investment objective of the Babson Capital's Active Short Duration Strategy is to outperform the total return of the Barclays Capital 1-3 year US Government Index while minimizing fluctuations in capital value and providing sufficient liquidity to fund withdrawals driven by client activity. The portfolio seeks to achieve a high total rate of return primarily from current income while minimizing fluctuations in capital values by investing in a well-diversified portfolio of US Government, mortgage-backed, asset backed securities and corporate bonds. The investment team uses proprietary research to conduct value-driven sector rotation and intensive credit and structure analysis, while utilizing a dynamic yield curve management process, to construct effective portfolios. In addition to income, primary goals for the Active Short Duration strategy are stability and liquidity. In meeting these goals, risk is measured by perceived or actual changes in credit worthiness, adequate diversification and exposure to potential changes in interest rates. Babson Capital explicitly manages the portfolio to minimize these risks and endeavors to add value through security selection and portfolio duration structure designed to maximize the risk-return characteristics of the yield curve.
Babson Capital Management Chad Strean	Insurance Budget Stabilization	Short Term Fixed Inc	 Sep-11	Babson was hired to manage the Bank Loans in the former Prudential account. Their direction is to manage and supervise the deliberate liquidation, over time of these holdings. As securities mature or are sold off the proceeds will be transferred to the Active Short Duration Strategy.

updated 6/20/2014

North Dakota State Investment Board Managers

Investment Manager	Trust	Asset Class	Open to Close Date	Description
Bank of North Dakota Tim Porter	Pension Insurance	Dom Inv Grade FI Fixed Income	Apr-91 to Apr-12 changed mandate to long treasury Dec-93 to April-13 Terminated	The Bank of North Dakota (BND) manages this fixed income portfolio for the State Investment Board with a passive management style designed to replicate the Barclay's Government/Corporate Bond Index. In order to accomplish this objective, BND utilizes optimization software that allows us to monitor several portfolio and individual security constraints (duration, yield, convexity, credit quality and issue size). The portfolio is rebalanced monthly in order to achieve an annualized time-weighted rate of return that matches the Barclay's Gov/Corp Bond Index with a tracking error not more than (+ or -) 30 basis points.
Bank of North Dakota Tim Porter	Pension	Dom Inv Grade FI	Apr-12 to Apr-13 Terminated	The Bank of North Dakota (BND) manages this fixed income portfolio for the State Investment Board with a passive management style designed to replicate the Barclay's Long Treasury Index. In order to accomplish this objective, BND utilizes optimization software that allows us to monitor several portfolio and individual security constraints (duration, yield, convexity, credit quality and issue size). The portfolio is rebalanced monthly in order to achieve an annualized time-weighted rate of return that matches the Barclay's Gov/Corp Bond Index with a tracking error not more than (+ or -) 30 basis points.
Blackfriars Asset Management (WestAM) Hugh Hunter	Pension	Emerging Markets Equity	Mar-06 to Jun-12 Terminated	Blackfriars Asset Management Limited has been appointed by North Dakota State Investment Board to manage a Global Emerging Market Equity portfolio. The fund is invested in the WestAM Group Trust. Blackfriars strategy is that of a core, active manager with the objective of outperforming the MSCI Emerging Markets index by 2% over rolling three year periods. Our investment approach is team-based and focuses on capturing alpha from our top-down and bottom-up decisions. Our country allocation process is primarily driven by a factor model encompassing fundamental market and economic factors, whilst stock selection is driven by fundamental research by our internal team of analysts. Blackfriars Asset Management, at the time of appointment, was called WestLB Asset Management which was owned by WestLB AG, a German bank. Following the creation of a 50:50 joint venture with BNY Mellon in 2006, the company became fully owned by BNY Mellon on 31 December 2008 and changed its name to Blackfriars Asset Management Limited. The investment process and investment personnel involved in the management of the portfolio have not changed as a result of the change in ownership.
Brandywine Asset Management Nedra Hadley	Pension	Int'l Fixed Income	May-03	Brandywine's Global Fixed Income investment style is a disciplined, active, value-driven, strategic approach. Their investment strategy concentrates on top-down analysis of macro-economic conditions in order to determine where the most attractive valuations exist. Specifically, they invest in bonds with the highest real yields globally. They manage currency to protect principal and increase returns, patiently rotate among countries and attempt to control risk by purchasing undervalued securities. They believe their approach is ideally suited to the asset class, as each country, and sector exhibit unique valuation parameters. They believe that a client's portfolio should be invested in markets with, what they believe, demonstrate above-average value. Value is defined as a combination of above-average real interest rates and an under-valued currency. They typically concentrate investments where existing economic and market conditions may enable that value to be realized in an intermediate time frame. Their research has identified global fixed income as an opportunity class wherein active strategies have the most potential for reward and passive, index-replicating strategies are fundamentally insufficient and add an unnecessary level of risk to the portfolio management process. Country-by-country return dispersion (and, therefore, opportunity) across developed country bond markets is remarkable, and if capitalized upon as part of an actively managed process, can potentially provide significant excess return (alpha) above the benchmark. They seek to capture those excess returns through strategic investment in countries, currencies, sectors and securities, rather than by maintaining minimum, core commitments, reflective of the benchmark.

North Dakota State Investment Board Managers

Investment Manager	Trust	Asset Class	Open to Close Date	Description
Brookfield Investment Management (Hyperion) Richard Torykian	Insurance	Fixed Income	Jan-07 to Mar-10 Terminated (acct taken over by Declaration)	The Enhanced MBS investment process begins with a macro-economic assessment of the market. Included in the macro-economic assessment is the analysis of: the interest rate environment, the phase of the real estate cycle, consumer credit trends, recently released or pending economic data, supply and demand relationships, housing prices, and the Mortgage Refinancing Index. The analysis and review that occurs at this stage provides the groundwork for establishing the asset allocation for our Enhanced MBS Investment Strategy. We then conduct a detailed review of the MBS sub-sectors. We evaluate developments in each sector; current offerings; recent transactions and market clearing levels; security types and yield spread levels to formulate a relative value outlook. Our research analysts provide fundamental analysis on prepayment speeds, borrower credit exposure, geographic diversification, refinancing trends, and the correlation of returns. We then further analyze the risks of the various MBS sectors—specifically, the outlook for delinquencies, housing affordability, consumer debt, collateral value appreciation, and loss severities. These factors build a larger picture for the appropriate asset allocation for this strategy. The asset mix for our Enhanced MBS Investment Strategy is a ratio that may change over time, as opportunities in the sectors and sub-sectors are identified. Once the initial allocation mix has been determined, the investment process moves to the security selection phase. The most important component of our Enhanced MBS Investment Strategy is security selection. In short, while the market for non-Agency MBS may seem generic, the credit performance from one issue to another varies. Our security selection process results from both quantitative and qualitative inputs, as well as the substantial experience of the portfolio managers. Members of the investment team, utilizing Hyperion Brookfield's proprietary analytics, determine the relative strengths of various securities based on applicable criteria such as issuer, issue, vintage, credit rating, structure, and geographic exposure.
Calamos Investments Meredith French	Pension	Dom Inv Grade FI	Oct-06 to Mar-12 Mandate changed to Global Opportunities	Calamos Advisors LLC manages a convertible mandate for the North Dakota State Investment Board through the Calamos Convertible Plus strategy. The primary objective of the strategy is to achieve high long-term total return through growth and income. The strategy is focused on primarily investing in convertible securities but in addition utilizes both equities and fixed income. This enhanced flexibility allows Calamos to better manage the overall risk/reward profile of a convertible mandate. To take advantage of international opportunities, the portfolio will utilize the Calamos International Convertible Group Trust, a commingled fund in which we purchase units on behalf of the North Dakota State Investment Board. This commingled fund is generally hedged between 70-100% from a currency perspective.
Calamos Investments Meredith French	Pension	Global Equity	Mar 2012 to Dec 2013	The Global Opportunities objective is high long-term total return through capital appreciation and current income. The Trust invests primarily in a global portfolio of equity, convertible and fixed-income securities. In pursuing the Trust's investment objective, the Investment Manager attempts to utilize these different types of securities to strike, in its opinion, the appropriate balance between risk and reward in terms of growth and income. The Investment Manager attempts to keep a consistent balance between risk and reward over the course of different market cycles, through various combinations of stock, bonds and/or convertible securities, to achieve what the Investment Manager believes to be an appropriate blend for the then-current market. As the market environment changes, portfolio securities may change in an attempt to achieve a relatively consistent risk level over time. At some points in a market cycle, one type of security may make up a substantial portion of the portfolio, while at other times certain securities may have minimal or no representation, depending on market conditions.

updated 6/20/2014

North Dakota State Investment Board Managers

Investment Manager	Trust	Asset Class	Open to Close Date	Description
Callan Associates Greg Allen	Pension	Small Cap Dom Equity	May-06	The investment strategy for the Diversified Alpha Small Cap Equity Fund ("Fund") is based on two empirical studies. The first observed that the average portfolio for a comprehensive universe of active institutional small cap products out-performed the Russell 2000 Index in every three-year period since 1984, resulting cumulative out-performance in excess of five percent per year over the 20-year period with a tracking error of five percent annualized. The consistency and magnitude of this out-performance led to Callan's use of the average institutional small cap portfolio as the target in the Fund's portfolio construction methodology rather than one of the standard small cap indices. The second study observed that the illiquidity of the small cap market presents significant structural challenges to managers as they grow in assets under management ("AUM"). These challenges resulted in smaller products (in terms of AUM) out-performing their larger counterparts by in excess of three percent per year over the observed 20-year period. The consistency and magnitude of this out-performance provided the basis for favoring smaller, less capacity-constrained products in the Fund's manager selection methodology. The Fund's strategy is implemented through the use of a stratified sampling technique, and it begins with the decomposition of Callan's Total Institutional Small Cap ("TISC") universe (consisting of over 700 products) into 10 distinct sub-styles, with approximately 70-75 products in each sub-style. After extensive screening, four products from each sub-style are selected which, when held in combination, are expected to closely track the performance of each sub-style as a whole. This process results in a total portfolio made up of 40 equity sub-advisors, equally weighted in the Fund's portfolio, which very closely tracks the performance of the average actively managed institutional small cap product (historical tracking error since inception of approximately one percent annualized).
Capital Guardian Michael Bowman	Pension Insurance	Developed Int'l Equity Int'l Equity	Mar-92 Apr-97	The Portfolio will invest primarily in equity or equity type securities of companies in developed countries excluding the U.S. These equity securities will be listed on a stock exchange or traded in another recognized market and include, but are not limited to, common and preferred stocks, securities convertible or exchangeable into common or preferred stock, warrants, rights and depository arrangements. The Portfolio may invest in fixed-income securities (including cash or cash equivalents) when market conditions warrant. The Portfolio's investments may be denominated in U.S. dollars or in non-U.S. currencies. The Portfolio may include securities eligible for resale pursuant to Rule 144A and securities in offerings that are not registered for sale in the U.S. but are listed or quoted in the securities' local markets. Instruments acquired as a result of corporate actions are permitted.
Capital Int'l V & VI Jim McGuigan	Pension	Private Equity	Aug-07	Capital International Private Equity Fund (CIPEF) has a geographic focus in global emerging markets. CIPEF's investment focus, by stage, primarily includes buy-outs, expansion capital, and replacement capital.
Clifton Group Ben Lazarus	Pension	Asset Alloc Overlay - Lg Cap, Small Cap, Int'l Equity and Dom FI	Nov-08 to Jul-10 Overlay program discontinued	By utilizing exchange traded futures contracts, Clifton synthetically maintains North Dakota State Investment Board's (NDSIB) desired exposure to a variety of asset classes. This synthetic exposure is most often utilized between monthly cash rebalancing moves. Clifton works with NDSIB Staff intermonth and at month end to make sure the economic exposure is between prescribed bands. Futures are purchased or sold to change the portfolio's effective asset class exposure without liquidating or purchasing securities in the cash market. Subsequent asset class exposure is adjusted by modifying the futures positions while the underlying portfolio remains unaffected. Using exchange traded futures contracts as opposed to physical securities provides NDSIB with: • More flexibility and efficiency in moving between asset classes • Lower cost for establishing and removing positions • Detailed accounting on the performance of the rebalance move

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North Dakota State Investment Board Managers

