MINNESOTA STATE BOARD OF INVESTMENT

MINNESOTA STATE BOARD OF INVESTMENT MEETING March 6, 2013



Governor Mark Dayton
State Auditor Rebecca Otto
Secretary of State Mark Ritchie
Attorney General Lori Swanson

STATE BOARD OF INVESTMENT AGENDA AND MINUTES March 6, 2013

AGENDA

STATE BOARD OF INVESTMENT MEETING

Wednesday, March 6, 2013 9:00 A.M. – Room 118 State Capitol, St. Paul

1.	Approval of Minutes of December 6, 2012	TAH
2.	Report from the Executive Director (H. Bicker)	A
	A. Quarterly Investment Review (October 1, 2012 – December 31, 2012)	
	 B. Administrative Report 1. Reports on budget and travel 2. Results of FY12 Financial Audit 3. Legislative Update 4. Update on Sudan 5. Update on Iran 6. Litigation Update 	В
3.	Report from Proxy Voting Committee (H. Bicker)	C
4.	Investment Advisory Council Report (J. Bailey)	
	A. Stock and Bond Report	D
	 Review of manager performance for the period ending December 31, 2012 	
	B. Alternative Investment Report	${f E}$
	1. Review of current strategy	
	 Consideration of an investment commitment to one new private equity manager 	
	3. Review of the SBI's investment in core open-end real estate funds	
5.	Staff review of the swap market for potential legislative action (H. Bicker)	F
6	Other items	

Minutes State Board of Investment December 6, 2012

The State Board of Investment (SBI) met at 10:00 A.M. Tuesday, December 6, 2012 in Room 123, State Capitol, St. Paul, Minnesota. Governor Mark Dayton, State Auditor Rebecca Otto, Secretary of State Mark Ritchie and Attorney General Lori Swanson were present. The minutes of the September 12, 2012 meeting were approved.

Executive Director's Report

Mr. Bicker, Executive Director, referred members to Tab A of the meeting materials and he reported that the Combined Funds had outperformed its Composite Index over the ten year period ending September 30, 2012 (Combined Funds 8.7% vs. Composite 8.6%) and had provided a real rate of return over the latest 20 year period (Combined Funds 8.3% vs. CPI 2.5%).

Mr. Bicker reported that the Combined Funds' assets increased 3.4% for the quarter ending September 30, 2012 due to positive market performance. He said that the asset mix is essentially on target, and he stated that the Combined Funds outperformed its Composite Index for the quarter (Combined Funds 4.5% vs. Composite 4.3%) and for the year (Combined Funds 18.1% vs. Composite 17.7%).

Mr. Bicker reported that the domestic stock manager group matched its target for the quarter (Domestic Stocks 6.2% vs. Domestic Equity Asset Class Target 6.2%) and outperformed for the year (Domestic Stock 30.3% vs. Domestic Equity Asset Class Target 30.2%). He said the international stock manager group outperformed for the quarter (International Stock 7.7% vs. International Equity Asset Class Target 7.4%) and for the year (International Stock 14.9% vs. International Equity Asset Class Target 14.5%). Mr. Bicker stated that the bond segment outperformed its target for the quarter (Bonds 2.4% vs. Fixed Income Asset Class Target 1.6%) and for the year (Bonds 7.5% vs. Fixed Income Asset Class Target 5.2%). He stated that the alternative investments returned 0.3% for the quarter and 6.1% for the year. He concluded his report with the comment that, as of September 30, 2012, the SBI was responsible for over \$62 billion in assets.

Mr. Bicker referred members to Tab B of the meeting materials for an update on the budget and travel for the quarter. He reported that the Legislative Auditor is working on the financial audit of the SBI's operations for FY12 and that members will receive a copy of their report when it becomes available. He added that the draft of the SBI's FY12 Annual Report will be distributed by early December and he noted the tentative meeting dates for calendar year 2013.

Mr. Bicker stated that TIAA-CREF, the manager of the state's College Savings Plan, has requested a couple changes in the Plan's investment options and approval of a small management fee reduction. He said that staff concurs with these changes. Mr. Ritchie moved approval of staff's recommendation, as stated in Tab B of the meeting materials, which reads: "Staff requests that the Board approve the recommendations from TIAA-CREF to enhance the

state's College Savings Plan. These changes are: Replace the Large-Cap Growth Index Fund, the Large-Cap Value Index Fund and the Small Cap Blend Index Fund in the Managed Allocation Option, the 100% Equity Option and the Balanced Option with an all-cap Equity Index Fund. Add a separate International Equity Index Option. Lower program management fees by five basis points." The motion passed. Mr. Bicker reported that updated information on Sudan and Iran is also included in Tab B.

Mr. Bicker asked Ms. Eller, Deputy Attorney General for an update on litigation. Ms. Eller reported that the Minnesota Court of Appeals had affirmed the District Court's dismissal of the lawsuit. She noted that the time for appeal had not yet expired.

Mr. Bicker referred members to Tab C of the meeting materials and briefly reviewed the process used by the Master Custodian Review Committee to evaluate responses to the SBI's request for proposal for master custody services. He stated that the Committee is recommending that the SBI renew its contract with State Street Bank and Trust. Ms. Otto moved approval of the recommendation as stated in Tab C of the meeting materials, which reads: "Based on the results of the RFP, the Committee recommends that the Board authorize the Executive Director, with the Assistance of SBI counsel, to negotiate and execute a contract with State Street Bank and Trust Company, Boston, MA, for Master Custodial services for a five year period ending April 30, 2018.

Approval by the SBI of this potential commitment is not intended to be, and does not constitute in any way, a binding or legal agreement or impose any legal obligation on the State Board of Investment and neither the State of Minnesota, the State Board of Investment or its Executive Director have any liability for reliance by State Street Bank and Trust Company upon this approval. Until a formal agreement is executed by the Executive Director on behalf of the SBI, further due diligence and negotiations may result in the imposition of additional terms and conditions on State Street Bank and Trust or reduction or termination of the commitment." The motion passed.

Mr. Bailey referred members to Tab D of the meeting materials and noted that no recommendations were being made at this time regarding the stock and bond managers. He reported that the IAC had spent some time discussing the potential use of swaps as an additional investment strategy. In response to a question from Governor Dayton, Mr. Bicker stated that legislation would be needed if the Board chose to proceed and he said that staff could prepare legislative language for the Board to consider at its March 2013 meeting. In response to a request from Mr. Ritchie, Mr. Bicker stated that staff would provide additional background information to the Board regarding swap transactions.

Mr. Bailey referred members to Tab E of the meeting materials and briefly reviewed the new investments with two existing private equity managers, Warburg Pincus and Chicago Growth Partners, one existing resource manager, EnCap Investments and one new private equity manager, Public Pension Capital. He highlighted a few of the more investor friendly terms available with Public Pension Capital. Mr. Ritchie commented that he is appreciative that staff is watching for new opportunities in the alternative area. In response to questions from Ms. Swanson, Mr. Bicker stated that the State of Oregon had already committed and that the

recommendation stipulates a limitation on the length of time to fund raise for the fund. Ms. Otto moved approval of the four recommendations, as stated in Tab F of the meeting materials, which reads: "The Investment Advisory Council recommends that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of up to \$200 million, or 20% of Warburg Pincus XI, whichever is less. Approval by the SBI of this potential commitment is not intended to be, and does not constitute in any way, a binding or legal agreement or impose any legal obligations on the State Board of Investment and neither the State of Minnesota, the Investment Advisory

Council, the State Board of Investment nor its Executive Director have any liability for reliance by Warburg Pincus upon this approval. Until the Executive Director on behalf of the SBI executes a formal agreement, further due diligence and negotiations may result in the imposition of additional terms and conditions on Warburg Pincus or reduction or termination of the commitment.

The Investment Advisory Council recommends that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of up to \$75 million, or 20% of Chicago Growth III, whichever is less. Approval by the SBI of this potential commitment is not intended to be, and does not constitute in any way, a binding or legal agreement or impose any legal obligations on the State Board of Investment and neither the State of Minnesota, the Investment Advisory Council, the State Board of Investment nor its Executive Director have any liability for reliance by Chicago Growth upon this approval. Until the Executive Director on behalf of the SBI executes a formal agreement, further due diligence and negotiations may result in the imposition of additional terms and conditions on Chicago Growth or reduction or termination of the commitment.

The Investment Advisory Council recommends that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of up to \$100 million, or 20% of EnCap IX, whichever is less. Approval by the SBI of this potential commitment is not intended to be, and does not constitute in any way, a binding or legal agreement or impose any legal obligations on the State Board of Investment and neither the State of Minnesota, the Investment Advisory Council, the State Board of Investment nor its Executive Director have any liability for reliance by EnCap upon this approval. Until the Executive Director on behalf of the SBI executes a formal agreement, further due diligence and negotiations may result in the imposition of additional terms and conditions on EnCap or reduction or termination of the commitment.

The Investment Advisory Council recommends that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of up to \$100 million, or 20% of the PPC Fund, whichever is less. Additionally, the commitment is contingent on PPC obtaining at least \$500 million in signed and finalized Limited Partner commitments to the Fund from at least four (4) other Limited Partner investors in the Fund by June 30, 2013. Approval by the SBI of this potential commitment is not intended to be, and does not constitute in any way, a binding or legal agreement or impose any legal obligations on the State Board of Investment and

neither the State of Minnesota, the Investment Advisory Council, the State Board of Investment nor its Executive Director have any liability for reliance by PPC upon this approval. Until the Executive Director on behalf of the SBI executes a formal agreement, further due diligence and negotiations may result in the imposition of additional terms and conditions on PPC or reduction or termination of the commitment." The motion passed. The meeting adjourned at 11:45 a.m.

Respectfully submitted,

Howard Bicker

Executive Director

TAB A

LONG TERM OBJECTIVES Period Ending 12/31/2012

COMBINED FUNDS: \$49.5 Billion	Result	Compared to Objective
Match or Exceed Composite Index (10 Yr.)	8.4% (1)	0.2 percentage point above the target
Outperform a composite market index weighted		the target
in a manner that reflects the long-term asset allocation of the Combined Funds over the		
latest 10 year period.		
Provide Real Return (20 yr.)	8.2%	5.8 percentage points
Provide returns that are 3-5 percentage points		above CPI
greater than inflation over the latest 20 year period.		

⁽¹⁾ Performance is calculated net of fees.

SUMMARY OF ACTUARIAL VALUATIONS

Nine Plans of MSRS, PERA and TRA July 1, 2012

Liabilities

Actuarial Accrued Liabilities

\$63.7 billion

Assets

Current Actuarial Value

\$47.9 billion

Funding Ratio

Current Actuarial Value divided by

75.3%

Accrued Liabilities

Actuarial Assumptions:

- 1. Liabilities calculated using entry age normal cost method.
- 2. Difference between actual returns and actuarially expected returns spread over five years.
- 3. Interest/Discount Rate 5-Year Select and Ultimate Rates:

July 1, 2012 – June 30, 2017

8%

July 1, 2017 - and later

8.5%

4. Full Funding Target Date:

2040 - MSRS General

2031 - PERA General

2037 - TRA

EXECUTIVE SUMMARY

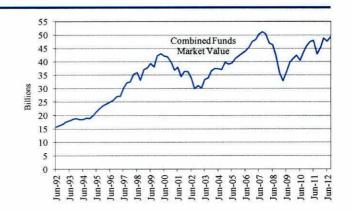
Combined Funds (Net of Fees)

Asset Growth

The market value of the Combined Funds increased 0.7% during the fourth quarter of 2012. Positive investment returns caused the increase in market value.

Asset Growth During Fourth Quarter 2012 (Millions)

Beginning Value	\$ 49,141
Net Contributions	-479
Investment Return	807
Ending Value	\$ 49,469

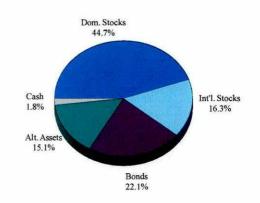


Asset Mix

The allocation to international equity and alternative assets increased due to outperformance relative to other asset classes.

		Actual	Actual
	Policy	Mix	Market Value
	Targets	12/31/2012	(Millions)
Domestic Stocks	45.0%	44.7%	\$22,123
Int'l. Stocks	15.0	16.3	8,065
Bonds	18.0	22.1	10,913
Alternative Assets*	20.0	15.1	7,452
Cash	2.0	1.8	916
	100.0%	100.0%	\$49,469





Fund Performance (Net of Fees)

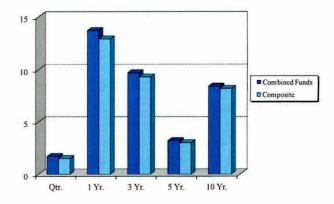
Combined Funds

Composite

The Combined Funds outperformed its target for the quarter and for the year.

Period Ending 12/31/2012

		An	nualize	d
Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
1.7%	13.7%	9.7%	3.2%	8.4%
1.5	12.9	9.3	3.0	8.2



EXECUTIVE SUMMARY

Stock and Bond Manager Performance (Net of Fees)

Domestic Stocks

The domestic sto	ock manager group (active,
semi-passive and	d passive combined)
outperformed its	target for the quarter and
for the year.	

Russell 3000: The Russell 3000 measures the performance of the 3,000 largest U.S. companies based on total market capitalization.

	Per	Period Ending 12/31/2012				
	Annualized				ed	
	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.	
Dom. Stocks	0.3%	16.6%	11.1%	1.9%	7.5%	
Asset Class Target*	0.2	16.4	11.2	2.0	7.7	

* The Domestic Equity Asset Class Target is the Russell 3000 effective 10/1/03. From 7/1/99 to 9/30/03, it was the Wilshire 5000 Investable Index.

International Stocks

The international stock manager group (active, semi-passive and passive combined) matched its target for the quarter and outperformed for the year.

MSCI ACWI Free ex U.S. (net): The Morgan Stanley Capital International 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. There are 45 countries included in this index. It does not include the United States.

Period Ending 12/31/2012

Annualized

Qtr. 1 Yr. 3 Yr. 5 Yr. 10 Yr.

Int'l. Stocks
Asset Class Target*

5.9 16.8 3.9 -2.9 9.7

* Since 6/1/08 the International Equity Asset Class Target is the Standard MSCI ACWI ex U.S. (net). From 10/1/07 to 5/31/08 the benchmark was the Provisional Standard MSCI ACWI ex U.S. (net). From 10/1/03 to 9/30/07 the target was MSCI ACWI ex U.S. (net). From 1/1/01 to 9/30/03, the target was MSCI EAFE Free (net) + Emerging Markets Free (EMF) (net), and from 7/1/99 to 12/31/00 was MSCI EAFE Free (net) + EMF (gross). From 7/1/99 to 9/30/03, the weight of each index fluctuated with market cap.

Bonds

The bond manager group (active and semi-passive combined) outperformed its target for the quarter and for the year.

Barclays Capital Aggregate: The Barclays Capital Aggregate Bond Index reflects the performance of the broad bond market for investment grade (Baa or higher) bonds, U.S. treasury and agency securities, and mortgage obligations with maturities greater than one year.

	Period Ending 12/31/2012				
	Annualized				
	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Bonds	0.6%	6.7%	7.6%	6.4%	5.6%
Asset Class Target	0.2	4.2	6.2	5.9	5.2

Alternative Investments

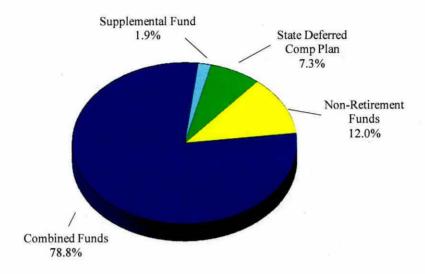
Period Ending 12/31/2012

Annualized

Qtr. 1 Yr. 3 Yr. 5 Yr. 10 Yr.

Alternatives 3.3% 12.8% 13.1% 5.7% 15.2%

EXECUTIVE SUMMARYFunds Under Management



	12/31/2012 Market Value (Billions)
Retirement Funds	, ,
Combined Funds	\$49.5
Supplemental Investment Fund	1.2
- Excluding Deferred Compensation Plan Assets	
State Deferred Compensation Plan	4.6
Non-Retirement Funds	
Assigned Risk Plan	0.3
Permanent School Fund	0.9
Environmental Trust Fund	0.6
Miscellaneous Trust Accounts	0.1
Other Post Employment Benefits Accounts	0.4
State Cash Accounts	5.2
Total	\$62.8

This page intentionally left blank.

MINNESOTA STATE BOARD OF INVESTMENT

QUARTERLY INVESTMENT REPORT

Fourth Quarter 2012 (October 1, 2012 - December 31, 2012)

Table of Contents

Page
Capital Market Indices2
Financial Markets Review
Combined Funds5
Stock and Bond Manager Pools9
Alternative Investments
Supplemental Investment Fund
Fund Description
Income Share Account
Growth Share Account
Common Stock Index Account
International Share Account
Bond Market Account
Money Market Account
Fixed Interest Account
Volunteer Firefighter Account
Deferred Compensation Plan14
Assigned Risk Plan
Permanent School Fund
Environmental Trust Fund
State Cash Accounts
Composition of State Investment Portfolios

VARIOUS CAPITAL MARKET INDICES

	Period Ending 12/31/2012			2	
	Qtr.	Yr.	3 Yr.	5 Yr.	10 Yr.
Domestic Equity					
Russell 3000 (broad market)	0.2%	16.4%	11.2%	2.0%	7.7%
Russell 1000 (large cap) Russell 2000 (small cap)	0.1 1.9	16.4 16.3	11.1 12.2	1.9 3.6	7.5 9.7
Dow Jones Wilshire Composite	0.2	16.4	11.4	2.2	7.9
Dow Jones Industrials S&P 500	-1.8 -0.4	10.1 16.0	10.8 10.9	2.6 1.7	7.3 7.1
Domestic Fixed Income					
Barclays Capital Aggregate (1)	0.2	4.2	6.2	5.9	5.2
Barclays Capital Gov't./Corp. 3 month U.S. Treasury Bills	0.4 0.0	4.8 0.1	6.7 0.1	6.1 0.4	5.2 1.7
International					
Emerging Markets Free (2) ACWI Free ex-U.S. (3)	5.6 5.8	18.2 16.8	4.7 3.9	-0.9 -2.9	16.5 9.7
EAFE (4) World ex-U.S. (5)	6.6 5.9	17.3 16.4	3.6 3.6	-3.7 -3.4	8.2 8.6
Salomon Non U.S. Gov't. Bond	-2.4	1.5	3.9	5.2	6.4
Inflation Measure					
Consumer Price Index CPI-U (6) Consumer Price Index CPI-W (7)	-0.8 -1.0	1.7 1.7	2.1 2.2	1.8 1.9	2.3 2.5

⁽¹⁾ Barclays Capital Aggregate Bond index. Includes governments, corporates and mortgages.

⁽²⁾ Morgan Stanley Capital International Emerging Markets Free index. (Net index)

⁽³⁾ Morgan Stanley Capital International All Country World Index Ex-U.S. (Net index)

⁽⁴⁾ Morgan Stanley Capital International index of Europe, Australasia and the Far East (EAFE). (Net index)

⁽⁵⁾ Morgan Stanley Capital International World Ex-U.S. Index (Developed Markets) (Net index)

⁽⁶⁾ Consumer Price Index (CPI) for all urban consumers, also known as CPI-U.

⁽⁷⁾ Consumer Price Index (CPI) for all wage earners, also known as CPI-W.

FINANCIAL MARKETS REVIEW

DOMESTIC STOCKS

The U.S. stock market, as measured by the Russell 3000 index, posted a 0.2% return during the fourth quarter of 2012. Equity markets struggled to gain any momentum in the fourth quarter as the political stalemate in Washington stoked fears of recession and dampened both consumer and investor sentiment. Within the Russell 3000, Financials was the best performing sector with a 5.0% return while the Technology sector led the detractors with a -5.8% for the quarter. Value companies outperformed their growth counterparts for the quarter across large and small capitalization.

Performance of the Russell Style Indices for the quarter is shown below:

Large Growth	Russell 1000 Growth	-1.3%
Large Value	Russell 1000 Value	1.5%
Small Growth	Russell 2000 Growth	0.4%
Small Value	Russell 2000 Value	3.2%

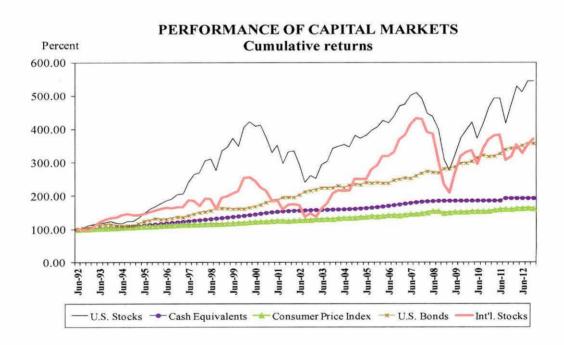
The Russell 3000 index returned 16.4% for the year ending December 31, 2012.

DOMESTIC BONDS

The U.S. bond market, as measured by the Barclays Capital U.S. Aggregate Bond Index, produced a total return of 0.2% for the quarter. Yields on U.S. Treasuries rose during the quarter. The 2-year U.S. Treasury ended the fourth quarter two basis points higher at 0.25%, the 10-year yield increased by 13 basis points to 1.76%, and the 30-year increased by 13 basis points to 2.95%. Investment grade corporate bonds and CMBS outperformed the benchmark and agency bonds matched the benchmark during the fourth quarter, while all other sectors of the Barclays Agg underperformed the broader benchmark.

The major sector returns for the Barclays Capital U.S. Aggregate Bond Index for the quarter were:

U.S. Treasury	-0.1%
Agency	0.2
Corporates	1.1
Agency MBS	-0.2
Commercial Mortgages	0.3
Asset-backed	-0.1



FINANCIAL MARKETS REVIEW

INTERNATIONAL STOCKS

In aggregate, developed international stock markets (as measured by the MSCI World ex U.S. index net) provided a return of 5.9% for the quarter. The quarterly performance of the six largest stock markets is shown below:

United Kingdom	4.2%
Japan	5.8
Canada	0.7
France	10.8
Australia	6.8
Germany	8.5

The World ex U.S. index returned 16.4% during the last year.

The World ex U.S. index is compiled by Morgan Stanley Capital International (MSCI) and is a measure of 23 markets located in Europe, Australasia, Far East, and Canada. The major markets listed above comprise about 74% of the value of the international markets in the index.

EMERGING MARKETS

Emerging markets (as measured by MSCI Emerging Markets Free index net) provided a return of 5.6% for the quarter. The quarterly performance of the six largest stock markets in the index is shown below:

China	12.9%
Brazil	3.5
Korea	4.8
Taiwan	1.5
India	0.5
South Africa	6.2

The Emerging Markets Free index returned 18.2% during the last year.

The Emerging Markets Free (EMF) index is compiled by MSCI and measures performance of 21 stock markets in Latin America, Asia, Africa and Eastern Europe. EMF includes only those securities foreign investors are allowed to hold. The markets listed above comprise about 72% of the value of the international markets in the index.

REAL ESTATE

During the fourth quarter of 2012, real estate posted its 12th consecutive quarter of positive returns with the NCREIF Property Index posting a return of 2.5%. Real Estate markets have seen a healthy recovery since the 2008-2009 crash. However, the real estate outlook for 2013 continues to be one of caution due to continued weakness in employment.

PRIVATE EQUITY

Despite a sluggish start to the year, 2012 saw buyout deal flow approach the post-Lehman high level recorded in mid-2011. Capital markets seem to have thawed, as average debt multiples increased for LBOs in 2012 vs. 2011. In addition, 2012 saw the highest level of private equity-backed exits since 2006, as many buyout firms were able to exit some of their boom-era deals. This in turn led to increased levels of distributions to Limited Partners. 2013 looks to be a crowded fundraising market for GPs as over 1,900 private equity funds were fundraising as of the start of the year (source: Prequin).

RESOURCE FUNDS

During the fourth quarter of 2012, crude oil traded between a range of \$84/bbl and \$92/bbl. The average price for the fourth quarter of 2012 was \$88/bbl which is approximately \$4/bbl less than the average price for the third quarter of 2012. Strong global energy demand and unrest in the Middle East should continue to provide strength to oil prices.

COMBINED FUNDS

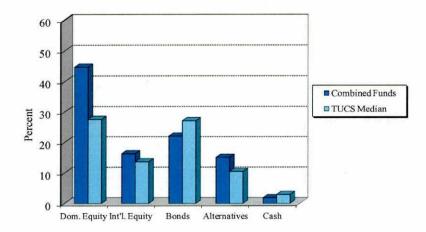
The comparison universe used by the SBI is the Trust Universe Comparison Service (TUCS). Only funds with assets over \$1 billion are included in the comparisons shown in this section.

Asset Mix Compared to Other Pension Funds

On December 31, 2012, the asset mix of the Combined Funds was:

	\$ Millions	%
Domestic Stocks	\$22,123	44.7%
International Stocks	8,065	16.3
Bonds	10,913	22.1
Alternative Assets	7,452	15.1
Unallocated Cash	916	1.8
Total	\$49,469	100.0%

Comparisons of the Combined Funds' asset mix to the median allocation to stocks, bonds and other assets of the public and corporate funds in TUCS over \$1 billion are shown below:



	Dom. Equity	Int'l Equity	Bonds	Alternatives	Cash
Combined Funds	44.7%	16.3%	22.1%	15.1%	1.8%
Median Allocation in TUCS*	27.5	13.6	27.1	10.5**	2.9

^{*} Public and corporate plans over \$1 billion.

^{**} May include assets other than alternatives.

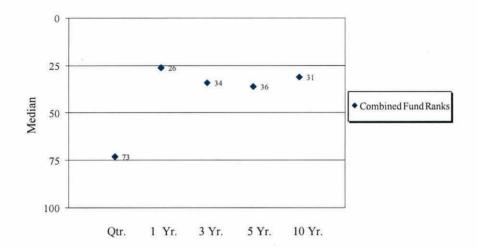
COMBINED FUNDS Performance Compared to Other Pension Funds

While the SBI is concerned with how its returns compare to other pension investors, universe comparisons should be used with great care. There are several reasons why such comparisons will provide an "apples to oranges" look at performance:

- Differing Allocations. Asset allocation will have a dominant effect on return. The allocation to stocks among the funds in TUCS typically ranges from 20-90%, a very wide range for meaningful comparison. In addition, it appears that many funds do not include alternative asset holdings in their reports to TUCS. This further distorts comparisons among funds.
- Differing Goals/Liabilities. Each pension fund structures its portfolio to meet its own liabilities and risk tolerance. This will result in different choices on asset mix. Since asset mix will largely determine investment results, a universe ranking is not relevant to a discussion of how well a plan sponsor is meeting its long-term liabilities.

With these considerations in mind, the performance of the Combined Funds compared to other public and corporate pension funds in Trust Universe Comparison Service (TUCS) are shown below.

The SBI's returns are ranked against public and corporate plans with over \$1 billion in assets. All funds in TUCS report their returns gross of fees.



	Period Ending 12/31/2012				
	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Combined Funds					
Percentile Rank in TUCS*	73rd	26th	34th	36th	31st

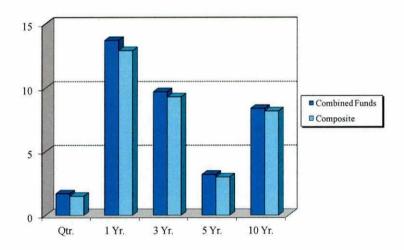
^{*} Compared to public and corporate plans greater than \$1 billion, gross of fees.

COMBINED FUNDS Performance Compared to Composite Index

The Combined Funds' performance is evaluated relative to a composite of market indices. The composite is weighted in a manner that reflects the asset allocation of the Combined Funds:

	Market Index	Combined Funds Composite* 4Q12
Domestic Stocks	Russell 3000	45.0%
Int'l. Stocks	MSCI ACWI Free ex-U.S.	15.0
Bonds	Barclays Capital Aggregate	23.1*
Alternative Investments	Alternative Investments	14.9*
Unallocated Cash	3 Month T-Bills	2.0
		100.0%

^{*} Alternative asset and fixed income weights are reset in the composite at the start of each month to reflect the amount of unfunded commitments in alternative asset classes. The above Combined Funds Composite weighting was as of the beginning of the quarter.



Period Ending 12/31/2012

	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Combined Funds**	1.7%	13.7%	9.7%	3.2%	8.4%
Composite Index	1.5	12.9	9.3	3.0	8.2

^{**} Actual returns are reported net of fees.

This page intentionally left blank.

STOCK AND BOND MANAGERS

Performance of Asset Pools (Net of Fees)

Domestic Stocks

Target: Russell 3000

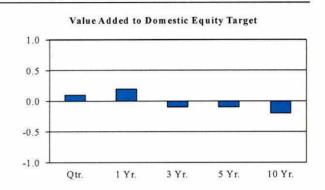
Expectation: If one-third of the pool is actively managed, one-third is semi-passively managed, and one-third is passively managed, the entire pool is expected to exceed the target by .18% - .40% annualized, over time.

Period Ending 12/31/2012

Annualized

	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Domestic Stocks	0.3%	16.6%	11.1%	1.9%	7.5%
Asset Class Target*	0.2	16.4	11.2	2.0	7.7

^{*} The Domestic Equity Asset Class Target is the Russell 3000 effective 10/1/03. From 7/1/99 to 9/30/03, it was the Wilshire 5000 Investable Index.



International Stocks

Target: Standard MSCI ACWI Free ex U.S. (net)
Expectation: If at least one-third of the pool is managed

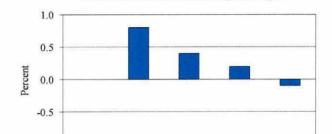
actively, no more than one-third is semi-passively managed, and at least one-quarter is passively managed, the entire pool is expected to exceed the target by .25% - .75% annualized, over time.

Period Ending 12/31/2012

Annualized

	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Int'l. Stocks	5.9%	17.6%	4.3%	-2.7%	9.6%
Asset Class Target*	5.9	16.8	3.9	-2.9	9.7

^{*} The Int'l Equity Asset Class Target is MSCI ACWI Free ex U.S. (net) effective 10/1/03. From 1/1/01 to 9/30/03, the target was MSCI EAFE Free (net) + Emerging Markets Free (EMF) (net), and from 7/1/99 to 12/31/00 was MSCI EAFE Free (net) + EMF (gross). From 7/1/99 to 9/30/03, the weight of each index fluctuated with market cap.



1 Yr.

-1.0

Qtr.

Value Added to International Equity Target

Bonds

Target: Barclays Capital Aggregate Bond Index **Expectation:** If half of the pool is actively managed and half is managed semi-passively, the entire pool is expected to exceed the target by .20% - .35% annualized,

over time.

Period Ending 12/31/2012

Annualized

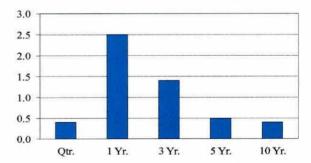
	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Bonds	0.6%	6.7%	7.6%	6.4%	5.6%
Asset Class Target	0.2	4.2	6.2	5.9	5.2

Value Added to Fixed Income Target

3 Yr.

5 Yr.

10 Yr.



returns may not be indicative of future returns.

ALTERNATIVE INVESTMENTS

Performance of Asset Categories (Net of Fees)

Expectation: The alternative investments are			31/2012			
measured against themselves using actual portfolio returns.		Qtr.	Yr.	3 Yr.	nualized 5 Yr.	10 Yr.
	Alternatives	3.3%	12.8%	13.1%	5.7%	15.2%
	Inflation	-0.8%	1.7%	2.1%	1.8%	2.3%
Real Estate Investments (Equity emphasis)						
Expectation: Real estate investments are expected to		I	Period En		1/2012 nualized	
exceed the rate of inflation by 5% annualized, over the life of the investment.		Qtr.	Yr.	3 Yr.	5 Yr.	10 Yr.
The SBI began its real estate program in the mid-1980's and periodically makes new investments. Some of the existing investments are relatively immature and returns may not be indicative of future results.	Real Estate	2.8%	8.2%	8.5%	-2.8%	7.1%
Private Equity Investments (Equity emphasis) Expectation: Private equity investments are expected			Period Er	The state of the s		
to exceed the rate of inflation by 10% annualized, over the life of the investment.		Qtr.	Yr.	An 3 Yr.	nualized 5 Yr.	10 Yı
The SBI began its private equity program in the mid- 1980's and periodically makes new investments. Some of the existing investments are relatively immature and returns may not be indicative of future results.	Private Equity	3.9%	15.1%	14.2%	6.4%	15.99
Resource Investments (Equity emphasis)						
Expectation: Resource investments are expected to		F	Period En	The state of the s		
exceed the rate of inflation by 5% annualized, over the life of the investment.		Qtr.	Yr.	3 Yr.	nualized 5 Yr.	10 Yr.
The SBI began its resource program in the mid-1980's and periodically makes new investments. Some of the existing investments are relatively immature and returns may not be indicative of future results.	Resource	0.5%	7.3%	14.5%	9.0%	27.6%
Yield Oriented Investments (Debt emphasis)				water the second	1000000 AS 100	
Expectation: Yield oriented investments are expected to exceed the rate of inflation by 5.5% annualized, over the		F	Period End		1/2012 nualized	
life of the investment.		Qtr.	Yr.	3 Yr.	5 Yr.	10 Yr.
The SBI began its yield oriented program in 1994. Some of the existing investments are relatively immature and	Yield Oriented	3.8%	14.7%	12.6%	9.6%	16.7%

SUPPLEMENTAL INVESTMENT FUND

The Minnesota Supplemental Investment Fund is a multi-purpose investment program that offers a range of investment options to state and local public employees. The different participating groups use the Fund for a variety of purposes:

- It functions as the investment manager for all assets of the Unclassified Employees Retirement Plan, Public Employees Defined Contribution Plan, Hennepin County Supplemental Retirement Plan, and Health Care Savings Plan.
- It is one investment vehicle offered to employees as part of Minnesota State Colleges and University's Individual Retirement Account Plan and College Supplemental Retirement Plan.
- 3. It serves as an external money manager for a portion of some local police and firefighter retirement plans.
- 4. It serves as the investment vehicle for the Voluntary Statewide Volunteer Firefighter Plan.

A wide diversity of investment goals exists among the Fund's participants. In order to meet those needs, the Fund has been structured much like a "family of mutual funds." Participants may allocate their investments among one or more accounts that are appropriate for their needs, within the statutory requirements and rules established by the participating organizations. Participation in the Fund is accomplished through the purchase or sale of shares in each account.

The investment returns shown in this report are calculated using a time-weighted rate of return formula. All returns are net of investment management fees.

On December 31, 2012 the market value of the entire Fund was \$1.2 billion.

Investment Options

-	
	12/31/2012 Market Value (In Millions)
Income Share Account – a balanced portfolio utilizing both common stocks and bonds.	\$274
Growth Share Account – an actively managed, all common stock portfolio.	\$139
Common Stock Index Account – a passively managed, all common stock portfolio designed to track the performance of the entire U.S. stock market.	\$176
International Share Account – a portfolio of non U.S. stocks that incorporates both active and passive management.	\$84
Bond Market Account – an actively managed, all bond portfolio.	\$138
Money Market Account – a portfolio utilizing short-term, liquid debt securities.	\$208
Fixed Interest Account – a portfolio of stable value instruments, including security backed contracts and insurance company and bank investment contracts.	\$190
Volunteer Firefighter Account – a balanced portfolio only used by the Voluntary Statewide Volunteer Firefighter Plan.	\$15

SUPPLEMENTAL INVESTMENT FUND ACCOUNTS

Benchmark*

Total Account

Benchmark*

INCOME SHARE ACCOUNT

Investment Objective

The primary investment objective of the Income Share Account is similar to that of the Combined Funds. The Account seeks to maximize long-term real rates of return, while limiting short-run portfolio return volatility.

Asset Mix

The Income Share Account is invested in a balanced portfolio of common stocks and bonds. Common stocks provide the potential for significant capital appreciation, while bonds act as a deflation hedge and provide portfolio diversification.

	Target	Actual
Stocks	60.0%	60.8%
Bonds	35.0	34.4
Cash	5.0	4.8
	100.0%	100.0%

Period Ending 12/31/2012 Annualized Qtr. 1 Yr. 3 Yr. 5 Yr. 10 Yr. Total Account 0.4% 12.2% 9.4% 4.2% 7.1% 0.2 11.3 9.2 3.4 6.6

GROWTH SHARE ACCOUNT

Investment Objective

The Growth Share Account's investment objective is to generate above-average returns from capital appreciation on common stocks.

Asset Mix

The Growth Share Account is invested primarily in the common stocks of US companies. The managers in the account also hold varying levels of cash.

Otr. 1 Yr. 3 Yr. 5 Yr. 10 Yr. 0.3% 16.8% 11.0% 1.8% 7.3% 0.2 16.4 11.2 2.0 7.7

Period Ending 12/31/2012

Annualized

Russell 3000 since 10/1/03, 100% Wilshire 5000 Investable from July 1999 to September 2003.

COMMON STOCK INDEX ACCOUNT

Investment Objective and Asset Mix

The investment objective of the Common Stock Index Account is to generate returns that track those of the U.S. stock market as a whole. The Account is designed to track the performance of the Russell 3000, a broad-based equity market indicator.

The Account is invested 100% in common stock.

Period Ending 12/31/2012 Annualized 5 Yr. 1 Yr.

3 Yr. 10 Yr. Otr. Total Account 0.3% 16.4% 11.2% 2.2% 7.8% Benchmark* 0.2 16.4 11.2 2.0 7.7

INTERNATIONAL SHARE ACCOUNT

Investment Objective and Asset Mix

The investment objective of the International Share Account is to earn a high rate of return by investing in the stock of companies outside the U.S. At least twentyfive percent of the Account is "passively managed" and no more than 33% of the Account is "semi-passively managed." These portions of the Account are designed to track and modestly outperform, respectively, the return of 23 developed markets included in the Morgan Stanley Capital International World ex U.S. Index. The remainder of the Account is "actively managed" by several international managers and emerging markets specialists who buy and sell stocks in an attempt to maximize market value.