Investment Manager	Trust	Asset Class	Open to Close Date	Description
Clifton Group Ben Lazarus	Pension Insurance	Dom Small Cap Equity Dom Lg Cap Equity Dom Small Cap Equity Dom Lg Cap Equity	Nov-09 Apr-11 Nov-09 Nov-09	The Clifton Group believes that the U.S. equity universe is highly efficient. As such, we utilize a method of constructing the portfolio that we believe provides us with the greatest likelihood of outperforming the index. Specifically equity futures are used to gain the benchmark exposure. The underlying cash portfolio is then invested in a liquid, high quality short duration fixed income portfolio. Over market cycles excess return generated by the short duration portfolio, when added to the performance of futures is expected to allow the strategy to achieve 0.50% to 1.00% of gross excess annual performance. Each Enhanced Equity portfolio is carefully constructed and managed within strict quality and diversification guidelines. The Portfolio Management Team oversees all aspects of the construction and management process. Individual Portfolio Managers oversee different parts of the portfolio, but all are required to stay within pre-determined guidelines as provided by NDSIB. The account is monitored daily to verify that performance is maintained within expectation bands. Furthermore, accounts are reconciled monthly and audited semi-annually to confirm compliance with all existing guidelines.
Clifton Group Ben Lazarus	Pension	Developed Int'l Equity	Mar-10 to Dec 13 Terminated	This portfolio replicates the MSCI EAFE index utilizing futures contracts.
Coral Partners Momentum Fund Yuval Almog	Pension	Private Equity	Jul-02	Coral's Momentum Fund focuses on opportunities in high growth markets undergoing imminent transitions driven by emerging technologies, new business modalities and customer preferences. Examples include: a) the transition to rich digital media as a mass market opportunity; b) the ascendance of ubiquitous telecommunications networks, allowing universal access to voice, data and rich content; and c) the transition to the delivery of software-driven applications as a service, creating new software based franchises with recurring revenue models. Coral's Momentum Fund invests in late stage, technology driven companies the General Partner believes has substantial intrinsic momentum. Companies with intrinsic momentum have early demand related indicators such as accelerating revenues, channel build-up, growing product utilization, and expanding customer bases. The General Partner believes that investing in companies at this stage of development mitigates product and technology risk as well as market acceptance risk.
Coral Partners Fund V Yuval Almog	Pension	Private Equity	Mar-98 to Dec-12 Capital Returned	Coral Partners V focuses its investments in the healthcare and technology sectors with companies in all stages of growth from seed to expansion. The General Partners believe that achieving strong venture capital returns depends on the ability to create enterprises capable of attaining a defensible market leadership position, often by developing new technologies which result in either a new market or the restructuring of an existing market; and that the most effective way of accomplishing this objective is to exploit industry trends and focus on businesses which are execution intensive and operate on a worldwide scale. Important components of this strategy are: active involvement, industry focus, and portfolio management.
Coral Partners Supplemental Fund V	Pension	Private Equity	Aug-01 to Dec-12 Capital Returned	Coral Technology Supplemental Fund V invests in technology portfolio companies of Coral Partners V.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
Corsair (Fund III, IV & ND Investors) Michael Poe Cliff Brokaw	Pension	Private Equity	Feb-07	Corsair seeks to earn strong risk-adjusted returns by leveraging the investment team's knowledge and contacts to identify and execute attractive investments in companies in the financial services industry around the world. Corsair takes control and minority positions, either individually or as a lead member of an investor consortium. Target investments include both privately-held and public companies, generally via private transactions when the target company loses access to, or has difficulty accessing, the public capital markets. In certain circumstances, the Fund may acquire pools of financial assets or securities, or provide financing to a secured pool of assets. Corsair endeavors to develop a strong relationship and high degree of influence with investee company senior executives and key shareholders. In many instances, Corsair obtains Board representation, observer seats, or other types of management rights. Given the complexities of investing in a regulated industry, Corsair's ability to receive more traditional generalist buyout governance rights is often limited, and its ability to influence managerial decisions requires a degree of experience which Corsair believes can only be achieved through a long and consistent history of investing in the financial services sector. Corsair expects the Fund to make 10 to 15 investments over its investment period, although there can be no assurances with respect to the number of investments that will be made. Corsair anticipates holding its investments for between three and six years. In those instances where Corsair is part of an investor consortium, Corsair generally endeavors to act as a lead or co-lead investor, as was the case in all Corsair III investments. On select occasions Corsair expects to co-invest with strategic partners that are capable of bringing added value to an investment and where the Fund's exit considerations can be addressed. Above all, Corsair's value-driven investment style focuses on those investment opportunities in which the Investment Advisor believes that a positive discrepancy exists between an asset's price and its intrinsic value.
DFA - Dimensional Fund Advisors Joe Young	Pension Insurance	Developed Int'l Equity Int'l Equity	Nov-07 Nov-07	The International Small Cap Value Portfolio invests in the stocks of small, non-US developed markets companies that Dimensional believes to be value stocks at the time of purchase. Size is defined as the smallest 8-10% of each country's market capitalization. Securities are considered value stocks primarily because a company's shares have a high book value in relation to their market value (BtM). This BtM sort excludes firms with negative or zero book values. In assessing value, additional factors such as price-to-earnings ratios may be considered, as well as economic conditions and developments in the issuer's industry. The criteria for assessing value are subject to change from time to time. The Portfolio currently invests in companies in Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom. It does not invest in emerging markets.
DFA - Dimensional Fund Advisors Joe Young	Pension	Emerging Markets Equity	Oct-05	The Emerging Markets Small Cap Portfolio invests in small cap emerging markets companies. Presently, this means investment in companies whose market capitalization is less than $2.3 billion at the time of purchase. Dimensional will consider, among other things, information disseminated by the International Finance Corporation in determining and approving emerging market countries. The Portfolio currently invests in companies in Brazil, Chile, China, Hungary, India, Indonesia, Israel, Malaysia, Mexico, the Philippines, Poland, South Africa, South Korea, Taiwan, Thailand, and Turkey. Due to repatriation restrictions, the Portfolio currently holds but does not purchase securities in Argentina.

North Dakota State Investment Board Managers

Investment Manager	Trust	Asset Class	Open to Close Date	Description
DMR (Declaration Mgmt & Research) Mortgage Opportunity Fund John Pluta	Pension	Below Inv Grade FI	May-08 to Dec-09 (fund matured/ capital returned)	The Fund's investment strategy is to acquire stressed and distressed mortgage backed securities, primarily non-Agency Residential Mortgage Backed Securities ("RMBS"). The return objective of the Fund is to achieve a net IRR in the 12%-20% range within a target five year horizon from the acquisition of such securities. The goal is to extract a significant liquidity premium (apart from the compensation available for assuming credit risk) using bottom-up security analysis during a period when legacy holders of mortgage backed securities are in need of liquidity. Once fully invested, the Fund will be a long-biased investment in distressed securities within various sub-sectors of mortgage credit. The focus of the Fund is senior class RMBS backed by prime, Alt-A and subprime collateral. Higher allocations are expected to be in prime and Alt-A transactions. Security-specific risk will be analyzed at the loan level. The risk analysis links borrower attributes (loan-to-value, credit score, documentation status, age of loan, size of loan, etc.) to the borrower's default and prepayment propensities. Similar borrower attributes are examined to estimate recovery rates post default. Risk management at the security level also involves an examination of issue structure, waterfall priorities and other structural features which trap or divert cash flow, particularly as it relates to our target asset. It is anticipated that the Fund's returns will be earned primarily through cash yield on bonds it acquires at discounted prices and through repayment of principal, or partial principal from recoveries on defaulted mortgages, over the holding period of each asset in the Fund.
DMR (Declaration Mgmt & Research) TALF and ABS Fund/Clifton John Pluta	Pension	Lg Cap Dom Equity	Aug-09 to Dec-11 Fund matured/capital returned	The investment objective of the DMR TALF and ABS Fund is to achieve attractive risk-adjusted returns in the low to mid-teens by investing opportunistically in senior classes of Consumer ABS and CMBS. The returns are expected to be achieved primarily through cash flow yield from assets acquired and financed using non recourse TALF leverage. The Fund term is expected to be relatively short with distributions beginning in July 2010 and most bonds naturally amortizing and maturing within 2-4 years from our purchase date. From a tactical standpoint, we believe the risk/return characteristics of short tenor ABS and CMBS compare favorably to other debt sectors. For TALF eligible assets, the low cost, non-recourse borrowing facility is an attractive feature which corporate credit, levered loans and high yield cannot access. The Fund's primary focus by sub-sector is on TALF-eligible legacy AAA senior CMBS. These assets are trading near par and tend to have a solid credit profile. The strategy does not involve stressed or "credit intensive" securities. Rather, we seek to execute risk efficient trades by employing non- recourse TALF leverage on lower volatility "par based" assets with high confidence in the receipt of coupon cash flow and full repayment of principal. TALF leverage is likely to range at 5x-15x capital depending upon the asset. In general, we expect to hold investments to their respective maturity dates, although we have the flexibility to sell holdings if spreads tighten. In acquiring assets, we employ a bottom-up analysis and model the structural characteristics of each transaction. DMR has a value orientation in security selection, seeking a margin of safety or cushion between base case performance expectations and extreme loss outcomes. The Clifton Group is charged with applying the S&P 500 "beta" exposure for the Declaration "alpha" exposure. The overall goal of the account is to get the return of the S&P 500 index plus an additional alpha amount provided by the TALF fund.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
DMR (Declaration Total Return Bond Fund) John Pluta	Pension	Dom Inv Grade FI	Apr-12	The Fund invests primarily in residential (RMBS) and commercial (CMBS) mortgage-backed securities. The Fund's portfolio holdings consist primarily of RMBS issued by private sector companies (Non-Agency RMBS) and government agencies (Agency MBS) and CMBS issued by private sector companies. Agency MBS includes securities issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Government National Mortgage Association (Ginnie Mae). Portfolio holdings may range from short tenor senior classes to stressed issues or subordinated securities with substantial risk of non-payment and correspondingly higher yields. Smaller portfolio allocations may include consumer asset-backed securities (ABS), or other structured credit securities and corporate bonds. As a diversification strategy and a potential hedge to credit risk, the Fund may invest in securities which tend to benefit from slow mortgage prepayments and economic growth, such as interest only (IO) MBS. Other Fund investments may include US government securities (US Treasuries), unsecured debt securities issued by US government agencies and entities (Agency Debt) and derivatives related to any of the above.
DMR (Declaration Mgmt & Research) - formerly Hyperion Brookfield mortgage portfolio John Pluta	Insurance	Fixed Income	Feb-10 to May-14 liquidated and moved to TRBF	In this mandate, DMR will assume management of mortgage assets originally acquired by Brookfield (Hyperion) over the period 2006-2009. DMR will provide a fresh perspective on the holdings, some of which are credit impaired. The portfolio management services will include loan-level analysis on individual securities and portfolio level risk management of liquidity and volatility. DMR will seek to optimize the risk-return profile of the portfolio. The performance target of the portfolio is a gross total return of 1.25% above the return of the Benchmark over a full market cycle. The Benchmark is the Securitized Portion of Barclays U.S. Aggregate Index (ID #5582). In analyzing portfolio holdings, DMR may produce loss-adjusted cash flow projections on various bonds and/or stress test individual assets to identify break points (principal loss). DMR will evaluate the effect, if any, of government policy such as loan modification on portfolio holdings.
DMR (Declaration Total Return Bond Fund) John Pluta	Insurance	Dom Inv Grade FI	Dec-13	The Fund's investment objective is to achieve net returns in the range of 6% to 10% annualized over rolling 3-year periods. The Investment Advisor attempts to achieve this objective using fundamental analysis to evaluate the pricing and volatility of a wide range of MBS and other structured finance securities while also making a relatively small allocation to corporate bonds. The Fund invests primarily in residential ("RMBS") and commercial ("CMBS") mortgage-backed securities. The Investment Advisor expects the Fund's returns to be achieved — if the Fund is successful — through both cash flow yield and trading gains. The Fund's portfolio holdings consist primarily of RMBS issued by private sector companies ("Non-Agency RMBS") and government agencies ("Agency MBS") and CMBS issued by private sector companies. Agency MBS includes securities issued by the Federal National Mortgage Association ("Fannie Mae"), the Federal Home Loan Mortgage Corporation ("Freddie Mac") and the Government National Mortgage Association ("Ginnie Mae"). Portfolio holdings may range from short tenor senior classes to stressed issues or subordinated securities with substantial risk of non-payment and correspondingly higher yields. The tactical weighting of the Fund's portfolio across the different sub-sectors of the securitization market varies according to the Investment Advisor's perception of sub-sector as well as overall market volatility and liquidity. Smaller portfolio allocations may include consumer asset-backed securities ("ABS"), other structured credit securities and corporate bonds. As a diversification strategy and a potential hedge to credit risk, the Fund may invest in securities which tend to benefit from slow mortgage prepayments and economic growth, such as interest only ("IO") MBS. Other Fund investments may include U.S. government securities ("U.S. Treasuries"), unsecured debt securities issued by U.S. government agencies and entities ("Agency Debt") and derivatives related to any of the above.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
ECM - European Credit Mgmt John (Rusty) Reese	Pension	Lg Cap Dom Equity	Nov-07 to May-11 Terminated	The investment consists of variable rate notes issued by European Credit (Luxembourg), S.A., and managed by European Credit Management Ltd. The notes represent undivided interests in the issuer, a predominately investment grade European credit commingled fund currently rated BBB by Fitch Ratings, and are akin to fund subscriptions. The return on the investment is a combination of the beta of the S&P 500, achieved by means of a total return swap, and the excess return over EURIBOR, net of swap costs (if any), generated by the performance of EC(L). Returns of the investment are substantially hedged back to U.S. dollars.
Epoch Investment Partners Thomas Pernice	Pension	Lg Cap Dom Equity	Jul-07 to Dec-11 Mandate changed to Global Choice	Epoch's Global Absolute Return strategy seeks to produce superior risk-adjusted returns by building portfolios of businesses with outstanding risk/reward profiles without assuming a high degree of capital risk. We adopt a globally-minded approach, seeking to capture the benefits of borderless investing and globalization. The businesses in which we invest effectively reflects the high conviction ideas of the entire range of U.S. and Non-U.S. strategies offered by the firm to be included in this concentrated portfolio We manage portfolio risk exposure through quantitative and qualitative asset allocation inputs to reduce the likelihood of loss of capital. Our goal is to produce a portfolio of 20 – 30 positions that exhibits low volatility, strong risk-adjusted returns and real absolute returns. Global Absolute Return will use cash to mitigate downside capture.
Epoch Investment Partners Thomas Pernice	Pension	Global Equity	Jan-12	The Epoch Global Choice strategy seeks to produce superior risk adjusted returns by building portfolios of businesses with outstanding risk/reward profiles. The concentrated active, global equity portfolio typically consists of approximately 20-35 securities (generally equities) representing the firm's highest conviction names. The expected annual turnover is generally between 90-130%. The equity portion of the portfolio will invest no more than 10% of the portfolio, at the time of purchase, in any one equity security.
Goldman Sachs (2006 Fund, Fund V) Stephanie Ivy	Pension	Below Inv Grade FI	Apr-06	The GS Mezzanine Partners family of funds is the largest mezzanine fund family in the world, with over $20 billion invested in 100+ companies since 1996. In 2007, Goldman Sachs established its fifth mezzanine fund, GS Mezzanine Partners V, with $13 billion of leveraged capital. GS Mezzanine Partners seeks large-sized mezzanine investments comprised generally of fixed income securities and an associated equity component. Our focus is on providing "private high yield" capital for mid- to large-sized leveraged and management buyout transactions, recapitalizations, financings, re-financings, acquisitions and restructurings for private equity firms, private family companies and corporate issuers. We target high-quality companies with $500 million to $10+ billion of enterprise value; leading market positions; high barriers to entry; well-regarded management teams; and stable, cash generative businesses.
Grosvenor Capital (formerly Credit Suisse) Andrew Johnson Paul Burraston	Pension Insurance	Infrastructure Inflation Protected	Dec-11 Dec-11	Established on October 21, 2009, the Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%).

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
Hearthstone (MSII, MSIII) Mark Porath	Pension	Private Equity	Oct-99	In the Hearthstone-MSII Homebuilding Investors (MS2) and Hearthstone Multi-State Value-Added Fund III ("MS3") funds, Hearthstone, on behalf of the Fund, is authorized to invest exclusively in residential development projects. Residential development projects include residential land development and single-family homebuilding, including the acquisition and conversion of rental properties into condominiums and other forms of single-family housing. MS3 was authorized to invest in the construction and sale of apartment buildings, but no such investments were made. Land development projects typically involve the acquisition, entitlement and development of anywhere from 100 to 1,000 finished residential lots for sale to merchant builders, but may involve the acquisition, permitting and development of other residential land. Single-family homebuilding projects generally involve the construction and sale of approximately 25 to 500 single-family attached or detached homes.
Invesco Asia Fund I Asia Fund IV Paul Michaels	Pension Pension	Real Estate	11/1/2008 awaiting first call	This investment strategy will focus on value added investments with an initial focus on China and Japan, with a secondary focus on Singapore and Hong Kong, in residential, industrial, retail and office properties. Where IRE identifies best value, it will execute the following value added strategies for the Fund: -Provide equity for the development of new real estate product that generates high cash returns and demonstrates mid-term growth opportunities. -Reposition assets or change the use of an asset to maximize its value by identifying highest/best use, curing deferred maintenance, improving overall asset quality and developing additional revenue-generating amenities. -Participating in high growth markets -Adopting higher leverage strategies and exploiting market inefficiencies.
Invesco Core USA LLC Paul Michaels	Pension Insurance	Real Estate	8/1/1997 10/1/2012	The Fund invests in properties located in the United States, typically requiring an investment of $10 million or greater. The Fund focuses on quality core real estate opportunities and, in addition, the Fund may invest up to 15% of its assets in "value-added" type real estate investment opportunities. The Fund seeks to provide Investors with returns equal to or greater than the NPI on a 3- and 5-year rolling basis.
Invesco IREF II Invesco IREF III Paul Michaels	Pension Pension	Real Estate	Nov-07 awaiting first call	The Fund will invest in value-added real estate opportunities. Investments will be made solely in the United States in four specific product types- multifamily, industrial, retail and office properties. Where IRE identifies best values, it will execute the following strategies for the Fund: • Re-capitalization: Invest in properties or portfolios at a favorable basis by acquiring an equity interest and/or debt. • Lease-up: Acquire properties with vacant space or near-term lease rollover exposure, with the opportunity to reposition rent roll and tenancy. • High Yield Debt: Acquire unrated pieces of CMBS debt • Renovation/Retenanting/Repositioning: Reposition assets (an example would be to upgrade an asset from Class B to Class A) or change the use of an asset to maximize its value by curing deferred maintenance, improving overall asset quality and developing additional revenue-generating amenities. • Development: Provide equity commitments/investments for the development of new real estate products that allows for access to new, state-of-the-art products at wholesale pricing.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
InvestAmerica Lewis & Clark L&C II John Cosgriff David Schroder	Pension	Private Equity	Feb-02 Jun-09	The investment strategy for Lewis and Clark Private Equities, LP and L&C Private Equities II, LP (the Funds) is to assemble a portfolio of investments in private growth and later-stage companies that have a strong probability of providing high returns without undue volatility and risk to investors. The Funds target for investment middle market growth and later stage companies throughout the United States with existing sales from $5,000,000 to $100,000,000. Typically, these small to medium sized companies are seeking to raise $1,000,000 to $10,000,000. The Principals of the Funds have demonstrated through the successful investment of previous venture funds, that this market niche has historically delivered high returns with more limited competition for financing. The Funds seek to achieve a minimum of a 25% and in many cases in excess of a 30% internal rate of return on each of its company investments. The Funds diversify their investments by investing in portfolio companies across many industries and geographic locations. Investments will be made across a range of manufacturing, service, distribution and technology companies. Most investments are expected to be in later stage companies with established sales and profitability. Some investments may be opportunistically made in growth stage companies. The investment team has historically invested throughout the United States with offices strategically located in the Midwest and Northwest.
JP Morgan Short Term Bond Fund Jim Sakelaris	Insurance Budget Stabilization Legacy Fund	Short Term Fixed Inc	Sep-11 Dec-11	The investment objective of the Short Term Bond Fund is to outperform (based on the portfolio's total return, gross of fees) the Barclays Capital 1-3 Year Government/Credit Index (the benchmark) while maintaining total return risk similar to that of the Benchmark as measured over a market cycle.
JP Morgan Alternative Property Fund Jim Sakelaris	Pension	Real Estate	Jan-06	The JPMorgan Alternative Property Fund seeks current income and capital appreciation from a portfolio of investments consisting of alternative real estate (senior housing, medical office, hotels, single-family subdivision development, condos, storage, parking and other “non-core” cash-flow-generating property investments) and real estate-related assets in the U.S., as well as traditional and alternative real estate and real estate-related assets in Canada, Mexico and the Caribbean. The Fund pursues a broadly diversified absolute-return strategy targeting a 12-15% total annualized IRR (including a current income return of 5-7% and the balance from capital appreciation) gross of all Fund-level fees and expenses, assuming at least a 5-year holding period. The Fund is designed to benefit from less competitive flow of capital relative to core property. As an infinite-life structure, the Fund offers potential investors the opportunity for periodic liquidity at net asset values established on a quarterly basis. The Fund will also periodically rebalance sector, product and geographic diversification to dampen volatility and create a stable alternative real estate investment portfolio with a conservative level of leverage (60% on a portfolio basis).