Period Ending 12/31/2012 Annualized Qtr. 1 Yr. 3 Yr. 5 Yr. 10 Yr. 5.9% 17.6% 4.3% -2.6% 9.7% **Total Account** 5.9 3.9 -2.99.7 Benchmark* 16.8

* The Int'l Equity Asset Class Target is MSCI ACWI Free ex U.S. (net) since 10/1/03. From 1/1/01 to 9/30/03, the target was MSCI EAFE Free (net) + Emerging Markets Free (EMF) (net), and from 7/1/99 to 12/31/00 was MSCI EAFE Free (net) + EMF (gross). From 7/1/99 to 9/30/03, the weight of each index fluctuated with market cap.

^{* 60%} Russell 3000/35% Barclays Capital Aggregate Bond Index/ 5% T-Bills Composite since 10/1/03, 60% Wilshire 5000/35% Barclays Capital Aggregate Bond Index/5% T-Bills composite through 9/30/03.

Russell 3000 since 10/1/03. Wilshire 5000 Investable from 7/1/00 to 9/30/03. Wilshire 5000 through 6/30/00.

SUPPLEMENTAL INVESTMENT FUND ACCOUNTS

BOND MARKET ACCOUNT

Investment Objective	Period Ending 12/31/2012					
The investment objective of the Bond Market Account is	Annualize				ed	
to exceed the return of the broad domestic bond market		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
by investing in fixed income securities.	Total Account	0.6%	6.7%	7.6%	6.4%	5.7%
Asset Mix	Barclays Capital Aggregate	0.2	4.2	6.2	5.9	5.2

The Bond Market Account invests primarily in highquality, government and corporate bonds that have intermediate to long-term maturities, usually 3 to 20 years.

MONEY MARKET ACCOUNT

Investment Objective	Period Ending 12/31/2012					
The investment objective of the Money Market Account	Annualized			ed .		
is to protect principal by investing in short-term, liquid		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
U.S. Government securities.	Total Account	0.1%	0.3%	0.2%	0.8%	2.0%
	3 month T-Bills	0.0	0.1	0.1	0.4	1.7

Asset Mix

The Account is invested entirely in high quality, shortterm U.S. Treasury and Agency securities. The average maturity of the portfolios is less than 90 days.

FIXED INTEREST ACCOUNT

Investment Objectives]	Period Er	ding 12/	31/2012	
The investment objectives of the Fixed Interest Account				ed		
are to protect investors from loss of their original		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
investment and to provide competitive interest rates	Total Account	0.7%	2.8%	3.5%	3.9%	4.2%
using somewhat longer-term investments than typically	Benchmark*	0.2	0.8	1.2	1.6	2.8
found in a money market account.						

Asset Mix

The Account is invested in a well-diversified portfolio of high-quality fixed income securities with strong credit ratings. The Account also invests in contracts issued by highly rated insurance companies and banks which are structured to provide principal protection for the Account's diversified bond portfolios, regardless of daily market changes.

* The Fixed Interest Benchmark is the 3 year Constant Maturity Treasury Bill +45 basis points.

VOLUNTEER FIREFIGHTER ACCOUNT

The investment objective of the Volunteer Firefighter Account is to maximize long-term returns while limiting short-term portfolio return volatility.

The Account is invested in a balanced portfolio:

	Target	Actual
Domestic Stocks	35.0	34.9%
International Stocks	15.0	15.7
Bonds	45.0	44.1
Cash	5.0	5.3
	100.0%	100.0%

	Period Ending 12/31/2012					
	Annualized					
	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.	
Total Account	1.3%	11.7%	8.3	N/A	N/A	
Benchmark*	1.1	10.3	7.7	N/A	N/A	

^{*} The benchmark for this account is 35% Russell 3000, 15% MSCI ACWI Free ex U.S. (net), 45% Barclays Capital Aggregate, 5% 3 month T-Bills.

DEFERRED COMPENSATION PLAN ACCOUNTS

The Deferred Compensation Plan provides public employees with a tax-sheltered retirement savings plan that is a supplement to their primary retirement plan. (In most cases, the primary plan is a defined benefit plan administered by TRA, PERA, or MSRS.)

Participants choose from 4 actively managed mutual funds 5 passively managed mutual funds and 11 target retirement

fund options. The SBI also offers a money market option and a stable value option. All provide for daily pricing needs of the plan administrator. Participants may also choose from hundreds of funds in a mutual fund window. The current plan structure became effective July 1, 2011. The investment options and objectives are outlined below.

Investment Options

	12/31/2012 Market Value (in Millions)
Vanguard Index Institutional Plus Shares (passive)	\$658
Janus Twenty (active)	\$415
Vanguard Mid Cap Index Institutional Shares (passive)	\$244
T. Rowe Price Small-Cap Stock (active)	\$451
Fidelity Diversified International (active)	\$234
Vanguard Total International Stock Index Institutional Plus (passive)	\$109
Vanguard Balanced Index Institutional Shares (passive)	\$517
Dodge & Cox Income Fund (active)	\$206
Vanguard Total Bond Market Index Institutional Shares (passive)	\$194
SIF Money Market Account	\$70
SIF Fixed Interest Account (stable value)	\$1,367
State Street Global Advisors MN Target Retirement Funds	
Income Fund	\$17
2015 Fund	\$24
2020 Fund	\$26
2025 Fund	\$17
2030 Fund	\$10
2035 Fund	\$6
2040 Fund	\$4
2045 Fund	\$2
2050 Fund	<\$1
2055 Fund	<\$1
2060 Fund	<\$1

Annualized

3 Yr. 5 Yr.

18.3% N/A N/A 17.0 N/A N/A

1 Yr.

Qtr.

5.7

6.7%

DEFERRED COMPENSATION PLAN ACCOUNTS

LARGE (CAP	EQU	ITY
---------	-----	-----	-----

Vanguard Index Institutional Plus (passive)]	Period En	ding 12/3	31/2012
 A passive domestic stock portfolio that tracks the 				Annua	lized
S&P 500.		Qtr.	1 Yr.	3 Yr.	5 Yr.
	Fund	-0.4%	16.0%	10.9%	1.7%
	S&P 500	-0.4	16.0	10.9	1.7
Janus Twenty (active) • A concentrated fund of large cap stocks which is		1	Period En	ding 12/3 Annua	
expected to outperform the S&P 500, over time.		Qtr.	1 Yr.	3 Yr.	5 Yr.
See 1	Fund	-0.1%	22.3%	6.3%	0.0%
	S&P 500	-0.4	16.0	10.9	1.7
MID CAP EQUITY					
Vanguard Mid Cap Index (passive)			Period En	ding 12/3	1/2012
• A fund that passively invests in companies with				Annua	
medium market capitalizations that tracks the Morgan		Qtr.	1 Yr.	3 Yr.	5 Yr.
Stanley Capital International (MSCI) U.S. Midcap 450	Fund	2.8%	16.0%	12.6%	3.2%
index.	MSCI US	2.8	16.0	12.7	3.2
	Mid-Cap 450				
SMALL CAP EQUITY T. Rowe Price Small Cap (active)			Period En	ding 12/3	11/2012
• A fund that invests primarily in companies with small			eriou En	Annua	
market capitalizations and is expected to outperform		Qtr.	1 Yr.	3 Yr.	5 Yr.
the Russell 2000.	Fund	1.8%	18.0%	16.0%	7.6%
the Russell 2000.	Russell 2000	1.9	16.3	12.2	3.6
		2.00	20525		
INTERNATIONAL EQUITY Fidelity Diversified International (active)		1	Period En	ding 12/3	31/2012
• A fund that invests primarily in stocks of companies				Annua	
located outside the United States and is expected to		Qtr.	1 Yr.	3 Yr.	5 Yr.
outperform the MSCI index of Europe, Australasia and	Fund	5.0%	23.9%	5.4%	
the Far East (EAFE), over time.	MSCI EAFE	6.6	17.3	3.6	-3.7
		1	Period En	ding 12/3	31/2012
				340	

Vanguard Total International Stock Index (passive)

 A fund that seeks to track the investment performance of the MSCI All Country World ex USA Investable Market Index, an index designed to measure equity market performance in developed and emerging markets, excluding the United States.

Fund

ACWI ex US IMI

DEFERRED COMPENSATION PLAN ACCOUNTS

BALANCED

¥7	D - I J	T J	(·
Vanguard	Balanced	Index	(passive)

 A fund that passively invests in a mix of domestic stocks and bonds. The fund is expected to track a weighted benchmark of 60% MSCI US Broad Market Index/40% Barclays Capital Aggregate.

	Period Ending 12/31/2012				
	Annualized				
	Qtr.	1 Yr.	3 Yr.	5 Yr.	
Fund	0.2%	11.5%	9.6%	4.3%	
Benchmark	0.2	11.6	9.6	4.1	

FIXED INCOME

Dodge & Cox Income Fund (active)

 A fund that invests primarily in investment grade securities in the U.S. bond market which is expected to outperform the Barclays Capital Aggregate, over time.

	Period Ending 12/31/2012					
	Annualized					
	Qtr.	1 Yr.	3 Yr.	5 Yr.		
Fund	1.0%	8.0%	6.6%	7.0%		
Barclays	0.2	4.2	6.2	5.9		
Capital Agg.						

Vanguard Total Bond Market Index (passive)

 A fund that passively invests in a broad, marketweighted bond index that is expected to track the Barclays Capital Aggregate.

	I	Period En	ding 12/	31/2012
		lized		
	Qtr.	1 Yr.	3 Yr.	5 Yr.
Fund	0.1%	4.2%	6.2%	5.9%
Barclays	0.2	4.2	6.2	5.9
Capital Agg.				

Money Market Account

 A fund that invests in short-term debt instruments which is expected to outperform the return on 3-month U.S. Treasury Bills.

	Period Ending 12/31/201					
	Annualized					
	Qtr.	1 Yr.	3 Yr.	5 Yr.		
Fund	0.1%	0.3%	0.2%	0.8%		
3-Mo. Treas.	0.0	0.1	0.1	0.4		

FIXED INTEREST ACCOUNT

 A portfolio composed of stable value instruments which are primarily investment contracts and security backed contracts. The account is expected to outperform the return of the 3 year Constant Maturity Treasury + 45 basis points, over time.

	Period Ending 12/31/2012					
	Annualized					
	Qtr.	1 Yr.	3 Yr.	5 Yr.		
Fund	0.7%	2.8%	3.5%	3.9%		
Benchmark	0.2	0.8	1.2	1.6		

MN TARGET RETIREMENT ACCOUNTS

 Target retirement funds offer a mix of investments that are adjusted over time to reduce risk and become more conservative as the target retirement date approaches.

See Page A-107 for returns.

ASSIGNED RISK PLAN

Investment Objectives

The Assigned Risk Plan has two investment objectives: to minimize the mismatch between assets and liabilities and to provide sufficient liquidity for the payment of on-going claims and operating expenses.

Asset Mix

The Assigned Risk Plan is invested in a portfolio of common stocks and bonds. The actual asset mix will fluctuate in response to changes in the Plan's liability stream.

12/31/2012		12/31/2012
	Target	Actual
Stocks	20.0%	19.6%
Bonds	80.0	80.4
Total	100.0%	100.0%

Investment Management

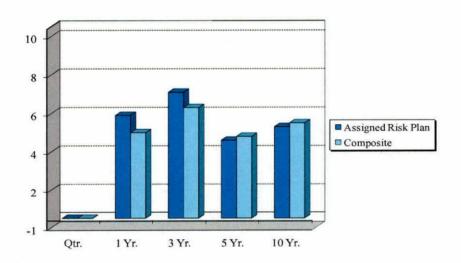
RBC Global Asset Management (US) manages the bond segment of the Fund. GE Investment Management manages the equity segment.

Performance Benchmarks

Since July 1, 2011, the fixed income benchmark has been the Barclays Capital Intermediate Government Index. Since July 1, 1994, the equity benchmark has been the S&P 500 index. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets.

Market Value

On December 31, 2012 the market value of the Assigned Risk Plan was \$271 million.



Period Ending 12/31/2012

Annualized

			Annuanzeu			
	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.	
Total Fund*	0.0%	5.4%	6.6%	4.1%	4.8%	
Composite	0.0	4.5	5.8	4.3	5.0	
Equity Segment*	-0.4	16.8	8.1	1.5	6.5	
Benchmark	-0.4	16.0	10.9	1.7	7.1	
Bond Segment*	0.1	1.8	5.7	4.5	4.1	
Benchmark	0.0	1.7	4.3	4.6	4.3	

* Actual returns are calculated net of fees.

PERMANENT SCHOOL FUND

Investment Objectives

The investment objective of the Permanent School Fund is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity. The income from the portfolio is used to offset expenditures on school aid payments to local school districts.

Asset Mix

Effective with FY98, the Permanent School Fund is invested in a balanced portfolio of common stocks and bonds. Common stocks provide the potential for significant capital appreciation, while bonds provide portfolio diversification and a more stable stream of current income.

	12/31/2012	12/31/2012
	Target	Actual
Stocks	50.0%	50.4%
Bond	48.0	47.7
Cash	2.0	1.9
Total	100.0%	100.0%

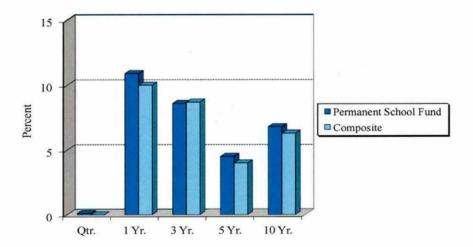
Prior to FY98, the Fund was invested entirely in fixed income securities in order to maximize current income. It is understood that the change in asset mix will reduce portfolio income in the short term, but will enhance the value of the fund, over time.

Investment Management

SBI staff manages all assets of the Permanent School Fund. The stock segment is passively managed to track the performance of the S&P 500. The bond segment is actively managed to add incremental value through sector, security and yield curve decisions.

Market Value

On December 31, 2012 the market value of the Permanent School Fund was \$874 million.



Period Ending 12/31/2012

Annualized

			Annuanzeu			
	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.	
Total Fund*	0.1%	10.9%	8.6%	4.5%	6.8%	
Composite	-0.1	10.0	8.7	4.0	6.3	
Equity Segment*	-0.4	15.9	10.9	1.7	7.2	
S&P 500	-0.4	16.0	10.9	1.7	7.1	
Bond Segment*	0.6	5.8	5.9	6.5	5.8	
Barclays Capital Agg.	0.2	4.2	6.2	5.9	5.2	

* Actual returns are calculated net of fees.

ENVIRONMENTAL TRUST FUND

Investment Objective

The objective of the Environmental Trust Fund is to increase the market value of the Fund over time in order to increase the annual amount made available for spending.

Asset Mix

The Environmental Trust Fund is invested in a balanced portfolio of common stocks and bonds. Common stocks provide the potential for significant capital appreciation, while bonds act as a deflation hedge and provide portfolio diversification. As of July 1, 1999, the asset

	12/31/2012	12/31/2012
	Target	Actual
Stocks	70.0%	70.3%
Bonds	28.0	27.9
Cash	2.0	1.8
Total	100.0%	100.0%

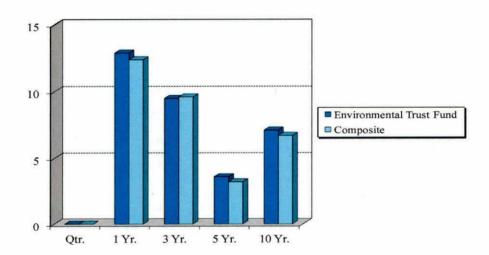
allocation changed from 50% stocks/50% fixed income to 70% stocks /30% fixed income.

Investment Management

SBI staff manage all assets of the Environmental Trust Fund. The bond segment is actively managed to add incremental value through sector, security and yield curve decisions. The stock segment is passively managed to track the performance of the S&P 500.

Market Value

On December 31, 2012 the market value of the Environmental Trust Fund was \$648 million.



Period Ending 12/31/2012

		com the seath that and the seath	3			
Annualized						
	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.	
Total Fund*	-0.1%	12.9%	9.5%	3.6%	7.1%	* Actual returns are calculated net of fees.
Composite	-0.2	12.4	9.6	3.2	6.7	
Equity Segment*	-0.4	15.9	10.9	1.8	7.2	
S&P 500	-0.4	16.0	10.9	1.7	7.1	
Bond Segment*	0.6	5.8	5.9	6.4	5.8	
Barclays Capital Agg.	0.2	4.2	6.2	5.9	5.2	

STATE CASH ACCOUNTS

Description

State Cash Accounts represent the cash balances in more than 400 separate accounts that flow through the Minnesota State Treasury. These accounts vary greatly in size.

Most accounts are invested by SBI staff through a short-term pooled fund referred to as the Treasurer's Cash Pool. The Pool has an average daily balance of about \$5.0 billion. It contains the cash balances of special or dedicated accounts necessary for the operation of certain State agencies and non-dedicated cash in the State Treasury.

In addition, each State of Minnesota bond sale requires two additional pools, one for bond proceeds and one for debt reserve transfer.

Because of special legal restrictions, a small number of cash accounts cannot be commingled. These accounts are invested separately.

Investment Objectives

Safety of Principal. To preserve capital.

Liquidity. To meet cash needs without the forced sale of securities at a loss.

Competitive Rate of Return. To provide a high level of current income.

Asset Mix

The SBI maximizes current income while preserving capital by investing all cash accounts in high quality, liquid, short-term investments. These include U.S. Treasury and Agency issues, repurchase agreements, bankers acceptances, commercial paper, and certificates of deposit.

Investment Management

All state cash accounts are managed by SBI investment staff. As noted above, most of the assets of the cash accounts are invested through the large commingled investment pool.

		Period En	ding 12/31/20	12		
	Market Value	1	Annualized			
	(Millions)	Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Treasurer's Cash Pool*	\$5,008	0.1%	0.7%	0.6%	1.5%	2.4%
Custom Benchmark**		0.0	0.0	0.0	0.5	1.5
3 month T-Bills		0.0	0.1	0.1	0.4	1.7

- Actual returns are calculated net of fees.
- ** Beginning in January 2003, the Treasurer's Cash Pool is measured against the iMoneyNet, All Taxable Money Fund Report Average. From January 1997 to December 2002 the fund was measured against a blended benchmark consisting of the Barclays Capital 1-3 year Government Index and the iMoneyNet, All Taxable Money Fund Report Average. The proportion of each component of the blended benchmark is adjusted periodically as the asset allocation of the Cash Pool is modified.

Note: Effective March 6, 2012 the Trust Fund Cash Pool was dissolved. The Trust Fund Cash Pool which invested temporary cash balances of retirement related accounts was no longer needed with the adoption of daily transfers to the SBI's custodian bank.

MINNESOTA STATE BOARD OF INVESTMENT

Composition of State Investment Portfolios By Type of Investment Market Value December 31, 2012 (in Thousands)

	Cash & ST	Bonds Int	Bonds Ext	Stock Int	Stock Ext	Ext Intl	Alternative	Total
COMBINED RETIREMENT FUNDS								
Teachers Retirement Fund	312,209	0	3,795,916	0	7,694,990	2,805,353	2,592,027	17,200,495
	1.82%		22.07%		44.74%	16.31%	15.07%	100%
Public Employees Retirement Fund	275,717	0	3,131,745	0	6,348,597	2,314,500	2,138,498	14,209,057
	1.95%		22.04%		44.68%	16.29%	15.05%	100%
State Employees Retirement Fund	163,101	0	2,093,836	0	4,244,573	1,547,439	1,429,767	9,478,716
	1.72%		22.09%		44.78%	16.33%	15.08%	100%
Public Employees Police & Fire	108,617	0	1,325,986	0	2,688,006	979,963	905,444	6,008,016
	1.81%		22.07%		44.74%	16.31%	15.07%	100%
Highway Patrol Retirement Fund	9,950	0	125,242	0	253,889	92,560	85,521	567,162
	1.75%		22.08%		44.76%	16.32%	15.08%	100%
Judges Retirement Fund	2,831	0	32,751	0	66,393	24,205	22,364	148,544
	1.91%		22.05%		44.70%	16.29%	15.06%	100%
Correctional Employees Retirement	12,814	0	153,680	0	311,535	113,576	104,939	696,544
	1.84%		22.06%		44.73%	16.31%	15.07%	100%
Public Employees Correctional	6,907	0	73,209	0	148,408	54,105	49,991	332,620
	2.08%		22.01%		44.62%	16.27%	15.03%	100%
Legislative Retirement Fund	209	0	2,849	0	5,776	2,106	1.945	12,885
	1.62%		22.11%		44.83%	16.34%	15.10%	100%
PERA Minneapolis Retirement	23,135	0	177,993	0	360.826	131.546	121 543	815,043
	2.84%		21.84%		44.27%	16.14%	14.91%	100%
TOTAL COMBINED FUNDS	015 400	0	10.012.207	0				organis Librario Universidad
	1.85%	U	22.06%	U	A STATE OF THE STA		8 90	49,469,082 100%
Judges Retirement Fund Correctional Employees Retirement Public Employees Correctional Legislative Retirement Fund	9,950 1.75% 2,831 1.91% 12,814 1.84% 6,907 2.08% 209 1.62% 23,135 2.84%	0 0 0	125,242 22.08% 32,751 22.05% 153,680 22.06% 73,209 22.01% 2,849 22.11% 177,993 21.84%	0 0 0	253,889 44.76% 66,393 44.70% 311,535 44.73% 148,408 44.62% 5,776 44.83% 360,826	92,560 16.32% 24,205 16.29% 113,576 16.31% 54,105 16.27% 2,106 16.34%	85,521 15.08% 22,364 15.06% 104,939 15.07% 49,991 15.03% 1,945 15.10%	5 1 6 3 1 8 49,

	Cash & ST	Bonds Int	Bonds Ext	Stock Int	Stock Ext	Ext Intl	Alternative	Total
MINNESOTA SUPPLEMENTAL FUNDS:								
Income Share Account	13,244 4.84%	94,101 34.40%	0	0	166,221 60.76%	0	0	273,566 100%
Growth Share Account	0	0	0	0	139,223 100.00%	0	0	139,223 100%
Money Market Account	207,864 100.00%	0	0	0	0	0	0	207,864 100%
Common Stock Index	0	0	0	0	175,949 100.00%	0	0	175,949 100%
Bond Market Account	0	0	138,156 100.00%	0	0	0	0	138,156 100%
International Share Account	0	0	0	0	0	84,407 100.00%	0	84,407 100%
Fixed Interest Account	0	0	190,098 100.00%	0	0	0	0	190,098 100%
Volunteer Firefighters Account	798 5.28%	0	6,664 44.10%	0	5,271 34.88%	2,379 15.74%	0	15,112 100%
TOTAL SUPPLEMENTAL FUNDS	221,906 18.12%	94,101 7.69%	334,918 27.35%	0	486,664 39.75%	86,786 7.09%	0	1,224,375 100%
MN DEFERRED COMP PLAN	73,643 1.61%	0	2,017,220 44.10%	0	2,122,913 46.42%	360,416 7.88%	0	4,574,192 100%
TOTAL RETIREMENT FUNDS	1,211,039 2.19%	94,101 0.17%	13,265,345 24.00%	0	24,732,570 44.75%	8,512,555 15.40%	7,452,039 13.48%	55,267,649 100%

	Cash & ST	Bonds Int	Bonds Ext	Stock Int	Stock Ext	Ext Intl	Alternative	Total
ASSIGNED RISK PLAN	1,491 0.55%	0	216,628 79.85%	0	53,186 19.60%	0	0	271,305 100%
ENVIRONMENTAL FUND	11,893 1.84%	180,438 27.86%	0	455,383 70.31%	0	0	0	647,714 100%
PERMANENT SCHOOL FUND	16,443 1.88%	416,616 47.65%	0	441,207 50.47%	0	0	0	874,266 100%
Miscellanous Trust Funds	304 0.26%	56,928 49.41%	0	57,990 50.33%	0	0	0	115,222 100%
Other Post Employment Funds (OPEB's)	72,051 19.48%	65,975 17.84%	0	231,826 62.68%	0	0	0	369,852 100%
TREASURERS CASH	5,008,275 100.00%	0	0	0	0	0	0	5,008,275 100%
MISCELLANEOUS ACCOUNTS	. 0	249,736 100.00%	0		0	0	0	249,736 100%
TOTAL CASH AND NON-RETIREMENT	5,110,457 67.81%	969,693 12.87%	216,628 2.87%	1,186,406 15.74%	53,186 0.71%	0	0	7,536,370 100%
GRAND TOTAL	6,321,496 10.07%	1,063,794 1.69%	13,481,973 21.47%	1,186,406 1.89%	24,785,756 39.47%	8,512,555 13.55%	7,452,039 11.87%	62,804,019 100%

TAB B

EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT

DATE:

February 27, 2013

TO:

Members, State Board of Investment

FROM:

Howard Bicker

1. Reports on Budget and Travel

A report on the SBI's administrative budget for the period ending January 31, 2013 is included as **Attachment A**.

A report on travel for the period from November 4, 2012 - February 2, 2013 is included as **Attachment B**.

2. Results of FY12 Financial Audit

Each member of the State Board of Investment and the Investment Advisory Council will receive a copy of the final report when it becomes available.

3. Legislative Update

I will present a verbal update on any legislation activity of interest to the SBI.

4. Update on Sudan

Each quarter, staff provides a report to the Board on steps taken to implement *Minnesota Statutes*, section 11A.243 that requires SBI actions concerning companies with operations in Sudan. Staff receives periodic reports from the Conflict Risk Network (CRN) about the status of companies with operations in Sudan.

The SBI is restricted from purchasing stock in the companies designated as highest offenders by the CRN. Accordingly, staff updates the list of restricted stocks and notifies investment managers that they may not purchase shares in companies on the restricted list. Staff receives monthly reports from the SBI's custodian bank concerning SBI holdings of companies on the CRN list and writes letters as required by law.

According to the law, after 90 days following the SBI's communication, a company continues to have active business operations in Sudan, the SBI must divest holdings of the company according to the following schedule:

- at least 50% shall be sold within nine months after the company appeared on the Task Force list; and
- 100% shall be sold within fifteen months after the company appeared on the list.

In the fourth quarter, SBI managers held no shares in companies on the divestment list.

Attachment C is a copy of the December 11, 2012 letter sent to each international equity manager and domestic equity manager containing the most recent restricted list and the list of stocks to be divested.

Attachment D is an updated list of companies with operations in Sudan.

5. Update on Iran

Each quarter, staff provides a report to the Board on steps taken to implement *Minnesota Statutes*, section 11A.244 that requires SBI actions concerning companies with operations in Iran.

SBI receives information on companies with Iran operations from IW Financial, through Glass Lewis. Staff receives monthly reports from the SBI's custodian bank concerning SBI holdings of companies on the restricted list and writes letters as required by the law.

According to the law, if after 90 days following the SBI's communication a company continues to have scrutinized business operations, the SBI must divest all publicly traded securities of the company according to the following schedule:

- at least 50 percent shall be sold within nine months after the company appeared on the scrutinized list.
- 100 percent, within fifteen months after the company appeared on the scrutinized list.

In the fourth quarter, SBI managers divested 399,649 shares in companies on the divestment list.

Attachment E is a copy of the December 11, 2012 letter sent to each international equity manager and domestic equity manager and fixed income manager containing the end of quarter restricted list and the list of companies to be divested.

6. Litigation Update

SBI legal counsel will give the Board a verbal update on the status of the litigation at the Board meeting on March 6, 2013.

ATTACHMENT A

STATE BOARD OF INVESTMENT FISCAL YEAR 2013 ADMINISTRATIVE BUDGET REPORT FISCAL YEAR TO DATE THROUGH JANUARY 31, 2013

	FISCAL YEAR	FISCAL YEAR
	2013	2013
ITEM	BUDGET	1/31/2013
PERSONAL SERVICES		
FULL TIME EMPLOYEES	\$ 2,964,500	\$ 1,538,704
PART TIME EMPLOYEES	\$ 67,000	\$ 37,354
SEVERENCE PAYOFF	0	0
WORKERS COMPENSATION INSURANCE	0	0
MISCELLANEOUS PAYROLL	5,000	858
SUBTOTAL	\$ 3,036,500	\$ 1,576,916
STATE OPERATIONS		
RENTS & LEASES	203,000	113,497
REPAIRS/ALTERATIONS/MAINTENANCE	10,000	3,012
PRINTING & BINDING	4,000	2,688
PROFESSIONAL/TECHNICAL SERVICES	0	0
COMPUTER SYSTEMS SERVICES	23,000	7,015
COMMUNICATIONS	26,000	11,644
TRAVEL, IN-STATE	900	375
TRAVEL, OUT-STATE	42,000	24,658
SUPPLIES	28,000	9,137
EQUIPMENT	12,000	0
EMPLOYEE DEVELOPMENT	5,000	6,495
OTHER OPERATING COSTS	12,000	7,997
SUBTOTAL	\$ 365,900	\$ 186,518
TOTAL ADMINISTRATIVE BUDGET	\$ 3,402,400	\$ 1,763,434

ATTACHMENT B

STATE BOARD OF INVESTMENT

Travel Summary by Date SBI Travel November 4, 2012 – February 2, 2013

Purpose	Name(s)	Destination and Date	Total Cost
Conference: Institutional Investor Services (IIS) Client Advisory Council Meeting sponsored by: State Street Bank & Trust	H. Bicker	Boston, MA 11/7-11/9	\$1,186.21
Manager Monitoring Domestic Equity Managers: J.P. Morgan; Martingale Asset Mgmt.; McKinley Capital Mgmt.; Mellon Capital Mgmt. Manager Search Domestic Equity Managers: AQR; DE Shaw; Panagora; MFS	T. Brusehaver P. Ammann	Boston, MA Stamford, CT New York, NY 11/12-11/15	\$2,914.62
Manager Monitoring Short Term Brokers/Dealers: Bank of Montreal; Barclays; J.P. Morgan; Morgan Stanley Manager Search Short Term Brokers/Dealers: Alloya Corp. Credit Union	A. Griga	Chicago, IL 11/14-11/15	\$889.26
Conference: Public Funds Summit sponsored by Opal Financial Group	H. Bicker	Phoenix, AZ 1/8-1/10	\$233.00

STATE BOARD OF INVESTMENT

Travel Summary by Date SBI Travel November 4, 2012 – February 2, 2013

Purpose	Name(s)	Destination and Date	Total Cost
Manager Monitoring Short Term/Brokers/Dealers: Williams Capital Group; Deutsche Bank Conference: Crane's Money Fund University	S. Kuettel	New York, NY 1/24-1/26	\$2,300.64
Manager Monitoring Alternative Investment Managers: Audax Mezzanine Partners; Credit Suisse Strategic Partners; DLJ Investment Partners Manager Search Alternative Investment Manager: Apax Partners	J. Kirby	New York, NY 1/22-1/24	\$1,776.56

ATTACHMENT C

Letter to SBI International Equity Managers and Domestic Equity Managers

December 11, 2012

Regarding: Sudan Companies

Dear Manager:

The Minnesota State Board of Investment (SBI) sent you prior communication concerning holdings in companies doing business in Sudan. This new communication applies to all SBI equity portfolios managed by your organization and replaces all prior communications. This communication also applies to all depository receipts or ADR's of any of the listed companies.

Minnesota Statutes, section 11A.243 requires the SBI to implement a Sudan restriction.

Attachment 1 is the List of Restricted Sudan Stocks. These securities <u>may not</u> <u>be purchased</u> for the SBI portfolio that your organization manages. If you own securities of companies on the Restricted List <u>and</u> the companies are <u>not</u> on the divestment list, then you do not need to sell your holdings. Please note that the attached List makes changes to the List of Restricted Sudan Companies that was attached to the September 28, 2012 letter you received. This new list is effective December 14, 2012.

• The following companies have been added to the list:

•	Statesman Resources Limited	Canada
•	China Hydraulic and Hydroelectric	
	Construction Group AKA Sinohydro Group	China
•	Liaoning Huajin Tongda Chemical Co. Ltd.	China
•	Areva T&D India	India
•	Societe Metallurgique D'imiter	Morocco
•	Petroliam Nasional Berhad AKA Petronas	Malaysia
•	KLCC Property Holdings Bhd	Malaysia

- The following companies have been **removed** from the list:
 - KEPCO Plant Service and Engineering Co. Ltd.

South Korea

ONA S.A.

Morocco

Attachment 2 is the List of Sudan Stocks Requiring Divestment.

• There were no changes to the Divestment List.

If you own securities of companies on the List of Sudan Companies Requiring Divestment in the SBI portfolio that your organization manages, then you must <u>divest</u> those holdings according to the schedule provided in the Attachment:

- At least 50 percent of a company's holdings must be sold by the date indicated, and
- At least 100 percent of a company's holdings must be sold by the date indicated.

Attachment 3 is a list of security identifiers for the companies on the List of Restricted Sudan Stocks (Attachment 1) that your organization may use. The SBI does not represent that this is a complete list of identifiers. The manager is responsible for identifying all listings. Please note that the list of security identifiers may have information on companies not on the restricted list.

If you have any questions about this matter, please contact Tammy Brusehaver or Patricia Ammann, Domestic Equities; Stephanie Gleeson, International Equities or me.

Sincerely,

James E. Heidelberg Assistant Executive Director

Enclosures

cc: LeaAnn M. Stagg, Manager, Public Programs
Tammy Brusehaver, Manager, Domestic Equities
Patricia Ammann, Portfolio Manager, Domestic Equities
Stephanie Gleeson, Manager, International Equities

ATTACHMENT 1

Restricted Sudan Stocks	in the second second
Company Name	Country of Origin
Statesman Resources Limited	Canada
Wuhan Boiler Company	China
AviChina Industry & Technology Limited	China
Hafei Aviation Industry Company	China
Harbin Dongan Auto Engine Company	China
China Gezhouba Group Company Limited	China
China Hydraulic and Hydroelectric Construction Group AKA Sinohydro Group	China
Daqing Huake Group Company Limited	China
Jinan Diesel Company Limited	China
PetroChina	China
China North Industries Group Corporation AKA CNGC/Norinco	China
Norinco International Cooperation Ltd	China
Liaoning Huajin Tongda Chemical Co. Ltd.	China
Sichuan Nitrocell Co. Ltd	China
North Navigation Control Technology Co. Ltd (formerly China North Optical-	
Electrical Technology Company Limited)	China
AKM Industrial Company Limited	China
China Petroleum and Chemical Corporation AKA Sinopec Corp.	China
Kingdream PLC	China
Sinopec Shanghai Petrochemicals Ltd	China
Sinopec Yizheng Chemical Fibre Co Ltd	China
liangxi Hongdu Aviation AKA Hongdu Aviation	China
Dongfeng Motor Group Company Limited	China
Egypt Kuwait Holding Company	Egypt
Alstom	France
Kunlun Energy Co. Ltd	Hong Kong
Sinopec Kanton Holdings Limited	Hong Kong
Alstom India Ltd	India
Areva T&D India	India
ndian Oil Corporation Ltd. AKA IOCL	India
Chennai Petroleum Corporation Ltd. AKA CPCL	India
Lanka IOC Limited	India
Mercator Ltd	India
Dil and Natural Gas Company AKA ONGC	India
Mangalore Refinery and Petrochemicals Limited	India
Dil India Limited	India
AREF Energy Holding Company	Kuwait
Managem	Morocco
Societe Metallurgique D'imiter	Morocco
Petroliam Nasional Berhad AKA Petronas	Malaysia
KLCC Property Holdings Bhd	Malaysia
Malaysia International Shipping Company AKA MISC Berhad	Malaysia
Petronas Gas Berhad	Malaysia
Petronas Dagangan Berhad	Malaysia

ATTACHMENT 1

Restricted Sudan Sto	cks
Company Name	Country of Origin
Petronas Chemicals Group Berhad	Malaysia
Scomi Group Berhad	Malaysia
Scomi Engineering Berhad	Malaysia
Mercator Lines Singapore	Singapore
LS Industrial Systems	South Korea
Electricity Generating PCL AKA EGCO	Thailand

Note: List contains parent companies and subsidiaries publicly traded.

AKA means "Also Known As"

Source: Conflict Risk Network

SBI Effective Date: December 14, 2012

ATTACHMENT 2

Suda	n Stocks Requirin	g Divestment	
Company Name	Country of Origin	Divest 50 Percent By this Date	Divest 100 Percent By this date
China Petroleum and Chemical			
Corporation AKA Sinopec Corp	China	April 30, 2008	October 31, 2008
PetroChina Company	China	April 30, 2008	October 31, 2008
Oil and Natural Gas Corp AKA ONGC	India	April 30, 2008	October 31, 2008
Malaysia International Shipping Company AKA MISC Berhad	Malaysia	April 30, 2008	October 31, 2008
Alstom	France	April 30, 2008	October 31, 2008
Dongfeng Motor Group Company Limited	China	March 31, 2011	September 30, 2011

Note: AKA means "Also Known As"

Source: Conflict Risk Network

SBI Effective Date: December 14, 2012



Attachment 3

Security Identifiers for "Scrutinized" Stocks

The following security identifiers correlate with the November 30, 2012

ALL DATA IS FROM BLOOMBERG LP UNLESS OTHERWISE NOTED.