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
JP Morgan Asian Infrastructure & Related Resources Opportunity Fund Jim Sakelaris	Pension	Infrastructure	Aug-08	The JPMorgan Asian Infrastructure & Related Resources Opportunity ("AIRRO") Fund seeks to invest in infrastructure and related resources opportunities across the greater Asia Pacific region. The Fund seeks to invest in a broad range of assets, including (but not exhaustive): core infrastructure such as transportation, power both from conventional and renewable sources, communications, water and waste-water, public works, urban development and other "social" infrastructure assets (i.e. hospitals, schools, government centers) and related resources such as energy, raw materials, natural resources, construction and construction-related materials and real estate (that are part of or associated with any of the installation and operation of infrastructure). The Fund will seek an internal rate of return in excess of 19% (net of Incentive Allocation and Fund Expenses and any Taxation that is payable by the Fund, but exclusive of any Taxation payable by Investors with respect to distributions), assuming a constant exchange rate during the term of the Fund between the USD and the currencies in the countries where the Fund's Investments are located. The Investment Adviser will have the right, but not the obligation, to hedge currency risk at its discretion, however there currently is no intent to engage in active hedging except as follows: (i) in exceptional cases where we believe the underlying risk is excessive and (ii) where there are known future equity commitments subject to currency risk, including with respect to the acquisition of new assets. The Fund team's view of infrastructure, in the Asian context, takes a holistic approach, encompassing not only core infrastructure but also the raw material and construction-related stages of infrastructure and those companies needed "to make infrastructure happen". By focusing on both infrastructure and related resources, the Investment Adviser has developed a strategy which seeks to capitalize on the entire opportunity presented by the large forecasted growth and required investment in Asian infrastructure. The Fund monitors its currency exposure on a regular basis taking account of the outlook for any currencies in which AIRRO is invested. At this time, AIRRO does not anticipate hedging its currency exposure in the near-term. Based on consensus forecasts prepared by Bloomberg, analysts expect Asian currencies to strengthen versus the USD over the medium-term. AIRRO's entry cost (based on average weighted rates) for its investments are 47.68 INR/USD for SevenHills and 7.76 HKD/USD for Scitus (6.93 RMB/USD for Scitus' corresponding investments onshore). We anticipate these positions to strengthen in the favor of AIRRO by exit (estimated to be 2013 for each investment). AIRRO will continue to monitor movements in Asian currencies and review its hedging strategy accordingly.
JP Morgan Emerging Markets Fund Jim Sakelaris	Pension	Emerging Markets Equity	Nov-05	The emphasis of investments in the Emerging Markets Equity Focused Fund is in capital and common stocks, securities convertible into capital and common stocks, and other equity investments, all of which involve foreign companies and enterprises' located primarily in emerging markets. In this context, 'Emerging' refers generally to countries outside of the MSCI EAFE Universe.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
JP Morgan Greater China Property Fund Jim Sakelaris	Pension	Real Estate	Jan-08	The JPMorgan Greater China Property Fund is a closed-end investment fund which seeks to invest in real estate development projects in Greater China (defined to include China, Hong Kong, Macau and Taiwan). Drawing on over 30 years of real estate investing experience and its position as one of the largest real estate investment managers globally, J.P. Morgan Investment Management Inc. seeks to develop and manage a portfolio of capital-appreciation oriented real estate assets in Greater China. The Fund will generally make its investments across the office, residential, industrial, retail and hospitality sectors by creating project-level joint venture arrangements with multiple operating partners in Greater China. In addition to direct real estate investments, the fund may invest in shorter-term, "structured capital" opportunities in the real estate sector (typically 6-18 months in nature). Such investments may involve publicly listed companies and private companies seeking funding for their operations. The fund will limit the structured capital investments to 20% of the fund's total allocation. The Fund seeks to capitalize on the rapid and sustained economic growth, rising income levels, as well as the recent developments in China that will present opportunities for experienced real estate investment firms like J.P. Morgan to partner with local developers for new investments. The investment objective of the Fund is to seek capital appreciation. Since most of the Fund's investments will be development stage properties, the Fund expects to generate little to no current income. The Fund expects that aggregate secured permanent indebtedness will not exceed, on average over a fiscal year, 75% of the greater of the fair market value or total cost of all of the Fund investments. Investment returns may be hedged on a case by case basis as some investments may be hedged while others may not. Whether to hedge will depend on a number of factors including the currency outlook, the cost/benefit of the hedge, the requirements of lenders, etc. In addition, in cases where debt borrowings are in local currency, there is effectively a built in hedge as well.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
JP Morgan Greater Europe Opportunistic Property Fund Jim Sakelaris	Pension	Real Estate	Sep-09	The JPMorgan Greater Europe Opportunistic Property Fund is a closed-end opportunity fund that offers investors an opportunity to participate in an actively managed portfolio of property investments throughout Europe both in direct assets and select investments in existing property companies. The Fund has the flexibility to invest in a variety of different types of real estate, including, without limitation, office, retail, industrial/warehouse, multi-family, hotel/leisure, parking and self-storage. The Fund aims to provide Investors with a targeted annualized IRR of at least 15% over the life of the fund net of all fees and expenses. The Fund intends to achieve its Target Return by using JPMorgan Asset Management's expertise and market contacts to successfully make use of the following risks: leasing risk; development risk; restructuring risk; liquidity/transparency risk and leverage. J.P. Morgan Asset Management - Global Real Assets believes that opportunities exist in the Target Markets for investors to create value through the development, rehabilitation, repositioning and recapitalization of undervalued real estate and real estate-related assets through the purchase of high quality assets or portfolios of assets from distressed sellers. After a period of rapid capital appreciation and falling risk premium for European real estate assets, partially a result of excess liquidity, the dislocation in capital markets experienced since the end of July 2007 has resulted in a substantial re-pricing of risk, particularly at the higher risk end of the spectrum. More uncertain prospects for occupier markets in some, though not all, countries are likely to continue to impact risk and therefore pricing. In Europe, JPMAM-GRA believes this creates two very distinct but compelling opportunities for the foreseeable future. The first is to capitalize on the opportunity to purchase high quality assets in core Western European markets which will be sold at favorable prices due to the lack of liquidity in the market or where the underlying risk is mispriced. Property owners overleveraged with short duration leverage, developers overexposed to construction and leasing risk, and corporate owners whose balance sheets have come under pressure are all expected to be excellent sources of these buying opportunities. We consider hedging on a deal-by-deal basis when we think it makes sense and is cost-effective. We consult with our foreign exchange desk at J.P. Morgan on a regular basis. At the present time, we believe the British Pound is underpriced relative to the Euro on a long-term historical basis and, therefore, we are currently not hedging the Pound position (at least with respect with the net equity, leverage acts as a natural hedge against 65% of the GAV since the debt on UK transactions is also denominated in Pounds). The Greater Europe Opportunistic Property Fund is Euro-denominated and thus reflects periodic currency movements in addition to property valuation changes.
JP Morgan Income & Growth Fund Jim Sakelaris	Insurance	Real Estate	Nov-05	J.P. Morgan U.S. Real Estate Income and Growth Fund - The J.P. Morgan U.S. Real Estate Income and Growth Fund seeks to construct and opportunistically manage a portfolio of core direct real estate investments, complemented by other real estate and real estate-related assets. The Fund pursues a broadly diversified absolute-return strategy targeting an 8-10% total annualized IRR (including a current income return of 5-7% per annum and the balance from capital appreciation) net of management fees and expenses, the payment of any Infrastructure Development Fee, if applicable, and the effect of taxes payable by certain of the Fund's Entities. The Fund pursues all property investments on an opportunistic basis. The majority (>50%) of the Fund's investments will be in direct core properties in the office, industrial, retail and residential sectors. In addition to direct real estate, the Fund has the ability to invest in other access points - mezzanine debt, CMBS and REITs - when they provide core real estate cash flows at a better price than owning the property. This helps diversify the portfolio and offer a superior risk reward equation. This dynamic investment approach focuses on relative value and is not constrained by fixed allocation targets or benchmark composition allowing the Investment Advisor the ability to change the Fund's portfolio composition in response to changing market conditions and opportunities.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
JP Morgan Infrastructure Investments Fund Jim Sakelaris	Pension Insurance	Infrastructure Inflation Protected	May-07 Nov-08	Infrastructure Investments Fund - Launched October 31, 2006, JPMorgan Infrastructure Investments Fund is the only open-ended private commingled infrastructure fund in the U.S. It invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and, seaports and airports. Our open-ended strategy supports a long-term investment horizon as we seek to achieve steady returns over time that are largely cash yield with modest capital appreciation. Our open-end format also aids in our acquisition and disposition process as a long-term outlook is attractive to governments, regulators and operating partners. The Fund seeks to achieve a leveraged portfolio target IRR of 10–12%, net of Fund Expenses. Leverage is targeted at 75% at the fund level. Its diverse client base, includes U.S., European, Asian and Canadian government, union and corporate pension plans, insurance companies, and high net worth individuals. The interaction of multiple currencies is viewed by many investors as another form of diversification. With respect to the JPMorgan Infrastructure Investments Fund ('IIF' or the 'Fund'), the Investment Adviser has the right, but not the obligation, to hedge currency risk at its discretion. Due to clients' differing perspectives on currency, and the complexities/costs of hedging an illiquid portfolio, there currently is no intent to engage in active hedging except as follows: (i) in exceptional cases where we believe the underlying risk is excessive and (ii) where there are known future equity commitments subject to currency risk, including with respect to the acquisition of new assets; this is a strategy that we have utilized for several investments in the existing portfolio. Generally speaking, we believe clients are more concerned with active management of infrastructure assets and strategies than with currency hedging. We understand that many clients prefer to hedge their currency exposures on an individual total portfolio basis. Further, many clients are interested in actively managing their currency exposure to generate alpha. J.P. Morgan has the capability to provide currency hedging (as a separate service outside of the Fund) for those clients that are interested in hedging currency risk and for clients wishing to generate additional alpha (whether the risk is associated with the Fund's portfolio or with other client investments). Since we began investing in non-US assets in 2007, we have supplied currency positions to invested clients on a quarterly basis. Of the 65 institutional investors in IIF, we are aware of less than 10 that hedge the currency. Many investors view the currency volatility as short-term noise. While IIF may be long sterling, other holdings in an investor's portfolio may be short sterling. Many investors have taken the view that, in the long run, currencies are a zero sum game reverting to the mean, and they do not want to absorb the hedging costs. If an investor does want to hedge currency risk on their investment in IIF, we welcome the opportunity to arrange meetings with our colleagues that will manage the currency hedge. We have explained the structure and nuances of IIF to our colleagues, and they are prepared to assist any IIF investor. Hedging the currency associated with an illiquid asset is much more complicated than hedging international equities, or other liquid assets. For instance, if international equities appreciate and a currency depreciates, and you receive a margin call for a currency contract, you can liquidate some equities to satisfy the margin call. It is not quite so simple if the asset is a bridge rather than a liquid asset. In the case of IIF or an illiquid asset, there must also be a source of liquidity. This complicates it, but does not preclude hedging.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
JP Morgan Strategic and Special Situations Property Funds Jim Sakelaris	Pension	Real Estate	Oct-90	**Strategic Property Fund** is an actively managed diversified, core, open-end commingled pension trust fund. It seeks an income-driven rate of return of 100 basis points over the NCREIF Property Index over a full market cycle (three-to-five-year horizon) through asset, geographic and sector selection and active asset management. The Fund invests in high-quality stabilized assets with dominant competitive characteristics in markets with attractive demographics throughout the United States. Following a core strategy, Strategic Property Fund focuses primarily on existing high-quality, well-leased assets in the four major property types: office, industrial, multi-family and retail. Strategic Property Fund focuses on the larger primary economic markets. Each sector is well leased with modest lease expiration exposure of approximately 10% per annum over the next five years. Due to the broad diversification in the Fund's investments, no individual properties or tenancies have the capacity to materially affect the Fund's performance. **Special Situation Property Fund** is an actively managed, value-added, open-ended commingled trust fund. It seeks an increased total return with a moderate-to-high risk level, as reflected in the potential volatility of both income and property values. Our investment philosophy for Special Situation Property Fund is based on our belief that consistently excellent investment results can be achieved by focusing on value-added investment opportunities while maintaining an optimum leverage ratio. The investment process is designed to continuously add value throughout the acquisition, ownership and disposition of an asset. Following a value-added strategy, Special Situation Property Fund focuses primarily on value-added real estate opportunities in the following major property types: office, industrial, hotel, retail and multi-family. The Fund does not attempt to match the geographic and property type diversification of the benchmark, but does maintain guidelines in order to limit over-or underweighting in regards to the NCREIF's property type and geographic guidelines. Our assets are generally located in major markets across the country (i.e., Washington D.C. and surrounding areas, Los Angeles, San Francisco, Atlanta, Chicago, Denver and Northern New Jersey). The Fund invests in a wide variety of value-added real estate opportunities, including but not limited to, improved properties that have significant appreciation potential through lease up, new development, redevelopment, repositioning and re-merchandising situations. The Fund may also acquire vacant land to be held for future development or appreciation. Development, renovation and property repositioning are important aspects of our value-added strategy.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
LA Capital Enhanced Tom Stevens	Pension Insurance	Dom Lg Cap Equity Dom Lg Cap Equity	Aug-00 Apr-04	A large core portfolio benchmarked to the Russell 1000 Index. This we would characterize as more of an enhanced index assignment where the objective is to track the benchmark with lower variability. This mandate is targeting a 1% annual alpha with a risk budget of 3%. The pension portfolio began in July of 2000 and the insurance portfolio was initiated in April of 2004. In October of 2006 we received approval from you to allocate a portion of each of these core accounts into the Large Cap Alpha Fund which we were launching at that time. A small portion of the portfolio has as a result been allocated to that product. The benchmark for this fund is the S&P500 which is very similar to the Russell 1000 Index. The objective here has been to outperform the benchmark by 5% while allowing for a risk budget as high as 7%. The intent here was to add incremental alpha to the assignment given that the information ratio was expected to be higher. The overall objectives have been met since this was initiated. **Investment Philosophy** All of our applications are driven by our Dynamic Alpha Model which is a quantitative process based upon understanding how specific factors are behaving in the market. We believe that investment results are driven by Investor Preferences which simply put, highlight which factors investors like or dislike at any point in time. We have developed sophisticated attribution tools which allow us to measure how the different factors are performing. While there is a significant amount of persistence, i.e. factors will move in one direction for sometimes an extended period of time, they will change at some point. Investors are not static in the views and one needs to recognize that when preferences shift a different posture related to that factor is warranted. Consequently we are not static and we are dynamic. In turbulent markets it is important to be able to understand how investor preferences change. In the last year there have been dramatic shifts in investor attitudes about risk factors and we feel our ability to perform during this period has been directly related to our ability to adapt.
LA Capital Structured (Russell 1000 Growth) Tom Stevens	Pension Insurance	Dom Lg Cap Equity Dom Lg Cap Equity	Jun-98 Aug-03	A large growth portfolio benchmarked to the Russell 1000 Growth Index. It is an active assignment meaning that we are targeting a 2% alpha and constraining our risk budget (tracking error) to 4% relative to the benchmark. **Investment Philosophy** All of our applications are driven by our Dynamic Alpha Model which is a quantitative process based upon understanding how specific factors are behaving in the market. We believe that investment results are driven by Investor Preferences which simply put, highlight which factors investors like or dislike at any point in time. We have developed sophisticated attribution tools which allow us to measure how the different factors are performing. While there is a significant amount of persistence, i.e. factors will move in one direction for sometimes an extended period of time, they will change at some point. Investors are not static in the views and one needs to recognize that when preferences shift a different posture related to that factor is warranted. Consequently we are not static and we are dynamic. In turbulent markets it is important to be able to understand how investor preferences change. In the last year there have been dramatic shifts in investor attitudes about risk factors and we feel our ability to perform during this period has been directly related to our ability to adapt.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
Loomis Sayles Stephanie Lord	Pension	Below Inv Grade FI	Apr-04	The High Yield Full Discretion Strategy seeks to exploit the collaborative efforts of our economics group and Sector Teams in conjunction with the fundamental credit analysis from our Fixed Income Research Department. Our economics group and yield curve teams provide a global economic and interest rate framework for identifying sectors that we think are attractive. Our research department, along with the Sector Teams, seeks to identify specific investment opportunities primarily within the global fixed income market. Asset class and sector allocations reflect the macroeconomic view, while security selection based on fundamental and relative value analysis within sectors provides our primary source of excess return. Portfolio guidelines are broad and offer the portfolio management team significant investment flexibility. Experienced portfolio managers collaborate with our in-house credit analysts to identify attractive total rate of return investment opportunities in the global fixed income market. Portfolio managers incorporate the long-term macroeconomic view along with a stringent bottom-up investment evaluation process that drives security selection and resulting sector allocations. Opportunistic investments in non-benchmark sectors including investment grade corporate, emerging market, and non-US dollar debt and convertible bonds help to manage overall portfolio risk and enhance total return potential. The product's portfolio managers are responsible for strategy implementation, portfolio construction, and adherence to guidelines. This rigorous investment process results in portfolios that, we believe, are well diversified and expected to generate superior long-term investment performance when compared to the Barclays Capital High Yield Index.
LSV Int'l Equity James Owens, Jr.	Pension Insurance	Developed Int'l Equity Int'l Equity	Nov-04 to Jan-13 changed mandate to Global Equity Nov-04	The objective of our International Large Cap Value strategy is to outperform the MSCI EAFE Index (50% Hedged) by at least 250 basis points (gross of fees) per annum over an annualized 3-5 year period with a tracking error of approximately 5-6%. The process used to select stocks is a quantitative approach developed by our founding partners through years of academic research on a variety of investment and investor behavior topics. The process ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 150 stocks in the most attractive securities possible within our strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio will be broadly diversified across industry groups and fully invested (cash balances are typically less than 1% of the portfolio). LSV weights countries at a neutral weight relative to the benchmark country weights. Initial positions must be in stocks with a market capitalization above $500 million. 50% of the portfolio is US dollar hedged.
LSV Large Cap James Owens, Jr.	Pension Insurance	Dom Lg Cap Equity Dom Lg Cap Equity	Jun-98 to Jan-13 Changed mandate to Global Equity Jun-98	The objective of our Large Cap Value Equity (U.S.) strategy is to outperform the Russell 1000 Value by at least 200 basis points (gross of fees) per annum over a 3-5 year period with a tracking error of approximately 4%. The process used to select stocks is a quantitative approach developed by our founding partners through years of academic research on a variety of investment and investor behavior topics. The process ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 100 stocks in the most attractive securities possible within our strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio will be broadly diversified across industry groups and fully invested (cash balances are typically less than 1% of the portfolio). Initial positions must be in stocks with a market capitalization above $500 million.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
LSV Global Equity James Owens, Jr.	Pension	Global Equity	Feb-13	The objective of the Global ACWI strategy is to outperform the unhedged total rate of return, net of dividend withholding taxes of the benchmark by at least 200 basis points (gross of fees) per annum. The process used to select stocks is a quantitative approach developed by our founding partners through years of academic research on a variety of investment and investor behavior topics. The process ranks a broad universe of stocks on a combination of value and momentum factors and seeks to invest approximately 125 stocks in the most attractive securities possible within our strict risk parameters to control the portfolio's tracking error relative to the benchmark. The resulting portfolio will be broadly diversified across countries and industry groups. Initial positions must be in stocks with a market capitalization above $400 million.
Matlin Patterson (Fund I, II, III) Mark Patterson	Pension	Private Equity	Jul-02	Invest globally in the severely discounted securities and obligations of financially distressed companies with the objective of obtaining corporate control. Through the Investment Adviser's active management of the Fund's investments, the Fund is seeking superior risk adjusted returns and is operating globally in a segment of the distressed sector in which it has few significant competitors. Invest globally in the severely discounted securities and obligations of financially distressed companies with the objective of obtaining corporate control. Through the Investment Adviser's active management of the Fund's investments, the Fund is seeking superior risk adjusted returns and is operating globally in a segment of the distressed sector in which it has few significant competitors.
Mellon (Franklin Portfolio Assoc.)	Pension	Lg Cap Dom Equity	Sep-06 to Aug-09 Terminated	To achieve superior long term equity market returns through an investment process consisting of two parts: a) a market neutral equity strategy with approximately equal dollars invested long and short having the objective of neutralizing the overall movements of the market. Furthermore, other systematic sources of risk, including industry/sector and capitalization effects, will be controlled so that the large portion of portfolio returns comes from individual stock selection. b) an equitization strategy using S&P 500 index futures contracts to overlay the performance of the S&P 500 index on the market neutral strategy.
NTGI (Northern Trust Global Investments) Common TIPS Fund Richard Clark Jim Aitcheson	Insurance	Inflation Protected	May-07 to July-10 Terminated	The Corporate Trustee may invest and reinvest in units of common funds maintained by the Corporate Trustee or any affiliate of the Corporate Trustee, including, but not limited tom the NTGI-QM Common Daily Treasury Inflation Protected Securities (TIPS) Index Fund-Lending. To meet liquidity needs, the Corporate Trustee may also invest in short term cash investments, including shares of money market portfolios, other common funds, or registered investment companies for which the Corporate Trustee or an affiliate serves as trustee, custodian or investment advisor.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
NTGI (Northern Trust Global Investments) Enhanced S&P 500 Jason Pasquinelli	Pension	Dom Lg Cap Equity	Aug-00	The Investment Manager will use an investment approach primarily based on quantitative investment techniques. The principal source of value added is the stock selection process. Relative attractiveness is assessed using a proprietary multiple factor model. Attractive securities are over weighted relative to the Index while unattractive securities are under weighted, or excluded entirely. The account will invest primarily in a broadly diversified portfolio of equity securities. Equity securities include securities convertible into equity securities (including common stock), warrants, rights and units or shares in trusts, exchange traded funds and investment companies. The account may invest and reinvest in long or short positions in any of the instruments. The Investment Manager may purchase or sell futures and exchange traded and over-the-counter options on the Index or on a similarly broad index. The Investment Manager intends to use futures and options to manage market risk associated with the account's investments by selling futures on a stock index which correlates in price movement with a portion of the account to hedge against a potential decline in the prices of the securities comprising that portion of the account and, conversely, by purchasing futures on a stock index which correlates in price movement to a group of stocks which the account anticipates purchasing, to hedge against an increase in the value of such stocks. A portion of the cash in the account may be deposited with a broker as margin on futures or options transactions, to be invested on behalf of the account in obligations issued or guaranteed by the US Government or other appropriate short-term investments. To meet liquidity needs, the Investment Manager may also invest in short term cash investments, including shares of money market portfolios, which may be registered investment companies for which the Investment Manager or an affiliate serves as custodian or investment advisor.
NTGI (Northern Trust Collective Emerging Markets Index Fund) Jason Pasquinelli	Pension	Emerging Markets Equity	Jul-12	The Northern Trust Collective Emerging Markets Index Fund will be invested primarily in equity securities of business enterprises organized and domiciled outside the US or for which the principal trading market is outside the US. In the Fund, and where applicable with respect to the Fund, the Trustee will employ statistical methods to select securities which comprise or will comprise the Index without necessarily buying all the relevant Index equities. Such securities will be selected, acquired, held and liquidated solely on the basis of such methods and not on the basis of any economic, financial, market timing, or other analysis. Securities purchased for the Fund will generally, but not necessarily be traded on a foreign securities exchange. The Trustee may, in its discretion, purchase or sell depository receipts. The Fund will be rebalanced from time to time in order to minimize the expected or predicted deviation between the performance of the Fund and the performance of the relevant Index or to reflect changes in the composition of the Index.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
NTGI (Northern Trust Global Investments) World Ex-US Jason Pasquinelli	Pension	International Equity	Dec-13	The Fund will be maintained by the Trustee with the objective of providing investment results that replicate the overall performance of the MSCI® Emerging Markets Equity Index (the "Index"). The Trustee will attempt to meet the Fund's investment objective by including the common stocks of one or more companies included in the Index, on the sole basis of computer-generated statistical data, deems representative of the industry diversification of the entire Index. The Fund will be invested primarily in equity securities of business enterprises organized and domiciled outside of the United States ("U.S.") or for which the principal trading market is outside the U.S. In the Fund, and where applicable with respect to the Fund, the Trustee will employ statistical methods to select securities which comprise or will comprise the Index without necessarily buying all the relevant Index equities. Such securities will be selected, acquired, held and liquidated solely on the basis of such methods and not on the basis of any economic, financial, market timing, or other analysis. Securities purchased for the Fund will generally, but not necessarily, be traded on a foreign securities exchange. The Trustee may, in its discretion, purchase or sell depositary receipts. The Fund will be rebalanced from time to time in order to minimize the expected or predicted deviation between the performance of the Fund and the performance of the relevant Index or to reflect changes in the composition of the Index.
PanAgora Asset Mgmt Lisa Mahoney	Pension	Emerging Markets Equity	Feb 06 to Dec 13 Terminated	The Emerging Markets Fund seeks to exceed, in the aggregate, the return of the Morgan Stanley Capital International Emerging Markets Index before fees and expenses. The Emerging Markets fund may be invested in: • International equity securities including common, preferred and instruments convertible into common or preferred stock for those companies which comprise the Benchmark and the Morgan Stanley Capital International Frontier Markets Equity Index. • American Depository Receipts, Global Depository Receipts, European Depository Receipts • Exchange traded funds based on the underlying securities in the Benchmark • Spot and forward currency exchange contracts • US Treasury bills • Daily Liquidity Fund • The maximum investment in companies which comprise the Morgan Stanley Capital International Frontier Markets Equity Index will not exceed 10% measured at time of purchase.
PIMCO Bravo II Julie Meggers Todd Staley Michael Chandra	Pension Insurance	Residential & Commercial Debt	Oct-13 Dec-13	To seek to capitalize on the perceived market opportunity and achieve its Target Return, the Fund will have broad discretion to invest principally in (or otherwise gain exposure to) U.S. and non-U.S.: (i) performing, underperforming or non-performing loans and other assets that have historically been securitized and/or otherwise traditionally held by financial institutions (as well as participations and other interests therein), including commercial and residential mortgage loans (each of which may convert to real estate holdings), consumer loans (such as credit card receivables, automobile loans and student loans) and/or servicing or similar rights relating to such loans and other assets; (ii) structured products, securitizations and other assetbacked securities ("ABS") backed by assets of any type (whether U.S. or non-U.S. based collateral), including non-agency residential mortgage-backed securities ("RMBS") and commercial mortgage-backed securities ("CMBS" and, together with RMBS, "MBS"), collateralized debt obligations ("CDOs"), collateralized loan obligations ("CLOs") and repackaged securities (collectively, "Structured Investments"), including Structured Investments managed by PIMCO or an affiliate thereof; (iii) residential and commercial real estate; and/or (iv) investments in equity securities, equity-linked securities and/or debt instruments (including loans) of operating companies and other entities (whether stressed, distressed or otherwise on an opportunistic basis), including banks and other financial institutions, specialty finance entities, and other opportunities.