STOCKS ADDED SINCE LAST REPORT ARE HIGHLIGHTED

TOCKS ADDED SINCE LAST REPORT ARE HIGHLIGHTED	J											
Company	Primary Company (Affiliate/Parent)	Exchange	Security Type	Security Name	Tiese Tiese		1		white the last	47		
LSTOM (FRANCE)	ALSTOM	EN Paris (XPAR)	Common Stock	ALSTOM	ALO FP	WPK Number	SEDOL	CUSP	Sicovam	ISIN		CINS
LSTOM (FRANCE)	ALSTOM	OTC US (XOTC)	Common Stock	ALSTOM	AOMFF US	ADF7BK	BODJ8Q5 FR BOGLY93 US			FR0010220475		
LSTOM (FRANCE)	ALSTOM	Frankfurt (XFRA)	Common Stock	ALSTOM	AOMD GR	A0F7BK	BOGO412 DE			FR0010220475 FR0010220475	022581074	F0259M475
LSTOM (FRANCE)	ALSTOM	Euro Comp (XLON)	Common Stock	ALSTOM	ALO EU	A0F7BK	BOYLTO7 GB			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Chi-X Alt TS (CHIX)	Common Stock	ALSTOM	ALSPIX	A0F7BK	BODJBQ5 FR			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Euro Comp (XLON)	Common Stock	ALSTOM	ALOGBX EU	A0F7BK	BOYLTQ7 GB			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALOGBX EO	A0F7BK	BOYLTO7 GB			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALOGBP EO	A0F7BK	BOYLTO7 GB			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Euro Comp (XLON)	Common Stock	ALSTOM	ALOUSD EU	A0F7BK	BOYLTQ7 GB			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALOUSD EO	A0F7BK	BOYLTQ7 GB			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Turquoise (TRQX)	Common Stock	ALSTOM	ALO TQ	A0F7BK	B0DJ8Q5 FR			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Equiduct (XEQT)	Common Stock	ALSTOM	ALO BQ	A0F7BK	B0DJ8Q5 FR			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	BATS Europe (BATE)	Common Stock	ALSTOM	ALO EB	A0F7BK	B0DJ8Q5 FR				022581074	
LSTOM (FRANCE)	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALO EO	A0F7BK	BOYLTO7 GB				022581074	
LSTOM (FRANCE)	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALOCHF EO	A0F7BK	BOYLTQ7 GB				022581074	
LSTOM (FRANCE)	ALSTOM	Euro Comp (XLON)	Common Stock	ALSTOM	ALOCHF EU	A0F7BK	BOYLTQ7 GB				022581074	
LSTOM (FRANCE)	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALONOK EO	A0F7BK	BOYLTQ7 GB				022581074	
LSTOM (FRANCE)	ALSTOM	Euro Comp (XLON)	Common Stock	ALSTOM	ALONOK EU	A0F7BK	BOYLTO7 GB				022581074	
LSTOM (FRANCE)	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALOAUD EO	A0F7BK	BOYLTQ7 GB			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Euro Comp (XLON)	Common Stock	ALSTOM	ALOAUD EU	AOF7BK	BOYLTO7 GB			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Quote MTF (QMTF)	Common Stock	ALSTOM	ALO QM	A0F7BK	B0DJ8Q5 FR			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	LSE EuropeQS (XLON)	Common Stock	ALSTOM	ALO LI	AOF7BK	BOYLTQ7 GB			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	Tradegate (XGAT)	Common Stock	ALSTOM	AOMD TH	A0F7BK	B0G0412 DE			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	EN Paris (XPAR)	Common Stock	ALSTOM	ALO S1	A0F7BK	BODJ8Q5 FR			FR0010220475	022581074	
LSTOM (FRANCE)	ALSTOM	EN Paris (XPAR)	Common Stock	ALSTOM	ALONV FP		B7VY300 FR			FR0011163948	076959013	
LISTOM PROJECTS INDIA LTD (INDIA)	ALSTOM	Natl India (XNSE)	Common Stock	ALSTOM PROJECTS INDIA LTD	ABBAP IN	AGEAYM	6230834 IN			INE878A01011		
REVA TAD INDIA LTD AUHAN BOILER CO (CHINA)	ALSTOM	Natl India (XNSE)	Common Stock	AREVA T&D INDIA LTD	ATD IN	AORB87	6139890 IN			INE200A01026		
REF ENERGY HOLDING COMPANY (KUWAIT)	ALSTOM	Shenzhen (XSHE)	Common Stock	WUHAN BOILER CO-B	200770 CH	913669	6111928 CN			CNE000000VM7		
VICHINA INDUSTRY & TECHNOLOGY LTD (CHINA)	AREF ENERGY HOLDING COMPANY	Kuwait (XKUW)	Common Stock	AREF ENERGY HOLDING CO KSCC	AREFENRGKK	A0KD4C	B13BW99 KW			KW0EQ0601801		
VICHINA INDUSTRY & TECHNOLOGY LTD (CHINA)	AVICHINA INDUSTRY & TECHNOLOGY LTD		Common Stock	AVICHINA INDUSTRY & TECH-H	2357 HK	A0M4WY	6707899 HK			CNE1000001Y8		
	AVICHINA INDUSTRY & TECHNOLOGY LTD	Frankfurt (XFRA)	Common Stock	AVICHINA INDUSTRY & TECH-H	AVT GR	A0M4VVY	B1BJK68 DE			CNE1000001Y8		
VICHINA INDUSTRY & TECHNOLOGY LTD (CHINA)	AVICHINA INDUSTRY & TECHNOLOGY LTD	OTC US (XOTC)	Common Stock	AVICHINA INDUSTRY & TECH-H	AVIJF US	A0M4WY	B01W4B3 US			CNE1000001Y8		Y0485Q109
AFEI AVIATION INDUSTRY CO (CHINA)	AVICHINA INDUSTRY & TECHNOLOGY LTD	Shanghai (XSHG)	Common Stock	HAFEI AVIATION INDUSTRY CO	600038 CH	A0M4ER	6306586 CN			CNE0000015V6		
ARBIN DONGAN AUTO ENGINE CO (CHINA) ATERPILLAR INC	AVICHINA INDUSTRY & TECHNOLOGY LTD		Common Stock	HARBIN DONGAN AUTO ENGINE-A	600178 CH	A0M369	6128519 CN			CNE000000XJ9		
ATERPILLAR ING	CATERPILLAR INC	New York (XNYS)	Common Stock	CATERPILLAR INC	CAT US	850598	2180201 US		005976	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Frankfurt (XFRA)	Common Stock	CATERPILLAR INC	CAT1 GR	850598	5626520		919161	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	EN Paris (XPAR)	Common Stock	CATERPILLAR INC	CAT FP	950598	4180254 FR		005976	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	LIMA (XLIM)	Common Stock	CATERPILLAR INC	CAT PE	850598	2743778		919161	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	London Inti (XLON)	Common Stock	CATERPILLAR INC	CTALN	850598	0180162 GB		005976	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	24 15 15 15 15 15 15	Common Stock	CATERPILLAR INC	CAT ES	850598	7151600 BE		005976	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Mexico (XMEX)	Common Stock	CATERPILLAR INC	CAT* MM	850598	2665979 MX		005976	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	25/10/20/2019 (1997)	Common Stock	CATERPILLAR INC	CATG IX	850598	5626520 DE		919161	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Euro OTC (XLON)	Common Stock	CATERPILLAR INC	CAT EO	850598	0180162 GB			US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Euro Comp (XLON)	Common Stock	CATERPILLAR INC	CAT EU	850598	0180162 GB			US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Euro Comp (XLON)	Common Stock	CATERPILLAR INC	CATGBX EU	850598	0180162 GB			US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Euro OTC (XLON)	Common Stock	CATERPILLAR INC	CATGBX EO	850598	0180162 GB			US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Euro Comp (XLON)	Common Stock	CATERPILLAR INC	CATEUR EU	850598	0180162 GB			US1491231015	009986537	
ATERPILLAR INC		F OTO IVI ON	Common Stock	CATERPILLAR INC	CATR PZ	850598	0180162 GB		005976	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Euro OTC (XLON)	Common Stock	CATERPILLAR INC	CATEUR EO	850598	0180162 GB			US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	EuroTLX (ETLX)	Common Stock	CATERPILLAR INC	CAT TE	850598			005976	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Turquoise (TRQX)	Common Stock	CATERPILLAR INC	CAT TQ	850598	2180201 US		005976	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC		Common Stock	CATERPILLAR INC	CAT NR	850598	2180201 US		005976	US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Tradegate (XGAT)	Common Stock	CATERPILLAR INC	CAT1 TH	850598	5626520 DE		919161	US1491231015	009986537	
ATERPILLAR INC		Bolsa Colomb (XBOG)	Common Stock	CATERPILLAR INC	CAT CB	850598	B63T975 CO		005976		009986537	
ATERPILLAR INC		Euro OTC (XLON)	Common Stock	CATERPILLAR INC	CATCHF EO	850598				US1491231015	009986537	
ATERPILLAR INC	CATERPILLAR INC	Euro Comp (XLON)	Common Stock	CATERPILLAR INC	CATCHF EU	850598					009986537	
ATERPILLAR INC	SULTUR INC	BATS Europe (BATE)	Common Stock	CATERPILLAR INC	CAT EB	850598	2180201 US		005976		009986537	
ATERPILLAR INC	CATERDILLARING		Receipt	CATERPILLAR-CED	CAT AR		2378277 AR			ARDEUT110079	033876874	
	CATERDILLAR INC	Buenos Floor (XBUE)										
	CATERPILLAR INC	Buenos Floor (XBUE)	Receipt	CATERPILLAR-CED	CATD AR		2378277 AR			ARDEUT110079		
ATERPILLAR INC	CATERPILLAR INC	Buenos Floor (XBUE) Buenos Floor (XBUE)	Receipt Receipt	CATERPILLAR-CED CATERPILLAR-CED	CATD AR CATC AR		2378277 AR			ARDEUT110079		
ATERPILLAR INC ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC	Buenos Floor (XBUE) Buenos Floor (XBUE) Buenos Floor (XBUE)	Receipt Receipt Receipt	CATERPILLAR-CED CATERPILLAR-CED CATERPILLAR-CE B	CATD AR CATC AR CATB AR		2378277 AR 2378277 AR			ARDEUT110079 ARDEUT110079	033876874	
ATERPILLAR INC ATERPILLAR INC ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC	Buenos Floor (XBUE) Buenos Floor (XBUE) Buenos Floor (XBUE) Soma (BVMF)	Receipt Receipt Receipt Receipt	CATERPILLAR-CED CATERPILLAR-CED CATERPILLAR-CE B CATERPILLAR-BDR	CATD AR CATC AR CATB AR CATP11B BZ		2378277 AR 2378277 AR B463G79 BR			ARDEUT110079 ARDEUT110079 BRCATPBDR003	033876874	
ATERPILLAR INC ATERPILLAR INC ATERPILLAR INC ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC	Buenos Floor (XBUE) Buenos Floor (XBUE) Buenos Floor (XBUE) Soma (BVMF) SIX Swiss Ex (XSWX)	Receipt Receipt Receipt Receipt Receipt	CATERPILLAR-CED CATERPILLAR-CE B CATERPILLAR-BDR CATERPILLAR INC	CATD AR CATC AR CATB AR CATP11B BZ CAT SW	850598	2378277 AR 2378277 AR		919161	ARDEUT110079 ARDEUT110079	033876874	
ATERPILLAR ING ATERPILLAR ING ATERPILLAR ING ATERPILAR ING	CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC	Buenos Floor (XBUE) Buenos Floor (XBUE) Buenos Floor (XBUE) Soma (BVMF) SIX Swiss Ex (XSWX) Santiago Comercio	Receipt Receipt Receipt Receipt Receipt Common Stock	CATERPILLAR-CED CATERPILLAR-CED CATERPILLAR-CE B CATERPILLAR-BDR CATERPILLAR INC CATERPILLAR INC	CATD AR CATG AR CATB AR CATP11B BZ CAT SW CAT CI	850598	2378277 AR 2378277 AR B463G79 BR 4516310 CH	149123101	919161 005976	ARDEUT110079 ARDEUT110079 BRCATPBDR003	033876874	
ATERPILLAR ING ATERPILLAR ING ATERPILLAR ING ATERPILLAR ING ATERPILLAR ING	CATERPILLAR INC	Buenos Floor (XBUE) Buenos Floor (XBUE) Buenos Floor (XBUE) Soma (BVMF) SIX Swiss Ex (XSWX) Santiago Cornercio EN Brussels (XBRU)	Receipt Receipt Receipt Receipt Receipt Common Stock Receipt	CATERPILLAR-CED CATERPILLAR-CEB CATERPILLAR-CEB CATERPILLAR-BDR CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC	CATD AR CATE AR CATB AR CATP11B BZ CAT SW CAT CI CATER BB	850598 A1JULH	2378277 AR 2378277 AR B463G79 BR 4516310 CH B752850 BE	149123101		ARDEUT110079 ARDEUT110079 BRCATPBDR003 US1491231015 US1491231015 BE0004610516	033876874 009986537 009986537	
ATERPILLAR INC ATERPILLAR INC ATERPILAR INC ATERPILAR INC ATERPILLAR INC HINA GEZHOUBA GROUP COMPANY LTD (CHINA)	CATERPILLAR INC CHINA GEZHOUBA GROUP COMPANY LTD	Buenos Floor (XBUE) Buenos Floor (XBUE) Buenos Floor (XBUE) Soma (BVMF) SIX Swiss Ex (XSWX) Santiago Cornercio EN Brussels (XBRU)	Receipt Receipt Receipt Receipt Receipt Common Stock	CATERPILLAR-CED CATERPILLAR-CED CATERPILLAR-CE B CATERPILLAR-BDR CATERPILLAR INC CATERPILLAR INC	CATD AR CATG AR CATB AR CATP11B BZ CAT SW CAT CI	850598	2378277 AR 2378277 AR B463G79 BR 4516310 CH	149123101		ARDEUT110079 ARDEUT110079 BRCATPBDR003 US1491231015 US1491231015	033876874 009986537 009986537	
ATERPILLAR INC INTERPILLAR INC INTERPILLAR INC INTERPILLAR INC INTERPILLAR INC INTERPILLAR INC INTERPILAR INC	CATERPILAR INC CHINA GEZIOUBA GROUP COMPANY LTD CHINA GEZIOUBA GROUP COMPANY LTD CHINA TOPORALUC AND HYDROELECTRIC	Buenos Floer (XBUE) Buenos Floer (XBUE) Buenos Floer (XBUE) Sema (BVMF) SIX Swiss Ex (XSWX) Santiago Comercio EN Brussels (XBRU) Shanghai (XSHG)	Receipt Receipt Receipt Receipt Receipt Common Stock Receipt Common Stock	CATERPILLAR-CED CATERPILLAR-CE B CATERPILLAR-BOR CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CHINA GEZHOUBA GROUP CO LT-A	CATD AR CATC AR CATB AR CATP11B BZ CAT SW CAT CI CATER BB 500068 CH	850598 A1JULH	2378277 AR 2378277 AR B463G79 BR 4516310 CH B752850 BE 6377214 CN	149123101		ARDEUT110079 ARDEUT110079 BRCATPBDR003 US1491231015 US1491231015 BE0004610516	033876874 009986537 009986537	
ATERPILLAR INC ATERPILLAR INC ATERPILLAR INC ATERPILLAR INC ATERPILLAR INC INTERPILLAR INC INT	CATERPILLAR INC CHINA GEZOUGRA GROUP COMPANY LTD CHINA HYDRAULIC AND HYDROELECTRIC CHINA HYDRAULIC AND HYDROELECTRIC CONSTRUCTION GROUP (SINOHYDRO)	Buenos Floer (XBUE) Buenos Floer (XBUE) Buenos Floer (XBUE) Soma (BVMF) SIX Swiss Ex (XSWX) Santiago Comercio En Brussels (XBRU) Shanghai (XSHG) Shanghai (XSHG)	Receipt Receipt Receipt Receipt Receipt Common Stock Receipt	CATERPILLAR-CED CATERPILLAR-CED CATERPILLAR-CE B CATERPILLAR-BOR CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CHINA GEZHOUBA GROUP CO LT-A SINOHYDRO GROUP LTD-A	CATD AR CATC AR CATB AR CATP 11B BZ CAT SW CAT CI CATER BB 600068 CH	850598 A1JULH A0M31Z	2378277 AR 2378277 AR B463G79 BR 4516310 CH B752850 BE 6377214 CN B4TH690 CN	149123101		ARDEUT110079 ARDEUT110079 BRCATPBDR003 US1491231015 US1491231015 BE0004610516 CNE000000QF1	033876874 009986537 009986537	
ATERPILLAR INC INTERPILLAR INC INTERP	CATERPILAR INC CHINA GEZHOUBA GROUP COMPANY LTD CHINA HYDRAULIC AND HYDROELECTRIC CONSTRUCTION GROUP (SINOHYDRO) CAPIC	Buenos Floer (XBUE) Buenos Floer (XBUE) Buenos Floer (XBUE) Sema (BVMF) SIX Swiss Ex (XSWX) Santiago Comercio EN Brussels (XBRU) Shanghai (XSHG)	Receipt Receipt Receipt Receipt Receipt Receipt Common Stock Common Stock Common Stock	CATERPILLAR-CED CATERPILLAR-CE B CATERPILLAR-BOR CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CHINA GEZHOUBA GROUP CO LT-A	CATD AR CATE AR CATE BAR CATPINB BZ CAT SW CAT CI CATER BB 600068 CH 601669 CH 000685 CH	850598 A1JULH A0M31Z	2378277 AR 2378277 AR B463G79 BR 4516310 CH B752850 BE 6377214 CN B4TH690 CN 6277949 CN	149123101		ARDEUT110079 ARDEUT110079 BRCATPBDR003 US1491231015 BE0004610516 CNE000000QF1 CNE0000001402	033876874 009986537 009986537	
ATERPILLAR INC INCAPACION OF THE TOP TO THE T	CATERPILAR INC CHINA GEZIOUBA GROUP COMPANY LTD CHINA GEZIOUBA GROUP (SINOHYDRO) CNPC CNPC	Buenos Floer (XBUE) Buenos Floer (XBUE) Buenos Floer (XBUE) Soma (BVMF) SIX Swiss Ex (XSVX) Santiago Corneratio EN Brussels (XBRU) Shanghai (XSHG) Shanghai (XSHG) Shenzhen (XSHE) Shenzhen (XSHE)	Raceipt Receipt Receipt Raceipt Raceipt Common Stock	CATERPILLAR-CED CATERPILLAR-CED CATERPILLAR-CE B CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CHINA GEZHOUBA GROUP CO LT-A SINOHYDRO GROUP LTD-A DAGING HUAKE GROUP CO-A JINAN DIESEL ENGINE CO-A	CATO AR CATE AR CATE BB CATCH COMMON CATCH COMMON CATCH COMMON CATCH COMMON CATCH COMMON CATCH COMMON CATCH	A0M31Z A0M4C2 A0M3ZT	2378277 AR 2378277 AR B453G79 BR 4516310 CH B752850 BE 6377214 CN B4TH590 CN 6277949 CN 6486109 CN	149123101	005976	ARDEUT110079 ARDEUT110079 BRCATPBDR003 US1491231015 BE0004610516 CNE000000QF1 CNE0000001402 CNE000000MS3	039866537 009986537 009986537 002789370	
ATERPILLAR INC INTERPILLAR INC INTERP	CATERPILAR INC CHINA GEZHOUBA GROUP COMPANY LTD CHINA GEZHOUBA GROUP COMPANY LTD CHINA THYRRALIC AND HYDROELECTRIC CONSTRUCTION GROUP (SINOHYDRO) CAPIC CAPIC CAPIC CAPIC	Buenos Floer (XBUE) Buenos Floer (XBUE) Buenos Floer (XBUE) Sema (BWMF) Soma (BWMF) Santiago Cemercio EN Brussels (XBRU) Shandiago (XSHG) Shanghai (XSHG) Shenzhen (XSHE) Shenzhen (XSHE)	Raceipt Receipt Receipt Receipt Receipt Common Stock Receipt Common Stock	CATERPILLAR-CED CATERPILLAR-CE D CATERPILLAR-CE B CATERPILLAR BOR CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CHINA GEZHOUBA GROUP CO LT-A SINOHYDRO GROUP LTD-A DAGING HUAKE GROUP CO-A JINAN DIESEL ENGINE CO-A KUNLUN ENERGY CO LTD	CATO AR CATE AR CATE AR CATE HB CAT SW CAT CI CATE BB S00065 CH 501659 CH 000985 CH 135 HK	A0M4C2 A0M3TZ A0M3TZ A0M4C2 A0M3ZT A1CV3E	2378277 AR 2378277 AR B463G79 BR 4516310 CH B752850 BE 6377214 CN B4TH590 CN 6277949 CN 6486109 CN 6486109 CN 6340078 HK	149123101	952131	ARDEUT110079 ARDEUT110079 BRCATPBDR003 US1491231015 US1491231015 BE0004610516 CNE000000471 CNE000001402 CNE000000MS3 BMGS320C1062	033876874 009986537 009986537 002789370	
ATERPILLAR INC ATERPI	CATERPILAR INC CHIRAL REPORT OF COMPANY LTD CHIRAL PROFILE CAND OF COMPANY LTD CHIRAL PROFILE CAND OF COMPANY C	Buenos Floer (XBUE) Buenos Floer (XBUE) Buenos Floer (XBUE) Sema (BVMF) SIX Swiss Ex (XSWX) Sanflago Comercio EM Rrussels (XBUE) Shanghai (XSHG) Shanghai (XSHG) Shanghai (XSHG) Shanghai (XSHE) Hong Keng (XHKG) Frankfut (XSHE)	Raceipt Receipt Receipt Raceipt Raceipt Common Stock	CATERPILLAR-CED CATERPILLAR-CED CATERPILLAR-CE B CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CATERPILLAR INC CHINA GEZHOUBA GROUP CO LT-A SINOHYDRO GROUP LTD-A DAGING HUAKE GROUP CO-A JINAN DIESEL ENGINE CO-A	CATO AR CATE AR CATE BB CATCH COMMON CATCH COMMON CATCH COMMON CATCH COMMON CATCH COMMON CATCH COMMON CATCH	A0M31Z A0M4C2 A0M3ZT	2378277 AR 2378277 AR B453G79 BR 4516310 CH B752850 BE 6377214 CN B4TH590 CN 6277949 CN 6486109 CN	149123101	005976	ARDEUT110079 ARDEUT110079 BRCATPBDR003 US1491231015 BE0004610516 CNE000000QF1 CNE0000001402 CNE000000MS3	033876874 009986537 009986537 002789370 050092003 050092003	

KUNLUN ENERGY CO LTD	CNPC	Tradegate (XGAT)	Common Stock	KUNLUN ENERGY CO LTD	CTJ1 TH	A1CV3E	5387753 DE		952131	BMG5320C1082	050092003	ï
PETROCHINA CO LTD (CHINA)	CNPC	Hong Kong (XHKG)	Common Stock	PETROCHINA CO LTD-H	857 HK	AOM4YQ	6226576 HK			CNE1000003w6	011014674	
PETROCHINA CO LTD (CHINA)	CNPC	Frankfurt (XFRA)	Common Stock	PETROCHINA CO LTD	PC6 GR	A0M4YQ	5939507 DE			CNE1000003w6	011014674	
PETROCHINA CO LTD (CHINA)	CNPC	OTC US (XOTC)	Common Stock	PETROCHINA CO LTD	PCCYF US	A0M4YQ	BOIDNL9 US			CNE1000003w8	011014674	Y6883Q104
PETROCHINA CO LTD (CHINA)	CNPC	Shanghai (XSHG)	Common Stock	PETROCHINA CO LTD	601857 CH		B28SLD9 CN			CNE1000007Q1		
PETROCHINA CO LTD (CHINA)	CNPC	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR US	936983	2568841 US			US71646E1001	011511449	
PETROCHINA CO LTD (CHINA)	CNPC	Frankfurt (XFRA)	ADR	PETROCHINA CO LTD -ADR	PC6A GR	936983	4633327 DE			US71646E1001	011511449	
PETROCHINA CO LTD (CHINA)	CNPC	Buenos Floor (XBUE)	Receipt	PETROCHINA CO LTD-CEDEAR	PTR AR		B1C5SR2 AR			ARDEUT113958		
PETROCHINA CO LTD (CHINA)	CNPC	Buenos Floor (XBUE)	Receipt	PETROCHINA CO LTD-CEDEAR BLK	PTRB AR					ARDEUT113958		
PETROCHINA CO LTD (CHINA)	CNPC	Buenos Floor (XBUE)	Receipt	PETROCHINA CO LTD-CEDEAR C/E	PTRC AR					ARDEUT113958		1
PETROCHINA CO LTD (CHINA)	CNPC	Buenos Floor (XBUE)	Receipt	PETROCHINA CO LTD-CEDEAR \$	PTRD AR					ARDEUT113958		
PETROCHINA CO LTD (CHINA)	CNPC	Tradegate (XGAT)	Common Stock	PETROCHINA CO LTD-H	PC6 TH	A0M4YQ	5939507 DE			CNE1000003W8	011014674	
PETROCHINA CO LTD (CHINA)	CNPC	Tradegate (XGAT)	ADR	PETROCHINA CO LTD -ADR	PC6A TH	936983				US71646E1001	011511449	
PETROCHINA CO LTD (CHINA)	CHINA NATIONAL PETROLEUM CORP aka	Singapore (XSES)	ADR	PETROCHINA CO LTD -ADR	PTR SP	935983	B3KTK63			US71646E1001	011511449	
PETROCHINA CO LTD (CHINA)	CHINA NATIONAL PETROLEUM CORP aka (CHINA NORTH INDUSTRIES GROUP	Mexico (XMEX)	ADR	PETROCHINA CO LTD -ADR	PTRN MM	936983	B569834 MX			US71646E1001	011511449	
NORINCO INTERNATIONAL COOPERATION LTD.	CORPORATION (CNGC/NORINGO)	Shenzhen (XSHE)	Common Stock	NORINCO INTL COOPERATION -A	200.200	20100211	200000					
The state of the s	CHINA NORTH INDUSTRIES GROUP	Silenzien (Nonc)	Common Stock	NORINGO INTE COOPERATION -A	000065 CH	A0M35W	6112125 CN			CNE000000VZ9		
LIAONING HUAJIN TONGDA CHEMICALS CO. LTD	CORPORATION (CNGC/NORINCO)	Shenzhen (XSHE)	Common Stock	LIAONING HUAJIN TONGDA CHE - A	000059 CH	A0M30T	6796143 CN			CNE000000NY9		
LIAONING HUAJIN TONGDA CHEMICALS CO. LTD	CHINA NORTH INDUSTRIES GROUP									OHEDODOGGHTS		1
LIAUNING HUAJIN TUNGUA CHEMICALS CO. LTD	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Shenzhen (XSHE)	Common Stock	LIAONING HUAJIN TONGDA CHE - A	000059 CS	A0M30T	6796143 CN			CNE000000NY9		
SICHUAN NITROCELL, CO. LTD.	CORPORATION (CNGC/NORINCO)	Shenzhen (XSHE)	Common Stock	SICHUAN NITROCEU COUTO A	000045 011							
The state of the s	CHINA NORTH INDUSTRIES GROUP	Shenzhen (ASPIE)	Common Stock	SICHUAN NITROCELL CO LTD-A	002246 CH	AORPGJ	B39G5K4 CN			CNE100000BW7		V
NORTH NAVIGATION CONTROL TECHNOLOGY CO. LTD.	CORPORATION (CNGC/NORINCO)	Shenzhen (XSHE)	Common Stock	CHINA NORTH OPTICAL-ELECTR-A	600435 CH	A0M4L5	6649946 CN			CNE000001F88		
	CHINA NORTH INDUSTRIES GROUP					7.0111-125	5045545 674			CHECOCOOTEGO		9
NORTH NAVIGATION CONTROL TECHNOLOGY CO. LTD.	CORPORATION (CNGC/NORINGO)	Shenzhen (XSHE)	Common Stock	CHINA NORTH OPTICAL-ELECTR-A	600435 CG	A0M4L5	6649946 CN			CNE000001F88		
AKM INDUSTRIAL CO, LTD.	CHINA NORTH INDUSTRIES GROUP CORPORATION (CNGC/NORINCO)	Hone Vans (VIIVO)	Comment Co.	ANN INDUSTRIAL CO. TO	8888 IIII	1.44						
	CHINA NORTH INDUSTRIES GROUP	Hong Kong (XHKG)	Common Stock	AKM INDUSTRIAL CO LTD	8298 HK	ADD86T	B02J0J3 HK			HK8298013897		
AKM INDUSTRIAL CO. LTD.	CORPORATION (CNGC/NORINCO)	Berlin (XBER)	Common Stock	AKM INDUSTRIAL CO LTD	AIQ GR	A0D86T	BOGLOH3 DE			HK8298013897		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Hong Kong (XHKG)	Common Stock	CHINA PETROLEUM & CHEMICAL-H	386 HK	A0M4XN	6291819 HK			CNE1000002Q2	012150504	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	CHINA PETROLEUM & CHEMICAL -H	CHU GR	ADM4XN	7027756 DE			CNE1000002Q2		- 1
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	OTC US (XOTC)	Common Stock	CHINA PETROLEUM & CHEMICAL-H	SNPMF US	A0M4XN	801XKR4 US			CNE1000002Q2		Y15010104
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Shanghai (XSHG)	Common Stock	CHINA PETROLEUM & CHEMICAL-A	600028 CH	A0M4G4	6373728 CN			CNE1000002Q2	012130304	1.5010104
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	New York (XNYS)	ADR	CHINA PETROLEUM & CHEMICAL-ADR	SNP US	578971	2639189 US			US16941R1086	011899374	1
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Munich (XMUN)	ADR	CHINA PETROLEUM & CHEMICAL-ADR	CHUA GR	578971	BORSW00 DE			US16941R1086 US16941R1086		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	London Intl (XLON)	ADR	CHINA PETROLEUM & CHEMICAL-ADR	SNP LI	370311	2654375 GB			US16941R1086		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Buenos Floor (XBUE)	Receipt	CHINA PETROLEUM & CHEMICAL-CEDE			B1C5SX8			ARDEUT114071	0110993/4	N N
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Buenos Floor (XBUE)	Receipt	CHINA PETROLEUM & CHEMICAL-CEDB			BILGONO			ARDEUT114071		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Buenos Floor (XBUE)	Receipt	CHINA PETROLEUM & CHEM-C C/E	SNPC AR					ARDEUT114071		1
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Buenos Floor (XBUE)	Receipt	CHINA PETROLEUM & CHEM-CED \$	SNPD AR					ARDEUT114071		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Tradegate (XGAT)	Common Stock	CHINA PETROLEUM & CHEMICAL -H	CHU TH	A0M4XN	7027756 DE			CNE1000002Q2	017150504	9
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Mexico (XMEX)	ADR	CHINA PETROLEUM & CHEM - ADR	SNPN MM	578971	B4QSP22 MX			US16941R1086		
KINGDREAM PLC	SINOPEC GROUP	Shenzhen (XSHE)	Common Stock	KINGDREAM PUBLIC LIMITED - A	000852 CH	A0M37A	6136385 CN			CNE000000XK7	011099374	1
SINOPEC KANTON HOLDINGS LTD (CHINA)	SINOPEC GROUP	Hong Kong (XHKG)	Common Stock	SINOPEC KANTONS HOLDINGS	934 HK	923923	6162692 HK			BMG8165U1009	044502004	
SINOPEC KANTON HOLDINGS LTD (CHINA)	SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	SINOPEC KANTONS HOLDINGS	SAK GR	923923	4601197 DE			BMG8165U1009		N N
SINOPEC KANTON HOLDINGS LTD (CHINA)	SINOPEC GROUP	OTC US (OOTC)	ADR	SINOPEC KANTONS-UNSPON ADR	SPKOY US	DEGDEG	B3KRT60 US			US82934W2070	011303304	
SINOPEC SHANGHAI PETROCHEMICALS LTD (CHINA)	SINOPEC GROUP	Singapore (XSES)	ADR	SINOPEC SHANGHAI -SPONS ADR	SHISP	887169	B3MNGN2		908289	US82935M1099	012240750	
SINOPEC SHANGHAI PETROCHEMICALS LTD (CHINA)	SINOPEC GROUP	Shanghai (XSHG)	Common Stock	SINOPEC SHANGHAI PETROCHEM	600688 CH	AOM3RA	6802794 CN		300203	CNE0000008B2	012248/50	9
SINOPEC SHANGHAI PETROCHEMICALS LTD (CHINA)	SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	SINOPEC SHANGHAI PETROCHEM	SGJH GR	A0M4Y5	5888632 DE		908303	CNE1000004C8	005000460	3
SINOPEC SHANGHAI PETROCHEMICALS LTD (CHINA)	SINOPEC GROUP	Hong Kong (XHKG)	Common Stock	SINOPEC SHANGHAI PETROCHEM-H	338 HK	AOM4Y5	6797458 HK		908303	CNE1000004C8		9
SINOPEC SHANGHAI PETROCHEMICALS LTD (CHINA)	SINOPEC GROUP	OTC US (XOTC)	Common Stock	SINOPEC SHANGHAI PETROCHEM-H	SPTJF US	AOM4Y5	B01XTG6 US		300303	CNE1000004C8		Y80373106
SINOPEC SHANGHAI PETROCHEMICALS LTD (CHINA)	SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHIUS	887169	2800059 US		908289	US82935M1099		Y80373106
SINOPEC SHANGHAI PETROCHEMICALS LTD (CHINA)	SINOPEC GROUP	Frankfurt (XFRA)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI GR	887169	5734638 DE		908289	US82935M1099		
SINOPEC YIZHENG CHEMICAL FIBRE CO LTD (CHINA)	SINOPEC GROUP	Hong Kong (XHKG)	Common Stock	SINOPEC YIZHENG CHEMICAL-H	1033 HK	A0M4Y6	6984669 HK		917709	CNE1000004D6		Λ
SINOPEC YIZHENG CHEMICAL FIBRE CO LTD (CHINA)	SINOPEC GROUP	OTC US (OOTC)	Common Stock	SINOPEC YIZHENG CHEMICAL-H	YZCFF US	AOM4Y6	B01XVL5 US		91//09	CNE1000004D6		Y9841W106
SINOPEC YIZHENG CHEMICAL FIBRE CO LTD (CHINA)	SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	SINOPEC YIZHENG CHEMICAL-H	YIZH GR	AOM4Y6	4303675 DE		917709	CNE100000406		Y9841VV1U6
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP (CHINA)	SINOPEC GROUP	Tradergate	ADR	CHINA PETROLEUM & CHEM-ADR	CHUA TH	578971	4303073 DE	169418108	317703			
SINOPEC YIZHENG CHEMICAL FIBRE CO LTD (CHINA)	SINOPEC GROUP	Shanghai (XSHG)	Common Stock	SINOPEC YIZHENG CHEMICAL-H	600871 CH	A0M3V6	6986740 CN	16941 K 108		US16941R1086 CNE000000HS3	011899374	
DONGFENG MOTOR GROUP COMPANY LIMITED	LIMITED	Hong Kong (XHKG)	Common Stock	DONGFENG MOTOR GRP CO LTD-H	489 HK	A0M4XY	BOPHSN3 HK				000007150	
DONGFENG MOTOR GROUP COMPANY LIMITED	LIMITED	OTC US (OOTC)	Common Stock	DONGFENG MOTOR GRP CO LTD-H	DNFGF US	A0M4XY	BOXZY65 US			CNE100000312 CNE100000312		V21042100
DONGFENG MOTOR GROUP COMPANY LIMITED	LIMITED	Frankfurt (XFRA)	Common Stock	DONGFENG MOTOR GRP CO LTD-H	DAD GR	ADM4XY	BOX2 V65 US			CNE100000312 CNE100000312		Y21042109
DONGFENG MOTOR GROUP COMPANY LIMITED	LIMITED	Tradegate (XGAT)	Common Stock	DONGFENG MOTOR GRP CO LTD-H	D4D GR	A0M4XY	8018866 DE			CNE 100000312		
DONGFENG MOTOR GROUP COMPANY LIMITED	LIMITED	OTC US	ADR	DONGFENG MOTOR GRP-H-UNS ADR	DNFGY US	r.Smito.	B3SQPT4 US			US2577382037	023657456	
EGYPTIAN KUWAIT HOLDING CO (EGYPT)	EGYPTIAN KUWAIT HOLDING CO (EGYPT)		Common Stock	EGYPTIAN KUWAITI HOLDING CO	EKHO EY	A0H1G7	BOOMDOO			332311302031		
EGYPTIAN KUWAIT HOLDING CO (EGYPT)	EGYPTIAN KUWAIT HOLDING CO (EGYPT)	Kuwait (XKUW)	Common Stock	EGYPTIAN KUWAITI HOLDING CO	EKHOLDINKK	A0H1G7	BOSBH15 KW			EG69082C013		
ELECTRICITY GENERATING PCL, aka EGCO (THAILAND)	ELECTRICITY GENERATING CO (EGCO)	Bangkok (XBKK)	Common Stock	ELECTRICITY GENERATING PCL	EGCO TB	893182	6304632 TH		929726	TH0465010005	006148590	
ELECTRICITY GENERATING PCL, aka EGCO (THAILAND)	ELECTRICITY GENERATING CO (EGCO)	Bangkok (XBKK)	Common Stock	ELECTRICITY GEN PUB CO-FOR R	EGCO/F TB	893183	6304643 TH		930467	TH0465010003		
ELECTRICITY GENERATING PCL, aka EGCO (THAILAND)	ELECTRICITY GENERATING CO (EGCO)	Frankfurt (XFRA)	Common Stock	ELECTRICITY GEN PUB CO-FOR R	EGCF GR	893183	5336799 DE		930467	TH0465010013	D.T-G-COO 1995-CO	
ELECTRICITY GENERATING PCL, aka EGCO (THAILAND)	ELECTRICITY GENERATING CO (EGCO)	Bangkok (XBKK)	Receipt	ELECTRICITY GENERA PCL-NVDR	EGCO-R TB	676043	6368553 TH		330407	TH0465010013		
ELECTRICITY GENERATING PCL, aka EGCO (THAILAND)	ELECTRICITY GENERATING CO (EGCO)	OTC US (XOTC)	Receipt	ELECTRICITY GENERA PCL-NVDR	EYUUF US	676043	B05PBX9 US			TH0465010R13		Y22834124
ELECTRICITY GENERATING PCL, aka EGCO (THAILAND)	ELECTRICITY GENERATING CO (EGCO)	Munich (XMUN)	Receipt	ELECTRICITY GENERA PCL-NVDR	NVAE GR	676043	801LYC1 DE			TH0465010R13		22004124
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	Hong Kong (XHKG)	Common Stock	Glencore International PLC	805 HK	A1JAGV	B3NFYS8			JE00B4T3BW64		
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	London Intl (XLON)	Common Stock	Glencore International PLC	GLEN LN	AIJAGV	B4T3BW6 GB			JE0084T3BW64		
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	Stuttgart (XSTU)	Common Stock	Glencore International PLC	8GC GR	AIJAGV	855NST3 DE			JE0084T3BW64		
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	BATS Europe (BATE)	Common Stock	Glencore International PLC	GLEN EB	AIJAGV	B4T3BW6 GB			JE00B4T3BW64		
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	Tradegate (XGAT)	Common Stock	Glencore International PLC	8GC TH	AIJAGV	31100100 00			JE0084138W64		1
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	Quote MTF (QMTF)	Common Stock	Glencore International PLC	GLEN QM	AIJAGV				JE00B413BW64		
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	Euro OTC (XLON)	Common Stock	Glencore International PLC	GLEN EO	AIJAGV				JE0084138W64		
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	Euro Comp (XLON)	Common Stock	Glencore International PLC	GLEN EU	AIJAGV				JE0084138W64		
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	Euro Comp (XLON)	Common Stock	Glencore International PLC	GLENEUR EU	ATJAGV				JE008413BW64		
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	Turquoise (TRQX)	Common Stock	Glencore International PLC	GLEN TQ	AIJAGV	B4T3BW6 GB			JE008413BW64		
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	Chi-X Alt TS (CHIX)	Common Stock	Glencore International PLC	GLEN IX	AIJAGV	B4T3BVV6 GB			JE0084T3BW64		1
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	Equiduct (XEQT)	Common Stock	Glencore International PLC	GLEN BQ	AIJAGV	24.50.W GD			JE0084138W64		1
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	NYSE ARCA Eu (XHFT)	Common Stock	Glencore International PLC	GLEN NR	AIJAGV	B4T3BV/6 GB			JE0084138W64		i i
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	OTC US (OOTC)	Common Stock	Glencore International PLC	GLCNF US	AIJAGV	B4MSCG9 US			JE00B4T3BW64		1
GLENCORE INTERNATIONAL PLC	GLENCORE INTERNATIONAL PLC	OTC US (OOTC)	ADR	Glencore International PLC-UNSP ADR	GLNCY US		B6QZ367 US			US3782731067	000002236	
BIOPETROL INDUSTRIES AG	GLENCORE INTERNATIONAL PLC	Xetra (XETR)	Common Stock	Biopetrol Industries AG	B2I GR	AOHNO5	B0Q9VP2 DE				022642720	
					seen well	- drings	DOGGALS OF			CH0023225938	UZ364//29	
BIOPETROL INDUSTRIES AG	GLENCORE INTERNATIONAL PLC	OTC US (OOTC)	Common Stock	Biopetrol Industries AG	BIOPF US	ADHNOS	B1EDC93 HE			CHOOSSESSES		U0078D442
BIOPETROL INDUSTRIES AG	GLENCORE INTERNATIONAL PLC GLENCORE INTERNATIONAL PLC	OTC US (OOTC) Euro OTC (XLON)	Common Stock	Biopetrol Industries AG Biopetrol Industries AG	BIOPF US B2LFO	AOHNOS	B1FDC93 US			CH0023225938	023647729	H0978P112
BIOPETROL INDUSTRIES AG BIOPETROL INDUSTRIES AG	GLENCORE INTERNATIONAL PLC GLENCORE INTERNATIONAL PLC				B2I EO	AOHNQ5				CH0023225938	023647729 023647729	H0976P112
BIOPETROL INDUSTRIES AG	GLENCORE INTERNATIONAL PLC	Euro OTC (XLON)	Common Stock	Biopetrol Industries AG			B1FDC93 US B0Q9VP2 DE B1DL5V2 SG				023647729 023647729 023647729	H0976P112

	۱	
	-	
(0
•	ĭ	-

HEMOIL ENERGY LIMITED	GLENCORE INTERNATIONAL PLC	Berlin (XBER)	Common Stock	CHEMOIL ENERGY LTD	LHT GR	ADLBTC	B1L6R79 DE			LIVERDOORS	2020000		
HEMOIL ENERGY LIMITED	GLENCORE INTERNATIONAL PLC	OTC US (OOTC)	Common Stock	CHEMOIL ENERGY LTD	CLRGF US	AOLBTC	B1L6R79 DE B1L97F6 US			HK0000035819	027111866		
HEMOIL ENERGY LIMITED	GLENCORE INTERNATIONAL PLC	OTC US (OOTC)	ADR	CHEMOIL ENERGY LTD-UNSPN ADR	CLRGY US	AULBIC	83L34K6 US	4525201402			027111866	Y1306Z104	
HENNAI PETROLEUM CORPORATION LIMITED (INDIA)	INDIAN OIL CORP LTD aka IOCL	Mumbai (XBOM)	Common Stock	CHENNAI PETROLEUM CORP LTD	MRL IN	A0B968	6121563 IN	16383N102		US16383N1028			
IDIAN OIL CORP LTD (INDIA)	INDIAN OIL CORP LTD aka IOCL	Natl India (XNSE)	Common Stock	INDIAN OIL CORPORATION LTD	IOCL IN	A0B9FM	6253767 IN			INE178A01016			
ANKA IOC LTD (INDIA)	INDIAN OIL CORP LTD aka IOCL	Colombo (XCOL)	Common Stock	LANKA IOC LTD	LIOC SL	AOD83L	B0591G4 LK			INE242A01010			
ANGXI HONGDU AVIATION INDUSTRY CO LTD (CHINA)	JIANGXI HONGDU AVIATION INDUSTRY O		Common Stock	JIANGXI HONGDU AVIATION-A	600316 CH	A0M4EK	6304375 CN			LK0345N00005			
(HOLDINGS INC (JAPAN)	JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	JX HOLDINGS INC	5020 JP	A1CS9H	B627LW9 JP			CNE0000015N3 JP3386450005		-	Mess
X HOLDINGS INC (JAPAN)	JX HOLDINGS INC	Stuttgart (XSTU)	Common Stock	JX HOLDINGS INC	JHJ GR	A1CS9H	B55WTCO DE				049326777		
X HOLDINGS INC (JAPAN)	JX HOLDINGS INC	OTC US (OOTC)	ADR	JX HOLDINGS INC - UNSPON ADR	JXHLY US	A1CVU3	B588TZ8 US		968503	JP3386450005 US4662951023	049326777		
X HOLDINGS INC (JAPAN)	JX HOLDINGS INC	OTC US (OOTC)	Common Stock	JX HOLDINGS INC	JXHGF US	A1CS9H	B6R59M4 US		366503	JP3386450005	049326777		
IPPO CORP (JAPAN)	JX HOLDINGS INC	Takya (XTKS)	Common Stock	NIPPO CORP	1881 JP	857846	6640789 JP		968503	JP3750200002		J29699105	
S INDUSTRIAL SYSTEMS CO., LTD (SOUTH KOREA)	LS INDUSTRIAL SYSTEMS CO., LTD	Korea (XKRX)	Common Stock	LS INDUSTRIAL SYSTEMS	010120 KS	895497	6378217 KR		966503	KR7010120004	001227858		
ANAGEM (MOROCCO)	MANAGEM	Casablanca (XCAS)	Common Stock	MANAGEM	MNG MC	165414	6287454 MA		-	MA0000011058			
ANAGEM (MOROCCO)	MANAGEM	Casablanca (XCAS)	Common Stock	MANAGEM	MNG21 MC	100414	B6Q8FB5 MA			MA0000011058			
OCIETE METALLURGIQUE D'IMITER (MOROCCO)	MANAGEM	Casablanca (XCAS)	Common Stock	SOCIETE METALLURGI D'IMITER	SMI MC	256307	6007759 MA						
ERCATOR LTD (INDIA)	MERCATOR	Natl India (XNSE)	Common Stock	MERCATOR LINES LIMITED	MRLN IN	AOLGOH	BOSH3TS IN			MA0000010068 INE934B01028			
ERCATOR LINES SINGAPORE (SINGAPORE)	MERCATOR	Berlin (XBER)	Common Stock	MERCATOR LINES SINGAPORE LTD	3KD GR	A0M91H	B2NBMJ6 DE			ANNOUS STORES	000070070		
ERCATOR LINES SINGAPORE (SINGAPORE)	MERCATOR	Singapore (XSES)	Common Stock	MERCATOR LINES SINGAPORE LTD	MRLN SP	AOM91H	829Y4W6 SG			SG1W39939069			
MANGALORE REFINERY & PETROCHEMICALS LIMITED (INDIA)	OIL & NATURAL GAS CORP	Mumbai (XBOM)	Common Stock	MANGALORE REFINERY & PETRO	MRPL IN	AONANW	6121530 IN			SG1W39939069	033670079		
IL & NATURAL GAS CORP LTD (INDIA)	OIL & NATURAL GAS CORP	Mumbai (XBOM)	Common Stock	OIL & NATURAL GAS CORP LTD	ONGC IN	A1H6P4	6139362 IN			INE103A01014 INE213A01029			
IL INDIA LTD (INDIA)	OIL INDIA LTD	Natl India (XNSE)	Common Stock	OIL INDIA LTD	OINL IN	AOX9PF	B409HQ9 IN						_
LCC PROPERTY HOLDINGS BHD (MALAYSIA)	PETRONAS	OTC US (OOTC)	Common Stock	KLCC PROPERTY HOLDINGS BHD	KPYHF US	AODJ6E	BOSHSKS US			INE274J01014		1440000440	
LCC PROPERTY HOLDINGS BHD (MALAYSIA)	PETRONAS	Kuala Lumpur (XKLS)	Common Stock	KLCC PROPERTY HOLDINGS BHD	KLCC MK	AODJ6E	B02FW17			MYL508900007		Y4804V104	
ALAYSIA INTERNATIONAL SHIPPING COMPANY aka MISC BHD (MALAYS	PETRONAS	Kuala Lumpur (XKLS)	Common Stock	MISC BHD	MISC MK	880504	6557997 MY		905279	MYL5089OO007			5089
ETRONAS DAGANGAN BHD (MALAYSIA)	PETRONAS	OTC US (OOTC)	Common Stock	PETRONAS DAGANGAN BHD	PNADE US	895131	87PW9S0 US		9052/9	MYL381600005			3816
ETRONAS DAGANGAN BHD (MALAYSIA)	PETRONAS	Kuala Lumpur (XKLS)	Common Stock	PETRONAS DAGANGAN BHD	PETD MK	895131	6695938 MY			MYL568100001		Y6885A107	
ETRONAS CHEMICALS GROUP BHD (MALAYSIA)	PETRONAS	Kuala Lumpur (XKLS)	Common Stock	PETRONAS CHEMICALS GROUP BHD	PCHEM MK	A1C891	B5KQGT3			MYL568100001			5681
ETRONAS GAS BHD (MALAYSIA)	PETRONAS	Kuala Lumpur (XKLS)	Common Stock	PETRONAS GAS BHD	PTG MK	896633				MYL5183OO008			5183
ETRONAS GAS BHD (MALAYSIA)	PETRONAS	Munich (XMUN)	Common Stock	PETRONAS GAS BERHAD	PTR GR	896633	6703972 MY 5330694 DE			MYL6033OO004			6033
TT PCL (THAILAND)	PTT PUBLIC COMPANY LTD	Bangkok (XBKK)	Common Stock	PTT PCL	PTT TB	983094				MYL6033OO004			
TT PCL (THAILAND)	PTT PUBLIC COMPANY LTD	OTC US (OOTC)	Common Stock	PTT PCL	PETTE	983094	6420389 TH B05PCH0 US				015040319		
TT PCL (THAILAND)	PTT PUBLIC COMPANY LTD	OTC US (OOTC)	Common Stock	PTT PCL-FOREIGN	PETFF US					TH0646010007	015040319	Y6883U105	
TT PCL (THAILAND)	PTT PUBLIC COMPANY LTD	Bangkok (XBKK)	Common Stock	PTT PCL/FOREIGN	PTT/F TB	811962 811962	B1G40G8 US			TH0646010015	013973369	Y6883U113	
TT PCL (THAILAND)	PTT PUBLIC COMPANY LTD	Frankfurt (XFRA)	Common Stock	PTT PCL/FOREIGN	PTOF GR	811962	6420390 TH B1BDGH3 DE				013973369		
TT PCL (THAILAND)	PTT PUBLIC COMPANY LTD	Bangkok (XBKK)	Receipt	PTT PCL-NVDR	PTT-R TB	754704	6420408 TH				013973369		
TT PCL (THAILAND)	PTT PUBLIC COMPANY LTD	OTC US (OOTC)	Receipt	PTT PCL-NVDR	PUTRF US	754704	B0305R8 US				016320307		
TT PCL (THAILAND)	PTT PUBLIC COMPANY LTD	Frankfurt (XFRA)	Receipt	PTT PCL-NVDR	NVA3 GR						016320307	Y6883U121	
TT PCL (THAILAND)	PTT PUBLIC COMPANY LTD	OTC US (OOTC)	ADR	PTT PCL-UNSP ADR	PUTRY US	754704	BOILYK9 DE	*******			016320307		
TT EXPLORATION & PRODUCTION PCL (THAILAND)	PTT PUBLIC COMPANY LTD	Bangkok (XBKK)	Common Stock	PTT EXPLOR & PROD PUBLIC CO	PTTEPTB	100000	B6Z7G76 US	69367C105	0262000	US69367C1053			
TT EXPLORATION & PRODUCTION PCL (THAILAND)	PTT PUBLIC COMPANY LTD	Bangkok (XBKK)	Common Stock	PTT EXPLORATION & PROD-FOR		AOJKZ6	B1359K1 TH		907061		025513029		
TT EXPLORATION & PRODUCTION PCL (THAILAND)	PTT PUBLIC COMPANY LTD	Frankfurt (XFRA)	Common Stock	PTT EXPLORATION & PROD-FOR	PTTEP/F TB PTTG GR	AOJKZV	B1359JO TH		904717		025257804		
TT EXPLORATION & PRODUCTION PCL (THAILAND)	PTT PUBLIC COMPANY LTD	OTC US (OOTC)	Common Stock	PTT EXPLORATION & PROD-FOR	PTTG GR PTXLF US	AOJKZV	B13B738 DE		904717		025257804	11021000000000	
TT EXPLORATION & PRODUCTION PCL (THAILAND)	PTT PUBLIC COMPANY LTD	OTC US (OOTC)	ADR	PTT EXPLORATION & PROD-FOR		AOJKZV	B13JK44 US		904717	TH0355A10Z12	025257804	Y7145P165	
TT EXPLORATION & PRODUCTION PCL (THAILAND)	PTT PUBLIC COMPANY LTD	Bangkok (XBKK)	Receipt	PTT EXPLORATION & PR-SP ADR	PEXNY US PTTEP-R TB	AORGRM	2408806 US			US69364V1061			
TT EXPLORATION & PRODUCTION PCL (THAILAND)	PTT PUBLIC COMPANY LTD	OTC US (OOTC)	Receipt	PTT EXPLOR & PROD PCL-NVDR	PEXUFUS	676051	B1359L2 TH				016049000		
TT EXPLORATION & PRODUCTION PCL (THAILAND)	PTT PUBLIC COMPANY LTD	Frankfurt (XFRA)	Receipt	PTT EXPLOR & PROD PCL-NVDR	NVAL GR	*******	B13JKM2 US				016049000	Y7145P140	
ELIANCE INDUSTRIES LTD (INDIA)	RELIANCE INDUSTRIES LTD	Natl India (XNSE)	Common Stock	RELIANCE INDUSTRIES LTD	NVAL GR RIL IN	676051	B13BP45 DE		22.000		016049000		
ELIANCE INDUSTRIES LTD (INDIA)	RELIANCE INDUSTRIES LTD	SIGMA	GDR	RELIANCE INDUSTRIES LTD	RIL IN RIGD 51	946078	6099626 IN		964067	INE002A01018	0.000		
COMI ENGINEERING BERHAD (MALAYSIA)	SCOMI GROUP BERHAD	Kuala Lumpur (XKLS)	Common Stock	SCOMI ENGINEERING BHD	RIGD S1 SEB MK	884241 903056	B16CYP9 GB	759470107	964066		010146160		
COMI GROUP BERHAD (MALAYSIA)	SCOMI GROUP BERHAD	Kuala Lumpur (XKLS)	Common Stock	SCOMI ENGINEERING BHD	SEB MK		6098452 MY			MYL7366OO007			7366
TATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED	Venture (XTSX)	Common Stock	SRR CN EQUITY	SRR CN	120745 A1J2NC	BOOPKJ3 MY BBOL116 CA	857652200		MYL715800008 CA8576522004	DESIGNATION OF THE PARTY OF THE		7158
FATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED	OTC US (OOTC)	Common Stock	SRRHF US EQUITY	SRRHF US	A1J2NC	B6SCJ24 US	857652200		CA8576522004 CA8576522004	25302885 25302885		
FATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED	Venture (XTSX)	Common Stock	SRR CV EQUITY	SRR CV	A1J2NC	BBOL116 CA	857652200		CA8576522004	25302885		
ATESMAN RESOURCES LIMITED ATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED STATESMAN RESOURCES LIMITED	Venture (XTSX)	Common Stock	SRR CJ EQUITY	SRR CJ CS	A1J2NC	B80L116 CA	857652200		CA8576522004	25302885		
ATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED	Venture (XTSX) Venture (XTSX)	Common Stock	SRR DV EQUITY	SRR DV C\$	A1J2NC	B80L116 CA	857652200		CA8576522004	25302885		
TATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED	Venture (XTSX)	Common Stock	SRR TG EQUITY SRR TJ EQUITY	SRR TG C\$ SRR TJ C\$	A1J2NC A1J2NC	BBDL116 CA	857652200		CA8576522004	25302885		
TATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED	Venture (XTSX)	Common Stock	SRR TK EQUITY	SRR TK CS	A1J2NC	B80L116 CA B80L116 CA	857652200 857652200		CA8576522004 CA8576522004	25302885		
TATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED	Venture (XTSX)	Common Stock	SRR TN EQUITY	SRR TN C\$	A1J2NC	BBOL116 CA	857652200		CA8576522004 CA8576522004	25302885 25302885		
TATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED	Venture (XTSX)	Common Stock	SRR TV EQUITY	SRR TV CS	A1J2NC	BBOL116 CA	857652200		CA8576522004	25302885		
TATESMAN RESOURCES LIMITED TATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED	Venture (XTSX)	Common Stock	SRR TWEQUITY	SRR TW CS	A1J2NC	B80L116 CA	857652200		CA8576522004	25302885		
STATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED STATESMAN RESOURCES LIMITED	Venture (XTSX) OTC US (OOTC)	Common Stock	SRR TY EQUITY SRRHF PO EQUITY	SRR TY C\$ SRRHF PQ	A1J2NC	B80L116 CA	857652200		CA8576522004	25302885		
						A1J2NC	B6SCJ24 US	857652200		CA8576522004	25302885		

ATTACHMENT D

Conflict Risk Network (CRN) List of "Scrutinized" Companies in Sudan List Effective Through February 28, 2013

Company Name	Country of Origin
Alstom	France
Alstom India Ltd Areva T&D India Ltd.	India
Wuhan Boiler Company	India China
AREF Energy Holding Company	Kuwait
AviChina Industry & Technology Ltd.	China
Hafei Aviation Industry Co.	China
Harbin Dongan Auto Engine Co.	China
Caterpillar Inc.	US
China Gezhouba Group Company Ltd.	China
China Hydraulic and Hydroelectric Construction Group AKA Sinohydro	China
Sichuan Power Development Co., Ltd.	China
Sinohydro Bureau 7 Co., Ltd.	China
Sinohydro Group Ltd.	China
China National Petroleum Corporation AKA CNPC	China
Daging Huake Group Co., Ltd.	China
Jinan Diesel Co., Ltd.	China
Kunlun Energy Co., Ltd.	
PetroChina Co., Ltd.	Hong Kong
China North Industries Group Corporation AKA CNGC/NORINCO	China China
AKM Industrial Co., Ltd.	
China North Industries Corporation AKA NORINCO	Hong Kong China
Liaoning Huajin Tongda Chemicals	China
NORINCO International Cooperation Ltd.	China
North Navigation Control Technology Co., Ltd	China
Sichuan Nitrocell Co., Ltd	China
China Petrochemical Corporation AKA Sinopec Group	China
China Petroleum and Chemical Corporation AKA Sinopec Corp	China
Kingdream PLC	China
Sinopec Kanton Holdings Ltd.	Hong Kong
Sinopec Shanghai Petrochemicals Ltd.	China
Sinopec Yizheng Chemical Fibre Co., Ltd.	China
Dongfeng Motor Group Co. Ltd.	China
Egypt Kuwait Holding Company	Egypt
Electricity Generating Company AKA EGCO	Thailand
Glencore International PLC	Switzerland
Biopetrol Industries	Switzerland
Chemoil Energy Ltd	Singapore
ndian Oil Corporation Ltd. AKA IOCL	India
Chennai Petroleum Corporation Limited AKA CPCL	India
Lanka IOC Ltd	India
Jiangxi Hongdu Aviation AKA Hongdu Aviation	China
IX Holdings	Japan
Nippo Corporation	Japan
S Industrial Systems	South Korea
Managem	Morocco
ONA S.A.	Morocco
Societe Metallurgique D'imiter	Morocco
Mercator Ltd	India
Mercator Lines Singapore	Singapore
Dil and Natural Gas Company, AKA ONGC	India
Mangalore Refinery and Petrochemicals Ltd. AKA MRPL	India
Dil India Ltd.	India
Petroliam Nasional Berhad AKA Petronas	Malaysia
KLCC Property Holdings Bhd	Malaysia
Malaysia International Shipping Company AKA MISC Berhad	Malaysia
Petronas Chemicals Group Berhad	Malaysia
Petronas Dagangan Bhd	Malaysia
Petronas Gas Bhd	Malaysia
PT Pertamina Persero	Indonesia
Ranhill Berhad	Malaysia
Reliance Industries Ltd.	India
Scomi Group Berhad	Malaysia
Scomi Engineering Berhad	Malaysia
	Malaysia Canada

Note: List contains parent companies and subsidiaries publicly traded AKA means "also known as"

Conflict Risk Network (CRN) List of Companies in Sudan for "Substantial Action" List Effective Through February 28, 2013

 Company Name
 Country of Origin

 Mott MacDonald
 UK

 Petrofac LTD
 UK

 Schlumberger LTD
 Netherland

 Wartsila OYJ
 Finland

Conflict Risk Network (CRN) List of Companies in Sudan with "No Publicly Traded Equity" or "Not Relevant under the CRN Targeted Divestment Model" List Effective Through February 28, 2013

Company Name	Country of Origin
Abdel Hadi Abdullah Al-Qahtani & Sons Group of Companies	Saudi Arabia
Africa Energy	Nigeria
Andritz AG	Austria
Andritz Hydro	Austria
Ansan Wikfs Investments Ltd.	Yemen
APS Engineering Company S.p.A.	Italy
Arcadia Petroleum	UK
Ascom Group SA	Moldova
Atlas Copco AB	Sweden
Bharat Electronics Ltd.	India
Bharat Heavy Electricals Ltd.	India
China International Water & Electric Corp AKA CWE	China
China Machinery Engineering Company (CMEC)	China
China Poly Group Corporation	China
Poly Investment Ltd.	Hong Kong
Citadel Capital	Egypt
Daedong Industrial Machinery Co., Ltd	South Korea
Dindir Petroleum International/Edgo Group	Jordan
Express Petroleum and Gas Company	Nigeria
GAZ Group	Russia
Avtodizel OAO	Russia
GAZ Auto Plant	Russia
Pavlovsky Bus Plant	Russia
Tverskoy Excavator OSJC	Russia
Yaroclavsky Diesel Equipment Plant OAO	Russia
GIAD Industrial City	Sudan
Harbin Electric Co., Ltd	China
Harbin Power Engineering AKA HPE	China
Hi-Tech Petroleum Group Co., Ltd.	Sudan
HTC Yemen International Ltd.	Yemen
Kamaz	
	Russia
Neftekamsky Avtozavod AKA NEFAZ	Russia
Kuwait Foreign Petroleum Exploration Company AKA KUFPEC	Kuwait
La Mancha Resources	Canada
Lahmeyer International	Germany
MAN SE	Germany
MTN Group	South Africa
Petrolin	Gabon
Petroneeds Service International Company	Sudan
PTT Public Company Ltd.	Thailand
PTT Exploration & Production PCL	Thailand
PTTEP Australia International Finace Proprietary Ltd	Thailand
PTTEP Canada International Finance Ltd.	Thailand
Ranhill Berhad	Malaysia
Saras S.p.A.	Italy
Shandong Electric Power Construction Corporation	China
Shanghai Electric Group Co.	China
Shanghai Power Trnasmission and Distribution Co. Ltd.	China
Snowy Mountain Engineering Corporation	Australia
Star Petroleum S.A.	Spain
Sudan Petroleum Corporation AKA Sudapet	Sudan
Tamoil	Libya
Total SA (several locations)	Belgium
Rosier S.A.	US
Sunpower Corporation	Canada
Total Gabon	Africa
Total Kenya Ltd.	Africa
Total Nigeria PLC	Africa
UAE for Gold Minerals and Investment Company Ltd.	United Arab Emirates
Vitol Group	Switzerland
Zain Group	Kuwait

December 14, 2012

ATTACHMENT E

Letter to SBI International Equity Managers and Domestic Equity Managers

December 11, 2012

Regarding: Iran Companies

Dear Manager:

The Minnesota State Board of Investment (SBI) sent you prior communication concerning holdings in companies doing business in Iran. This new communication applies to all SBI equity portfolios managed by your organization and replaces all prior communications. This communication also applies to all depository receipts or ADR's of any of the listed companies.

Minnesota Statutes, section 11A.244, requires the Minnesota State Board of Investment (SBI) to implement an Iran restriction.

Attachment 1 is the List of Restricted Iran Companies. These securities <u>may</u> <u>not be purchased</u> for the SBI portfolio that your organization manages. If you own securities of companies on the Restricted List <u>and</u> the companies are <u>not</u> on the divestment list, then you do not need to sell your holdings. Please note that the attached List makes changes to the List of Restricted Iran Companies that was attached to the September 28, 2012 letter you received. This new list is effective December 14, 2012.

The following companies have been <u>removed</u> from the restricted list:

• Linde AG Germany

• Maire Tecnimont S.p.A. Italy

MOL Magyar Olaj-es Gazipari Nyrt
 Hungary

Attachment 2 is the List of Iran Companies Requiring Divestment.

• There were no changes to the Divestment List.

If you own securities of companies on the List of Iran Companies Requiring Divestment in the SBI portfolio that your organization manages, then you must <u>divest</u> those holdings according to the schedule provided in the Attachment:

- At least 50 percent of a company's holdings must be sold by the date indicated, and
- At least 100 percent of a company's holdings must be sold by the date indicated.

Attachment 3 is a list of security identifiers for the companies on the List of Restricted Iran Companies (Attachment 1) that your organization may use. The SBI does not represent that this is a complete list of identifiers. The manager is responsible for identifying all listings.

If you have any questions about this matter, please contact Tammy Brusehaver or Patricia Ammann, Domestic Equity; Stephanie Gleeson, Manager, International Equity or me.

Sincerely,

James E. Heidelberg Assistant Executive Director

Enclosures

ce: LeaAnn M. Stagg, Manager, Public Programs
Tammy Brusehaver, Manager, Domestic Equity
Patricia Ammann, Portfolio Manager, Domestic Equity
Stephanie Gleeson, Manager, International Equity

ATTACHMENT 1 RESTRICTED IRAN COMPANIES SECURITIES OF COMPANIES MAY NOT BE PURCHASED FOR PORTFOLIO

COMPANY NAME

Bharat Petroleum Corporation Ltd. China Petroleum & Chemical Corp

Daelim Industrial

Gail (India) Ltd.

Gazprom

GS Engineering & Construction Corp

GS Holdings

Gubre Fabrikalari T.A.S. Ina-Industrija Nafte DD Indian Oil Corporation Ltd.

L G International

Liquefied Natural Gas Ltd

Mitsui & Co. Ltd

Nagarjuna Fertilizers & Chemicals Ltd. Oil & Natural Gas Corporation Ltd.

PetroChina Co. Ltd.

Petrofac

Petronet LNG Ltd. Punj Lloyd Ltd.

Saipem Spa Sasol Ltd

Toyo Engineering Corporation Toyota Tsusho Corporation

Technip

COUNTRY

India

China

Korea South

India

Russia

Korea South Korea South

Turkey

Croatia

India

Korea South Australia

Japan

India

India

China

United Kingdom

India India

Italy

South Africa

France

Japan

Japan

Effective Date: December 14, 2012

ATTACHMENT 2

LIST OF IRAN COMPANIES REQUIRING DIVESTMENT

Company Name	Country of Origin	Divest 50 Percent By this Date	Divest 100 Percent By this Date	
Gazprom Oao	Russia	July 31, 2010	January 31, 2011	
Sasol Ltd	South Africa	July 31, 2010	January 31, 2011	
Mitsui & Company, Ltd.	Japan	September 30, 2012	March 31, 2013	
Petrofac	United Kingdom	September 30, 2012	March 31, 2013	
Saipem SA	Italy	September 30, 2012	March 31, 2013	
Technip	France	September 30, 2012	March 31, 2013	
Toyota Tsusho	Japan	September 30, 2012	March 31, 2013	

Effective Date: December 14, 2012

	COMPANY_NAME	SEDOL	ISIN	SYMBOL	CUSIP	CUSIP_2	COUNTRY
	Bharat Petroleum Corporation Ltd.	6099723	INE029A01011	500547		-	India
	China Petroleum & Chemical Corp	2654375	US16941R1086		16941R108		China
	China Petroleum & Chemical Corp	BORSW00	US16941R1086		16941R108		China
	China Petroleum & Chemical Corp	2639189	US16941R1086		16941R108		China
	China Petroleum & Chemical Corp	B01XKR4	CNE1000002Q2	386	16941R108		China
	China Petroleum & Chemical Corp	7027756	CNE1000002Q2	386	16941R108		China
	China Petroleum & Chemical Corp	6291819	CNE1000002Q2	386	16941R108		China
	China Petroleum & Chemical Corp	6373728	CNE0000018G1		16941R108		China
	China Petroleum & Chemical Corp	B1C5SX8	ARDEUT114071		16941R108		China
	Daelim Industrial	6246604	KR7000211003				Korea South
	Daelim Industrial	B1T52M8	KR7000211003				Korea South
S	Daelim Industrial	6249584	KR7000210005	A000210			Korea South
7	Gail (India) Ltd.	B1HJOL7	US36268T2069		36268T206		India
	Gail (India) Ltd.	3235520	US36268T2069		36268T206		India
	Gail (India) Ltd.	B2NTDN1	US36268T2069		36268T206		India
	Gail (India) Ltd.	B033102	US36268T2069		36268T206		India
	Gail (India) Ltd.	2498517	US36268T1079		36268T206		India
	Gail (India) Ltd.	3235490	US36268T1079		36268T206		India
	Gail (India) Ltd.	6133405	INE129A01019	532155	36268T206		India
	Gazprom	B0338T0	US3682873068		368287207		Russia
	Gazprom	5385003	US3682873068		368287207		Russia
	Gazprom	2016629	US3682872078		368287207		Russia
	Gazprom	5259528	US3682872078		368287207		Russia
	Gazprom	5140989	US3682872078		368287207		Russia
	Gazprom	2398899	US3682871088		368287207		Russia
	Gazprom	3313181	US3682871088		368287207		Russia
	Gazprom	4364928	RU0007661625	GAZP	368287207		Russia
	Gazprom	B2NH841	ARDEUT114261		368287207		Russia
	GS Engineering & Construction Corp	B06ZHC9	KR7006360002	A006360			Korea South

-25-

	COMPANY_NAME	SEDOL	ISIN	SYMBOL	CUSIP	CUSIP_2	COUNTRY
	GS Engineering & Construction Corp	6537096	KR7006360002	A006360		-	Korea South
	GS Holdings	B02FVX2	KR7078931003		Y2901P103		Korea South
	GS Holdings	B01RJV3	KR7078930005	A078930	Y2901P103		Korea South
	Gubre Fabrikalari T.A.S.	B03MTC7	TRAGUBRF91E2	GUBRF			Turkey
	Gubre Fabrikalari T.A.S.	B188YV1	TRAGUBRF91E2	GUBRF			Turkey
	Ina-Industrija Nafte DD	B1L56D5	US45325E2019		45325E102	45325E201	Croatia
	Ina-Industrija Nafte DD	B1L1YV7	US45325E2019		45325E102	45325E201	Croatia
	Ina-Industrija Nafte DD	В1НЈКС8	US45325E2019		45325E102	45325E201	Croatia
	Ina-Industrija Nafte DD	B1HJKF1	US45325E1029		45325E102	45325E201	Croatia
	Ina-Industrija Nafte DD	B1L5RN2	US45325E1029		45325E102	45325E201	Croatia
	Ina-Industrija Nafte DD	B1JMYF6	HRINAORA0007	INA-R-A	45325E102	45325E201	Croatia
-26-	Indian Oil Corporation Ltd.	6253767	INE242A01010	530965			India
တု	L G International	B02PV43	KR7001120005	A001120			Korea South
	L G International	6537115	KR7001120005	A001120			Korea South
	Liquefied Natural Gas Ltd	B05KKL5	AU000000LNG0	LNG			Australia
	Liquefied Natural Gas Ltd	B2RHN19	AU000000LNG0	LNG			Australia
	Liquefied Natural Gas Ltd	B02L5H2	AU000000LNG0	LNG			Australia
	Mitsui & Co. Ltd	4597058	XS0029348686		606827202		Japan
	Mitsui & Co. Ltd	2597061	US6068272029		606827202		Japan
	Mitsui & Co. Ltd	B1HHX89	US6068272029		606827202		Japan
	Mitsui & Co. Ltd	B0ZGPX0	JP3893600001	8031	606827202		Japan
	Mitsui & Co. Ltd	B03KWZ5	JP3893600001	8031	606827202		Japan
	Mitsui & Co. Ltd	5736463	JP3893600001	8031	606827202		Japan
	Mitsui & Co. Ltd	4594071	JP3893600001	8031	606827202		Japan
	Mitsui & Co. Ltd	6597302	JP3893600001	8031	606827202		Japan
	Nagarjuna Fertilizers & Chemicals Ltd.	6628644	INE580A01013	500075			India
	Oil & Natural Gas Corporation Ltd.	6139362	INE213A01011	500312	Y64606117		India
	PetroChina Co. Ltd.	2568841	US71646E1001		71646E100		China
	PetroChina Co. Ltd.	4633327	US71646E1001		71646E100		China

26-

COMPANY_NAME	SEDOL	ISIN	SYMBOL	CUSIP	CUSIP_2	COUNTRY
PetroChina Co. Ltd.	B28SLD9	CNE1000007Q1		71646E100		China
PetroChina Co. Ltd.	B17HOR7	CNE1000003W8	857	71646E100		China
PetroChina Co. Ltd.	5939507	CNE1000003W8	857	71646E100		China
PetroChina Co. Ltd.	B01DNL9	CNE1000003W8	857	71646E100		China
PetroChina Co. Ltd.	6226576	CNE1000003W8	857	71646E100		China
PetroChina Co. Ltd.	B1C5SR2	ARDEUT113958		71646E100		China
Petrofac	B0H2K53	GB00B0H2K534	PFC	G7052T101		United Kingdom
Petrofac	B11B6G6	GB00B0H2K534	PFC	G7052T101		United Kingdom
Petrofac	B0LWHB4	GB00B0H2K534	PFC	G7052T101		United Kingdom
Petronet LNG Ltd.	B00KT68	INE347G01014	532522			India
Punj Lloyd Ltd.	B1VJSG4	INE701B01021	532693			India
Saipem Spa	2209076	US79376W1099		79376W208	79376W109	Italy
7 Saipem Spa	B28LP70	IT0000068533		79376W208	79376W109	Italy
Saipem Spa	B02ZP63	IT0000068533		79376W208	79376W109	Italy
Saipem Spa	4768779	IT0000068533		79376W208	79376W109	Italy
Saipem Spa	4769103	IT0000068525	SPM	79376W208	79376W109	Italy
Saipem Spa	B020R51	IT0000068525	SPM	79376W208	79376W109	Italy
Saipem Spa	4765996	IT0000068525	SPM	79376W208	79376W109	Italy
Saipem Spa	4768768	IT0000068525	SPM	79376W208	79376W109	Italy
Saipem Spa	B28LP69	IT0000068525	SPM	79376W208	79376W109	Italy
Sasol Ltd	B03NQB8	ZAE000006896	SAOA	803866300	803866102	South Africa
Sasol Ltd	5734304	ZAE000006896	SAOA	803866300	803866102	South Africa
Sasol Ltd	6777450	ZAE000006896	SAOA	803866300	803866102	South Africa
Sasol Ltd	4776910	US8038663006		803866300	803866102	South Africa
Sasol Ltd	2777294	US8038663006		803866300	803866102	South Africa
Technip	2811620	US8785462099		878546209	F90676101	France
Technip	2878658	US8785461000		878546209	F90676101	France
Technip	B2NG4D9	FR0010565044		878546209	F90676101	France
Technip	B1MD4Y5	FR0010412353		878546209	F90676101	France

COMPANY_NAME	SEDOL	ISIN	SYMBOL	CUSIP	CUSIP_2	COUNTRY
Technip	BOWC5Z3	FR0010273250		878546209	F90676101	France
Technip	B05K6W8	FR0010150342		878546209	F90676101	France
Technip	7328482	FR0000206039		878546209	F90676101	France
Technip	B06PC80	FR0000131708	TEC	878546209	F90676101	France
Technip	4122018	FR0000131708	TEC	878546209	F90676101	France
Technip	4874160	FR0000131708	TEC	878546209	F90676101	France
Technip	B28MSJ6	FR0000131708	TEC	878546209	F90676101	France
Toyo Engineering Corporation	6899718	JP3607800004	6330			Japan
Toyo Engineering Corporation	B02MHK2	JP3607800004	6330			Japan
Toyota Tsusho Corporation	6900580	JP3635000007	8015	J92719111		Japan

-07-

Effective Date: December 14, 2012

Letter to SBI Fixed Income Managers

December 11, 2012

Regarding: Iran Companies

Dear Manager:

The Minnesota State Board of Investment (SBI) sent you prior communication concerning holdings in companies doing business in Iran. This communication applies to the SBI fixed income portfolio managed by your organization.

Minnesota Statutes, section 11A.244, requires the Minnesota State Board of Investment (SBI) to implement an Iran restriction.

Attachment 1 is the List of Restricted Iran Companies. These securities <u>may</u> <u>not be purchased</u> for the SBI portfolio that your organization manages. If you own securities of companies on the Restricted List <u>and</u> the companies are <u>not</u> on the divestment list, then you do not need to sell your holdings. Please note that the attached List makes changes to the List of Restricted Iran Companies that was attached to the September 28, 2012 letter you received. This new list is effective December 14, 2012.