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
PIMCO Distressed Mortgage Fund Julie Meggers Todd Staley Michael Chandra	Pension	Below Inv Grade FI	Oct-07	The PIMCO Distressed Mortgage Fund is an opportunistic private-equity-style Fund which seeks to capitalize on the historic dislocation in the US and global mortgage markets. The Fund invests in mortgage-related securities and loans where PIMCO believes the long-term value of the investment is highly attractive relative to current market pricing. Within the universe of mortgage-related assets, the Fund will be otherwise unconstrained. The Fund will essentially look to capitalize on forced liquidations of mortgage risk from mark-to-market and ratings sensitive investors at historic high yields.
PIMCO Distressed Senior Credit Opportunities (DiSCO) Fund I Fund II Julie Meggers Todd Staley Michael Chandra	Pension Pension Insurance	Dom Inv Grade FI Dom Inv Grade FI Fixed Income	Jul-08 to Oct-11 Transferred to Fund II Oct-11 Oct-11	The PIMCO Distressed Senior Credit Opportunities Fund is an opportunistic private-equity style Fund which seeks to provide investors enhanced returns principally through long-biased investments in undervalued senior and super senior structured credit securities that are expected to produce attractive levels of current income and that may also appreciate in value over the long term. The fund will look to capitalize on forced sales by liquidity constrained investors.
PIMCO Unconstrained Bond Fund Julie Meggers Todd Staley	Pension	Dom Inv Grade FI	Mar 12 to Mar 14 Converted to SMA	The PIMCO Unconstrained Bond Strategy is an absolute return-oriented, investment grade quality fixed income strategy that embodies PIMCO's secular thinking, global themes, and integrated investment process without the constraints of a benchmark or significant sector/instrument limitations. The strategy is designed to offer the traditional benefits of a core bond approach - capital preservation, liquidity, and diversification - but with higher alpha potential and the opportunity to mitigate downside risk to a greater degree than what is reasonably possible from traditional active fixed income management approaches.
PIMCO MBS Julie Meggers Todd Staley	Pension	Dom Inv Grade FI	Mar-12	The PIMCO Mortgage-Backed Securities Strategy is an actively managed bond portfolio that invests in high quality, short to intermediate duration mortgage-backed securities. The fund invests primarily in securities that are highly rated, such as US Government guaranteed Ginnie Mae securities and Agency-guaranteed Fannie Mae and Freddie Mac mortgage-backed securities.
PIMCO Unconstrained (SMA) Julie Meggers Todd Staley Michael Chandra	Pension	Dom Inv Grade FI	Mar-14	The Fund seeks to achieve its investment objective by investing under normal circumstances at least 80% of its assets in a diversified portfolio of Fixed Income Instruments of varying maturities, which may be represented by forwards or derivatives such as options, futures contracts, or swap agreements. “Fixed Income Instruments” include bonds, debt securities and other similar instruments issued by various U.S. and non-U.S. public- or private-sector entities. The Fund intends to utilize various investment strategies in a broad array of fixed income sectors to achieve its investment objective. The Fund will not be constrained by management against an index. The average portfolio duration of this Fund will normally vary from (negative) 3 years to positive 8 years based on Pacific Investment Management Company LLC’s (“PIMCO”) forecast for interest rates. Duration is a measure used to determine the sensitivity of a security’s price to changes in interest rates. The longer a security’s duration, the more sensitive it will be to changes in interest rates. The Fund may invest in both investment-grade securities and high yield securities (“junk bonds”) subject to a maximum of 40% of its total assets in securities rated below Baa by Moody’s Investors Service, Inc. (“Moody’s”), or equivalently rated by Standard & Poor’s Ratings Services (“S&P”) or Fitch, Inc. (“Fitch”), or, if unrated, determined by PIMCO to be of comparable quality. The Fund may also invest without limitation in securities denominated in foreign currencies and in U.S. dollar-denominated securities of foreign issuers. In addition, the Fund may invest up to 50% of its total

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
Prudential Core Plus Peter Taggert	Insurance	Fixed Income	Aug-06	The core plus fixed income account is a multi-sector strategy with alpha objective of +150 basis points versus the Barclays Aggregate Index over a full market cycle. The strategy is diversified across a broad range of fixed income sectors, including Treasuries, agencies, mortgage-backed securities, structured product (asset-backed securities, commercial mortgage-backed securities), investment grade corporate bonds, high yield bonds, bank loans and international debt. The primary sources of excess return are sector allocation and security selection, with duration and yield curve less of a focus.
Prudential Privest Peter Taggert	Pension	Dom Inv Grade FI	Jun-05 to Mar-12 Terminated	The Prudential Privest fixed income account is invested primarily in unsecured privately placed debt securities.
Prudential PruAlpha Peter Taggert	Pension Insurance (currently Budget Stabilization only)	Dom Lg Cap Equity Enhanced Cash	Mar-08 to May-12 Redeemed out/Terminated Jul-07 to May-12 Redeemed out/ Terminated	At launch, Pru Alpha was an absolute return strategy investing across multiple sectors of the global fixed income markets. There were significant redemptions from Pru Alpha in the wake of the high market volatility in late 2008. Pru Alpha is currently focused on investing in distressed securities in the fixed income markets. The Pension Trust invested in a feeder fund that allocated a substantial portion of its assets to the Pru Alpha Master Fund and invested substantially all of its remaining assets in a replication strategy based on the S&P 500 Total Return Index. On November 26, 2008, the S&P 500 beta overlay was discontinued. Effective June 1, 2009, the S&P 500 beta overlay was reapplied via a separate account that invests in S&P 500 futures in amounts intended to match the market value of the Pension Trust's Pru Alpha investment. The budget stabilization account is an “enhanced cash” portfolio to augment the other components of North Dakota’s budget stabilization assets. This account was originally invested across three components: Dryden Core Short-Term Bond Fund (80%), bank loans (10%), and Pru Alpha (absolute return fund, 10%). Core Short-Term Bond Fund is an “enhanced cash” portfolio that seeks to capture incremental yield from various sectors in the short term portion of the market, with virtually no interest rate risk. Holding assets in the structured product and corporate sectors led to significant underperformance through the credit market downturn from 3Q07-1Q09, but the fund has recovered significantly year-to-date 2009. The bank loan component of the portfolio consists of approximately 20-25 individual bank loans managed by PFIM’s high yield/bank loan team. The names held in the account are biased towards the higher quality and more liquid names in the bank loan arena. Pru Alpha is an absolute return strategy and is described with the Pension Trust investment above. On July 28, 2009, $95mm was added to this account. As a result of discussions with our senior investment team at PFIM and Steve Cochrane, it was decided to invest the new assets in short-term corporate bonds (1-3 years). As of 8/31/09, the account is allocated as follows: Short-term corporates (47%), Dryden Core Short-Term Bond Fund (39%), bank loans (5%), and Pru Alpha (4%) and cash (5).

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Investment Manager	Trust	Asset Class	Open to Close Date	Description
Quantum (Energy Partners, Resources) Michael Dalton	Pension	Private Equity	Oct-06	Founded in 1998, Quantum Energy Partners is a leading provider of private equity to the global energy industry. With more than $5.7 billion in assets under management, Quantum targets investment opportunities between $100 and $400 million with proven management teams that possess a clear vision and whose companies have sustainable competitive advantages within well-defined segments of or strategies in the energy industry. Quantum primarily focuses on the oil and gas upstream, midstream and power sectors, but will consider opportunities across the entire energy industry. Quantum Resources' investment strategy is to acquire, develop, enhance and exploit mature oil and gas properties in order to provide investors with both a current income vehicle with capital appreciation potential and a hedge to other investments through long-term exposure to changes in commodity prices. The company will acquire cash flow producing oil and gas properties primarily located in North America through asset or corporate purchases. By acquiring properties in a diverse set of mature fields with long operating histories, long-lived production characteristics and additional development potential, the company is emphasizing a focus on capital preservation and the reinvestment of cash flow into property development or add-on acquisitions. Management expects to acquire income streams generated by the production of oil and gas reserves at attractive discount rates of future net cash flows.
Research Affiliates Jeff Wilson	Insurance	Dom Small Cap Equity	Jul-07	Small company value equity portfolio utilizing the index strategy and philosophy described as the Enhanced RAFI® US Small strategy which in turn is based on our patent pending Fundamental Index® concept. The Enhanced RAFI® US Small strategy relies on portfolio weights derived from firm fundamentals (free cash flow, book equity value, total sales and gross dividend), instead of market capitalization. In addition, the enhanced portfolio strategy uses a quality of earnings screening and a financial distress screening to augment portfolio returns and reduce portfolio volatility.
SEI Investments	Pension Insurance	Dom Small Cap Equity Dom Small Cap Equity	Jul-01 to Nov-09 Terminated Jul-01 to Nov-09 Terminated	Utilizing multiple SEI Portfolio sub-advisors, the SEI Portfolio invests in common stocks and other equity securities with the goal of providing capital appreciation.

updated 6/20/2014

North Dakota State Investment Board Managers

Investment Manager	Trust	Asset Class	Open to Close Date	Description
SEI Investments Bob Thomas	PERS Retiree Health		Jul-09	**Fixed Income Strategy** - A diversified set of lowly correlated alpha sources increase confidence in consistent excess return -Combination of managers with a broad opportunity sets inclusive of government, credit and structured securities -Derivatives provide an efficient means of strategy implementation -Managers have the ability to utilize derivatives to manage duration, yield curve, sector and security strategies to enhance return or reduce risk **Emerging Markets Debt Strategy** - Specialist Emerging Market Debt Managers and seasoned investment teams with complementary investment philosophies that invest broad opportunity sets inclusive of tactical allocations to external debt, local debt, local currency, and corporate debt. **High Yield Strategy** - Diversified group of managers with deep and experienced credit resources whose outperformance will be generated from both Sector/Industry and Selection decisions. The differentiation between managers is not on the alpha source they are seeking to exploit, but rather on the credit philosophy and process. Broad opportunity sets primarily in fixed income securities rated below investment grade, including corporate bonds. May also invest in bank loans, convertible and preferred securities, zero coupon obligations and credit derivatives. Given the illiquidity of the high yield market, managers also have the ability to utilize the credit default swap market for enhancing return or reducing risk. **Small Cap Strategy** - Utilizing multiple SEI Portfolio sub-advisors, the SEI Portfolio invests in common stocks and other equity securities with the goal of providing capital appreciation. **World Equity ex-US Strategy** - Utilizing multiple SEI portfolio sub-advisors, the SEI portfolio invests in equity securities of foreign companies, including those in emerging market countries with the goal of capital appreciation. These securities may include common stocks, preferred stocks, warrants, exchange-traded funds based on an international equity index and derivative instruments whose value is based on an underlying equity security or basket of equity securities. The SEI portfolio is diversified as to issuers, market capitalization, industry and country. Certain SEI portfolio sub-advisors use strategies that are designed to correlate with a portfolio of international equity securities, but which are composed of derivative instruments backed by other types of securities. **Large Cap Equity Strategy** - A Russell 1000 index fund.
SEI Investments Bob Thomas	Pension (Job Service only)	Core Plus Fixed Income	Jul-09 to Mar-12 Terminated	A diversified set of lowly correlated alpha sources increase confidence in consistent excess return -Combination of managers with a broad opportunity sets inclusive of government, credit and structured securities -Derivatives provide an efficient means of strategy implementation -Managers have the ability to utilize derivatives to manage duration, yield curve, sector and security strategies to enhance return or reduce risk
State Street Global Advisors Kevin Sullivan	Pension	Developed Int'l Equity	92 to Dec 13 Termin	SSgA attempts to identify stocks that it believes are undervalued, using detailed investment analysis. The strategy is normally broadly invested among countries and industries. The investable universe is equity securities of companies outside the United States within the market capitalization range of the index.
State Street Global Advisors Joe Cadigan	Pension	Dom Inv Grade FI	Jun-13	This is a commingled index fund that seeks to replicate the risk and return characteristics of the Barclays Long Treasury Bond Index.
State Street Global Advisors Joe Cadigan	Insurance	Fixed Income	Jun-13	This is a commingled index fund that seeks to replicate the risk and return characteristics of the Barclays Government/Credit Bond Index.

updated 6/20/2014

North Dakota State Investment Board Managers

Investment Manager	Trust	Asset Class	Open to Close Date	Description
State Street Global Advisors	Pension Insurance	Dom Lg Cap Equity Dom Lg Cap Equity	Jul-92 to Jul-09 Terminated Oct-96 to July-09 Terminated	Originally hired as S&P 500 Index funds and later re-mandated to 130/30 strategies.
State Street Global Advisors	PERS Retiree Health		Mar-94 to Jul-09 Terminated	Balanced account consisting of index funds in fixed income, large and small cap and int'l equity.
EIG Energy (formerly TCW) Renee Davidovits	Pension	Private Equity	Jul-07	TCW Energy Fund XIV-A, L.P. (the "Fund") is a Delaware limited partnership, formed on October 27, 2006 for the purpose of establishing a diversified portfolio of investments in energy and energy-related infrastructure projects and companies on a global basis. The investments will include loans, production payments, net profits interests, royalty interests and other forms of debt and equity securities issued by companies globally with emphasis on operations in the United States, Canada, Western Europe and Australia. The Fund, TCW Energy Fund XIV, L.P., TCW Energy Fund XIV-B, L.P., and TCW Energy Fund XIV (Cayman) L.P., (collectively, "Fund XIV") shall not invest more than 15% of total commitments ("Commitments") in any one issuer and shall not invest more than 25% of Commitments in issuers operated principally outside Organization for Economic Cooperation and Development ("OECD") countries. The Fund shall not invest more than 35% of Commitments in equity securities other than equity securities received in connection with the purchase of mezzanine debt.
TIR-Timberland Investment Resources Tom Johnson	Pension	Timber	Jun-01 Sept-04	**Teredo Timber LLC** - The investment objective of Teredo is to provide competitive investment returns from increasing saw timber production through the 20 year term of the partnership. TIR's management strategy is to maximize saw timber volume by applying intensive forest management techniques which accelerate growth through the diameter class distribution (from pulpwood to saw timber). Periodic cash flows are produced from thinning and final harvests of the individual timber stands. **Springbank LLC** - The investment objective of Springbank is to maximize long-term investment potential. TIR will implement four key strategies to attain the objective: • Formation of a dedicated land management group; • Intensive timber management to increase timber production; • Coordination of timber harvesting with land management activities; • Direct marketing and selective real estate partnerships.
TIR-Timberland Investment Resources Tom Johnson	Insurance	Inflation Protected	Oct-08	**Eastern Timberland Opportunities Fund** - The investment objective of the Eastern Timberland Opportunities fund is to provide competitive timberland investment returns from Eastern US timberland investments by pursuing management strategies to increase timber production and land values through the investment term. TIR will maximize timber values within the portfolio with the application of intensive forest management techniques to accelerate the growth in timber volume and movement into higher value product categories. Additional value will be captured by realizing higher and better use opportunities for select timberland properties throughout the portfolio.
UBS Global Asset Management Betsy Sanders	Pension	Emerging Markets Equity	July 05 to Dec 13 Terminated	Emerging markets equity investments will be confined to the UBS Emerging Markets Equity collective Fund of the UBS Group Trust, which is maintained by UBS Global Asset Management Trust Company. The account's emerging markets equity assets will be fully-invested at all times, but such assets may be invested in the UBS US Cash Management Prime Collective Fund for operational and risk management purposes.
UBS Global Asset Management Betsy Sanders	Pension	Dev. Int'l Fixed Income	Jul-89	The non-US fixed income portfolio's assets may be invested in emerging markets debt on an opportunistic basis up to the stated maximum allocation of 5%. The account's non-US fixed income assets will be fully-invested at all times, but such assets may be invested in the UBS US Cash Management Prime Collective Fund for operational and risk management purposes.

updated 6/20/2014

North Dakota State Investment Board Managers

Investment Manager	Trust	Asset Class	Open to Close Date	Description
Vanguard Group Bruce Mears	Insurance	Int'l Equity	Jun-03	Vanguard International Explorer Fund seeks to provide long-term capital appreciation. The fund invests primarily in the equity securities of small-capitalization companies located outside the United States that the advisor believes offer the potential for capital appreciation. In doing so, the advisor considers, among other things, whether a company is likely to have above-average earnings growth, whether the company's securities are attractively valued, and whether the company has any proprietary advantages.
Wachovia Global Securities Lending John Menard	Pension Insurance	All asset classes	Oct-07 to Jun-11 Terminated when acquired by Citi	Securities lending is the temporary loan of a security from an institutional investor's portfolio to a broker/dealer or dealer bank to support that firm's trading activities. These trading activities include short selling, selling on margin or the satisfaction of some other type of transaction. Loaned securities are generally collateralized, reducing the lender's credit exposure to the borrower. Except for the right to vote proxies, the lender retains entitlement to all the benefits of owning the original securities, including the receipt of dividends and interest. Additionally, the lender receives a fee for the use of the securities and can reinvest the collateral. The lender, however, bears the market risk of the loaned securities. This is due to the borrower being obligated to ultimately return the securities, not the original market value of the securities, at the time the loan was made. Lendable securities include U.S. government and agency bonds, U.S. and foreign equities, U.S. corporate and Eurobonds, foreign government bonds, asset backed and mortgage backed securities
Wellington Trust Company Elizabeth O'Hara	Pension	Developed Int'l Equity	Mar-02	Securities lending is the temporary loan of a security from an institutional investor's portfolio to a broker/dealer or dealer bank to support that firm's trading activities. These trading activities include short selling, selling on margin or the satisfaction of some other type of transaction. Loaned securities are generally collateralized, reducing the lender's credit exposure to the borrower. Except for the right to vote proxies, the lender retains entitlement to all the benefits of owning the original securities, including the receipt of dividends and interest. Additionally, the lender receives a fee for the use of the securities and can reinvest the collateral. The lender, however, bears the market risk of the loaned securities. This is due to the borrower being obligated to ultimately return the securities, not the original market value of the securities, at the time the loan was made. Lendable securities include U.S. government and agency bonds, U.S. and foreign equities, U.S. corporate and Eurobonds, foreign government bonds, asset backed and mortgage backed securities. The International Small Cap Opportunities investment approach is bottom-up focused, and leverages the global research resources at Wellington Management. In implementing purchase decisions, consideration is given to the size, liquidity, and volatility of these prospects. Sell decisions are based on changing fundamentals or valuations, or on finding better opportunities elsewhere. The assets are not hedged.
Wells Capital Management Stephen Scharre	Pension Insurance	Dom Inv Grade FI Fixed Income	Nov-98 to Mar-12 Terminated Apr-02	The Medium Quality Credit fixed income strategy is designed to maximize total return from the high-grade corporate bond market while maintaining a strategic allocation to the BBB portion of the high yield market. Credit research is a primary driver of our results; however, our process starts with a "top-down" strategy to guide decision-making. Security selection is determined by in-depth credit research. We believe in-depth knowledge of industries, companies, and their management teams enable us to identify credit trends that can lead to investment opportunities. In conjunction with performing rigorous fundamental research, we also apply a disciplined relative value framework which helps us determine the optimal position to invest within an industry and within an individual issuer's capital structure.
Wells Capital Management Jeff Mellas Doug Beath	Pension	Dom Lg Cap Equity	Apr-06 to Mar-10 Terminated	The State of North Dakota's Alpha Capture Portfolio (ACP) is a quantitatively driven global long/short strategy designed to exploit mispricing of risk between and within asset classes and market sectors. Core models are utilized in conjunction with the management team to identify opportunities between global stock and bond markets. Markets that are designed to focus more directly on specialized markets such as commodities and individual market sectors supplement the core models. ACP is constructed using instruments such as futures contracts and exchange traded funds (ETFs). The ACP strategy does not currently hedge its non-U.S. dollar positions.

updated 6/20/2014

North Dakota State Investment Board Managers

Investment Manager	Trust	Asset Class	Open to Close Date	Description
Wells/Sutter Niklas Nordenfelt	Pension	Below Inv Grade FI	Apr-04 to Mar-10 Terminated	The Sutter High Yield strategy applies a bottom-up fundamental based investment strategy focused on identifying the best risk adjusted opportunities in the high yield market. The investment objective is to deliver outperformance with less volatility over a market cycle. Documented rationale supports each initial investment in a credit. The team's philosophy and process is grounded on the principal of "underwriting the credit as though we are making a direct loan to that company" with a focus on U.S. based companies.
Western Asset Derek Fan	Pension	Dom Inv Grade FI	Mar-12	The investment objective for the Western Asset Mortgage-Backed Securities portfolio is to outperform the Barclays Capital US Mortgage Backed Securities Index over a three to five year market cycle. The portfolio is designed to hold high quality assets, with at least 90% of the portfolio rated AAA, or the rating of US Treasury or Agency securities, by at least one of the nationally recognized statistical rating organizations.
Western Asset Derek Fan	Pension Insurance	Dom Inv Grade FI Fixed Income	Oct-09 to Mar-12 Mandate changed to MBS Dec-93	A portfolio using all major fixed-income sectors with a bias towards non-Treasuries, especially corporate, mortgage-backed and asset-backed securities. Value can be added through sector rotation, issue selection, duration and term structure weighting.
Western Asset	Insurance	Inflation Protected	May-04 to Oct-09 (Mandate changed to Global TIPS)	Western Asset's US TIPS Full Discretion Composite includes portfolios that employ an active, team-managed investment approach around a long-term, value-oriented investment philosophy. These portfolios use diversified strategies in seeking to add value while minimizing risk. The approach is to construct a well diversified, higher yielding inflation-protected portfolio with a bias towards Treasury Inflation Protected Securities. Exposure to the diversifying sectors (which include credit, global inflation-linked securities and mortgage-backed securities) may be derived through derivative and forward transactions. This strategy allows for opportunistic investments in high yield, emerging markets, non-dollar securities, commodities and bank loans.
Western Asset Derek Fan	Insurance	Inflation Protected	Oct-09	Western Asset's Global Inflation-Linked composite includes portfolios that employ an active, team-managed investment approach around a long-term, value-oriented investment philosophy. These portfolios use diversified strategies in seeking to add value while minimizing risk. The approach is to construct a portfolio primarily of inflation-indexed securities. Value can be added through country selection, term structure, issue selection, duration management and currency management.
Westridge/WG Trading/Clifton	Pension Pension Insurance	Dom Lg Cap Equity Dom Inv Grade FI Dom Lg Cap Equity	Aug-00 to Apr-11 Jan-08 to Apr-11 Apr-04 to Apr-11 (Settlement proceeds rec'd Apr-11)	S&P 500 Index Arbitrage Portfolio. Pension Domestic Fixed Income beta portfolio was changed to S&P 500 in November 2008. WG Trading was shut down by Federal Regulators in February 2009 and assets are in receivership. An S&P beta exposure was put on the accounts in July, 2009 by Clifton Group to maintain proper exposure to markets while in litigation.

updated 6/20/2014

Agenda Item IV. E.

State Investment Board

Asset and Investment Performance Overview

June 27, 2014

Dave Hunter, Executive Director / CIO

Darren Schulz, Deputy Chief Investment Officer

ND Retirement & Investment Office (RIO)

State Investment Board (SIB)

State Investment Board – Client Assets Under Management

Fund Name	Market Values as of 4/30/14 [1]	Market Values as of 6/30/13 [2]
Pension Trust Fund		
Public Employees Retirement System (PERS)	2,249,250,884	2,000,899,336
Teachers' Fund for Retirement (TFFR)	1,998,097,772	1,810,735,455
Job Service of North Dakota Pension	96,104,304	90,442,764
City of Bismarck Employees Pension	76,382,573	68,822,847
City of Grand Forks Employees Pension	53,188,539	50,148,061
City of Bismarck Police Pension	33,538,851	30,072,819
Grand Forks Park District	5,756,567	5,109,311
City of Fargo Employees Pension	35,175	34,133,671
Subtotal Pension Trust Fund	**4,512,354,666**	**4,090,364,264**
Insurance Trust Fund		
Legacy Fund	2,009,264,825	1,194,779,193
Workforce Safety & Insurance (WSI)	1,673,436,741	1,557,719,286
Budget Stabilization Fund	590,923,254	401,353,181
City of Fargo FargoDome Permanent Fund	39,591,287	36,411,591
PERS Group Insurance Account	38,825,872	42,792,878
State Fire and Tornado Fund	29,045,268	26,633,417
Petroleum Tank Release Compensation Fund	7,035,426	6,839,483
State Risk Management Fund	6,778,247	6,187,298
State Risk Management Workers Comp Fund	5,805,176	5,247,448
ND Association of Counties (NDACo) Fund	3,373,103	2,717,444
State Bonding Fund	3,240,441	3,141,218
ND Board of Medical Examiners	1,864,469	
Insurance Regulatory Trust Fund	1,126,691	1,043,647
Bismarck Deferred Sick Leave Account	831,100	1,016,834
Cultural Endowment Fund	366,963	323,914
Subtotal Insurance Trust Fund	**4,411,508,863**	**3,286,206,832**
PERS Retiree Insurance Credit Fund	86,525,380	73,677,263
Total Assets Under SIB Management	**9,010,388,909**	**7,450,248,360**

[1] *4/30/14 and 12/31/14 market values are unaudited and subject to change.*

[2] *6/30/13 market values as stated in the Comprehensive Annual Financial Report.*

- **SIB Client Assets Under Management grew by $1.56 billion (or 20.9%) between June 30, 2013 and April 30, 2014.**
- **Net investment income was responsible for gains of 12.6% (or $515 million) for the Pension Trust and 6.2% ($204 million) for the Insurance Trust.**
- **Legacy assets increased by over 68% ($815 million) primarily due to tax collections.**
- **As of April 30, 2014, the market value of SIB client assets approximated $9.0 billion based on preliminary valuations.**

Estimated Fiscal YTD Returns to June 19, 2014

Estimated YTD Through **6/19/2014**
(Actual returns are net of fees; estimates are gross indices)

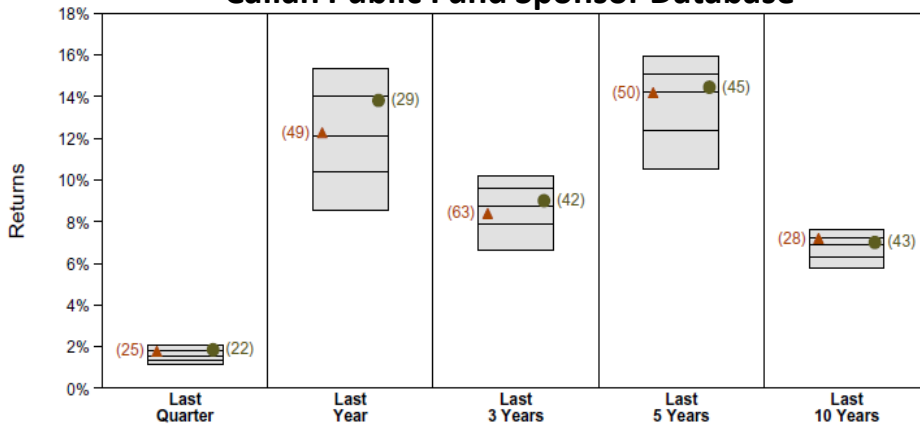
Note: Estimated FYTD Pension and Insurance Trust Returns > Policy Benchmark