• The following companies have been <u>removed</u> from the restricted list:

Linde AG
 Maire Tecnimont S.p.A.
 Italy

• MOL Magyar Olaj-es Gazipari Nyrt Hungary

Attachment 2 is the List of Iran Companies Requiring Divestment.

There have been no changes to the Divestment List.

If you own securities of companies on the List of Iran Companies Requiring Divestment in the SBI portfolio that your organization manages, then you must <u>divest</u> those holdings according to the schedule provided in the Attachment:

- At least 50 percent of a company's holdings must be sold by the date indicated, and
- At least 100 percent of a company's holdings must be sold by the date indicated.

If you have any questions about this matter, please contact Ryan Hill, Portfolio Manager, Long-Term Debt or me.

Sincerely,

James E. Heidelberg Assistant Executive Director

Enclosures

cc.: LeaAnn M. Stagg, Manager, Public Programs Ryan Hill, Portfolio Manager, Long-Term Debt Steve Kuettel, Manager, Short-Term Debt Michael J. Menssen, Manager, Long-Term Debt

ATTACHMENT 1 RESTRICTED IRAN COMPANIES SECURITIES OF COMPANIES MAY NOT BE PURCHASED FOR PORTFOLIO

COMPANY NAME

Bharat Petroleum Corporation Ltd. China Petroleum & Chemical Corp

Daelim Industrial

Gail (India) Ltd. Gazprom

GS Engineering & Construction Corp

GS Holdings

Gubre Fabrikalari T.A.S. Ina-Industrija Nafte DD Indian Oil Corporation Ltd.

L G International

Liquefied Natural Gas Ltd

Mitsui & Co. Ltd

Nagarjuna Fertilizers & Chemicals Ltd.
Oil & Natural Gas Corporation Ltd.

PetroChina Co. Ltd.

Petrofac

Petronet LNG Ltd. Punj Lloyd Ltd. Saipem Spa

Sasol Ltd Technip

Toyo Engineering Corporation
Toyota Tsusho Corporation

COUNTRY

India China

Korea South

India

Russia

Korea South Korea South Turkey Croatia

> Korea South Australia Japan

India India China

India

United Kingdom

India India Italy

South Africa France

Japan Japan

Effective Date: December 14, 2012

ATTACHMENT 2

LIST OF IRAN COMPANIES REQUIRING DIVESTMENT

Company Name	Country of Origin	Divest 50 Percent By this Date	Divest 100 Percent By this Date	
Gazprom Oao	Russia	July 31, 2010	January 31, 2011	
Sasol Ltd	South Africa	July 31, 2010	January 31, 2011	
Mitsui & Company, Ltd.	Japan	September 30, 2012	March 31, 2013	
Petrofac	United Kingdom	September 30, 2012	March 31, 2013	
Saipem SA	Italy	September 30, 2012	March 31, 2013	
Technip	France	September 30, 2012	March 31, 2013	
Toyota Tsusho	Japan	September 30, 2012	March 31, 2013	

Effective Date: December 14, 2012

TAB C

INVESTMENT ADVISORY COUNCIL REPORT

DATE:

February 27, 2013

TO:

Members, State Board of Investment

FROM:

Proxy Voting Committee

1. Reauthorization of the Proxy Voting Committee

In March 1982, the Board established the Proxy Voting Committee to carry out the SBI's voting responsibilities. Each Board member has one designee on the Committee. The current membership is:

Micah Hines

Governor's designee

Celeste Grant

State Auditor's designee

Bert Black

Secretary of State designee

Christie Eller

Attorney General's designee

According to statute, committees of this nature must be re-authorized every two years. The last authorization was in March 2011. A resolution to accomplish this is in **Attachment A**.

RECOMMENDATION:

The Executive Director recommends that the SBI adopt the resolution in Attachment A which reauthorizes the Proxy Voting Committee and delegates proxy voting responsibilities according to established guidelines.

2. Proxy Voting Guidelines

The Proxy Voting Committee votes the Board's proxies according to Guidelines approved by the Board. The Committee recommends that the Board review and reaffirm the Guidelines as shown in **Attachment B**.

RECOMMENDATION:

The Proxy Voting Committee recommends that the Board reaffirm the Proxy Voting Guidelines as shown in Attachment B.

ATTACHMENT A

RESOLUTION OF THE MINNESOTA BOARD OF INVESTMENT CONCERNING PROXY VOTING

WHEREAS, as a stockholder, the Minnesota State Board of Investment (SBI) is entitled to sponsor and cosponsor shareholder resolutions and participate in corporate annual meetings by casting its votes by proxy or through direct attendance at the meetings; and

WHEREAS, the SBI has previously established a Proxy Committee:

NOW THEREFORE, BE IT RESOLVED THAT:

- To advise and assist the SBI in the implementation of proxy voting guidelines
 previously adopted by the Board the SBI hereby authorizes and reaffirms the
 establishment of the SBI Proxy Committee composed of a representative selected
 by each member of the SBI to be chaired by the designee of the Governor and
 convened as necessary in accord with the Guidelines.
- 2. The SBI further authorizes the SBI Proxy Committee to review the Guidelines periodically and report to the SBI as necessary.
- 3. The SBI further directs its staff to advise and assist the Proxy Committee in the implementation of this resolution and directs its Executive Director to obtain such consulting and reporting services as may be necessary.
- 4. This resolution shall take effect immediately.

Adopted this 6th day of March, 2013

Governor Mark Dayton Chair, Minnesota State Board of Investment

Proxy Voting Guidelines

The Minnesota State Board of Investment (SBI) has formulated proxy voting guidelines by which it casts votes on a wide range of corporate governance and social responsibility issues.

As a stockholder, the Board is entitled to participate in corporate annual meetings by casting its votes by proxy or through direct attendance at the meetings. The following guidelines constitute an effort by the SBI to manage and control its proxy voting.

Overview of the SBI

By the Minnesota Constitution, the Board is composed of the Governor, the State Auditor, the Secretary of State, and the Attorney General. The Board employs a professional staff to carry out its policies. The Board and staff are assisted by a seventeen member Investment Advisory Council.

The SBI invests the pension assets of the three statewide public employee retirement systems:

- Minnesota State Retirement System (MSRS)
- Public Employees Retirement Association (PERA)
- Teachers Retirement Association (TRA)

The SBI also invests the cash balances of state government funds and assets of several trust funds.

Statutory Purpose

According to statute, state assets are to be responsibly invested by the SBI to maximize the total rate of return without incurring undue risk. Only a small portion of the SBI's equity holdings are in non-pension accounts. The focus, therefore, of the SBI's proxy voting activities is the extensive domestic and international equity holdings within the pension asset portfolios.

Fiduciary Responsibility

As fiduciaries of pension assets, members of the Board and the executive director owe a fiduciary duty to the members of the plans, to the taxpayers of the state and political subdivisions who help to finance the plans, and to the State of Minnesota.²

In addition to the general standard of fiduciary conduct, members of the Board, the executive director, the members of the Investment Advisory Council, staff, and members of Board committees must carry out their duties in accordance with the prudent person standard as articulated in statute.³

Voting Process

The Board recognizes its fiduciary responsibility to cast votes on proxy issues. The Board delegates proxy voting responsibilities to its Proxy Committee. Each Board member appoints one member to the Proxy Committee. The four member Committee meets only if it has a quorum and casts votes on proxy issues based on a majority vote of those present. In the unusual event that it reaches a tie vote or a quorum is not present, the Committee will cast a vote to abstain.

The Committee has formulated guidelines by which it casts votes on a wide range of corporate governance and social responsibility issues. These guidelines encompass both domestic and international proxy issues. Each year the Committee reviews existing guidelines and determines which issues it will review on a case-by-case basis. The Proxy Committee also may review certain corporate governance issues pertaining to companies headquartered in Minnesota.

Domestic voting: The SBI directly votes shares held in all domestic equity manager portfolios.

International voting: The SBI delegates to international equity managers the voting of shares held in the managers' portfolios following the Proxy Voting Guidelines, where feasible. The SBI believes that several factors affecting the voting of international proxies, including time constraints and lack of company specific information, support the conclusion that the SBI's international equity managers can more efficiently and effectively vote the proxies in their portfolios.

Corporate Governance Issues

Routine Matters

In general, the SBI **supports** management on routine matters of corporate governance. These issues include:

- uncontested election of directors.
- selection of auditors and approval of financial statements.
- management proposals on non-executive compensation issues including savings plans and stock options.
- limits on director and officer liability or increases in director and officer indemnification permitted under the laws of the state of incorporation.

The SBI directs the Proxy Committee, at its discretion, to review the positions taken by directors and withhold votes from or vote against some or all of the directors standing for election if they have taken positions on issues which are potentially not in the best interests of shareholders.

Shareholder Rights

In general, the SBI **opposes** proposals that would restrict shareholder ability to effect change. Such proposals include:

- instituting supermajority requirements to ratify certain events.
- · creating classified boards.
- barring shareholders from participating in the determination of the rules governing the board's actions, such as quorum requirements and the duties of directors.
- prohibiting or limiting shareholder action by written consent.
- granting certain stockholders superior voting rights over other stockholders.

In general, the SBI **supports** proposals that preserve shareholder rights to effect change. Such proposals include:

- having boards of directors comprised of a majority of independent directors.
- having compensation committees comprised entirely of independent directors.
- requiring shareholder approval of poison pill plans.
- repealing classified boards.
- adopting secret ballot of proxy votes.
- reinstating cumulative voting.
- adopting anti-greenmail provisions.

Executive Compensation

In general, the SBI **supports** efforts to have executive compensation linked to a company's long-term performance and to encourage full disclosure of compensation packages for principal executives. Accordingly, the SBI evaluates compensation packages on a case-by-case basis, including compensation agreements that are contingent upon corporate change in control.

Buyouts

In general, the SBI supports friendly takeovers and management buyouts.

Special Cases

The SBI evaluates the following proposals on a case-by-case basis:

- hostile takeovers.
- recapitalization plans.
- contested election of directors.

Social Responsibility Issues

Tobacco

The SBI supports shareholder resolutions that call for a company to reduce its involvement in tobacco production, product marketing and other related lines of business in order to diversify its business in a manner that will reduce or eliminate potential liability to legal claims associated with tobacco that may negatively impact the value of the SBI's holdings.

In furtherance of this policy, the SBI has sponsored and co-sponsored shareholder resolutions to reduce youth access to tobacco products, to request companies to voluntarily comply with FDA regulations, to eliminate smoking in restaurants, and other tobacco related issues.

Northern Ireland

The SBI **supports** resolutions that call for the adoption of the MacBride Principles as a means to encourage equal employment opportunities in Northern Ireland.

The SBI **supports** resolutions that request companies to submit reports to shareholders concerning their labor practices or their sub-contractors' labor practices in Northern Ireland.

In addition to casting proxy votes, the SBI sponsors and cosponsors Northern Ireland resolutions as required by *Minnesota Statutes*, Section 11A.241.

Environmental Protection/Awareness

In general, the SBI **supports** resolutions that require a corporation to report or disclose to shareholders company efforts in the environmental arena. Resolutions that request the adoption of various environmental policies are evaluated on a case-by-case basis.

Sudan

Minnesota Statutes, Section 11A.243 requires the SBI to make its best efforts to identify all "scrutinized companies" with operations in Sudan in which the SBI has direct or indirect holdings or could possibly have holdings in the future. The SBI will engage each scrutinized company. The legislation calls for the SBI to: encourage companies with inactive business operations to continue to refrain from initiating active operations; and to notify companies with active business operations that it may be subject to divestment by the State Board of Investment. In general, the SBI supports resolutions consistent with this legislation.

Iran

Minnesota Statutes, Section 11A.244 requires the SBI to make its best efforts to identify all "scrutinized companies" with operations in Iran in which the SBI has direct or indirect holdings or could possibly have holdings in the future. The SBI will engage each scrutinized company. The legislation calls for the SBI to: encourage companies with inactive business operations to continue to refrain from initiating active operations; and to notify companies with active business operations that it may be subject to divestment by the State Board of Investment. In general, the SBI supports resolutions consistent with this legislation.

Other Issues

In general, the SBI **supports** proposals that require a company to report or disclose to shareholders company efforts concerning a variety of social responsibility issues. In the past, these reporting resolutions have included issues such as affirmative action programs, animal testing procedures, and nuclear plan safety procedures.

In general, the SBI **opposes** proposals that require a company to institute a specific business action in response to such issues. As an example, the SBI voted against a shareholder proposal which would have required a utility to phase out operations of a nuclear power plant.

¹ Minnesota Statutes, Section 11A.01.

² Minnesota Statutes, Section 356A.04, subdivision 1.

³ Minnesota Statutes, Section 11A.09, and Section 356A.04, subdivision 2.

TAB D

INVESTMENT ADVISORY COUNCIL REPORT

DATE:

February 27, 2013

TO:

Members, State Board Investment

FROM:

Members, Investment Advisory Council

The Investment Advisory Council met on Tuesday, February 19, 2013 to consider the following agenda items:

• Review the manager performance for the period ending December 31, 2012.

INFORMATION ITEMS:

1. Review the manager performance for the period ending December 31, 2012.

• Domestic Equity Program

For the period ending December 31, 2012, the **Domestic Equity Program** outperformed the benchmark for the quarter and one-year periods and underperformed over the three and five-year time periods.

Time period	Total Program	Russell 3000
Quarter	0.3%	0.2%
1 Year	16.6%	16.4%
3 Years	11.1%	11.2%
5 Years	1.9%	2.0%

The performance evaluation reports for the domestic equity managers start on the **blue page A-1** of this Tab.

• Fixed Income Program

For the period ending December 31, 2012, the **Fixed Income Program** outperformed over all time periods.

Time period	Total Program	Barclays Capital Aggregate
Quarter	0.6%	0.2%
1 Year	6.7%	4.2%
3 Years	7.6%	6.2%
5 Years	6.4%	5.9%

The performance evaluation reports for the fixed income managers start on the blue page A-57 of this Tab.

• International Equity Program

For the period ending December 31, 2012, the **International Equity Program** matched the benchmark for the quarter and outperformed over all other time periods.

Time Period	Total Program	Int'l Equity Asset Class Target*
Quarter	5.9%	5.9%
1 Year	17.6%	16.8%
3 Year	4.3%	3.9%
5 Year	-2.7%	-2.9%

^{*} Since 6/1/08 the International Equity asset class target is the Standard MSCI ACWI ex U.S. (net). From 10/1/07 to 5/31/08, the International Equity asset class target was the Provisional Standard MSCI ACWI ex U.S. (net). From 10/1/03 to 9/30/07, the target was the MSCI ACWI Free ex. U.S. (net).

The performance evaluation reports for the international equity managers start on the **blue page A-71** of this Tab.



STATE BOARD OF INVESTMENT

Domestic Equity Manager Evaluation Reports

Fourth Quarter, 2012

Domestic Equity

Table of Contents

	Page
Domestic Equity Performance Summary	A-5
Active Manager Performance Summary (quarter, 1, 3, 5 year periods)	A-6
Semi-Passive and Passive Manager Performance Summary (quarter, 1, 3, 5 year periods)	A-7
Active Manager Performance Summary (by calendar year)	A-8
Semi-Passive and Passive Manager Performance Summary (by calendar years)	A-9
Large Cap Core (R1000)	A-13
Large Cap Growth (R1000 Growth)	A-19
Large Cap Value (R1000 Value)	A-29
Small Cap Growth (R2000 Growth)	A-37
Small Cap Value (R2000 Value)	A-43
Semi-Passive and Passive	A-51

COMBINED RETIREMENT FUNDS ACTIVE DOMESTIC EQUITY MANAGERS Periods Ending December, 2012

1 Year

Actual Bmk Actual Bmk Actual Bmk

3 Years

5 Years

Quarter

	%	%	%	%	%	%	%	% %		
Russell 1000 Core Aggregate	-0.7	0.1	12.4	16.4	7.1	11.1	-1.1	1.9		
Russell 1000 Growth Aggregate	-1.2	-1.3	15.5	15.3	11.2	11.4	2.6	3.1		
Russell 1000 Value Aggregate	1.7	1.5	16.9	17.5	9.6	10.9	0.2	0.6		
Russell 2000 Growth Aggregate	-1.1	0.4	12.0	14.6	10.9	12.8	-0.6	3.5		
Russell 2000 Value Aggregate	3.9	3.2	19.6	18.1	14.2	11.6	5.4	3.5		
Active Manager Aggregate	0.3	0.5	15.4	16.3	10.4	11.3	1.1	2.2		
Semi-Passive Aggregate	0.2	0.1	17.7	16.4	11.5	11.1	2.2	1.9		
Passive Manager (BlackRock)	0.3	0.2	16.4	16.4	11.2	11.2	2.1	2.0		
Total Aggregate	0.3	0.2	16.6	16.4	11.1	11.2	1.9	2.0		
Russell 3000 Index		0.2		16.4		11.2		2.0		
									7.35	
	201	2	201	1	201	0	200	9	200	08
	201 Actual %	2 Bmk %	201 Actual %	1 Bmk %	201 Actual %	0 Bmk %	200 Actual %		200 Actual %	08 Bmk %
Russell 1000 Core Aggregate	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual %	Bmk
Russell 1000 Core Aggregate Russell 1000 Growth Aggregate	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %
	Actual %	Bmk % 16.4	Actual %	Bmk %	Actual %	Bmk % 16.1	Actual % 27.6	Bmk % 28.4	Actual % -39.6	Bmk % -37.6
Russell 1000 Growth Aggregate	Actual % 12.4 15.5	Bmk % 16.4 15.3	Actual % -3.5 -0.4	Bmk % 1.5 2.6	Actual % 13.3 19.3	Bmk % 16.1 16.7	Actual % 27.6 44.5	Bmk % 28.4 37.2	Actual % -39.6 -42.7	Bmk % -37.6 -38.4
Russell 1000 Growth Aggregate Russell 1000 Value Aggregate	Actual % 12.4 15.5 16.9	Bmk % 16.4 15.3 17.5	Actual % -3.5 -0.4 -2.1	Bmk % 1.5 2.6 0.4	Actual % 13.3 19.3 15.0	Bmk % 16.1 16.7 15.5	Actual % 27.6 44.5 23.8	Bmk % 28.4 37.2 19.7 34.5	Actual % -39.6 -42.7 -38.0	Bmk % -37.6 -38.4 -36.8
Russell 1000 Growth Aggregate Russell 1000 Value Aggregate Russell 2000 Growth Aggregate	Actual % 12.4 15.5 16.9 12.0	Bmk % 16.4 15.3 17.5 14.6	Actual % -3.5 -0.4 -2.1 -5.6	Bmk % 1.5 2.6 0.4 -2.9	Actual % 13.3 19.3 15.0 29.1	Bmk % 16.1 16.7 15.5 29.1	Actual % 27.6 44.5 23.8 33.6	Bmk % 28.4 37.2 19.7 34.5	Actual % -39.6 -42.7 -38.0 -46.8	Bmk % -37.6 -38.4 -36.8 -38.5
Russell 1000 Growth Aggregate Russell 1000 Value Aggregate Russell 2000 Growth Aggregate Russell 2000 Value Aggregate	Actual % 12.4 15.5 16.9 12.0 19.6	Bmk % 16.4 15.3 17.5 14.6 18.1	Actual % -3.5 -0.4 -2.1 -5.6 -4.5	Bmk % 1.5 2.6 0.4 -2.9 -5.5	Actual % 13.3 19.3 15.0 29.1 30.5	Bmk % 16.1 16.7 15.5 29.1 24.5	Actual % 27.6 44.5 23.8 33.6 36.3	Bmk % 28.4 37.2 19.7 34.5 20.6	Actual % -39.6 -42.7 -38.0 -46.8 -36.1	Bmk % -37.6 -38.4 -36.8 -38.5 -28.9
Russell 1000 Growth Aggregate Russell 1000 Value Aggregate Russell 2000 Growth Aggregate Russell 2000 Value Aggregate Active Manager Aggregate	Actual % 12.4 15.5 16.9 12.0 19.6	Bmk % 16.4 15.3 17.5 14.6 18.1 16.3	Actual % -3.5 -0.4 -2.1 -5.6 -4.5 -2.7	Bmk % 1.5 2.6 0.4 -2.9 -5.5 0.0	Actual % 13.3 19.3 15.0 29.1 30.5 19.7	Bmk % 16.1 16.7 15.5 29.1 24.5 18.7	Actual % 27.6 44.5 23.8 33.6 36.3 32.3	Bmk % 28.4 37.2 19.7 34.5 20.6 27.9	Actual % -39.6 -42.7 -38.0 -46.8 -36.1 -40.5	Bmk % -37.6 -38.4 -36.8 -38.5 -28.9 -36.9
Russell 1000 Growth Aggregate Russell 1000 Value Aggregate Russell 2000 Growth Aggregate Russell 2000 Value Aggregate Active Manager Aggregate Semi-Passive Aggregate	Actual % 12.4 15.5 16.9 12.0 19.6 15.4 17.7	Bmk % 16.4 15.3 17.5 14.6 18.1 16.3 16.4	Actual % -3.5 -0.4 -2.1 -5.6 -4.5 -2.7	Bmk % 1.5 2.6 0.4 -2.9 -5.5 0.0 1.5	Actual % 13.3 19.3 15.0 29.1 30.5 19.7 15.2	Bmk % 16.1 16.7 15.5 29.1 24.5 18.7 16.1	Actual % 27.6 44.5 23.8 33.6 36.3 32.3 28.5	Bmk % 28.4 37.2 19.7 34.5 20.6 27.9 28.4	Actual % -39.6 -42.7 -38.0 -46.8 -36.1 -40.5 -37.2	Bmk % -37.6 -38.4 -36.8 -38.5 -28.9 -36.9 -37.6

COMBINED RETIREMENT FUNDS ACTIVE DOMESTIC EQUITY MANAGERS

Periods Ending December, 2012

Performance versus Russell Style Benchmarks for All Periods

									Si	ince		
	Qua	arter	1 3	/ear	3 Y	ears	5 Y	ears	Incep	tion (1)	Market	
	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	Value	Pool
	%	%	%	%	%	%	%	%	%	%	(in millions)	%
LARGE CAP												
Russell 1000 Core												
New Amsterdam Partners	-1.6	0.1	8.2	16.4	6.9	11.1	-0.7	1.9	9.2	9.1	\$392.0	1.7%
UBS Global	0.1	0.1	16.7	16.4	7.3	11.1	0.5	1.9	8.1	8.3	\$402.4	1.8%
Aggregate	-0.7	0.1	12.4	16.4	7.1	11.1	-1.1	1.9			\$794.4	3.5%
Russell 1000 Growth												
INTECH	-1.6	-1.3	17.8	15.3	12.1	11.4	1.6	3.1	4.2	5.2	\$388.6	1.7%
Jacobs Levy	-1.8	-1.3	13.0	15.3	12.9	11.4	1.7	3.1	3.5	5.2	\$350.3	1.5%
Knelman Asset Mgmt.	-0.7	-1.3	16.6	15.3	10.0	11.4	1.0	3.1	4.4	5.2	\$71.1	0.3%
Sands Capital	-0.8	-1.3	24.2	15.3	17.4	11.4	7.4	3.1	7.5	5.2	\$355.4	1.6%
Winslow-Large Cap	-1.4	-1.3	13.7	15.3	9.9	11.4	2.7	3.1	6.5	5.2	\$155.8	0.7%
Zevenbergen Capital	-0.5	-1.3	8.0	15.3	6.2	11.4	1.3	3.1	8.4	7.7	\$322.6	1.4%
Aggregate	-1.2	-1.3	15.5	15.3	11.2	11.4	2.6	3.1			\$1,643.9	7.3%
Russell 1000 Value												
Barrow, Hanley	1.7	1.5	15.5	17.5	9.0	10.9	0.7	0.6	5.1	4.9	\$501.3	2.2%
Earnest Partners	-0.3	1.5	10.7	17.5	7.7	10.9	-0.2	0.6	4.2	4.9	\$198.3	0.9%
LSV Asset Mgmt.	3.6	1.5	20.4	17.5	10.8	10.9	0.5	0.6	5.7	4.9	\$479.5	2.1%
Systematic Financial Mgmt.	0.3	1.5	18.2	17.5	8.9	10.9	-1.1	0.6	4.7	4.9	\$334.7	1.5%
Aggregate	1.7	1.5	16.9	17.5	9.6	10.9	0.2	0.6			\$1,513.7	6.7%
SMALL CAP												
Russell 2000 Growth												
McKinley Capital	3.7	0.4	23.2	14.6	13.4	12.8	-1.0	3.5	3.8	6.2	\$250.2	1.1%
Next Century Growth	-7.1	0.4	1.9	14.6	8.0	12.8	-2.9	3.5	0.5	1.7	\$261.5	1.2%
Turner Investment Partners	0.7	0.4	13.1	14.6	11.6	12.8	2.0	3.5	6.1	6.2	\$296.2	1.3%
Aggregate	-1.1	0.4	12.0	14.6	10.9	12.8	-0.6	3.5			\$807.9	3.6%
Russell 2000 Value												
Goldman Sachs	2.4	3.2	16.6	18.1	14.5	11.6	7.0	3.5	7.8	6.1	\$183.3	0.8%
Hotchkis & Wiley	5.2	3.2	24.1	18.1	16.6	11.6	7.6	3.5	6.0	6.1	\$158.2	0.7%
Martingale Asset Mgmt.	4.7	3.2	20.1	18.1	13.2	11.6	2.8	3.5	4.8	6.1	\$142.3	0.6%
Peregrine Capital	3.8	3.2	18.8	18.1	13.2	11.6	5.1	3.5	9.7	8.9	\$247.3	1.1%
Aggregate	3.9	3.2	19.6	18.1	14.2	11.6	5.4	3.5			\$731.1	3.2%
Active Mgr. Aggregate (2)	0.3	0.5	15.4	16.3	10.4	11.3	1.1	2.2			\$5,491.0	24.3%

⁽¹⁾ Since retention by the SBI. Time period varies for each manager.

Note: All aggregates include the performance of terminated managers.

⁽²⁾ The Active Manager Aggregate Benchmark is the aggregate of the weighted average of the active manager benchmarks and is not the Russell 3000.

COMBINED RETIREMENT FUNDS DOMESTIC EQUITY MANAGERS Periods Ending December, 2012 Versus Manager Benchmarks

	Ouz	ırter	1 Y	ear	3 V	ears	5 V	ears	10 P.O.	nce tion (1)	Market	
	Actual				Actual		Actual		Actual		Value	Pool
	%	%	%	%	%	%	%	%	%	%	(in millions)	%
SEMI-PASSIVE MANAGE	RS (2)											
BlackRock Institutional	0.5	0.1	19.0	16.4	11.3	11.1	2.0	1.9	8.3	8.0	\$2,547.7	11.3%
INTECH	0.3	0.1	16.6	16.4					10.4	9.9	\$1,832.2	8.1%
JP Morgan	0.2	0.1	17.6	16.4	11.6	11.1	2.9	1.9	8.3	8.0	\$3,023.7	13.4%
Mellon Capital	-0.3	0.1	17.3	16.4	11.7	11.1	1.8	1.9	7.6	8.0	\$1,897.7	8.4%
Semi-Passive Aggregate (R1000)	0.2	0.1	17.7	16.4	11.5	11.1	2.2	1.9			\$9,301.2	41.1%
PASSIVE MANAGER (R30	00)											
BlackRock Institutional	0.3	0.2	16.4	16.4	11.2	11.2	2.1	2.0	7.7	7.6	\$7,817.4	34.6%
									Since	1/1/84	8	
Total Aggregate (3)	0.3	0.2	16.6	16.4	11.1	11.2	1.9	2.0	9.7	9.9	\$22,609.7	100.0%
Russell 3000		0.2		16.4		11.2		2.0		10.3		
Russell 1000		0.1		16.4		11.1		1.9		10.4		
Russell 2000		1.9		16.3		12.2		3.6		8.9		

⁽¹⁾ Since retention by the SBI. Time period varies for each manager.

Note: All aggregates include the performance of terminated managers.

⁽²⁾ Semi-Passive managers' benchmark is the Russell 1000 index beginning 1/1/04 and was the Completeness Fund benchmark prior to 1/1/04.

⁽³⁾ The Total Aggregate benchmark is the Russell 3000 effective 10/1/03. From 7/1/99 to 9/30/03, it was the Wilshire 5000 Investable Index. From 11/1/93 to 6/30/99, the target was the Wilshire 5000 as reported with no adjustments. Prior to 11/1/93, the Wilshire 5000 was adjusted to reflect SBI mandated restrictions, which included liquor and tobacco, American Home Products and South Africa.

COMBINED RETIREMENT FUNDS ACTIVE DOMESTIC EQUITY MANAGERS

Calendar Year Returns Versus Russell Style Benchmarks for All Periods

	20	12	2011		201	10	2009		2008	
	Actual	Bmk								
	%	%	%	%	%	%	%	%	%	%
LARGE CAP										
Russell 1000 Core										
New Amsterdam Partners	8.2	16.4	-3.0	1.5	16.2	16.1	24.8	28.4	-36.7	-37.6
UBS Global	16.7	16.4	-4.1	1.5	10.3	16.1	41.3	28.4	-41.3	-37.6
Aggregate	12.4	16.4	-3.5	1.5	13.3	16.1	27.6	28.4	-39.6	-37.6
Russell 1000 Growth										
INTECH	17.8	15.3	0.1	2.6	19.5	16.7	34.0	37.2	-42.8	-38.4
Jacobs Levy	13.0	15.3	6.6	2.6	19.5	16.7	37.1	37.2	-44.9	-38.4
Knelman Asset Mgmt.	16.6	15.3	-3.3	2.6	18.1	16.7	31.1	37.2	-39.9	-38.4
Sands Capital	24.2	15.3	2.7	2.6	26.8	16.7	71.6	37.2	-48.6	-38.4
Winslow-Large Cap	13.7	15.3	0.1	2.6	16.8	16.7	40.9	37.2	-39.1	-38.4
Zevenbergen Capital	8.0	15.3	-9.8	2.6	22.9	16.7	57.4	37.2	-43.2	-38.4
Aggregate	15.5	15.3	-0.4	2.6	19.3	16.7	44.5	37.2	-42.7	-38.4
Russell 1000 Value										
Barrow, Hanley	15.5	17.5	1.7	0.4	10.4	15.5	23.2	19.7	-35.2	-36.8
Earnest Partners	10.7	17.5	-4.7	0.4	18.5	15.5	31.6	19.7	-39.8	-36.8
LSV Asset Mgmt.	20.4	17.5	-0.8	0.4	14.0	15.5	24.0	19.7	-39.3	-36.8
Systematic Financial Mgmt.	18.2	17.5	-7.4	0.4	18.1	15.5	23.2	19.7	-40.6	-36.8
Aggregate	16.9	17.5	-2.1	0.4	15.0	15.5	23.8	19.7	-38.0	-36.8
SMALL CAP										
Russell 2000 Growth										
McKinley Capital	23.2	14.6	-7.9	-2.9	28.5	29.1	28.0	34.5	-49.1	-38.5
Next Century Growth	1.9	14.6	-4.5	-2.9	29.6	29.1	35.0	34.5	-49.3	-38.5
Turner Investment Partners	13.1	14.6	-4.8	-2.9	29.0	29.1	36.9	34.5	-41.9	-38.5
Aggregate	12.0	14.6	-5.6	-2.9	29.1	29.1	33.6	34.5	-46.8	-38.5
Russell 2000 Value										
Goldman Sachs	16.6	18.1	1.3	-5.5	27.0	24.5	27.8	20.6	-26.8	-28.9
Hotchkis & Wiley	24.1	18.1	-10.8	-5.5	43.4	24.5	62.5	20.6	-44.1	-28.9
Martingale Asset Mgmt.	20.1	18.1	-5.2	-5.5	27.4	24.5	19.4	20.6	-33.8	-28.9
Peregrine Capital	18.8	18.1	-4.1	-5.5	27.3	24.5	45.8	20.6	-39.4	-28.9
Aggregate	19.6	18.1	-4.5	-5.5	30.5	24.5	36.3	20.6	-36.1	-28.9
Active Mgr. Aggregate (1)	15.4	16.3	-2.7	0.0	19.7	18.7	32.3	27.9	-40.5	-36.9

The Active Manager Aggregate Benchmark is the aggregate of the weighted average of the active manager benchmarks and is not the Russell 3000.

Note: All aggregates include the performance of terminated managers. Returns shown are full-year returns only.

Performance of managers hired during a calendar year are reported beginning with the following calendar year.

COMBINED RETIREMENT FUNDS DOMESTIC EQUITY MANAGERS Calendar Year Returns Versus Manager Benchmarks

	20	12	201	11	201	10	200	09	9 2008		
	Actual	Bmk									
	%	%	%	%	%	%	%	%	%	%	
SEMI-PASSIVE MANAGERS											
BlackRock Institutional	19.0	16.4	1.6	1.5	14.0	16.1	27.6	28.4	-37.1	-37.6	
INTECH	16.6	16.4	2.9	1.5							
JP Morgan	17.6	16.4	1.1	1.5	16.8	16.1	32.1	28.4	-37.1	-37.6	
Mellon Capital	17.3	16.4	4.6	1.5	13.7	16.1	25.6	28.4	-37.6	-37.6	
Semi-Passive Aggregate	17.7	16.4	2.2	1.5	15.2	16.1	28.5	28.4	-37.2	-37.6	
(R1000)											
PASSIVE MANAGER (R3000)											
BlackRock Institutional	16.4	16.4	0.8	1.0	17.2	16.9	28.2	28.3	-37.1	-37.3	
Total Aggregate	16.6	16.4	0.4	1.0	17.1	16.9	29.6	28.3	-38.1	-37.3	
Total Aggregate	10.0	10.4	0.4	1.0	17.1	10.9	29.0	20.3	-30.1	-3/.3	
Russell 3000		16.4		1.0		16.9		28.3		-37.3	
Russell 1000		16.4		1.5		16.1		28.4		-37.6	
Russell 2000		16.3		-4.2		26.9		27.2		-33.8	

Note: All aggregates include the performance of terminated managers. Returns shown are full-year returns only.

Performance of managers hired during a calendar year are reported beginning with the following calendar year.

Large Cap Core (R1000)

Large Cap Core (R1000)

Table of Contents

	Page
New Amsterdam Partners LLC	A-14
UBS Global Asset Management (Americas) Inc.	A-15

NEW AMSTERDAM PARTNERS LLC Periods Ending December, 2012

Portfolio Manager: Michelle Clayman

Assets Under Management: \$392,020,484

Investment Philosophy

New Amsterdam Partners believes that investment results are evaluated by actual return, and therefore, investment opportunities should be evaluated by expected return. They believe that all valid techniques depend on forecasts of the amounts and timing of future cash flows. Thus, the firm focuses on forecasted earnings growth, yield, price-to-book ratio, and forecasted return on equity. They believe that the disciplined application of their valuation techniques, in conjunction with sound financial analysis of companies, is the key to understanding and maximizing investment returns.

Staff Comments

New Amsterdam's growth at a reasonable price (GARP) investment process has struggled as performance has lagged the Russell 1000 over all time periods shown, with the exception of since inception. For the one year return, sector allocation and stock selection were negative across all sectors.

The strategy remains the same and Michelle Clayman, founder and majority owner, continues to lead the investment team. Staff continues to monitor this account closely.

Quantitative Evaluation

	Actual	Russell Index
Last Quarter	-1.6%	0.1%
Last 1 year	8.2	16.4
Last 2 years	2.5	8.7
Last 3 years	6.9	11.1
Last 4 years	11.1	15.2
Last 5 years	-0.7	1.9
Since Inception (1) (4/94)	9.2	9.1

Recommendation

No action required.

(1) New Amsterdam Partners' published benchmark is the Russell 1000 Core beginning 10/1/03. Prior to that date it was the Russell Midcap index.

NEW AMSTERDAM PARTNERS Rolling Five Year VAM vs. Russell Index (1)



UBS GLOBAL ASSET MANAGEMENT (AMERICAS) INC. Periods Ending December, 2012

Portfolio Manager: John Leonard

Assets Under Management: \$402,423,398

Investment Philosophy

UBS uses a relative value approach to equity investing. They believe that the market price will ultimately reflect the present value of the cash flows the security will generate for the investor. They focus on a bottom-up stock selection process to provide insight into finding opportunistic investments. UBS uses a proprietary discounted free cash flow model as the primary analytical tool for estimating the intrinsic value of a company.

Quantitative Evaluation

	Actual	(R1000 Core)
Last Quarter	0.1%	0.1%
Last 1 year	16.7	16.4
Last 2 years	5.8	8.7
Last 3 years	7.3	11.1
Last 4 years	14.9	15.2
Last 5 years	0.5	1.9
Since Inception	8.1	8.3
(7/93)		

Staff Comments

Short term performance relative to the Russell 1000 improved as stock selection had a positive impact.

The investment team was restructured during the quarter, and included downsizing the Analyst team from 12 to 9 people. A senior US Equity Strategist was also appointed. The investment strategy remains the same. Staff continues to monitor this account closely.

Recommendation

No action required.

UBS GLOBAL ASSET MANAGEMENT, INC. Rolling Five Year VAM vs. Russell 1000 Core



This page left blank intentionally.

Large Cap Growth (R1000 Growth)

Large Cap Growth (R1000 Growth)

Table of Contents

	Page
INTECH Investment Management LLC	A-20
Jacobs Levy Equity Management, Inc.	A-21
Knelman Asset Management Group, LLC	A-22
Sands Capital Management, LLC	A-23
Winslow Capital Management, Inc.	A-24
Zevenbergen Capital Investments LLC	A-25

INTECH INVESTMENT MANAGEMENT LLC Periods Ending December, 2012

Portfolio Manager: Adrian Banner Assets Under Management: \$388,581,269

Investment Philosophy

Through the application of a proprietary mathematical process, the investment strategy is designed to determine more efficient weightings of the securities within the Russell 1000 Growth benchmark. specific sector or security selection decisions based on fundamentals are required. Risk parameters include: 1) minimize absolute standard deviation or maximize information ratio, 2) security positions limited to lesser of 2.5% or 10 times maximum index security weight, and 3) beta equal to or less than benchmark beta. Target security positions are established using an optimization routine designed to build a portfolio that will outperform a passive benchmark over the long term. Rebalancing to target proportions occurs every six (6) business days, and partial re-optimization occurs weekly.

Staff Comments

Effective November 29, 2012, Adrian Banner, CIO, assumed the role of CEO, replacing Jennifer Young, who stepped down. There were additional staffing changes as the reporting structure to Adrian shifted. Staff will monitor the changes and any impact closely.

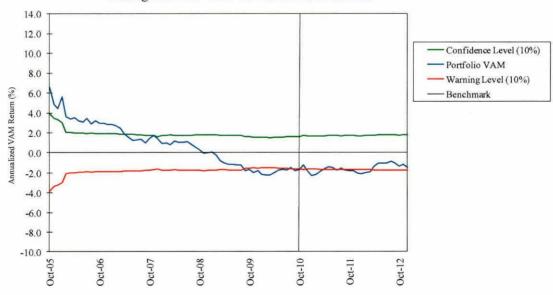
Quantitative Evaluation

	Actual	R1000 Growth
Last Quarter	-1.6%	-1.3%
Last 1 year	17.8	15.3
Last 2 years	8.6	8.8
Last 3 years	12.1	11.4
Last 4 years	17.2	17.3
Last 5 years	1.6	3.1
Since Inception	4.2	5.2
(1/05)		

Recommendation

No action required.

INTECH INVESTMENT MANAGEMENT LLC Rolling Five Year VAM vs. Russell 1000 Growth



JACOBS LEVY EQUITY MANAGEMENT, INC. Periods Ending December, 2012

Portfolio Manager: Bruce Jacobs and Ken Levy

Assets Under Management: \$350,332,553

Investment Philosophy

The strategy combines human insight and intuition, finance and behavioral theory, and state-of-the-art quantitative and statistical methods. Security expected returns generated from numerous models become inputs for the firm's proprietary portfolio optimizer. The optimizer is run daily with the objective of maximizing the information ratio, while ensuring proper diversification across market inefficiencies, securities, industries, and sectors. Extensive data scrubbing is conducted on a daily basis using both human and technology resources. Liquidity, trading costs, and investor guidelines are incorporated within the optimizing process.

Staff Comments

Staff has no concerns with Jacobs Levy at this time.

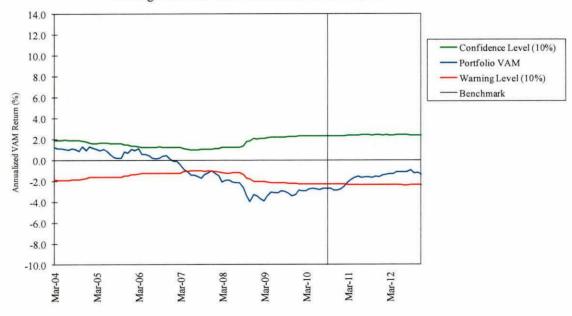
Quantitative Evaluation

	Actual	R1000 Growth
Last Quarter	-1.8%	-1.3%
Last 1 year	13.0	15.3
Last 2 years	9.8	8.8
Last 3 years	12.9	11.4
Last 4 years	18.5	17.3
Last 5 years	1.7	3.1
Since Inception	3.5	5.2
(1/05)		

Recommendation

No action required.

JACOBS LEVY EQUITY MANAGEMENT Rolling Five Year VAM vs. Russell 1000 Growth



KNELMAN ASSET MANAGEMENT GROUP, LLC Periods Ending December, 2012

Portfolio Manager: Kip Knelman Assets Under Management: \$71,106,529

Investment Philosophy

The strategy invests in companies exhibiting substantial growth opportunities, strong business models, solid management teams, and the probability for positive earnings surprises. The approach emphasizes earnings growth as the fundamental driver of stock prices over time. The process combines quantitative, qualitative and valuation criteria. The quantitative component addresses fundamentals and is focused on operating trends. Qualitative analysis involves confirmation of company fundamentals through discussions with company contacts and related parties. Valuation models focus on relative rankings of the fundamentals within the industry, the market overall and the company itself.

Staff Comments

The portfolio performance relative to the Russell 1000 Growth has improved over the quarter and one year. There have been no owner or personnel changes and the investment process remains the same at Knelman. Staff will continue to monitor performance.

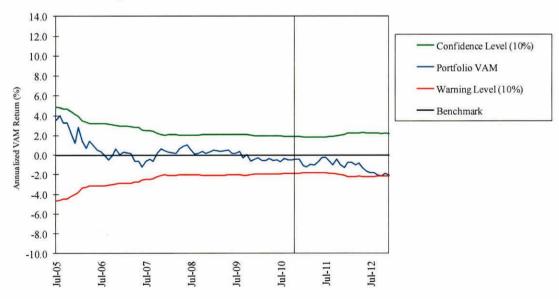
Quantitative Evaluation

	Actual	R1000 Growth
Last Quarter	-0.7%	-1.3%
Last 1 year	16.6	15.3
Last 2 years	6.2	8.8
Last 3 years	10.0	11.4
Last 4 years	14.9	17.3
Last 5 years	1.0	3.1
Since Inception	4.4	5.2
(1/05)		

Recommendation

No action required.

KNELMAN ASSET MANAGEMENT, LLC Rolling Five Year VAM vs. Russell 1000 Growth



SANDS CAPITAL MANAGEMENT, LLC Periods Ending December, 2012

Portfolio Manager: Frank Sands, Jr.

Assets Under Management: \$355,436,679

Investment Philosophy

The manager invests in high-quality, seasoned and growing businesses. Bottom-up, company-focused, long-term oriented research is the cornerstone of the investment process. The strategy focuses on six (6) key investment criteria: 1) sustainable above average earnings growth; 2) leadership position in a promising business space; 3) significant competitive advantages or unique business franchise; 4) management with a clear mission and value added focus; 5) financial strength; and 6) rational valuation relative to the overall market and the company's business prospects.

Staff Comments

Sands has positive relative return to the Russell 1000 Growth for all time periods shown. Staff anticipates high tracking error for this portfolio given Sands active share approach, concentrated portfolio, and long-term view of the companies in the portfolio.

Quantitative Evaluation

	Actual	R1000 Growth
Last Quarter	-0.8%	-1.3%
Last 1 year	24.2	15.3
Last 2 years	12.9	8.8
Last 3 years	17.4	11.4
Last 4 years	29.1	17.3
Last 5 years	7.4	3.1
Since Inception	7.5	5.2
(1/05)		

Recommendation

No action required.

SANDS CAPITAL MANAGEMENT, LLC Rolling Five Year VAM vs. Russell 1000 Growth



WINSLOW CAPITAL MANAGEMENT, LLC Periods Ending December, 2012

Portfolio Manager: Bart Wear and Justin Kelly

Assets Under Management: \$155,834,109

Investment Philosophy

The strategy identifies companies that can grow earnings above consensus expectations to build portfolios with forward weighted earnings growth in the range of 15-20% annually. A quantitative screen is employed for factors such as revenue and earnings growth, return on invested capital, earnings consistency, earnings revisions, low financial leverage and high free cash flow rates relative to net income. companies are subjected to a qualitative assessment within the context of industry sectors. Detailed examination of income statements, cash flow and balance sheet projections is conducted, along with a judgment on the quality of management. Attractively valued stocks are chosen based on P/E relative to the benchmark, sector peers, the company's sustainable future growth rate and return on invested capital. Final portfolio construction includes diversification by economic sectors, earnings growth rates, price/earnings ratios and market capitalizations.

Staff Comments

The portfolio has underperformed relative to the Russell 1000 Growth for all time periods shown, with the exception of since inception. Security selection has been negative and slightly offset by positive sector allocation.

There have been no owner or personnel changes and the investment process remains the same.

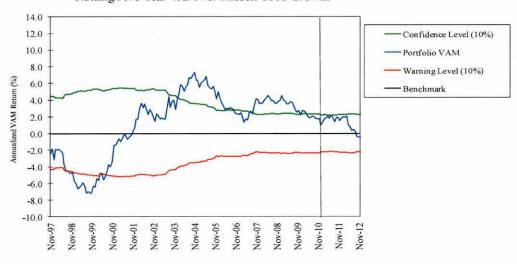
Quantitative Evaluation

	Actual	R1000 Growth
Last Quarter	-1.4%	-1.3%
Last 1 year	13.7	15.3
Last 2 years	6.7	8.8
Last 3 years	9.9	11.4
Last 4 years	17.0	17.3
Last 5 years	2.7	3.1
Since Inception	6.5	5.2
(1/05)		

Recommendation

No action required.

WINSLOW CAPITAL MANAGEMENT, LLC Rolling Five Year VAM vs. Russell 1000 Growth



ZEVENBERGEN CAPITAL INVESTMENTS LLC Periods Ending December, 2012

Portfolio Manager: Nancy Zevenbergen

Assets Under Management: \$322,562,810

Investment Philosophy

Zevenbergen is an equity growth manager. The investment philosophy is based on the belief that earnings drive stock prices while quality provides capital protection. Hence, portfolios are constructed with companies showing above-average earnings growth prospects and strong financial characteristics. They consider diversification for company size, expected growth rates and industry weightings to be important risk control factors. Zevenbergen uses a bottom-up fundamental approach to security analysis. Research efforts focus on finding companies with superior products or services showing consistent profitability. Attractive buy candidates are reviewed for sufficient liquidity and potential diversification. The firm emphasizes that they are not market timers.

Ouantitative Evaluation

	Actual	R1000 Growth
Last Quarter	-0.5%	-1.3%
Last 1 year	8.0	15.3
Last 2 years	-1.3	8.8
Last 3 years	6.2	11.4
Last 4 years	17.1	17.3
Last 5 years	1.3	3.1
Since Inception	8.4	7.7
(4/94)		

Staff Comments

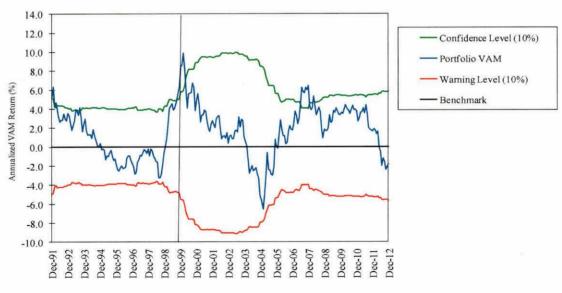
Zevenbergen's relative underperformance to the Russell 1000 Growth began in June of 2011 and has negatively impacted the one through five year returns. This concentrated growth portfolio is associated with significant volatility. Tracking error for this portfolio is within the policy range of 7-13%.

There have been no owner or personnel changes and the investment process remains the same. Staff will continue to monitor their performance.

Recommendation

No action required.

ZEVENBERGEN CAPITAL INVESTMENTS LLC Rolling Five Year VAM vs. Russell 1000 Growth



This page left blank intentionally.

Large Cap Value (R1000 Value)

Large Cap Value (R1000 Value)

Table of Contents

	Page
Barrow, Hanley, Mewhinney & Strauss, Inc.	A-30
Earnest Partners, LLC	A-31
LSV Asset Management	A-32
Systematic Financial Management, L.P.	A-33

BARROW, HANLEY, MEWHINNEY & STRAUSS, INC. Periods Ending December, 2012

Portfolio Manager: Tim Culler Assets Under Management: \$501,270,193

Investment Philosophy

The manager's approach is based on the underlying philosophy that markets are inefficient. Inefficiencies can best be exploited through adherence to a value-oriented investment process dedicated to the selection of securities on a bottom-up basis. The team does not attempt to time the market or rotate in and out of broad market sectors.

The manager remains fully invested with a defensive, conservative orientation based on the belief that superior returns can be achieved while taking below average risks. This strategy is implemented by constructing portfolios of individual stocks that exhibit price/earnings and price/book ratios significantly *below* the market and dividend yields significantly *above* the market. Risk control is achieved by limiting sector weights to 35% and industry weights to 15%. In periods of economic recovery and rising equity markets, profitability and earnings growth are rewarded by the expansion of price/earnings ratios and the generation of excess returns.

Staff Comments

Staff has no concerns with Barrow Hanley at this time.

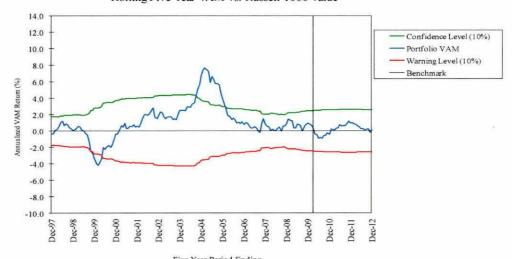
Quantitative Evaluation

	Actual	R1000 Value
Last Quarter	1.7%	1.5%
Last 1 year	15.5	17.5
Last 2 years	8.3	8.6
Last 3 years	9.0	10.9
Last 4 years	12.4	13.0
Last 5 years	0.7	0.6
Since Inception	5.1	4.9
(4/04)		

Recommendation

No action required.

BARROW, HANLEY, MEWHINNEY & STRAUSS, INC. Rolling Five Year VAM vs. Russell 1000 Value



Five Year Period Ending

Note: Area to the left of the vertical line inloudes performance prior to retention by the SBI.

Portfolio Manager: Paul Viera

Assets Under Management: \$198,310,223

Investment Philosophy

Earnest Partners utilizes its proprietary Return Pattern Recognition model and rigorous fundamental review to identify stocks with the most attractive relative returns. They have identified six performance drivers valuation measures, operating trends, market trends, growth measures, profitability measures macroeconomic measures. Extensive research is conducted to determine which combination of performance drivers, or return patterns, precede outperformance for stocks in each sector. They select stocks whose return patterns suggest favorable performance and control risk using a statistical program designed to measure and control the prospects of substantially under-performing the benchmark. The portfolio is diversified across industry groups.

Staff Comments

Staff has no concerns with Earnest at this time. Although performance has lagged over most time periods, the organization is stable and the process remains the same.

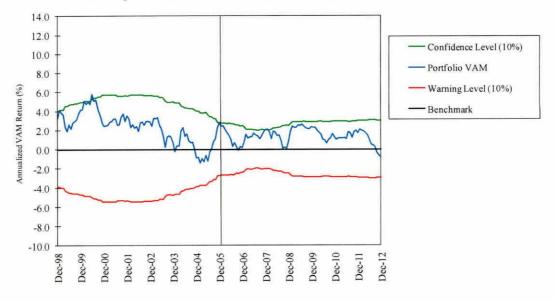
Quantitative Evaluation

	Actual	R1000 Value
Last Quarter	-0.3%	1.5%
Last 1 year	10.7	17.5
Last 2 years	2.7	8.6
Last 3 years	7.7	10.9
Last 4 years	13.3	13.0
Last 5 years	-0.2	0.6
Since Inception	4.2	4.9
(7/00)		

Recommendation

No action required.

EARNEST PARTNERS Rolling Five Year VAM vs. Russell 1000 Value



Five Year Period Ending
Note: Area to left of vertical line includes performance prior to retention by the SBI

Portfolio Manager: Josef Lakonishok

Assets Under Management: \$479,456,122

Investment Philosophy

The fundamental premise on which LSV's investment philosophy is based is that superior long-term results can be achieved by systematically exploiting the judgmental biases and behavioral weaknesses that influence the decisions of many investors. These include: the tendency to extrapolate the past too far into the future, wrongly equating a good company with a good investment irrespective of price, ignoring statistical evidence and developing a "mindset" about a company.

The strategy's primary emphasis is the use of quantitative techniques to select individual securities in what would be considered a bottom-up approach. Value factors and security selection dominate sector/industry factors as explanatory variables of performance. The competitive strength of this strategy is that it avoids introducing to the process any judgmental biases and behavioral weaknesses that often influence investment decisions.

Staff Comments

Staff has no concerns with LSV at this time.

Quantitative Evaluation

	Actual	R1000 Value
Last Quarter	3.6%	1.5%
Last 1 year	20.4	17.5
Last 2 years	9.3	8.6
Last 3 years	10.8	10.9
Last 4 years	14.0	13.0
Last 5 years	0.5	0.6
Since Inception	5.7	4.9
(4/04)		

Recommendation

No action required.

LSV ASSET MANAGEMENT Rolling Five Year VAM vs. Russell 1000 Value



Five Year Period Ending

Note: Area to the left of the vertical line includes performance prior to retention by the SBI.

SYSTEMATIC FINANCIAL MANAGEMENT, L.P. Periods Ending December, 2012

Portfolio Manager: Kevin McCreesh

Assets Under Management: \$334,676,509

Investment Philosophy

Systematic's investment strategy favors companies with low forward P/E multiples and a positive earnings catalyst. Cash flow is analyzed to confirm earnings and to avoid companies that may have employed accounting gimmicks to report earnings in excess of Wall Street expectations. The investment strategy attempts to avoid stocks in the "value trap" by focusing only on companies with confirmed fundamental improvement as evidenced by a genuine positive earnings surprise.

The investment process begins with quantitative screening that ranks the universe based on: 1) low forward P/E, and 2) a positive earnings catalyst, which is determined by a proprietary 16-factor model that is designed to be predictive of future positive earnings surprises. The screening process generates a research focus list of 150 companies, sorted by sector, upon which rigorous fundamental analysis is conducted to confirm each stock's value and catalysts for appreciation.

Staff Comments

Staff has no concerns with Systematic at this time.

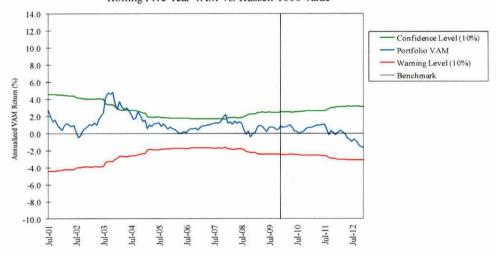
Quantitative Evaluation

	Actual	R1000 Value
Last Quarter	0.3%	1.5%
Last 1 year	18.2	17.5
Last 2 years	4.6	8.6
Last 3 years	8.9	10.9
Last 4 years	12.4	13.0
Last 5 years	-1.1	0.6
Since Inception	4.7	4.9
(4/04)		

Recommendation

No action required.

SYSTEMATIC FINANCIAL MANAGEMENT, LP Rolling Five Year VAM vs. Russell 1000 Value



Five Year Period Ending
Note: Area to the left of the vertical line includes performance prior to retention by the SBI.

This page left blank intentionally

Small Cap Growth (R2000 Growth)

Small Cap Growth (R2000 Growth)

Table of Contents

	Page
McKinley Capital Management, Inc.	A-38
Next Century Growth Investors, LLC	A-39
Turner Investment Partners, Inc.	A-40

MCKINLEY CAPITAL MANAGEMENT, LLC.

Periods Ending December, 2012

Portfolio Manager: Robert A. Gillam

Assets Under Management: \$250,150,334

Investment Philosophy

The team believes that excess market returns can be achieved through the construction and management of a diversified, fundamentally sound portfolio of inefficiently priced securities whose earnings growth rates are accelerating above market expectations. Using proprietary quantitative models, the team systematically searches for and identifies early signs of accelerating growth. The initial universe consists of growth and value stocks from all capitalization categories.

The primary model includes a linear regression model to identify common stocks that are inefficiently priced relative to the market while adjusting each security for standard deviation. The ratio of alpha to standard deviation is the primary screening value and is used to filter out all but the top 10% of stocks in its initial universe. The remaining candidates are tested for liquidity and strength of earnings. In the final portfolio construction process, qualitative aspects are examined, including economic factors, Wall Street research, and specific industry themes.

Staff Comments

McKinley's recent performance rebound continues their recovery from significant underperformance. McKinley has been consistent with their investment process and the organization has remained stable. Staff is monitoring the portfolio closely.

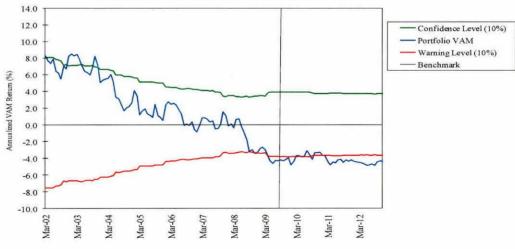
Quantitative Evaluation

	Actual	R2000 Growth
Last Quarter	3.7%	0.4%
Last 1 year	23.2	14.6
Last 2 years	6.5	5.5
Last 3 years	13.4	12.8
Last 4 years	16.9	17.9
Last 5 years	-1.0	3.5
Since Inception	3.8	6.2
(1/04)		

Recommendation

No action required.

MCKINLEY CAPITAL MANAGEMENT Rolling Five Year VAM vs. Russell 2000 Growth



Five Year Period Ending
Note: Area to left of vertical line includes performance prior to retention by the SBI.

NEXT CENTURY GROWTH INVESTORS, LLC Periods Ending December, 2012

Portfolio Manager: Thomas Press and Don Longlet

Assets Under Management: \$261,514,616

Investment Philosophy

Next Century Growth's (NCG) goal is to invest in the highest quality and fastest growing companies in America. They believe that growth opportunities exist regardless of the economic cycle. NCG uses fundamental analysis to identify companies that will surpass consensus earnings estimates, which they believe to be the number one predictor of future out-Their investment process focuses on performance. growth companies that have superior top line revenue growth (15% or greater), high profitability, and strong balance sheets, and are well poised to outperform the market. NCG believes in broad industry diversification; sector exposures are limited to twice the benchmark weighting and individual positions to five percent.

Staff Comments

Next Century has underperformed in all time periods shown. This past year was the worst relative to the benchmark in their fourteen year history. Next Century has been consistent with their investment process and the organization has remained stable. Staff will continue to track their performance.

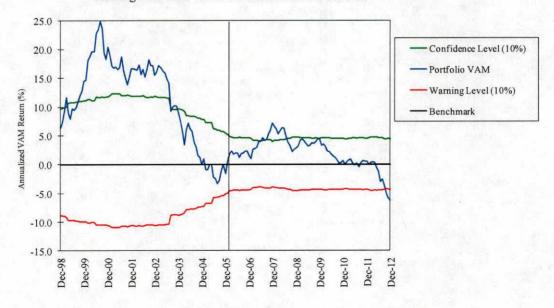
Quantitative Evaluation

	Actual	R2000 Growth
Last Quarter	-7.1%	0.4%
Last 1 year	1.9	14.6
Last 2 years	-1.4	5.5
Last 3 years	8.0	12.8
Last 4 years	14.2	17.9
Last 5 years	-2.9	3.5
Since Inception (7/00)	0.5	1.7

Recommendation

No action required.

NEXT CENTURY GROWTH INVESTORS, LLC Rolling Five Year VAM vs. Russell 2000 Growth



Five Year Period Ending

Note: Area to left of vertical line includes performance prior to the retention by the SBI.

TURNER INVESTMENT PARTNERS, INC. Periods Ending December, 2012

Portfolio Manager: William McVail

Assets Under Management: \$296,242,976

Investment Philosophy

The team's investment philosophy is based on the belief that earnings expectations drive stock prices. The team adds value primarily through stock selection and pursues a bottom-up strategy. Ideal candidates for investment are growth companies that have above average earnings prospects, reasonable valuations, favorable trading volume, and price patterns. Each security is subjected to three separate evaluation criteria: fundamental analysis (80%), quantitative screening (10%), and technical analysis (10%).

Proprietary computer models enable the team to assess the universe based on multiple earnings growth and valuation factors. The factors are specific to each economic sector. Fundamental analysis is the heart of the stock selection process and helps the team determine if a company will exceed, meet or fall short of consensus earnings expectations. Technical analysis is used to evaluate trends in trading volume and price patterns for individual stocks as the team searches for attractive entry and exit points.

Staff Comments

Staff has no concerns with Turner at this time.

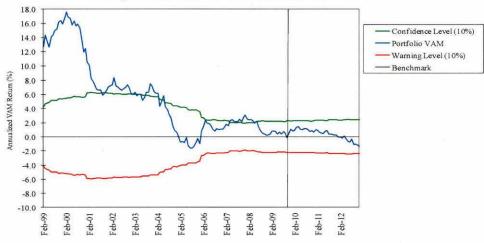
Quantitative Evaluation

	Actual	R2000 Growth
Last Quarter	0.7%	0.4%
Last 1 year	13.1	14.6
Last 2 years	3.8	5.5
Last 3 years	11.6	12.8
Last 4 years	17.5	17.9
Last 5 years	2.0	3.5
Since Inception	6.1	6.2
(1/04)		

Recommendation

No action required.

TURNER INVESTMENT PARTNERS, INC. Rolling Five Year VAM vs. Russell 2000 Growth



Five Year Period Ending

Note: Area to left of vertical line includes performance prior to retention by the SBI.

Small Cap Value (R2000 Value)

Small Cap Value (R2000 Value)

Table of Contents

	Page
Goldman Sachs Asset Management, L.P.	A-44
Hotchkis & Wiley Capital Management, LLC	A-45
Martingale Asset Management, L.P.	A-46
Peregrine Capital Management	A-47

GOLDMAN SACHS ASSET MANAGEMENT, L.P. Periods Ending December, 2012

Portfolio Manager: Sally Pope-Davis and Rob Crystal Assets Under Management: \$183,274,065

Investment Philosophy

The firm's value equity philosophy is based on the belief that all successful investing begins with fundamental stock selection that should thoughtfully weigh a stock's price and prospects. A company's prospective ability to generate high cash flow returns on capital will strongly influence investment success. The team follows a strong valuation discipline to purchase well-positioned, cash generating businesses run by shareholder-oriented management teams.

Through extensive proprietary research, the team confirms that a candidate company's long-term competitive advantage and earnings power are intact. The team seeks to purchase a stock at a price that encompasses a healthy margin of safety. The investment process involves three steps: 1) prioritizing research, 2) analyzing fundamentals, and 3) portfolio construction. The independent Risk and Performance Analytics Group (RPAG) monitors daily portfolio management risk, adherence to client guidelines and general portfolio strategy.

Staff Comments

Staff has no concerns with Goldman at this time.

Quantitative Evaluation

	Actual	R2000 Value
Last Quarter	2.4%	3.2%
Last 1 year	16.6	18.1
Last 2 years	8.7	5.6
Last 3 years	14.5	11.6
Last 4 years	17.7	13.8
Last 5 years	7.0	3.5
Since Inception	7.8	6.1
(1/04)		

Recommendation

No action required.

GOLDMAN SACHS ASSET MANAGEMENT, L.P. Rolling Five Year VAM vs. Russell 2000 Value



Five Year Period Ending

Note: Area to left of vertical line includes performance prior to retention by the SBL

HOTCHKIS & WILEY CAPITAL MANAGEMENT Periods Ending December, 2012

Portfolio Manager: Jim Miles and David Green

Assets Under Management: \$158,196,137

Investment Philosophy

The firm seeks to exploit mispriced securities in the small cap market by investing in "undiscovered" or "out of favor" companies. The team invests in stocks where the present value of the company's future cash flows exceeds the current market price. This approach exploits equity market inefficiencies created by irrational investor behavior and lack of Wall Street research coverage of smaller capitalization stocks. The team employs a disciplined, bottom-up investment process that emphasizes internally generated fundamental research.

The investment process begins with a quantitative screen based on market capitalization, trading liquidity and enterprise value/normalized EBIT, supplemented with ideas generated from the investment team. Internal research is then utilized to identify the most attractive valuation opportunities within this value universe. The primary focus of the research analyst is to determine a company's "normal" earnings power, which is the basis for security valuation.

Staff Comments

Staff has no concerns with Hotchkis at this time.

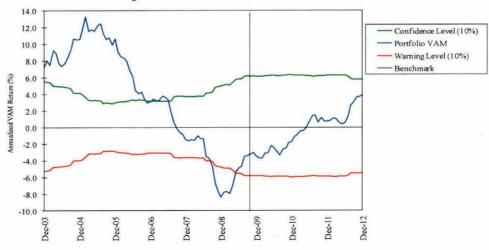
Quantitative Evaluation

	Actual	R2000 Value
Last Quarter	5.2%	3.2%
Last 1 year	24.1	18.1
Last 2 years	5.2	5.6
Last 3 years	16.6	11.6
Last 4 years	26.7	13.8
Last 5 years	7.6	3.5
Since Inception	6.0	6.1
(1/04)		

Recommendation

No action required.

HOTCHKIS & WILEY CAPITAL MANAGEMENT Rolling Five Year VAM vs. Russell 2000 Value



Five Year Period Ending

Note: Area to left of vertical line includes performance prior to retention by the SBI.

MARTINGALE ASSET MANAGEMENT, L.P. Periods Ending December, 2012

Portfolio Manager: William Jacques

Assets Under Management: \$142,287,642

Investment Philosophy

Martingale's investment process seeks to exploit the long-term link between undervalued company fundamentals and current market prices to achieve superior investment returns. Martingale has a long history of employing sound quantitative methods.

The valuation process is comprised of well-researched valuation indicators that have stood the test of time, with improvements made only after careful evaluation, testing and analysis. Multiple characteristics of quality, value and momentum are examined. The quality of company management is assessed by reviewing commitment to R&D, accounting practices with regard to earnings and cash flow from operations, and the ability to manage inventory.

The average holding period of a stock is typically one year. Every holding is approached as an investment in the business, with the intention of holding it until either objectives are reached, or it becomes apparent that there are better opportunities in other stocks.

Staff Comments

Staff has no concerns with Martingale at this time.

Quantitative Evaluation

	Actual	R2000 Value
Last Quarter	4.7%	3.2%
Last 1 year	20.1	18.1
Last 2 years	6.7	5.6
Last 3 years	13.2	11.6
Last 4 years	14.7	13.8
Last 5 years	2.8	3.5
Since Inception	4.8	6.1
(1/04)		

Recommendation

No action required.

MARTINGALE ASSET MANAGEMENT, L.P. Rolling Five Year VAM vs. Russell 2000 Value



Five Year Period Ending

Note: Area to left of vertical line includes performance prior to retention by the SBI.

PEREGRINE CAPITAL MANAGEMENT, INC Periods Ending December, 2012

Portfolio Manager: Doug Pugh and Tasso Coin

Assets Under Management: \$247,349,515

Investment Philosophy

Peregrine's Small Cap Value investment process begins with the style's proprietary valuation analysis, which is designed to identify the small cap value stocks most likely to outperform. The valuation analysis identifies the most under-priced securities on a sector-by-sector Drawing on thirty years of data, the analysis looks at different combinations of sixty fundamental factors most relevant in each independent sector to identify stocks that offer significant value relative to the companies' underlying fundamentals. The focus of the team's fundamental research is to determine if one or more of the style's "Value Buy Criteria" are present. These include short-term problems, unrecognized assets, take-over potential, and catalysts for change. portfolio is diversified and sector weights are aligned closely with the benchmark. This allows stock selection to drive performance.

Quantitative Evaluation

	Actual	R2000 Value
Last Quarter	3.8%	3.2%
Last 1 year	18.8	18.1
Last 2 years	6.7	5.6
Last 3 years	13.2	11.6
Last 4 years	20.6	13.8
Last 5 years	5.1	3.5
Since Inception (7/00)	9.7	8.9

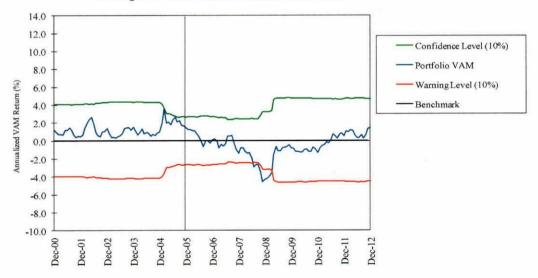
Staff Comments

Staff has no concerns with Peregrine at this time.

Recommendation

No action required.

PEREGRINE CAPITAL MANAGEMENT, INC. Rolling Five Year VAM vs. Russell 2000 Value



Five Year Period Ending

Note: Area to left of vertical line includes performance prior to retention by SBI.

This page left blank intentionally.

Semi-Passive and Passive

Semi-Passive and Passive

Table of Contents

Page
A-52
A-53
A-54
A-55
A-56

BLACKROCK INSTITUTIONAL TRUST CO., N.A. Periods Ending December, 2012

Portfolio Manager: Raffaele Savi Assets Under Management: \$2,547,664,656

Investment Philosophy - Semi-Passive Style

The Core Alpha Model disaggregates individual equity returns for each of the 3500 stocks in their universe into fundamental, expectational, and technical components. The fundamental factors look at measures of underlying company value including earnings, book value, cash flow, and sales. These factors help identify securities that trade at prices below their true economic value. The expectational factors incorporate future earnings and growth rate forecasts made by over 2500 security analysts. The technical factors provide a measure of recent changes in company fundamentals, consensus expectations, and performance. Estimated alphas are then calculated and are used in a portfolio optimization algorithm to identify the optimal portfolio.

Quantitative Evaluation

		Manager
	Actual	Benchmark*
Last Quarter	0.5%	0.1%
Last 1 year	19.0	16.4
Last 2 years	10.0	8.7
Last 3 years	11.3	11.1
Last 4 years	15.2	15.2
Last 5 years	2.0	1.9
Since Inception	8.3	8.0
(1/95)		

Staff Comments

Blackrock has had significant organizational changes at the top level due to the merger with Barclays Global Investors, including numerous structural and personnel changes within the Client Services Division. However, the portfolio management team assigned to the SBI domestic equity portfolio has been stable since that time. Staff will continue to monitor and provide updates as necessary.

Recommendation

No action required.

BLACKROCK INSTITUTIONAL TRUST CO.- SEMI-PASSIVE Rolling Five Year VAM vs. Manager Benchmark



Five Year Period Ending

Note: Area to the left of vertical line includes performance prior to retention by the SBI.

^{*} Russell 1000 since 1/1/04. Completeness Fund through 12/31/03.

INTECH INVESTMENT MANAGEMENT LLC Periods Ending December, 2012

Portfolio Manager: Adrian Banner

Assets Under Management: \$1,832,207,907

Investment Philosophy - Semi-Passive Style

Through the application of a proprietary mathematical process, the investment strategy is designed to determine more efficient weightings of the securities within the Russell 1000 benchmark. No specific sector or security selection decisions based on fundamentals are required. Risk parameters include: 1) minimize absolute standard deviation or maximize information ratio, 2) security positions limited to lesser of 1.0% or 8 times maximum index security weight, 3) beta equal to or less than benchmark beta, and 4) constraining the weighted average capital distribution to be roughly equal to the capital distribution of the benchmark. Target security positions are established using a weekly optimization routine designed to build a portfolio that will outperform a passive benchmark over the long term. Rebalancing to target proportions occurs every six (6) business days.

Staff Comments

Effective November 29, 2012, Adrian Banner, CIO, assumed the role of CEO, replacing Jennifer Young, who stepped down. There were additional staffing changes as the reporting structure to Adrian shifted. Staff will monitor the changes and any impact closely.

Quantitative Evaluation

	Actual	Russell 1000
Last Quarter	0.3%	0.1%
Last 1 year	16.6	16.4
Last 2 years	9.5	8.7
Last 3 years	N/A	N/A
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception	10.4	9.9
(4/10)		

Recommendation

No action required.

INTECH Investment Management LLC - Semi-Passive Rolling Five Year VAM vs. Russell 1000



Five Year Period Ending
Note: Shaded area includes performance prior to retention by the SBI.

J.P. MORGAN INVESTMENT MANAGEMENT INC. Periods Ending December, 2012

Portfolio Manager: Ralph Zingone and Scott Blasdell Assets Under Management: \$3,023,672,290

Investment Philosophy - Semi-Passive Style

J.P. Morgan believes that superior stock selection is necessary to achieve excellent investment results. To accomplish this objective, they use fundamental research and a systematic valuation model. Analysts forecast the earnings and dividends for the 650 stock universe and enter them into a stock valuation model that calculates an expected return for each security. The stocks are ranked according to their expected return within their economic sectors. The most undervalued stocks are placed in the first quintile. The portfolio includes stocks from the first four quintiles, always favoring the highest ranked stocks whenever possible. Stocks in the fifth quintile are sold. In addition, the portfolio closely approximates the sector, style, and security weightings of the index chosen by the plan sponsor. The firm remains fully invested at all times.

Staff Comments

Staff has no concerns with JP Morgan.

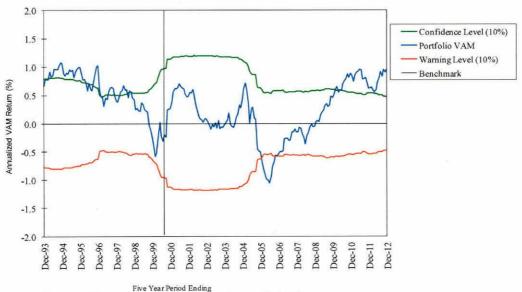
Quantitative Evaluation

	Actual	Manager Benchmark*
Last Quarter	0.2%	0.1%
Last 1 year	17.6	16.4
Last 2 years	9.0	8.7
Last 3 years	11.6	11.1
Last 4 years	16.4	15.2
Last 5 years	2.9	1.9
Since Inception	8.3	8.0

Recommendation

No action required.

JP MORGAN - SEMI-PASSIVE Rolling Five Year VAM vs. Manager Benchmark



^{*} Russell 1000 since 1/1/04. Completeness Fund through 12/31/03.

MELLON CAPITAL MANAGEMENT CORPORATION Periods Ending December, 2012

Portfolio Manager: Warren Chiang

Assets Under Management: \$1,897,689,085

Investment Philosophy - Semi-Passive Style

Mellon believes that rigorous and consistent application of fundamentally based valuation criteria will produce value added investment returns. Mellon builds a portfolio by using a series of more than 30 integrated computer models that value a universe of 3500 stocks. Their models rank each security based on fundamental momentum, relative value, future cash flow, and supplementary models. A composite ranking then provides one ranked list of securities reflecting their relative attractiveness. Stocks that fall below the median ranking are sold, and proceeds are reinvested in stocks from the top deciles in the ranking system. They use the BARRA risk model to monitor the portfolio's systematic risk and industry weightings relative to the selected benchmark. For this semi-passive mandate, they seek to achieve a residual risk of 1.5% or less. The firm remains fully invested at all times.

Staff Comments

Staff has no concerns with Mellon at this time.

Quantitative Evaluation

	Actual	Manager Benchmark*
Last Quarter	-0.3%	0.1%
Last 1 year	17.3	16.4
Last 2 years	10.7	8.7
Last 3 years	11.7	11.1
Last 4 years	15.0	15.2
Last 5 years	1.8	1.9
Since Inception (1/95)	7.6	8.0

Recommendation

No action required.