			TFFR	PERS	WSI	Legacy	Budget Stabilization	Pension Trust	Insurance Trust	Job Service	PERS Retiree Health	Bismarck Employees	Bismarck Police	Grand Forks
Market Value		**30-Apr**	**1,998,097,772**	**2,249,250,884**	**1,673,436,741**	**2,009,264,825**	**590,923,254**	**4,512,354,666**	**4,304,608,991**	**96,104,304**	**86,525,380**	**76,382,573**	**33,538,851**	**53,188,539**
Total Fund Actual through		30-Apr	**12.8%**	**12.7%**	**9.2%**	**4.6%**	**1.5%**	**12.6%**	**6.2%**	**10.6%**	**12.6%**	**11.1%**	**11.6%**	**12.6%**
Total Fund Policy through		30-Apr	12.5%	12.4%	7.8%	3.4%	0.5%	12.4%	5.2%	10.2%	12.8%	10.8%	11.4%	12.5%
		31-May												
MSCI World		1.97%	16.0%	16.0%	0.0%	0.0%	0.0%	16.0%	0.0%	16.0%	0%	6.0%	16.0%	16.0%
Russell 1000		2.30%	16.6%	16.6%	9.8%	15.7%	0.0%	16.5%	10.3%	15.0%	37.0%	12.8%	10.4%	21.3%
Russell 2000		0.80%	4.8%	4.8%	3.3%	5.4%	0.0%	4.9%	3.7%	3.6%	9.0%	8.6%	7.2%	7.1%
EAFE		1.62%	11.8%	11.1%	7.0%	14.8%	0.0%	11.1%	8.7%	5.4%	14.0%	10.3%	8.5%	7.1%
Emerging Mkts		3.49%	2.8%	3.5%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	4.3%	3.9%	3.5%
BC Agg		1.14%	12.0%	12.0%	51.0%	25.9%	0.0%	13.0%	33.4%	47.0%	40.0%	24.0%	19.0%	14.0%
BC High Yield		0.92%	5.0%	5.0%	0.0%	0.0%	0.0%	5.1%	0.0%	8.0%	0.0%	6.0%	6.0%	5.0%
BC Global Agg ex US		0.18%	5.0%	5.0%	0.0%	0.0%	0.0%	5.0%	0.0%	5.0%	0.0%	4.0%	4.0%	5.0%
Real Estate		0.91%	20.0%	20.0%	6.0%	5.3%	0.0%	19.4%	3.9%	0.0%	0.0%	20.0%	20.0%	15.0%
Private Equity		0.00%	5.0%	5.0%	0.0%	0.0%	0.0%	4.9%	0.0%	0.0%	0.0%	4.0%	5.0%	5.0%
TIPS		1.04%	0.0%	0.0%	22.0%	0.9%	0.0%	0.0%	9.2%	0.0%	0.0%	0.0%	0.0%	0.0%
ML 1-3Y Treasury		0.21%	0.0%	0.0%	0.0%	32.0%	100.0%	0.0%	28.9%	0.0%	0.0%	0.0%	0.0%	0.0%
T-Bill		0.00%	1.0%	1.0%	1.0%	0.0%	0.0%	1.0%	1.9%	0.0%	0.0%	0.0%	0.0%	1.0%
Est. MTD through	**5/31/2014**		**1.4%**	**1.4%**	**1.2%**	**1.1%**	**0.2%**	**1.4%**	**1.0%**	**1.4%**	**1.6%**	**1.3%**	**1.3%**	**1.4%**
		19-Jun												
MSCI World		2.03%	16.0%	16.0%	0.0%	0.0%	0.0%	16.0%	0.0%	16.0%	0%	6.0%	16.0%	16.0%
Russell 1000		2.09%	16.6%	16.6%	9.8%	15.7%	0.0%	16.5%	10.3%	15.0%	37.0%	12.8%	10.4%	21.3%
Russell 2000		4.46%	4.8%	4.8%	3.3%	5.4%	0.0%	4.9%	3.7%	3.6%	9.0%	8.6%	7.2%	7.1%
MSCI EAFE		1.96%	11.8%	11.1%	7.0%	14.8%	0.0%	11.1%	8.7%	5.4%	14.0%	10.3%	8.5%	7.1%
MSCI Emerging Mkts		2.48%	2.8%	3.5%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%	4.3%	3.9%	3.5%
BC Aggregate		-0.50%	12.0%	12.0%	51.0%	25.9%	0.0%	13.0%	33.4%	47.0%	40.0%	24.0%	19.0%	14.0%
High Yield		0.76%	5.0%	5.0%	0.0%	0.0%	0.0%	5.1%	0.0%	8.0%	0.0%	6.0%	6.0%	5.0%
BC Global Agg ex US		0.34%	5.0%	5.0%	0.0%	0.0%	0.0%	5.0%	0.0%	5.0%	0.0%	4.0%	4.0%	5.0%
Real Estate		0.57%	20.0%	20.0%	6.0%	5.3%	0.0%	19.4%	3.9%	0.0%	0.0%	20.0%	20.0%	15.0%
Private Equity		0.00%	5.0%	5.0%	0.0%	0.0%	0.0%	4.9%	0.0%	0.0%	0.0%	4.0%	5.0%	5.0%
TIPS		0.03%	0.0%	0.0%	22.0%	0.9%	0.0%	0.0%	9.2%	0.0%	0.0%	0.0%	0.0%	0.0%
ML 1-3Y Treasury		-0.16%	0.0%	0.0%	0.0%	32.0%	100.0%	0.0%	28.9%	0.0%	0.0%	0.0%	0.0%	0.0%
T-Bill		0.00%	1.0%	1.0%	1.0%	0.0%	0.0%	1.0%	1.9%	0.0%	0.0%	0.0%	0.0%	1.0%
Est. MTD through	**6/19/2014**		**1.3%**	**1.3%**	**0.3%**	**0.7%**	**-0.2%**	**1.3%**	**0.4%**	**0.7%**	**1.2%**	**1.1%**	**1.2%**	**1.4%**
Estimated FYTD Return	**6/19/2014**		**15.9%**	**15.7%**	**10.8%**	**6.4%**	**1.6%**	**15.7%**	**7.6%**	**13.0%**	**15.9%**	**13.8%**	**14.5%**	**15.8%**
Estimated FYTD Policy	6/19/2014		15.6%	15.5%	9.4%	5.2%	0.6%	15.4%	6.6%	12.6%	16.1%	13.5%	14.2%	15.7%
Comparison to 8% return assumption pro-rated FYTD			***7.7%***	***7.7%***				***7.7%***						

Peer Performance - Pension Trust Total Fund Ranking (previously supplied information)

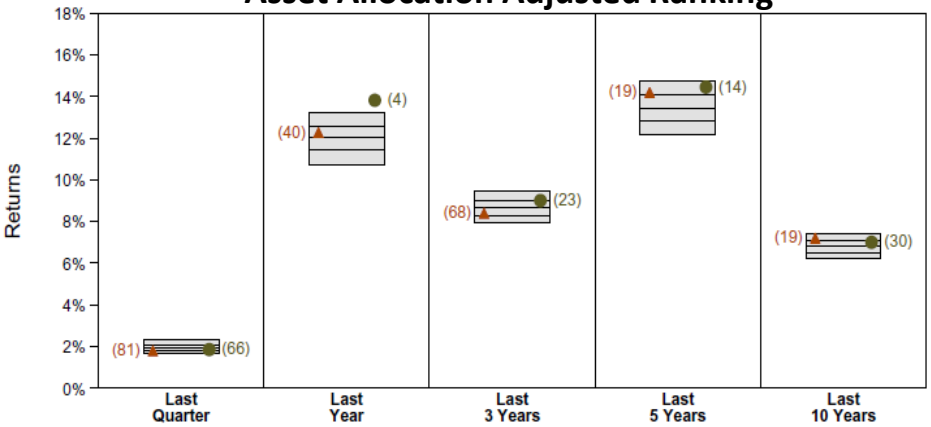
The two charts show the ranking of the Total Fund's performance relative to that of the Public Fund Sponsor Database for periods ended March 31, 2014. The left chart is a standard unadjusted ranking. In the right chart each fund in the database is adjusted to have the same historical asset allocations that of the Total Fund.

Callan Public Fund Sponsor Database



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	2.10	15.35	10.22	15.97	7.61
25th Percentile	1.79	14.02	9.63	15.09	7.24
Median	1.57	12.14	8.78	14.24	6.89
75th Percentile	1.34	10.40	7.87	12.34	6.33
90th Percentile	1.13	8.51	6.62	10.50	5.79
Total Fund ●	1.86	13.82	9.01	14.45	7.00
Policy Target ▲	1.79	12.27	8.39	14.19	7.20

Asset Allocation Adjusted Ranking



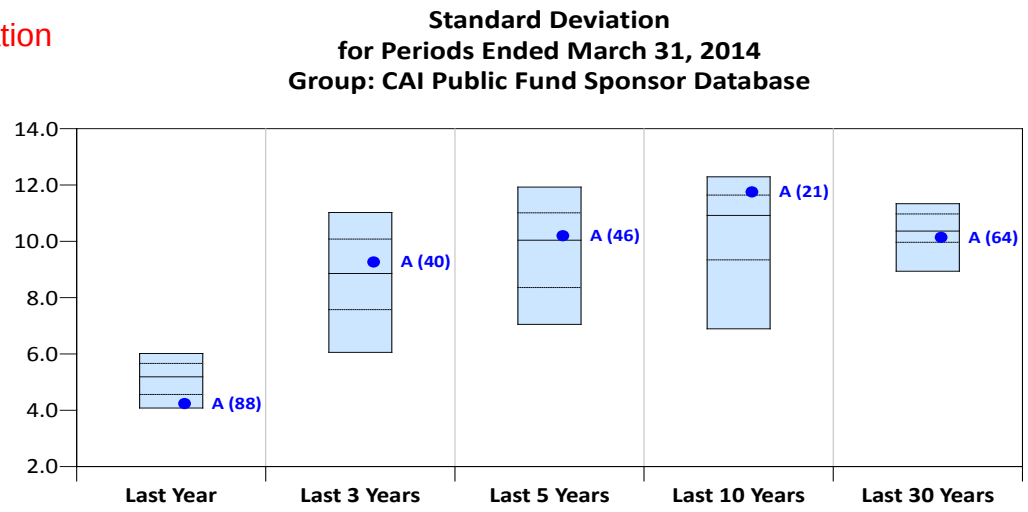
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	2.33	13.21	9.45	14.77	7.45
25th Percentile	2.09	12.57	8.98	14.07	7.09
Median	1.93	12.01	8.64	13.39	6.79
75th Percentile	1.81	11.44	8.30	12.80	6.51
90th Percentile	1.65	10.70	7.97	12.15	6.25
Total Fund ●	1.86	13.82	9.01	14.45	7.00
Policy Target ▲	1.79	12.27	8.39	14.19	7.20

* Current Quarter Target = 16.5% Russell 1000 Index, 16.0% MSCI World Index, 13.0% Barclays Aggregate Index, 11.1% MSCI EAFE Index, 9.7% NCREIF Total Index, 5.0% Barclays HY Corp 2% Issue, 5.0% Barclays Global Agg ex US, 4.9% CPI-W, 4.9% Russell 2000 Index, 4.9% NDSIB PEN - Private Equity, 4.9% NCREIF Timberland Index, 3.1% Emerging Mkts - Net and 1.0% 3-month Treasury Bill.

Gross Returns: The Pension Trust generated 2nd quartile returns for the 1-, 3-, 5- and 10-year periods ended March 31, 2014. The 1-year performance ranked in the 29th percentile of the Callan Associates Public Fund Sponsor Database (unadjusted basis).

Pension "Risk" has declined as measured by Standard Deviation

Previously supplied information



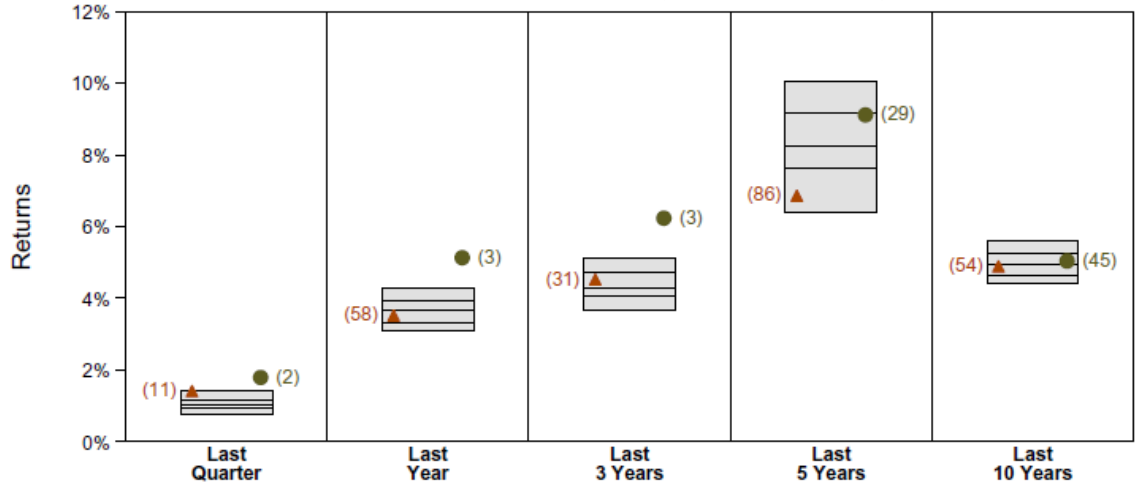
	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 30 Years
10th Percentile	6.0	11.0	11.9	12.3	11.3
25th Percentile	5.7	10.1	11.0	11.6	11.0
Median	5.2	8.9	10.0	10.9	10.4
75th Percentile	4.6	7.6	8.4	9.3	10.0
90th Percentile	4.1	6.1	7.1	6.9	8.9
Member Count	229	215	205	175	24
ND Pen-Total Fund ● A	**4.2**	**9.3**	**10.2**	**11.8**	**10.1**

Investment Risk, as measured by Standard Deviation, has been reduced significantly in recent years and currently resides in the lowest risk quartile (at the 88th percentile).

Peer Performance - Insurance Trust Fund Ranking (previously supplied information)

Given the material difference in the asset allocation of the Insurance Trust versus the Callan Associates Public Pension Fund database, it is inappropriate to show the unadjusted ranking for the Insurance Trust. As such, the "Asset Allocation Adjusted Ranking" is presented below for the periods ended March 31, 2014.

Asset Allocation Adjusted Ranking



	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
10th Percentile	1.44	4.29	5.13	10.06	5.61
25th Percentile	1.16	3.93	4.70	9.18	5.27
Median	1.03	3.65	4.29	8.23	4.95
75th Percentile	0.94	3.31	4.06	7.65	4.62
90th Percentile	0.77	3.08	3.67	6.40	4.40
Total Fund ●	1.79	5.13	6.23	9.11	5.04
Policy Target ▲	1.41	3.52	4.53	6.87	4.89

* Current Quarter Target = 33.4% Barclays Aggregate Index, 28.9% Barclays Gov 1-3 Yr, 10.3% Russell 1000 Index, 9.2% Barclays Glbl Inftn-Lnked, 8.7% MSCI EAFE Index, 3.9% NCREIF Total Index, 3.7% Russell 2000 Index and 1.9% 3-month Treasury Bill.

Gross Returns: The Insurance Trust generated 1nd quartile returns for the 1- and 3-year periods ended March 31, 2014. The 5- and 10-year performance ranked in the 29th and 45th percentile, respectively, of the Callan Public Fund Database (adjusted basis).

Strategic Initiatives - Executive Summary Update June 27, 2014

- **Credit Suisse Update (2Q)** - GCM Grosvenor has stated in a letter that the recent Credit Suisse settlement with the U.S. Government does not impact the North Dakota SIB investment in a GCM Grosvenor Private Markets investment fund in any way. Grosvenor noted that it is no longer a part of Credit Suisse and Callan has confirmed this opinion, although Callan noted is does not provide legal advice. RIO staff will continue to monitor the situation for further developments.

- **Client Reporting (3Q) -** RIO is working with Callan to expand performance reporting for SIB clients. These enhancements are expected to be implemented for the reporting period ended June 30, 2014 and presented in 3Q/14.

- **Custody Review (3Q)** - Callan has commenced a custody review of Northern Trust to confirm performance standards and fee levels including a proposal to adopt a conservative securities lending program. A presentation will be made to the SIB in 3Q/14.

- **Private Capital (3Q)** - RIO commenced a review of our existing Private Equity, Infrastructure, Real Estate and Timber mandates to confirm our investment approach to less liquid strategies, rationalize smaller investments with limited upside, ease administrative reporting and identify potential fee savings.