MELLON CAPITAL MANAGEMENT- SEMI-PASSIVE Rolling Five Year VAM vs. Manager Benchmark



Five Year Period Ending
Note: Area to the left of vertical line includes performance prior to retention by the SBI

^{*} Russell 1000 since 1/1/04. Completeness Fund through 12/31/03.

BLACKROCK INSTITUTIONAL TRUST CO., N.A. Periods Ending December, 2012

Portfolio Manager: Amy Schioldager Assets Under Management: \$7,817,397,024

Investment Philosophy - Passive Style

Barclays Global Investors seeks to minimize 1) tracking error, 2) transaction costs, and 3) investment and operational risks. The portfolio is passively managed against the asset class target using a proprietary optimization process that integrates a transaction cost model. The resulting portfolio closely matches the characteristics of the benchmark with less exposure to illiquid stocks.

Staff Comments

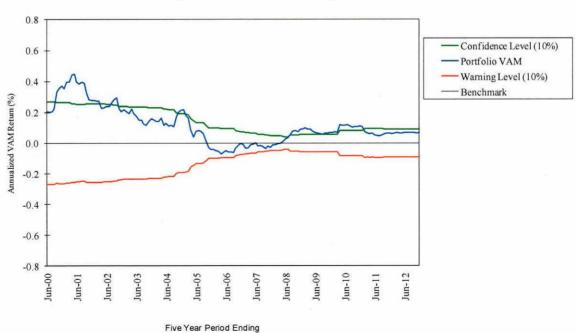
Blackrock has had significant organizational changes at the top level due to the merger with Barclays Global Investors, including numerous structural and personnel changes within the Client Services Division. However, the portfolio management team assigned to the SBI domestic equity portfolio has been stable since that time. Staff will continue to monitor and provide updates as necessary.

Quantitative Evaluation

	Actual	Manager Benchmark*
Last Quarter	0.3%	0.2%
Last 1 year	16.4	16.4
Last 2 years	8.4	8.4
Last 3 years	11.2	11.2
Last 4 years	15.3	15.3
Last 5 years	2.1	2.0
Since Inception (7/95)	7.7	7.6

No action required.

BLACKROCK INSTITUTIONAL TRUST CO.- PASSIVE Rolling Five Year VAM vs. Manager Benchmark



Recommendation

^{*} Russell 3000 since 10/1/03, Wilshire 5000 through 7/1/95.



STATE BOARD OF INVESTMENT

Bond Manager Evaluation Reports

Fourth Quarter, 2012

Bond Managers

Table of Contents

	Page
Bond Manager Performance Summary (quarter, 1, 3, 5, year periods)	A-60
Bond Manager Performance Summary (by calendar years)	A-61
Aberdeen Asset Management Inc.	A-62
Columbia Management Investment Advisers, LLC	A-63
Dodge & Cox	A-64
Pacific Investment Management Company LLC (PIMCO)	A-65
Western Asset Management Company	A-66
BlackRock Financial Management, Inc.	A-67
Goldman Sachs Asset Management	A-68
Neuberger Berman Fixed Income LLC	A-69

COMBINED RETIREMENT FUNDS **BOND MANAGERS**

Periods Ending December, 2012

					Since (1)							
	Qua	Quarter 1 Yea		1 Year 3 Years 5		5 Y	Years Inception			Market		
	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Value (in millions)	Pool %
Active Managers												
Aberdeen	0.8	0.2	7.7	4.2	8.8	6.2	5.4	5.9	6.3	6.3	\$862.3	7.8%
Columbia (RiverSource)	0.5	0.2	6.9	4.2	7.7	6.2	6.3	5.9	6.1	6.2	\$976.8	8.8%
Dodge & Cox	1.2	0.2	8.5	4.2	7.1	6.2	7.4	5.9	7.3	6.3	\$1,150.4	10.4%
PIMCO	1.1	0.2	9.3	4.2	8.6	6.2			9.7	6.9	\$1,271.5	11.5%
Western	0.9	0.2	7.8	4.2	8.6	6.2	7.0	5.9	9.5	8.3	\$1,310.1	11.8%
Active Mgr. Aggregate	0.9	0.2	8.1	4.2	8.2	6.2	6.4	5.9			\$5,571.1	50.4%
Sami Passira Managara												
Semi-Passive Managers BlackRock	0.3	0.2	5.0	4.2	6.5	6.2	5.6	5.9	6.3	6.2	£1 742 0	15 00/
				(3)							\$1,743.8	
Goldman	0.4	0.2	5.4	4.2	7.2	6.2	6.4	5.9	6.5	6.2	\$1,878.8	17.0%
Neuberger	0.3	0.2	5.4	4.2	7.4	6.2	6.8	5.9	7.4	7.2	\$1,864.2	
Semi-Passive Mgr. Aggregate	0.3	0.2	5.3	4.2	7.0	6.2	6.3	5.9			\$5,486.8	49.6%
									Since	7/1/84		
Historical Aggregate (2)	0.6	0.2	6.7	4.2	7.6	6.2	6.4	5.9	8.5	8.3	\$11,057.9	100.0%
Barclays Capital Aggregate (3)	0.2		4.2		6.2		5.9		8.3		

⁽¹⁾ Since retention by the SBI. Time period varies for each manager.(2) Includes performance of terminated managers.

⁽³⁾ Prior to July 1994, this index reflects the Solomon BIG.

COMBINED RETIREMENT FUNDS BOND MANAGERS Calendar Year Returns

	201	2012		2011		2010		2009		08
	Actual %	Bmk %								
Active Managers										
Aberdeen	7.7	4.2	8.0	7.8	10.7	6.5	18.4	5.9	-14.7	5.2
Columbia (RiverSource)	6.9	4.2	8.1	7.8	8.1	6.5	14.0	5.9	-4.9	5.2
Dodge & Cox	8.5	4.2	5.0	7.8	7.8	6.5	16.5	5.9	0.1	5.2
PIMCO	9.3	4.2	4.5	7.8	12.1	6.5				
Western	7.8	4.2	7.1	7.8	10.9	6.5	17.5	5.9	-6.8	5.2
Active Mgr. Aggregate	8.1	4.2	6.4	7.8	10.0	6.5	16.5	5.9	-7.3	5.2
Semi-Passive Managers										
BlackRock	5.0	4.2	8.0	7.8	6.5	6.5	9.6	5.9	-1.1	5.2
Goldman	5.4	4.2	8.3	7.8	8.0	6.5	12.0	5.9	-1.2	5.2
Neuberger	5.4	4.2	7.6	7.8	9.1	6.5	14.3	5.9	-1.9	5.2
Semi-Passive Mgr. Aggregate	5.3	4.2	8.0	7.8	7.9	6.5	12.0	5.9	-1.4	5.2
Historical Aggregate	6.7	4.2	7.2	7.8	9.0	6.5	14.3	5.9	-4.2	5.2
Barclays Capital Aggregate		4.2		7.8		6.5		5.9		5.2

The benchmark for the Fixed Income Asset Class is the Barclays Capital U.S. Aggregate Bond Index.

ABERDEEN ASSET MANAGEMENT INC. Periods Ending December, 2012

Portfolio Manager: Neil Moriarty Assets Under Management: \$862,307,756

Investment Philosophy

Aberdeen (formerly Deutsche) believes there are pricing inefficiencies inherent in bond markets and that diligent credit analysis, security structure evaluation, and relative value assessment can be used to exploit these inefficiencies. The firm avoids interest rate forecasting and sector rotation because they believe these strategies will not deliver consistent outperformance versus the benchmark over time. The firm's valued added is derived primarily from individual security selection. Portfolio managers and analysts research bonds within their sector of expertise and construct portfolios from the bottom-up, bond by bond. Sector weightings are a byproduct of the bottom-up security selection. Aberdeen was retained by the SBI in February 2000.

Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.8%	0.2%
Last 1 year	7.7	4.2
Last 2 years	7.9	6.0
Last 3 years	8.8	6.2
Last 4 years	11.1	6.1
Last 5 years	5.4	5.9
Since Inception	6.3	6.3
(2/00)		

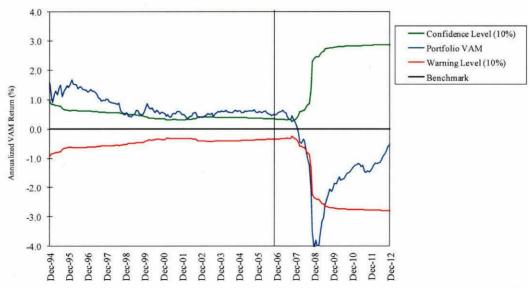
Staff Comments

Aberdeen continues to rebound from the adverse market conditions of 2008 while still trailing all other managers in the Active strategy over the five-year period ending December 2012. Previously, staff was concerned about Aberdeen's loss of fixed income assets under management and institutional client accounts during the 2008-10 time periods; however assets under management have stabilized since that time. Conversely, Aberdeen was the best performing portfolio in both the Active strategy and total fixed income portfolio over the recent three-year period. Staff has no additional organizational or performance issues to note.

Recommendations

No action required.

ABERDEEN ASSET MANAGEMENT Rolling Five Year VAM



COLUMBIA MANAGEMENT INVESTMENT ADVISERS, LLC Periods Ending December, 2012

Portfolio Manager: Colin Lundgren

Assets Under Management: \$976,797,584

Investment Philosophy

Columbia (formerly American Express and RiverSource) manages portfolios using a top-down approach culminating with in-depth fundamental research and credit analysis. Five portfolio components are actively managed: duration, maturity structure, sector selection, industry emphasis, and security selection. Duration and maturity structure are determined by the firm's economic analysis and interest rate outlook. This analysis also identifies sectors and industries expected to produce the best risk-adjusted In-depth fundamental research and credit analysis combined with proprietary valuation disciplines is used to identify attractive individual securities. Columbia was retained by the SBI in July 1993.

Staff Comments

Staff has no significant organizational or performance issues to note.

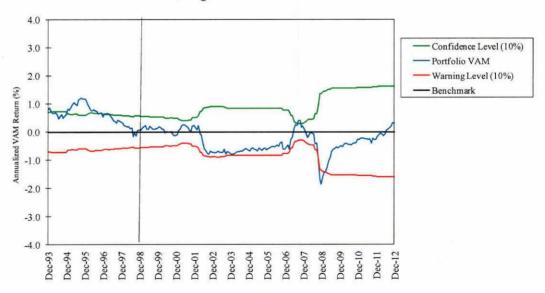
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.5%	0.2%
Last 1 year	6.9	4.2
Last 2 years	7.5	6.0
Last 3 years	7.7	6.2
Last 4 years	9.3	6.1
Last 5 years	6.3	5.9
Since Inception (7/93)	6.1	6.2

Recommendations

No action required.

COLUMBIA MANAGEMENT - FIXED INCOME Rolling Five Year VAM



DODGE & COX, INC. Periods Ending December, 2012

Portfolio Manager: Dana Emery

Assets Under Management: \$1,150,407,887

Investment Philosophy

Dodge & Cox manages a high quality, diversified portfolio of securities that are selected through fundamental analysis. The firm believes that by combining fundamental research with a long-term investment horizon it is possible to uncover inefficiencies in market sectors and individual securities. The firm combines this fundamental research with a disciplined program of risk analysis. To seek superior returns over the long-term, Dodge & Cox emphasizes sector and security selection, strives to build portfolios that have a higher yield than the broad bond market, and analyzes portfolio and individual security risk. Dodge & Cox was retained by the SBI in February 2000.

Staff Comments

Staff has no significant organizational or performance issues to note.

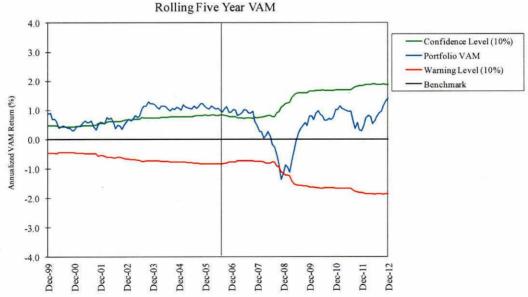
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	1.2%	0.2%
Last 1 year	8.5	4.2
Last 2 years	6.7	6.0
Last 3 years	7.1	6.2
Last 4 years	9.4	6.1
Last 5 years	7.4	5.9
Since Inception	7.3	6.3
(2/00)		

Recommendations

No action required.





PACIFIC INVESTMENT MANAGEMENT COMPANY LLC (PIMCO) Periods Ending December, 2012

Portfolio Manager: Bill Gross

Assets Under Management: \$1,271,451,294

Investment Philosophy

PIMCO's investment approach seeks to outperform a client's benchmark on a consistent basis, while maintaining overall risk similar to the index. PIMCO's approach to investing has three key principles: the utilization of multiple strategies, a long-term orientation and bond selection from a broad universe. PIMCO's investment process starts with an annual Secular Forum. The goal of this Forum is to look beyond the current business cycle and determine how secular forces will play out over the next 3 to 5 years. Quarterly, PIMCO holds Economic Forums to evaluate growth and inflation over the next 6 to 9 months. Following PIMCO's Secular and Economic Forums, the PIMCO Investment Committee (IC) develops key portfolio They consider both the "top-down" strategies. conclusions emanating from PIMCO's Forum, as well as the "bottom-up" market intelligence provided by PIMCO's teams of sector specialist portfolio managers. Through an interactive series of meetings, the IC defines a set of consistent strategies that are then implemented. PIMCO was retained by the SBI in September 2008.

Staff Comments

SBI staff expressed concern to PIMCO in early 2012 regarding the dispersion of returns across accounts within the Core Plus Constrained composite and has since implemented additional reporting requirements for all fixed income managers. Staff has no additional organizational or performance issues to note.

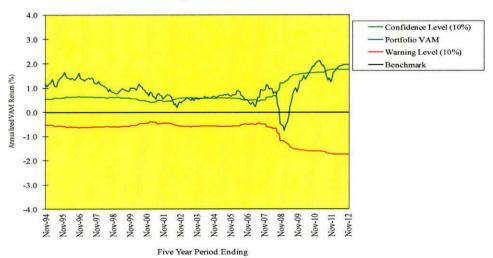
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	1.1%	0.2%
Last 1 year	9.3	4.2
Last 2 years	6.8	6.0
Last 3 years	8.6	6.2
Last 4 years	10.3	6.1
Last 5 years	N/A	N/A
Since Inception	9.7	6.9

Recommendations

No action required.

PACIFIC INVESTMENT MANAGEMENT CO. Rolling Five Year VAM



Note: Graph includes performance of the manager prior to retention by SBI.

WESTERN ASSET MANAGEMENT COMPANY Periods Ending December, 2012

Portfolio Manager: Steve Walsh

Assets Under Management: \$1,310,109,853

Investment Philosophy

Western emphasizes the use of multiple strategies and active sector and issue selection, while constraining interest rate risk. Multiple strategies are proportioned so that results do not depend on one or two opportunities. This approach adds consistent value over time and can reduce volatility. Long-term value investing is Western's fundamental approach. In making their sector decision, the firm seeks out the greatest long-term value by analyzing all fixed income market sectors and their economic expectations. Individual issues are identified based on relative credit strength, liquidity, issue structure, event risk, and market valuation. Western believes that successful interest rate forecasting is extremely difficult and consequently keeps portfolio duration within a narrow band around the benchmark. Western was retained by the SBI in July 1984.

Staff Comments

Staff has no significant organizational or performance issues to note.

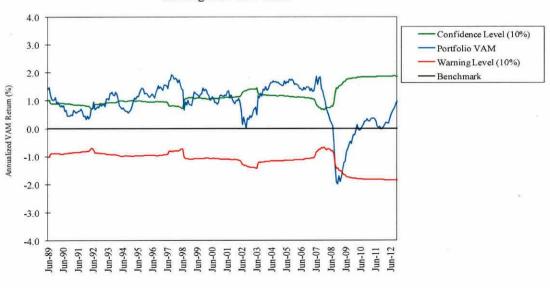
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.9%	0.2%
Last 1 year	7.8	4.2
Last 2 years	7.4	6.0
Last 3 years	8.6	6.2
Last 4 years	10.7	6.1
Last 5 years	7.0	5.9
Since Inception	9.5	8.3
(7/84)		

Recommendations

No action required.

WESTERN ASSET MANAGEMENT Rolling Five Year VAM



BLACKROCK FINANCIAL MANAGEMENT Periods Ending December, 2012

Portfolio Manager: Brian Weinstein

Assets Under Management: \$1,743,800,648

Investment Philosophy

BlackRock manages an enhanced index portfolio closely tracking the Barclays Capital U.S. Aggregate Bond Index. The firm's enhanced index strategy is a controlled-duration, sector rotation style, which can be described as active management with tighter duration, sector, and quality constraints. BlackRock seeks to add value through: (i) controlling portfolio duration within a narrow band relative to the benchmark, (ii) relative value sector/sub-sector rotation and security selection, (iii) rigorous quantitative analysis to the valuation of each security and of the portfolio as a whole, (iv) intense credit analysis and review, and (v) the judgment of experienced portfolio managers. Advanced risk analytics measure the potential impact of various sector and security strategies to ensure consistent value added and controlled volatility. BlackRock was retained by the SBI in April 1996.

Staff Comments

Blackrock has had significant changes at the top level across their entire organization due to the merger with Barclays Global Investors, including numerous structural and personnel changes within the Client Services Division. However, the portfolio management team assigned to the SBI fixed income portfolio has been relatively stable over this timeframe. Staff will continue to monitor and provide updates as necessary. Staff has no additional organizational or performance issues to note.

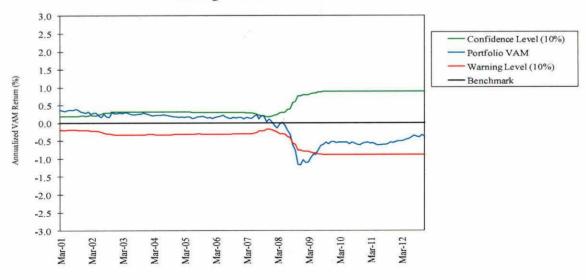
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.3%	0.2%
Last 1 year	5.0	4.2
Last 2 years	6.5	6.0
Last 3 years	6.5	6.2
Last 4 years	7.3	6.1
Last 5 years	5.6	5.9
Since Inception	6.3	6.2
(4/96)		

Recommendation

No action required.

BLACKROCK, INC. Rolling Five Year VAM



Five Year Period Ending

GOLDMAN SACHS ASSET MANAGEMENT Periods Ending December, 2012

Portfolio Manager: Jonathon Beinner

Assets Under Management: \$1,878,812,878

Investment Philosophy

Goldman manages an enhanced index portfolio closely tracking the Barclays Capital U.S. Aggregate Bond Index. Goldman's process can be viewed as active management within a very risk-controlled framework. The firm relies primarily on sector allocation and security selection strategies to generate incremental return. To a lesser degree, term structure strategies are also implemented. Goldman combines long-term strategic investment tilts with short-term tactical trading opportunities. Strategic tilts are based on fundamental and quantitative sector research and seek to optimize the long-term risk/return profile of portfolios. trades between sectors and securities within sectors are implemented to take advantage of short-term market anomalies. Goldman was retained by the SBI in July

Staff Comments

Goldman Sachs acquired a stable value-focused fixed income manager during the second quarter of 2012; however the acquisition should not impact the SBI portfolio. Staff has no additional organizational or performance issues to note.

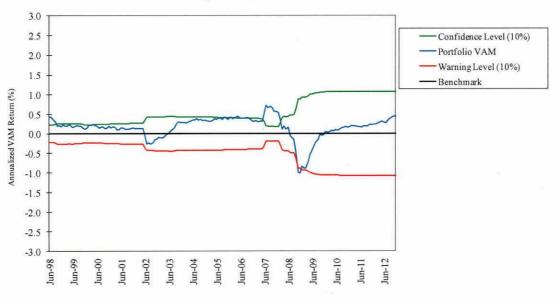
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.4%	0.2%
Last 1 year	5.4	4.2
Last 2 years	6.9	6.0
Last 3 years	7.2	6.2
Last 4 years	8.4	6.1
Last 5 years	6.4	5.9
Since Inception (7/93)	6.5	6.2

Recommendations

No action required.

GOLDMAN SACHS ASSET MANAGEMENT Rolling Five Year VAM



Five Year Period Ending

NEUBERGER BERMAN FIXED INCOME LLC Periods Ending December, 2012

Portfolio Manager: Andrew Johnson

Assets Under Management: \$1,864,227,986

Investment Philosophy

Neuberger (formerly Lincoln) manages an enhanced index portfolio closely tracking the Barclays Capital U.S. Aggregate Bond Index. Neuberger's process relies on a combination of quantitative tools and active management judgment. Explicit quantification and control of risks are at the heart of their process. Neuberger uses proprietary risk exposure measures to analyze 24 interest rate factors, and over 30 spreadrelated factors. For each interest rate factor, the portfolio is very closely matched to the index to ensure that the portfolio earns the same return as the index for any change in interest rates. For each spread factor, the portfolio can deviate slightly from the index as a means of seeking value-added. Setting target active risk exposures that must fall within pre-established maximums controls risk. To control credit risk, corporate holdings are diversified across a large number of issues. Neuberger was retained by the SBI in July 1988.

Staff Comments

Staff has no significant organizational or performance issues to note.

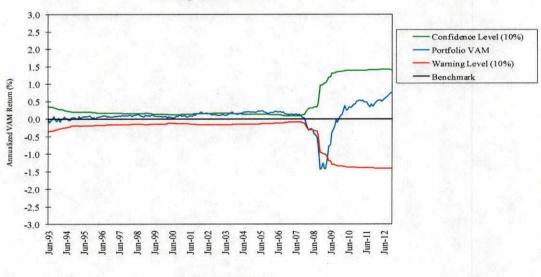
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.3%	0.2%
Last 1 year	5.4	4.2
Last 2 years	6.5	6.0
Last 3 years	7.4	6.2
Last 4 years	9.0	6.1
Last 5 years	6.8	5.9
Since Inception (7/88)	7.4	7.2

Recommendations

No action required.

NEUBERGER BERMAN Rolling Five Year VAM



This page left blank intentionally.



STATE BOARD OF INVESTMENT

International Manager Evaluation Reports

Fourth Quarter, 2012

International Managers

Table of Contents

	Page
International Manager Performance Summary (quarter, 1, 3, 5, year periods)	A-74
International Manager Performance Summary (by calendar years)	A-75
Acadian Asset Management, LLC	A-76
Columbia Management Investment Advisers, LLC	A-77
INVESCO Global Asset Management (N.A.), Inc.	A-78
J.P. Morgan Investment Management Inc.	A-79
Marathon Asset Management LLP	A-80
McKinley Capital Management LLC	A-81
Pyramis Global Advisors Trust Company – Active	A-82
Capital International, Inc.	A-83
Morgan Stanley Investment Management Inc.	A-84
AQR Capital Management, LLC	A-85
Pyramis Global Advisors Trust Company – Semi-Passive	A-86
State Street Global Advisors –Semi-Passive	A-87
State Street Global Advisers – Passive Emerging Markets	A-88
State Street Global Advisors – Passive Developed Markets	A-89

COMBINED RETIREMENT FUNDS INTERNATIONAL STOCK MANAGERS Periods Ending December, 2012

		arter		'ear	3 Ye			ears	Since Incer	otion	Market	
	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Value	Pool
Active Developed Markets (2)	70	70	70	70	/0	70	70	70	70	70	(in millions)	%
Acadian	5.8	5.9	17.6	16.4	5.3	3.7	-5.7	-3.4	3.6	4.3	\$292.1	3.6%
Columbia (RiverSource)	3.7	5.9	19.0		6.4	3.7	-1.6	-3.4	0.9	2.3	\$288.6	3.5%
Invesco	7.8	5.9	15.0	16.4	1.9	3.7	-3.1	-3.4	3.5	2.3	\$235.7	2.9%
J.P. Morgan	6.9	5.9	18.4	16.4	4.6	3.7	-1.7	-3.4	4.6	4.3	\$256.2	3.1%
Marathon	4.9	5.9	17.9	16.4	7.0	3.7	-0.3	-3.4	8.1	4.9	\$586.1	7.2%
McKinley	4.3	5.9	16.9	16.4	3.4	3.7	-6.7	-3.4	3.0	4.3	\$238.7	2.9%
Pyramis (Fidelity)	6.3	5.9	20.3	16.4	5.8	3.7	-1.8	-3.4	6.0	4.3	\$286.7	3.5%
Aggregate	5.5	5.9	17.9	16.4	5.2	3.7	-2.5	-3.4			\$2,184.3	26.8%
Active Emerging Markets (3)												
Capital International	5.6	5.6	13.8	18.2	0.7	4.7	-0.9	-0.9	10.5	11.9	\$742.7	9.1%
Morgan Stanley	5.0	5.6	21.1	18.2	5.6	4.7	-1.6	-0.9	12.1	11.9	\$795.6	9.8%
Aggregate	5.4	5.6	17.6	18.2	3.0	4.7	-1.9	-0.9			\$1,538.3	18.9%
Semi-Passive Developed Marke	ts (2)											
AQR	8.6	5.9	20.8	16.4	5.0	3.7	-2.5	-3.4	4.7	4.3	\$281.9	3.5%
Pyramis (Fidelity)	6.1	5.9	19.4	16.4	5.2	3.7	-3.2	-3.4	5.3	4.3	\$423.6	5.2%
State Street	7.8	5.9	17.3	16.4	2.5	3.7	-4.5	-3.4	3.3	4.3	\$254.0	3.1%
Aggregate	7.3	5.9	19.2	16.4	4.4	3.7	-3.3	-3.4			\$959.5	11.8%
Passive Emerging & Developed	Markets	s (2) (3))									
State Street (Emerging Mkts.)	6.0	5.6	18.5	18.2					18.5	18.2	\$171.3	2.1%
State Street (Developed Mkts.)	6.0	5.9	16.7	16.4	4.2	3.7	-3.0	-3.4	6.2	6.0	\$3,298.8	40.5%
									Sinc	e 10/1/9	2	
Equity Only (4) (6)	5.9	5.9	17.6	16.8	4.3	3.9	-2.7	-2.9	6.8	6.4	\$8,152.1	100.0%
Total Program (5) (6)	5.9	5.9	17.6	16.8	4.3	3.9	-2.7	-2.9	7.0	6.4	\$8,152.1	100.0%
SBI Int'l Equity Target (6)		5.9		16.8		3.9		-2.9		6.4		
MSCI ACWI Free ex. U.S. (7)		5.9		16.8		3.9		-2.9		6.6		
MSCI World ex U.S. (net)		5.9		16.4		3.7		-3.4		6.1		
MSCI EAFE Free (net)		6.6		17.3		3.6		-3.7		5.8		
MSCI Emerging Markets Free (8)		5.6		18.2		4.7		-0.9		8.9		

- (1) Since retention by the SBI. Time period varies for each manager.
- (2) Since 6/1/08 the developed markets manager's benchmark is the Standard (large + mid) MSCI World ex U.S. (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI World ex U.S. (net). From 10/1/03 to 9/30/07 the benchmark was MSCI World ex U.S. (net). Prior to that date, it was MSCI EAFE Free (net). From 10/1/01 to 5/31/02 the benchmark was the Provisional MSCI EAFE Free (net).
- (3) Since 6/1/08 the emerging markets manager's benchmark is the Standard (large + mid) MSCI Emerging Markets Free (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI Emerging Markets Free (net). From 1/1/01 to 9/30/07 the benchmark was MSCI Emerging Markets Free (net). Prior to that date, it was MSCI Emerging Markets Free (gross). From 10/1/01 to 5/31/02 the benchmark was the Provisional MSCI Emerging Markets Free (net).
- (4) Equity managers only. Includes impact of terminated managers.
- (5) Includes impact of currency overlay on the passive EAFE portfolio from 12/1/95-10/31/00.
- (6) Since 6/1/08 the International Equity asset class target is the Standard (large + mid) MSCI ACWI ex U.S. (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI ACWI ex U.S. (net). From 10/1/03 to 9/30/07 the target was MSCI ACWI ex U.S. (net). From 1/1/01 to 9/30/03, the target was MSCI EAFE Free (net) plus Emerging Markets Free (net), and from 7/1/99 to 12/31/00 the target was MSCI EAFE Free (net) plus Emerging Markets Free (gross). From 7/1/99 to 9/30/03, the weighting of each index fluctuated with market capitalization. From 10/1/01 to 5/31/02 all international benchmarks being reported were the MSCI Provisional indices. From 12/31/96 to 6/30/99 the benchmark was fixed at 87% EAFE Free (net)/13% Emerging Markets Free (gross). On 5/1/96, the portfolio began transitioning from 100% EAFE Free (net) to the 12/31/96 fixed weights. 100% EAFE Free (net) prior to 5/1/96.
- (7) MSCI ACWI Free ex U.S. (gross) through 12/31/00. MSCI ACWI Free ex U.S. (net) thereafter.
- (8) MSCI Emerging Markets Free (gross) through 12/31/00. MSCI Emerging Markets Free (net) thereafter.

COMBINED RETIREMENT FUNDS INTERNATIONAL STOCK MANAGERS Calendar Year Returns

	20	12 201		11 2010		10	2009		2008	
	Actual		Actual		Actual		Actual		Actual	
	%	%	%	%	%	%	%	%	%	%
Active Developed Markets (1)										
Acadian	17.6	16.4	-12.9		13.9	8.9	28.8	33.7	-50.5	-43.5
Columbia (RiverSource)	19.0	16.4	-12.1		15.2	8.9	29.3	33.7	-40.8	-43.5
Invesco	15.0	16.4	-13.0	-12.2	5.8	8.9	32.0	33.7	-38.8	-43.5
J.P. Morgan	18.4	16.4	-10.2	-12.2	7.6	8.9	37.5	33.7	-41.5	-43.5
Marathon	17.9	16.4	-9.2	-12.2	14.4	8.9	29.8	33.7	-38.0	-43.5
McKinley	16.9	16.4	-15.5	-12.2	11.8	8.9	24.1	33.7	-48.5	-43.5
Pyramis (Fidelity)	20.3	16.4	-11.9	-12.2	11.7	8.9	35.1	33.7	-42.9	-43.5
Aggregate	17.9	16.4	-11.7	-12.2	11.9	8.9	31.9	33.7	-42.8	-43.5
Active Emerging Markets (2)										
Capital International	13.8	18.2	-22.8	-184	16.1	18.9	83.1	78.5	-48 9	-53.2
Morgan Stanley	21.1	18.2	-17.8		18.4	18.9	71.7	78.5	-54.5	-53.2
Aggregate	17.6	18.2	-20.6		17.1	18.9	77.3	78.5	-53.0	-53.2
.,56, 64	17.0	10.2	20.0	10.4	.,	10.5	, , , , ,	70.5	-33,0	-33.4
Semi-Passive Developed Marke	ets (1)									
AQR	20.8	16.4	-13.9	-12.2	11.4	8.9	36.0	33.7	-44.0	-43.5
Pyramis (Fidelity)	19.4	16.4	-12.6	-12.2	11.5	8.9	30.2	33.7	-44.0	-43.5
State Street	17.3	16.4	-15.6	-12.2	8.7	8.9	34.9	33.7	-45.3	-43.5
Aggregate	19.2	16.4	-13.8	-12.2	10.6	8.9	33.6	33.7	-44.4	-43.5
Passive Developed Markets (1)										
State Street	16.7	16.4	-11.9	-12.2	9.9	8.9	34.0	33.7	-43.4	-43.5
Equity Only (3) (4)	17.6	16.8	-14.2	-13.7	12.3	11.2	41.2	41.5	-45.3	-45.5
Total Program (4)	17.6	16.8	-14.2	-13.7	12.3	11.2	41.2	41.5	-45.3	-45.5
SBI Int'l Equity Target (5)		16.8		-13.7		11.2		41.5		-45.5
MSCI ACWI Free ex. U.S. (net)		16.8		-13.7		11.2		41.5	4	-45.5
MSCI World ex U.S. (net)		16.4		-12.2		8.9		33.7		-43.6
MSCI EAFE Free (net)		17.3		-12.1		7.7		31.8		-43.4
MSCI Emerging Markets Free (ne	et)	18.2		-18.4		18.9		78.5		-53.3

⁽¹⁾ Since 6/1/08 the developed markets manager's benchmark is the Standard (large + mid) MSCI World ex U.S. (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI World ex U.S. (net). From 10/1/03 to 9/30/07 the benchmark was MSCI World ex U.S. (net).

⁽²⁾ Since 6/1/08 the emerging markets manager's benchmark is the Standard (large + mid) MSCI Emerging Markets Free (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI Emerging Markets Free (net). From 1/1/01 to 9/30/07 the benchmark was MSCI Emerging Markets Free (net).

⁽³⁾ Equity managers only. Includes impact of terminated managers.

⁽⁴⁾ Since 6/1/08 the International Equity asset class target is the Standard (large + mid) MSCI ACWI ex U.S. (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI ACWI ex U.S. (net). From 10/1/03 to 9/30/07 the target was MSCI ACWI ex U.S. (net).

ACADIAN ASSET MANAGEMENT, LLC Periods Ending December, 2012

Portfolio Manager: John Chisholm Assets Under Management: \$292,149,487

Investment Philosophy

Acadian believes there are inefficiencies in the global equity markets that can be exploited by a disciplined quantitative investment process. In evaluating markets and stocks, Acadian believes it is most effective to use a range of measures, including valuation, price trends, financial quality and earnings information. Risk control is a critical part of the Acadian approach. Acadian's process seeks to capture value-added at both the stock and the sector/country level. The process is active and bottom-up, but each stock forecast also contains a sector/country forecast. Selection is made from a very broad investment universe using disciplined, factordriven quantitative models. Portfolios are constructed with an optimizer and are focused on targeting a desired level of active risk relative to a client's chosen benchmark index.

Staff Comments

Acadian has a stable organization and team with mixed performance. The SBI has confidence that the strategy will add value over time.

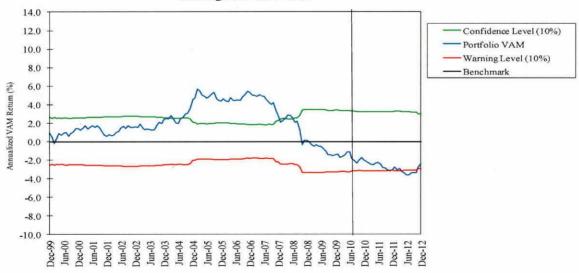
Ouantitative Evaluation

	Actual	Benchmark
Last Quarter	5.8%	5.9%
Last 1 year	17.6	16.4
Last 2 years	1.2	1.1
Last 3 years	5.3	3.7
Last 4 years	10.7	10.5
Last 5 years	-5.7	-3.4
Since Inception (7/05)	3.6	4.3

Recommendations

No action required.

ACADIAN ASSET MANAGEMENT Rolling Five Year VAM



COLUMBIA MANAGEMENT INVESTMENT ADVISERS, LLC Periods Ending December, 2012

Portfolio Manager: **Esther Perkins** Assets Under Management: \$288,620,009

Investment Philosophy

Staff Comments

these changes at a company level, complemented with an appreciation of the ability of management to exploit that will benefit. Columbia's (formerly RiverSource) philosophy focuses winners and avoid losers. these changes, creates significant opportunities to pick is rare, their research should focus on the dynamics of marketplace, where sustainable competitive advantage on key forces of change in markets and the companies A good understanding of the likely impact of The firm believes that in a global

Columbia has a stable organization and team.

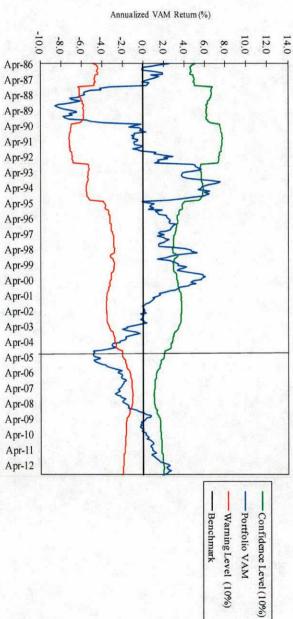
Quantitative Evaluation

Recommendations

	Actual	Benchmark
Last Quarter	3.7%	5.9%
Last 1 year	19.0	16.4
Last 2 years	2.3	1.1
Last 3 years	6.4	3.7
Last 4 years	11.7	10.5
Last 5 years	-1.6	-3.4
Since Inception	0.9	2.3

No action required.

COLUMBIA MANAGEMENT INVESTMENT ADVISERS Rolling Five Year VAM



Warning Level (10%)

INVESCO GLOBAL ASSET MANAGEMENT (N.A.), INC. Periods Ending December, 2012

Portfolio Manager: W. Lindsay Davidson

Assets Under Management: \$235,683,842

Investment Philosophy

INVESCO believes they can add value by identifying and investing in companies whose share price does not reflect the proven and sustainable growth of the company's earnings and assets. They also believe that a systematic process that identifies mis-valued companies, combined with a consistently applied portfolio design process, can control the predictability and consistency of returns. Portfolios are constructed on a bottom-up basis; they select individual companies rather than countries, themes, or industry groups. This is the first of four cornerstones of their investment approach. Secondly, they conduct financial analysis on a broad universe of non-U.S. companies whose key financial data is adjusted to be comparable across borders and Third, Invesco believes that using local currencies. professionals investment enhances fundamental company research. Finally, they manage risk and assure broad diversification relative to clients' benchmarks through a statistics-based portfolio construction approach rather than resorting to country or industry constraints.

Staff Comments

There has been recent turnover on the investment team. We are monitoring performance and personnel changes closely.

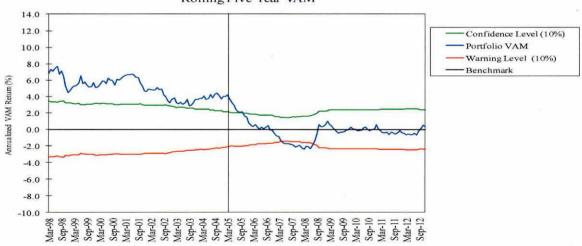
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	7.8%	5.9%
Last 1 year	15.0	16.4
Last 2 years	0.0	1.1
Last 3 years	1.9	3.7
Last 4 years	8.7	10.5
Last 5 years	-3.1	-3.4
Since Inception	3.5	2.3
(3/00)		

Recommendations

No action required.