- **Global Fixed Income (3Q/4Q) –** RIO will commence a review of our fixed income strategies with Callan so as to confirm sector allocations in light of our long-term strategic goals and strong performance.

- **Board Education (Ongoing)** - Introductory "Callan College" sessions will be presented to the SIB in July and August. Proposed topics include Asset Allocation, Capital Markets Theory, Fiduciary Role, Manager Structure and Performance Measurement. Two-day sessions will also be offered in San Francisco on October 28-29, 2014. This months topic is on Performance Reporting Methods.

- **Watch List (Ongoing)** - Loomis, PIMCO & WAMCO will be retained on the Watch List until performance improves and/or recent firm developments are satisfactorily resolved. RIO and Callan have commenced a search with regards to the WAMCO MBS mandate.

MEMO

TO: **SIB**
FROM: **David Hunter**
DATE: **June 27, 2014**
SUBJ: **Legislative Update**

Staff will provide an update on Legislative committee meetings. Staff presented to the Employee Benefits Programs Committee on June 5, 2014 and reviewed a draft of Bill 135 which modifies investment policies for and funds under the management of the SIB.

Staff also presented to the Legacy and Budget Stabilization Fund Advisory Board on June 16, 2014. Staff reviewed status, asset allocation, basis points charged by investment advisers, and returns of the Legacy Fund and Budget Stabilization Fund.

Bill Draft No. 135

Employee Benefits Programs Committee

June 5, 2014

Connie Flanagan - Fiscal and Investment Operations Manager
Darren Schulz, CFA – Deputy Chief Investment Officer
Retirement and Investment Office (RIO)/State Investment Board (SIB).

The changes requested in Bill Draft No. 135 to Chapter 21-10 are simply technical corrections to bring the language more in-line with current operational practices of the SIB and to correctly depict the funds under the direction of the SIB.

SECTION 1:
The first change in #1b of section 21-10-02.1 is meant to better describe the way rates of return should be determined within fund policies. Return objectives must be tied to liquidity requirements and risk tolerance and should not be viewed as absolute values. The SIB felt these changes better described that relationship.

The next change is under #2 of section 21-10-02.1. Because asset/liability studies are being conducted by the various funds at different times and under different schedules, the SIB does not require nor desire that all of these changes be brought to them at the same time. Therefore the January first deadline is being removed. Additionally, because these studies may result in changes to asset allocations after the initial allocations are set, it is important to distinguish that the original and all subsequent changes must be approved by both the governing bodies and the SIB.

SECTION 2:
The remaining changes are to section 21-10-06. The first is a correction to an incorrect reference. A change was made to this reference in the 2011 session and the error was not noticed. The reference to 21-10-01 does not make sense and should be to 21-10-02.

Next, the National Guard Tuition Trust Fund is no longer invested by the SIB so is being removed from the list. And finally, for clarification purposes, "m" is being added to the list to ensure that any fund contracted with the SIB for investment services under #3 is subject to section 21-10-02, the same as all of the funds listed above.

This concludes my testimony and I would be happy to answer any questions you may have.

DRAFT

Sixty-fourth
Legislative Assembly _____ BILL NO. _____
of North Dakota

Introduced by

(At the request of the State Investment Board)

A BILL for an Act to amend and reenact sections 21-10-02.1 and 21-10-06 of the North Dakota Century Code, relating to modifications to investment policies for and funds under management of the state investment board.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. AMENDMENT. Section 21-10-02.1 of the North Dakota Century Code is amended and reenacted as follows:

21-10-02.1. Board - Policies on investment goals and objectives and asset allocation.

1. The governing body of each fund enumerated in section 21-10-06 shall establish policies on investment goals and objectives and asset allocation for each respective fund. The policies must provide for:

   a. The definition and assignment of duties and responsibilities to advisory services and persons employed by the board.

   b. ~~Acceptable rates~~ Rate of return objectives, including liquidity~~,~~ requirements and acceptable levels of risk.

   c. Long-range asset allocation goals.

   d. Guidelines for the selection and redemption of investments.

   e. Investment diversification, investment quality, qualification of advisory services, and amounts to be invested by advisory services.

   f. The type of reports and procedures to be used in evaluating performance.

2. The asset allocation and any subsequent allocation changes for each fund, to be effective, must be approved by the governing body of that fund and the state investment board ~~by January first of each year. If the asset allocation is not approved, the previous asset allocation remains effective~~. The governing body of each fund shall use the staff and consultants of the retirement and investment office in developing asset allocation and investment policies.

SECTION 2. AMENDMENT. Section 21-10-06 of the North Dakota Century Code is amended and reenacted as follows:

21-10-06. Funds under management of board - Accounts.

1. Subject to the provisions of section ~~21-10-01~~21-10-02, the board is charged with the investment of the following funds:
   a. State bonding fund.
   b. Teachers' fund for retirement.
   c. State fire and tornado fund.
   d. Workforce safety and insurance fund.
   e. ~~National guard tuition trust fund.~~
   ~~f.~~ Public employees retirement system.
   ~~g.~~ f. Insurance regulatory trust fund.
   ~~h.~~ g. State risk management fund.
   ~~i.~~ h. Budget stabilization fund.
   ~~j.~~ i. Health care trust fund.
   ~~k.~~ j. Cultural endowment fund.
   ~~l.~~ k. Petroleum tank release compensation fund.
   ~~m.~~ l. Legacy fund.
   m. Any other fund under contract with the board pursuant to subsection 3.

2. Separate accounting must be maintained for each of the funds listed in subsection 1. The moneys of the individual funds may be commingled for investment purposes when determined advantageous.

3. The state investment board may provide investment services to, and manage the money of, any agency, institution, or political subdivision of the state, subject to agreement with the industrial commission. The scope of services to be provided by the state investment board to the agency, institution, or political subdivision must be specified in a written contract. The state investment board may charge a fee for providing investment services and any revenue collected must be deposited in the state retirement and investment fund.

MEMO

TO: **SIB**
FROM: **David Hunter**
DATE: **June 27, 2014**
SUBJ: **SIB Audit Committee**

Mr. Gessner will be updating the SIB on the SIB Audit Committee's activities from their May 23, 2014, meeting.

Staff also contacted the SIB Audit Committee current membership to determine who would be willing to serve on the Committee for the July 1, 2014 - June 30, 2015, fiscal year.

As directed by SIB Policy B-6, Governance Process/Standing Committees, the Audit Committee shall consist of five members selected by the SIB. Three members of the Audit Committee will represent the three groups on the SIB (TFFR board, PERS board, and the elected and appointed officials). The other two members will be selected from outside of the SIB and will be auditors with at least a Certified Public Accountant (CPA) or Certified Internal Auditor (CIA) designation.

Board representatives for the past year have been:

Cindy Ternes (designee for the Director of Workforce Safety & Insurance) representing elected and appointed officials

Mike Sandal, representing PERS

Michael Gessner, representing TFFR

External representatives for the past year have been:

Rebecca Dorwart, CPA, CIA

Lonny Mertz, CPA, CIA, CFE

All members are willing to serve on the Audit Committee with the exception of Mr. Mertz. Mr. Mertz has elected not to serve after serving for 10 years. He felt it was time to step aside and provide someone else the opportunity to serve on the committee with a fresh perspective.

ND STATE INVESTMENT BOARD
AUDIT COMMITTEE MEETING

Friday, May 23, 2014 - 1:00 p.m.
Peace Garden Room - State Capitol, Bismarck, ND

AGENDA

1. Call to Order and Approval of Agenda – Chair (committee action)

2. Approval of February 28, 2014 Minutes – Chair (committee action)

3. Presentation of Audit Scope for 7/1/13 – 6/30/14 agency audit and GASB 67/68 – Jason Ostroski, Clifton/Larson/Allen LLP (information)

4. GASB 67/68 Implementation Planning – Fay Kopp (information)

5. Executive Limitations Audit and Survey Update – Dave Hunter (information)

6. Audit Supervisor Recommendation – Dave Hunter and Fay Kopp (committee action)

7. 2013-14 Audit Activities Progress Report, 3rd Quarter – Dottie Thorsen (committee action)

8. 2014-15 Audit Services Work Plan and Time Budget – Chair Dorwart, Dave Hunter, and Fay Kopp (information)

9. 2014-15 Audit Committee Meeting Schedule – Fay Kopp (committee action)

10. Other Business
    Next SIB Audit Committee meeting – September 26, 2014

11. Adjournment

Any individual requiring an auxiliary aid or service should contact the Retirement and Investment Office at (701) 328-9885 at least three (3) days prior to the scheduled meeting.

STATE INVESTMENT BOARD
AUDIT COMMITTEE MEETING
MINUTES OF THE
FEBRUARY 28, 2014, MEETING

COMMITTEE MEMBERS PRESENT: Rebecca Dorwart, Chair
Lonny Mertz, Vice Chair
Mike Gessner, TFFR Board/Liaison to the SIB
Mike Sandal, PERS Board
Cindy Ternes, Workforce Safety & Insurance

STAFF PRESENT: Bonnie Heit, Assistant to the Audit Committee
David Hunter, Executive Director/CIO
Fay Kopp, Deputy Executive Director/CRO
Dottie Thorsen, Internal Auditor

CALL TO ORDER:

Ms. Dorwart called the State Investment Board (SIB) Audit Committee meeting to order at 1:00 p.m., on Friday, February 28, 2014, at the State Capitol, 600 E Blvd, Bismarck, ND.

A quorum was present for the purpose of conducting business.

AGENDA:

The Audit Committee considered the February 28, 2014, agenda.

IT WAS MOVED BY MR. SANDAL AND SECONDED BY MS. TERNES AND CARRIED ON A VOICE VOTE TO ACCEPT THE AGENDA FOR THE FEBRUARY 28, 2014, MEETING.

AYES: MR. SANDAL, MS. TERNES, MR. MERTZ, MR. GESSNER, AND MS. DORWART
NAYS: NONE
MOTION CARRIED

MINUTES:

The Audit Committee considered the minutes from the November 22, 2013, meeting.

IT WAS MOVED BY MR. GESSNER AND SECONDED BY MR. SANDAL AND CARRIED ON A VOICE VOTE TO ACCEPT THE NOVEMBER 22, 2013, MINUTES AS WRITTEN.

AYES: MR. GESSNER, MR. SANDAL, MS. TERNES, MR. MERTZ, AND MS. DORWART
NAYS: NONE
MOTION CARRIED

AUDIT ACTIVITIES REPORT:

Ms. Thorsen reviewed internal audit activities for the October 1, 2013 - December 31, 2013 period.

As of December 31, 2013, 10 audits were completed and two audits were in progress, and information for six districts was on file. As of February 28 2014, 14 audits have been completed, two are in progress, two not in compliance reviews have been completed, and notifications to five more districts were sent out.

Ms. Thorsen also indicated the TFFR File Maintenance Audit was completed. No exceptions were noted.

Staff also reviewed budgeted hours for the period ending December 31, 2013.

IT WAS MOVED BY MR. GESSNER AND SECONDED BY MR. MERTZ AND CARRIED ON A VOICE VOTE TO ACCEPT THE INTERNAL AUDIT ACTIVITIES REPORT FOR THE PERIOD OF OCTOBER 1, 2013 - DECEMBER 31, 2013.

AYES: MS. TERNES, MR. MERTZ, MR. SANDAL, MR. GESSNER, AND MS. DORWART
NAYS: NONE
MOTION CARRIED

GASB IMPLEMENTATION:

Ms. Kopp informed the Audit Committee she has been meeting with the Public Employees Retirement System (PERS) and the State Auditor's Office representatives to review options and timeframes for implementing the new pension reporting standards, GASB Statements No. 67 and No. 68. The entities are working through the process in a joint effort, where appropriate, in order to reduce costs and provide consistency for state and local governments, school districts, and other Teachers' Fund for Retirement (TFFR) and PERS participating employers. Ms. Kopp also reviewed a draft timeline to implement the new standards.

AUDIT SUPERVISOR POSITION:

Ms. Kopp updated the Audit Committee on recruitment efforts for the Audit Supervisor vacancy. Ms. Kopp has been working with Ms. Dorwart, Mr. Hunter, and Mr. Lynn Hart, State Human Resource Management Services (HRMS) on filling the vacancy. The vacancy was first posted on December 31, 2013, and in order to expand the applicant pool, the position has been re-posted twice with the current closing date scheduled for March 18, 2014. Ms. Dorwart will also look into having the local chapter of the Institute of Internal Auditors (IIA) distribute the vacancy posting to its members. Ms. Kopp will continue to keep the Audit Committee up to date on the status of the position.

STAFFING UPDATE:

Mr. Hunter provided an update on office staff. Mr. Cody Schmidt assumed the role of Compliance Officer effective December 9, 2013, and Ms. Connie Flanagan was reinstated as Fiscal & Investment Operations Manager, effective January 22, 2014. Mr. Gary Vetter, Information Technology Supervisor, will retire March 31, 2014, and Mr. Rich Nagel, will be promoted into the position effective April 1, 2014. Positions left to be filled are the Audit Supervisor, Information Technology Coordinator, and Investment Analyst and staff is addressing those vacancies.

OTHER:

The next Audit Committee meeting is scheduled for May 23, 2014, at 1:00 p.m. at the State Capitol, Peace Garden Room.

ADJOURNMENT:

With no further business to come before the Audit Committee, Ms. Dorwart adjourned the meeting at 1:35 p.m.

Respectfully Submitted:

Rebecca Dorwart

Ms. Rebecca Dorwart, Chair
SIB Audit Committee

Bonnie Heit

Bonnie Heit
Assistant to the Audit Committee

MEMO

TO: **SIB**
FROM: **David Hunter**
DATE: **June 27, 2014**
SUBJ: **Survey Discussion**

Mr. Sandal will lead the discussion on the SIB client survey.

ND STATE INVESTMENT BOARD

Board Action Requested

Annual Agenda & Strategic Initiatives for Fiscal 2015 SIB Meetings

July – Private Capital Review, Governance Preview and Callan College Part I

August – Annual Performance Preview, Technology Initiatives and Callan College Part II

September – Annual Peer Performance Review, Callan Custody Review, and Securities Litigation

October – Governance Review, Callan Fee Survey and Callan College Course (San Francisco)

November – Quarterly Performance Update, Global Fixed Income Review and Audit Results

December – No meeting is scheduled, although the 2015 Strategic Plan will be prepared by RIO.

January 2015 – RIO Strategic Plan Review for July 1, 2015 to June 30, 2017 Biennium

February – Quarterly Performance Update and Annual Executive Limitations Review

March – Global Public Equity Review

April – Review of Legislative Session

May – Quarterly Performance Update

June - Development of Annual Agenda and Strategic Initiatives for Fiscal 2016

Board Education and Governance topics highlighted in blue.
Performance and Fee topics highlighted in green.

MEMO

TO: **SIB**
FROM: **David Hunter**
DATE: **June 27, 2014**
SUBJ: **Staff Update**

Mr. Hunter will provide a status report on the Audit Supervisor and Investment Analyst positions.