INVESCO GLOBAL ASSET MANAGEMENT Rolling Five Year VAM



J.P. MORGAN INVESTMENT MANAGEMENT INC. Periods Ending December, 2012

Portfolio Manager: James Fisher

Assets Under Management: \$256,188,841

Investment Philosophy

JP Morgan's international equity strategy seeks to add value through active stock selection, while remaining diversified by both sector and region. The portfolio displays a large capitalization size bias and a slight growth orientation. Stock selection decisions reflect the insights of approximately 150 locally based investors, ranking companies within their respective local markets. The most attractive names in each region are then further validated by a team of Global Sector Specialists who seek to take the regional team rankings and put these into a global context. The team of six senior portfolio managers draws together the insights of both the regional and global specialists, constructing a portfolio of the most attractive names.

Staff Comments

J.P. Morgan has a stable organization and team.

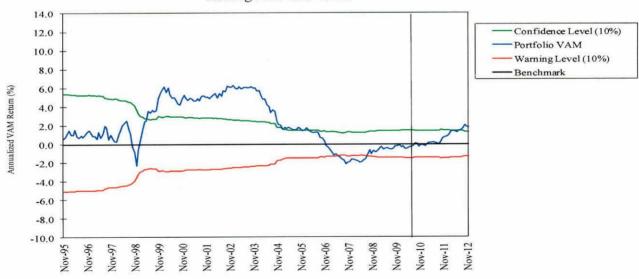
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	6.9%	5.9%
Last 1 year	18.4	16.4
Last 2 years	3.1	1.1
Last 3 years	4.6	3.7
Last 4 years	12.0	10.5
Last 5 years	-1.7	-3.4
Since Inception	4.6	4.3
(7/05)		

Recommendations

No action required.

J.P. MORGAN INVESTMENT MANAGEMENT, INC. Rolling Five Year VAM



MARATHON ASSET MANAGEMENT LLP Periods Ending December, 2012

Portfolio Manager: William Arah

Assets Under Management: \$586,144,310

Investment Philosophy

Marathon uses a blend of flexible, qualitative disciplines to construct portfolios which exhibit a value bias. Style and emphasis will vary over time and by market, depending on Marathon's perception of lowest risk opportunity. Since they believe that competition determines profitability, Marathon is attracted to industries where the level of competition is declining and they will hold a sector position as long as the level of competition does not increase. At the stock level, Marathon tracks a company's competitive position versus the attractiveness of their products or services and attempts to determine whether the company is following an appropriate reinvestment strategy for their current competitive position.

Staff Comments

Marathon has experienced significant recent changes to investment personnel in what has otherwise been a very stable organization over time. The recent changes do not materially impact the management of the SBI's portfolio and are not expected to affect the significant long-term added value in the strategy. However, the SBI is closely monitoring any further changes to the investment team.

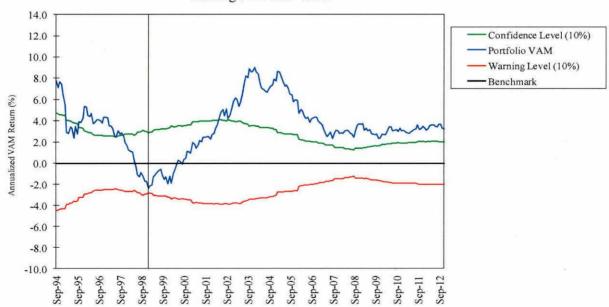
Quantitative Evaluation

	C	ustom
	Actual	Benchmark
Last Quarter	4.9%	5.9%
Last 1 year	17.9	16.4
Last 2 years	3.5	1.1
Last 3 years	7.0	3.7
Last 4 years	12.3	10.5
Last 5 years	-0.3	-3.4
Since Inception	8.1	4.9
(11/93)		

Recommendations

No action required.

MARATHON ASSET MANAGEMENT Rolling Five Year VAM



MCKINLEY CAPITAL MANAGEMENT LLC Periods Ending December, 2012

Portfolio Manager: Robert A. Gillam Assets Under Management: \$238,746,932

Investment Philosophy

At McKinley Capital, investment decisions are based on the philosophy that excess market returns can be achieved through the construction and active management of a diversified, fundamentally sound portfolio of inefficiently priced common stocks whose earnings growth rates are accelerating above market expectations. A disciplined quantitative investment process drives all product strategies. The firm can be described as a bottom-up growth manager. employ both a systematic screening process and a qualitative overview to construct and manage portfolios. Investment ideas are initially generated by the quantitative investment process. The balance of the qualitative overlay seeks to identify securities with earnings estimates that are reasonable and sustainable. All portfolios managed by McKinley Capital use the same investment process and construction methodology to manage portfolios.

Staff Comments

Stable organization and process with mixed returns. The SBI has confidence in the strategy to add value when growth is being rewarded in the market.

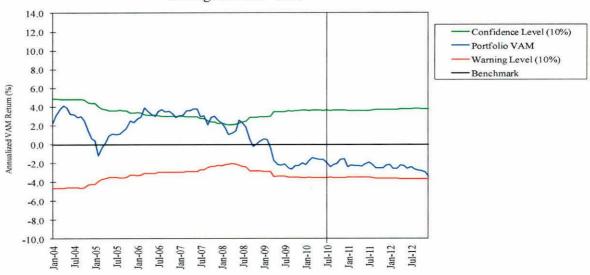
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	4.3%	5.9%
Last 1 year	16.9	.16.4
Last 2 years	-0.6	1.1
Last 3 years	3.4	3.7
Last 4 years	8.2	10.5
Last 5 years	-6.7	-3.4
Since Inception	3.0	4.3
(7/05)		

Recommendations

No action required.

McKINLEY CAPITAL MANAGEMENT Rolling Five Year VAM



PYRAMIS GLOBAL ADVISORS TRUST COMPANY (Active) Periods Ending December, 2012

Portfolio Manager: Michael Strong Assets Under Management: \$286,723,040

Investment Philosophy

Pyramis' International Growth is a core, growth-oriented strategy that provides diversified exposure to the developed international markets. The investment process combines active stock selection and regional asset allocation. Four portfolio managers in London, Tokyo, Hong Kong, Smithfield Rhode Island, and Toronto construct regional sub-portfolios, selecting stocks based on Fidelity analysts' bottom-up research and their own judgment and expertise. Portfolio guidelines seek to ensure risk is commensurate with the performance target and to focus active risk on stock selection. Resulting portfolios typically contain between 200-250 holdings.

Staff Comments

Stable organization and team.

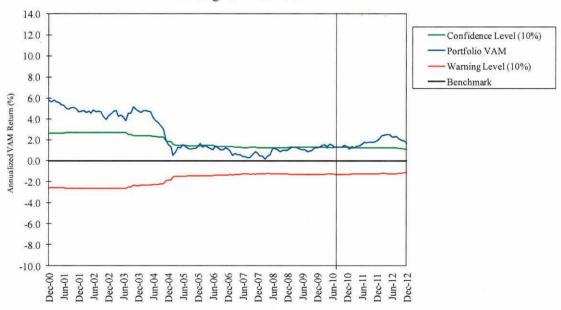
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	6.3%	5.9%
Last 1 year	20.3	16.4
Last 2 years	3.0	1.1
Last 3 years	5.8	3.7
Last 4 years	12.5	10.5
Last 5 years	-1.8	-3.4
Since Inception (7/05)	6.0	4.3

Recommendations

No action required.

PYRAMIS GLOBAL ADVISORS TRUST CO. - INTL GROWTH Rolling Five Year VAM



CAPITAL INTERNATIONAL, INC. Periods Ending December, 2012

Portfolio Manager: Victor Kohn

Assets Under Management: \$742,690,773

Staff Comments

Investment Philosophy

macroeconomic and political judgments on the outlook underlying value of a company and the price of its Capital International's philosophy is value-oriented, as they focus on identifying the difference between the and direct company contact. stocks for the portfolio based on extensive field research team of portfolio managers and analysts each select for economies, industries, currencies and markets. basic, fundamental, bottom-up approach is blended with securities in its home market. Capital International's

Stable organization and team.

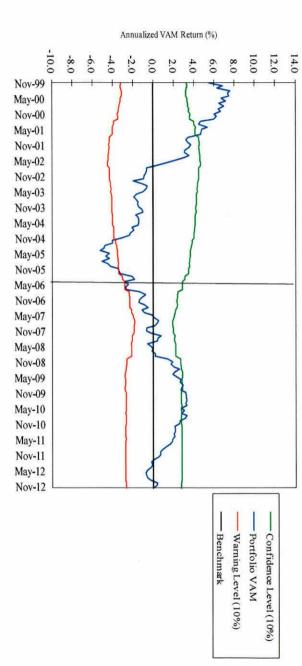
Quantitative Evaluation

Recommendations

	Actual	Benchmark
Last Quarter	5.6%	5.6%
Last 1 year	13.8	18.2
Last 2 years	-6.2	-1.8
Last 3 years	0.7	4.7
Last 4 years	16.9	19.6
Last 5 years	-0.9	-0.9
Since Inception	10.5	11.9
(3/01)		



CAPITAL INTERNATIONAL, Rolling Five Year VAM NC.



MORGAN STANLEY INVESTMENT MANAGEMENT INC. Periods Ending December, 2012

Portfolio Manager: Ruchir Sharma Assets Under Management: \$795,635,410

Investment Philosophy

Morgan Stanley's style is core with a growth bias. They follow a top-down approach to country allocation and a bottom-up approach to stock selection. Morgan Stanley's macro-economic and stock selection analyses are qualitative as well as quantitative, concentrating on fundamentals. Their top-down analysis highlights countries with improving fundamentals and attractive valuations. Their bottom-up approach to stock selection focuses on purchasing companies with strong operating earnings potential at attractive valuations.

Staff Comments

Stable organization and team.

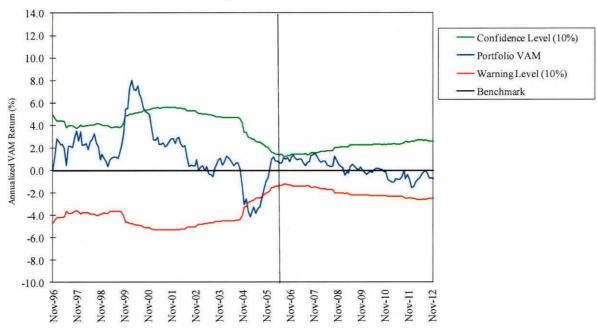
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	5.0%	5.6%
Last 1 year	21.1	18.2
Last 2 years	-0.2	-1.8
Last 3 years	5.6	4.7
Last 4 years	19.3	19.6
Last 5 years	-1.6	-0.9
Since Inception	12.1	11.9
(3/01)		

Recommendations

No action required.

MORGAN STANLEY INVESTMENT MANAGEMENT Rolling Five Year VAM



AQR CAPITAL MANAGEMENT, LLC Periods Ending December, 2012

Portfolio Manager: Cliff Asness

Assets Under Management: \$281,865,231

Investment Philosophy

AQR employs a disciplined quantitative approach emphasizing both top-down country/currency allocation and bottom-up security selection decisions to generate excess returns. AQR's investment philosophy is based on the fundamental concepts of value and momentum. AQR's international equity product incorporates stock selection, country selection, and currency selection models as the primary alpha sources. Dynamic strategy allocation (between the three primary alpha sources) and style weighting are employed as secondary alpha sources.

Staff Comments

AQR has a stable organization and investment process. While the stock selection strategy has added value since inception of the account, the currency (forwards) and country (futures) strategies have had mixed performance. The SBI is confident that the strategy will add value over time, but is monitoring performance attribution closely.

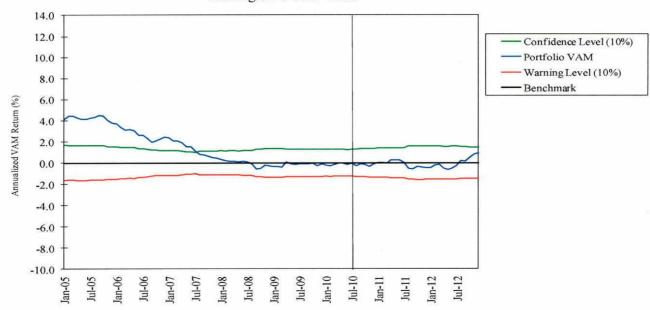
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	8.6%	5.9%
Last 1 year	20.8	16.4
Last 2 years	2.0	1.1
Last 3 years	5.0	3.7
Last 4 years	12.0	10.5
Last 5 years	-2.5	-3.4
Since Inception	4.7	4.3
(7/05)		

Recommendations

No action required.

AQR CAPITAL MANAGEMENT, LLC Rolling Five Year VAM



PYRAMIS GLOBAL ADVISORS TRUST COMPANY (Semi-Passive) Periods Ending December, 2012

Portfolio Manager: Cesar Hernandez

Assets Under Management: \$423,597,677

Investment Philosophy

Pyramis' Select International strategy combines active stock selection with quantitative risk control to provide consistent excess returns above the benchmartk while minimizing relative volatility and risk. By combining five regional sub-portfolios in the U.K., Canada, Continental Europe, Japan, and the Pacific Basin ex Japan, the portfolio manager produces a portfolio made up of the best ideas of the firm's research analysts. Each regional portfolio is created so that stock selection is the largest contributor to active return while systematic, sector, and factor risks are minimized. The portfolio manager uses a combination of proprietary and third-party optimization models to monitor and control risk within each regional module. Resulting portfolios typically contain between 275 and 325 holdings.

Staff Comments

Stable organization and team.

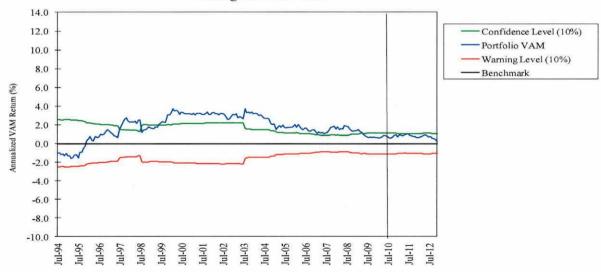
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	6.1%	5.9%
Last 1 year	19.4	16.4
Last 2 years	2.2	1.1
Last 3 years	5.2	3.7
Last 4 years	11.0	10.5
Last 5 years	-3.2	-3.4
Since Inception	5.3	4.3
(7/05)		

Recommendations

No action required.

PYRAMIS GLOBAL ADVISORS TRUST Co. - SELECT INTL Rolling Five Year VAM



STATE STREET GLOBAL ADVISORS (Semi-Passive) Periods Ending December, 2012

Portfolio Manager: Didier Rosenfeld Assets Under Management: \$254,044,476

Investment Philosophy

SSgA's Alpha strategy is managed using a quantitative process. Stock selection provides the best opportunity to add consistent value. Industry factors have come to dominate country factors and an approach that uses industry weights to add incremental value complements stock selection. Unwanted biases are controlled through disciplined risk-control techniques. Country and regional allocations are a result of the security selection process but are managed to remain with +/- 5% of the benchmarks allocation. Sector and industry allocations are managed to be within +/- 3% of the benchmarks allocation. The portfolio managers on this team have extensive experience and insight, which is used in conjunction with the models to create core portfolios.

Staff Comments

Significant team changes to the team shortly after inception of the account. There have been changes to the investment process recently. The SBI is monitoring this strategy closely due to persistent underperformance.

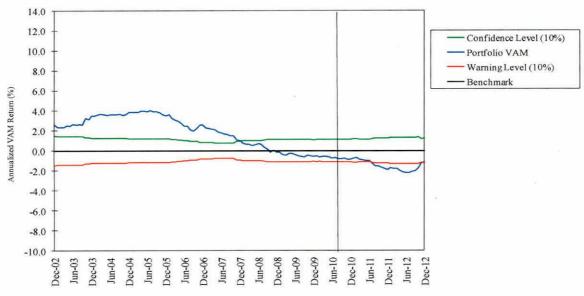
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	7.8%	5.9%
Last 1 year	17.3	16.4
Last 2 years	-0.5	1.1
Last 3 years	2.5	3.7
Last 4 years	9.8	10.5
Last 5 years	-4.5	-3.4
Since Inception (7/05)	3.3	4.3

Recommendations

No action required.

STATE STREET GLOBAL ADVISORS - ALPHA Rolling Five Year VAM



STATE STREET GLOBAL ADVISORS (Passive Emerging Markets) Periods Ending December, 2012

Portfolio Manager: Tom Coleman

Assets Under Management: \$171,254,899

Investment Philosophy

State Street Global Advisors passively manages the portfolio against the Morgan Stanley Capital International (MSCI) Emerging Markets. index of 21 markets located in the emerging markets outside of the United States. SSgA fully replicates the index whenever possible because it results in lower turnover, higher tracking accuracy and lower market impact costs.

Staff Comments

Retained at the beginning of 2012. Stable team with tracking error within expectation.

Quantitative Evaluation

	Actual	Benchmark
Last Quarter	6.0%	5.6%
Last 1 year	18.5	18.2
Last 2 years	N/A	N/A
Last 3 years	N/A	N/A
Last 4 years	N/A	N/A
Last 5 years	N/A	N/A
Since Inception	18.5	18.2
(12/11)		

Recommendation

No action required.

VAM Graph will be drawn for period ending 3/31/14.

STATE STREET GLOBAL ADVISORS (Passive Developed Markets) Periods Ending December, 2012

Portfolio Manager: Lynn Blake

Assets Under Management: \$3,298,792,981

Investment Philosophy

State Street Global Advisors (SSgA) passively manages the portfolio against the Morgan Stanley Capital International (MSCI) World ex U.S. index of 23 markets located in the developed markets outside of the United States (including Canada). SSgA fully replicates the index whenever possible because it results in lower turnover, higher tracking accuracy and lower market impact costs. The MSCI World ex U.S. (net) index reinvests dividends assuming a withholding tax on dividends, according to the Luxembourg tax rate. Whereas the portfolio reinvests dividends using all available reclaims and tax credits available to a U.S. pension fund, which should result in modest positive tracking error, over time.

Staff Comments

Very stable investment team with consistent tracking error within expectation over time.

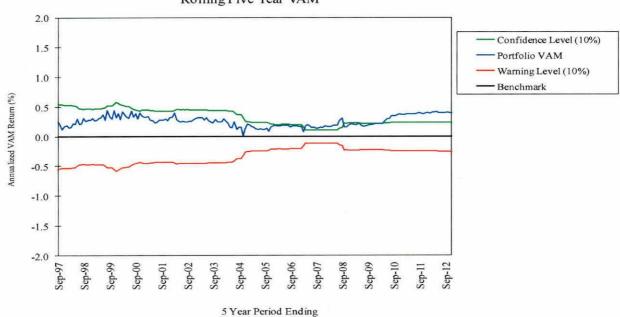
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	6.0%	5.9%
Last 1 year	16.7	16.4
Last 2 years	1.4	1.1
Last 3 years	4.2	3.7
Last 4 years	10.9	10.5
Last 5 years	-3.0	-3.4
Since Inception	6.2	6.0
(10/92)		

Recommendation

No action required.

SSGA - PASSIVE DEVELOPED MARKETS Rolling Five Year VAM



This page left blank intentionally.



STATE BOARD OF INVESTMENT

Non-Retirement Manager Evaluation Reports

Fourth Quarter, 2012

Non-Retirement Managers

Table of Contents

	Page
Non-Retirement Manager Performance Summary (quarter, 1, 3, 5 year periods)	A-94
Non-Retirement Manager Performance Summary (by calendar year)	A-95
GE Asset Management Inc. – Assigned Risk Plan	A-96
RBC Global Asset Management (U.S.) Inc. – Assigned Risk Plan	A-97
Galliard Capital Management, Inc.	A-98
Internal Stock Pool – Trust/Non-Retirement Assets	A-99
Internal Bond Pool – Income Share Account	A-100
Internal Bond Pool – Trust/Non-Retirement Assets	A-101

NON - RETIREMENT MANAGERS Periods Ending December, 2012

	Qua Actual %	arter Bmk %	1 Y Actual %	ear Bmk %	3 Ye Actual %	ars Bmk %	5 Ye Actual %	ars Bmk %	Since Inception Actual	G (6)	Market Value (in millions)
GE Asset Management (S&P 500 Index)	-0.4	-0.4	16.8	16.0	8.1	10.9	1.5	1.7	8.9	8.5	\$54.5
RBC Global Asset Management (2) (Barclays Capital Intermediate Gove	0.1 mment)	0.0	1.8	1.7	5.7	4.3	4.5	4.6	5.9	6.0	\$216.8
Galliard Capital Management (3 yr. Constant Maturity Treasury + 45 bp)	0.7	0.2	2.8	0.8	3.5	1.2	3.9	1.6	5.2	4.0	\$1,557.5
Internal Stock Pool (S&P 500 Index)	-0.4	-0.4	16.0	16.0	10.9	10.9	1.8	1.7	8.3	8.2	\$1,183.8
Internal Bond Pool - Income Share (Barclays Capital Aggregate) (3)	0.6	0.2	6.2	4.2	6.2	6.2	6.5	5.9	7.6	7.2	\$94.1
Internal Bond Pool - Trust (Barclays Capital Aggregate)	0.6	0.2	5.8	4.2	5.9	6.2	6.4	5.9	7.0	6.6	\$717.7

⁽¹⁾ Since retention by the SBI. Time period varies by manager.

⁽²⁾ Prior to July 2011, a blended benchmark consisting of 25% Merrill Lynch (ML) Mortgage Master, 25% ML 1-3 Yr. Gov't, 25% ML 5-10 Yr. Tsy/Ag, 15% ML 3-5 Yr. Tsy/Ag, and 10% ML 91 day T-Bill was utilized.

⁽³⁾ Prior to July 1994, the benchmark was the Solomon BIG.

NON - RETIREMENT MANAGERS Calendar Year Returns

	20	12	201	11	2010		200)9	2008		
	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	
GE Asset Management (S&P 500 Index)	16.8	16.0	-2.2	2.1	10.7	15.1	32.3	26.5	-35.6	-37.0	
RBC Global Asset Management (1) (Barclays Capital intermediate Govern	1.8 nment)	1.7	7.1	6.2	8.4	5.0	8.3	0.9	-2.4	9.5	
Galliard Capital Management (3 yr. Constant Maturity Treasury + 45 bp)	2.8	0.8	3.4	1.2	4.1	1.5	4.7	1.9	4.7	2.6	
Internal Stock Pool (S&P 500 Index)	16.0	16.0	2.2	2.1	15.1	15.1	26.3	26.5	-36.7	-37.0	
Internal Bond Pool - Income Share (Barclays Capital Aggregate)	6.2	4.2	5.3	7.8	7.0	6.5	12.9	5.9	1.3	5.2	
Internal Bond Pool - Trust (Barclays Capital Aggregate)	5.8	4.2	5.6	7.8	6.3	6.5	12.2	5.9	2.6	5.2	

⁽¹⁾ Prior to July 2011, a blended benchmark consisting of 25% Merrill Lynch (ML) Mortgage Master, 25% ML 1-3 Yr. Gov't, 25% ML 5-10 Yr. Tsy/Ag, 15% ML 3-5 Yr. Tsy/Ag, and 10% ML 91 day T-Bill was utilized.

GE ASSET MANAGEMENT INC. - Assigned Risk Plan Periods Ending December, 2012

Portfolio Manager: Dave Carlson

Assets Under Management: \$54,537,169

Investment Philosophy Assigned Risk Plan

GE's Multi-Style Equity program attempts to outperform the S&P 500 consistently while controlling overall portfolio risk through a multiple manager approach. A value portfolio, a growth portfolio and a research portfolio are combined to create a well diversified equity portfolio while maintaining low relative volatility and a style-neutral position between growth and value. All GE managers focus on stock selection from a bottom-up perspective.

Staff Comments

No long-term performance concerns. No organizational concerns.

Quantitative Evaluation

	Actual	Benchmark
Last Quarter	-0.4%	-0.4%
Last 1 year	16.8	16.0
Last 2 years	6.9	8.8
Last 3 years	8.1	10.9
Last 4 years	13.7	14.6
Last 5 years	1.5	1.7
Since Inception	8.9	8.5
(1/95)		

Recommendation

No action required.

GE ASSET MANAGEMENT Rolling Five Year VAM



RBC GLOBAL ASSET MANAGEMENT (U.S.) INC. - Assigned Risk Plan Periods Ending December, 2012

Portfolio Manager: Brian Svendahl

Assets Under Management: \$216,767,739

Investment Philosophy Assigned Risk Plan

RBC uses a top-down approach to fixed income investing. Their objective is to obtain superior long-term investment returns over a pre-determined benchmark that reflects the quality constraints and risk tolerance of the Assigned Risk Plan. Due to the specific liability requirement of the plan, return enhancement will focus on sector analysis and security selection. Yield curve and duration analysis are secondary considerations.

Staff Comments

No long-term performance concerns. No organizational concerns.

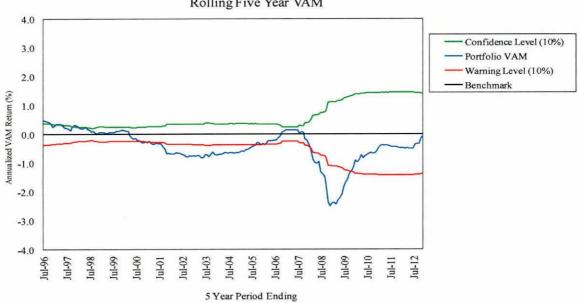
Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	0.1%	0.0%
Last 1 year	1.8	1.7
Last 2 years	4.4	3.9
Last 3 years	5.7	4.3
Last 4 years	6.4	3.4
Last 5 years	4.5	4.6
Since Inception	5.9	6.0
(7/91)		

Recommendation

No action required.

RBC GLOBAL ASSET MANAGEMENT Rolling Five Year VAM



^{*} From 4/1/02-6/30/11, blended benchmark consisted of 25% Merrill Lynch (ML) Mortgage Master, 25% ML 1-3 Yr. Gov't, 25% ML 5-10 Yr. Tsy/Ag, 15% ML 3-5 Yr. Tsy/Ag, 10% ML 91 day T-Bill. Effective 7/1/11, Barclays Capital Intermediate Government Index.

GALLIARD CAPITAL MANAGEMENT, INC. Periods Ending December, 2012

Portfolio Manager: Karl Tourville

Assets Under Management: \$1,557,533,425

Investment Philosophy

Galliard Capital Management manages the Fixed Interest Account in the Supplemental Investment Fund. The stable value fund is managed to protect principal and provide competitive interest rates using instruments somewhat longer than typically found in money market-type accounts. The manager invests cash flows to optimize yields. The manager invests in high quality fixed income securities and investment contracts with U.S. and non-U.S. financial institutions. To maintain necessary liquidity, the manager invests a portion of the portfolio in its Stable Return Fund and in cash equivalents. The Stable Return Fund is a large, daily priced fund consisting of a wide range of stable value instruments that is available to retirement plans of all

Staff Comments

No long-term performance concerns. No organizational concerns.

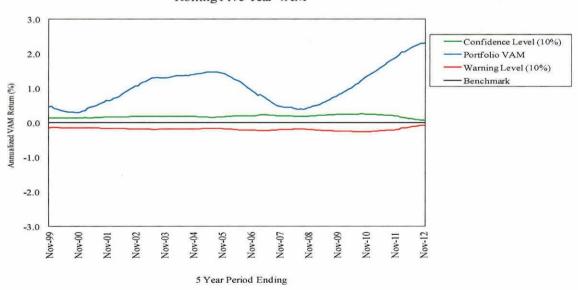
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.7%	0.2%
Last 1 year	2.8	0.8
Last 2 years	3.1	1.0
Last 3 years	3.5	1.2
Last 4 years	3.8	1.3
Last 5 years	3.9	1.6
Since Inception	5.2	4.0
(11/94)		

Recommendation

No action required.

Galliard Capital Management Rolling Five Year VAM



INTERNAL STOCK POOL - Trust/Non-Retirement Assets Periods Ending December, 2012

Portfolio Manager: Mike Menssen

approximately 10 basis points per year.

Assets Under Management: \$1,183,809,935

Investment Philosophy Environmental Trust Fund Permanent School Fund

The Internal Equity Pool is managed to closely track the S&P 500 Index. The strategy replicates the S&P 500 by owning all of the names in the index at weightings similar to those of the index. The optimization model's estimate of tracking error with this strategy is

Staff Comments

No tracking issues.

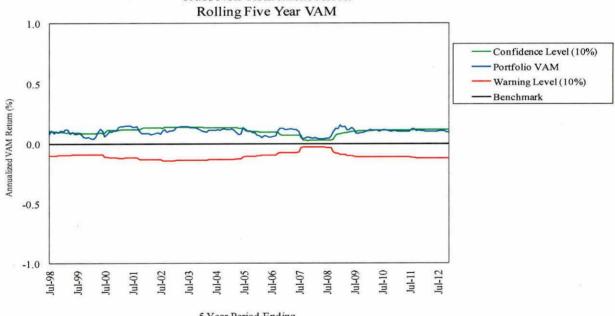
Quantitative Evaluation

T						4.	
Reco	٦m	m	en	a	Я	บาก	n

	Actual	Benchmark
Last Quarter	-0.4%	-0.4%
Last 1 year	16.0	16.0
Last 2 years	8.9	8.8
Last 3 years	10.9	10.9
Last 4 years	14.6	14.6
Last 5 years	1.8	1.7
Since Inception	8.3	8.2
(7/93)		

No action required.

INTERNAL STOCK POOL Trust/Non-Retirement Assets Rolling Five Year VAM



INTERNAL BOND POOL - Income Share Account Periods Ending December, 2012

Portfolio Manager: Mike Menssen Assets Under Management: \$94,100,885

Investment Philosophy Income Share Account

The investment approach emphasizes sector and security selection. The approach utilizes sector trading and relative spread analysis of both sectors and individual issues. The portfolio weightings in mortgage and corporate securities are consistently equal to or greater than the market weightings. The portfolio duration remains close to the benchmark duration but may be shortened or lengthened depending on changes in the economic outlook.

Staff Comments

No long-term performance concerns.

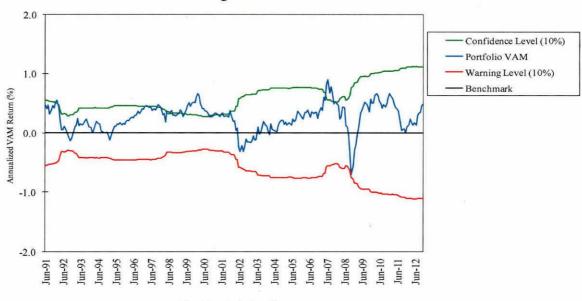
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.6%	0.2%
Last 1 year	6.2	4.2
Last 2 years	5.8	6.0
Last 3 years	6.2	6.2
Last 4 years	7.8	6.1
Last 5 years	6.5	5.9
Since Inception (7/86)	7.6	7.2

Recommendation

No action required.

INTERNAL BOND POOL - INCOME SHARE ACCOUNT Rolling Five Year VAM



INTERNAL BOND POOL - Trust/Non-Retirement Assets Periods Ending December, 2012

Portfolio Manager: Mike Menssen

Assets Under Management: \$717,671,018

Investment Philosophy Environmental Trust Fund Permanent School Trust Fund

The internal bond portfolio's investment approach emphasizes sector and security selection. The approach utilizes sector trading and relative spread analysis of both sectors and individual issues. The portfolio weightings in mortgage and corporate securities are consistently equal to or greater than the market weightings. The portfolio duration remains close to the benchmark duration but may be shortened or lengthened

depending on changes in the economic outlook.

Staff Comments

No long-term performance concerns.

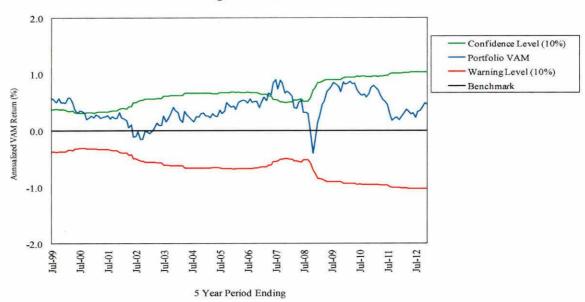
Quantitative Evaluation

	Actual	Benchmark
Last Quarter	0.6%	0.2%
Last 1 year	5.8	4.2
Last 2 years	5.7	6.0
Last 3 years	5.9	6.2
Last 4 years	7.4	6.1
Last 5 years	6.4	5.9
Since Inception	7.0	6.6
(7/94)*		

Recommendation

No action required.

INTERNAL BOND POOL - TRUST/NON-RETIREMENT ASSETS Rolling Five Year VAM



^{*} Date started managing the pool against the Barclays Capital Aggregate.

This page left blank intentionally.



STATE BOARD OF INVESTMENT

Deferred Compensation Plan Evaluation Reports

Fourth Quarter, 2012

Deferred Compensation Plan

Table of Contents

	Page
Fund Manager Performance Summary (quarter, 1, 3, 5 year periods)	A-106
Fund Manager Performance Summary (by calendar year)	A-108
Janus Twenty	A-110
Vanguard Index Institutional Plus	A-111
Vanguard Mid-Cap Index Institutional	A-112
T. Rowe Price Small Cap Stock Fund	A-113
Vanguard Balanced Index Institutional Fund	A-114
Dodge & Cox Income Fund	A-115
Vanguard Total Bond Market Index Institutional	A-116
Fidelity Diversified International	A-117
Vanguard Total International Stock Index Institutional Plus	A-118
State Street Global Advisors MN Target Retirement Funds	A-119

MN STATE 457 DEFERRED COMPENSATION PLAN FUND OPTIONS (1)

Periods Ending December, 2012

	Quarter 1 Year			3 Ye	ars	5 Y	ears	Since Reten		State's Participation	
457 Mutual Funds	Actual		Actual		Actual	Bmk	Actual		by S		In Fund
	%	%	%	%	%	%	%	%	%	%	(\$ millions)
Large Cap Equity:											
Janus Twenty	-0.1	-0.4	22.3	16.0	6.3	10.9	0.0	1.7	2.1	2.2	\$415.1
(S&P 500)											
Vanguard Institutional Index Plus (S&P 500)	-0.4	-0.4	16.0	16.0	10.9	10.9	1.7	1.7	2.2	2.2	\$657.9
Mid Cap Equity:											
Vanguard Mid-Cap Index	2.8	2.8	16.0	16.0	12.6	12.7	3.2	3.2	7.7	7.6	\$244.2
(MSCI US Mid-Cap 450)											
Small Cap Equity:											
T. Rowe Price Small-Cap Stock	1.8	1.9	18.0	16.3	16.0	12.2	7.6	3.6	9.0	6.1	\$451.1
(Russell 2000)											
Balanced:											
Vanguard Balanced Index Inst. Fund (60% MSCI US Broad Market, 40% Barclays Capital Agg)	0.2	0.2	11.5	11.6	9.6	9.6	4.3	4.1	6.2	6.1	\$516.6
Bond:											
Dodge & Cox Income Fund	1.0	0.2	8.0	4.2	6.6	6.2	7.0	5.9	6.6	6.1	\$206.5
(Barclays Capital Aggregate)	array.			1000	News.						
Vanguard Total Bond Market Index Inst.	0.1	0.2	4.2	4.2	6.2	6.2	5.9	5.9	5.4	5.4	\$194.3
(Barclays Capital Aggregate) International:											
Fidelity Diversified International	5.0	6.6	23.9	17.3	5.4	3.6	-3.3	-3.7	6.6	3.2	\$234.1
(MSCI EAFE-Free)	3.0	3.0	23.7	17.5	5.4	5.0	-5.5	-3.1	0.0	3.2	Φ2J4.1
Vanguard Total International Stock Index (ACWI ex US IMI) (3)	6.7	5.7	18.3	17.0	3.9	3.5	-3.0	-3.2	-1.7	-2.1	\$109.4

Numbers in blue include returns prior to retention by SBI.

Benchmarks for the Funds are noted in parentheses below the Fund names.

- (1) Money Market Account and Fixed Interest Accounts are also offered in the Supplemental Investment Fund, which is described within Tab A. Performance for these accounts is reported under the Deferred Compensation Plan accounts within Tab A.
- (2) Vanguard Total International retained July 2011; Vanguard Mid-Cap Index Fund retained January 2004; Vanguard Balanced, Vanguard Total Bond Mkt. retained December 2003; all others, July 1999.
- (3) Benchmark is the MSCI ACWI ex US IMI beginning December 2010; MSCI EAFE and Emerging Markets Index beginning August 2006. Prior to that date it was the total International Composite Index, which is the MSCI EAFE Index and the Select Emerging Markets Free Index.

MN STATE 457 DEFERRED COMPENSATION PLAN FUND OPTIONS

Periods Ending December, 2012

									Since F	Retention	State
	Qua	rter	1 Y	ear	3 Ye	ears	5 Ye	ears	by the	SBI*	Participation
SSgA Target Retirement Funds	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	in Fund
	%	%	%	%	%	%	%	%	%	%	(\$ millions)
Income Fund	1.0	0.9	9.7	9.8	7.9	8.2	4.7	4.8	6.7	6.8	\$16.7
2015 Fund	1.0	0.9	11.0	11.0	10.0	10.2	5.0	4.7	8.8	8.9	\$24.3
2020 Fund	1.1	1.0	12.5	12.5	11.1	11.3	4.8	4.5	10.0	10.0	\$26.1
2025 Fund	1.3	1.2	13.7	13.7	11.3	11.4	4.4	4,1	9.6	9.6	\$17.1
2030 Fund	1.4	1.2	14.3	14.1	11.3	11.4	3.9	3.6	9.2	9.2	\$10.1
2035 Fund	1.5	1.3	14.9	14.7	11.2	11.2	3.4	3.1	8.6	8.5	\$5.9
2040 Fund	1.7	1.5	15.5	15.3	10.8	10.8	2.7	2.5	7.4	7.4	\$3.8
2045 Fund	2.0	1.8	16.0	15.8	10.5	10.4	2.6	2.4	6.6	6.6	\$1.9
2050 Fund	2.0	1.8	15.9	15.8	10.4	10.4	2.6	2.4	6.6	6.6	\$0.9
2055 Fund	2.0	1.8	15.9	15.8	10.4	10.4			6.6	6.6	\$0.6
2060 Fund	2.0	1.8	16.0	15.8					6.6	6.6	\$0.6

Note: Each Fund benchmark is the aggregate of the returns of the Fund's underlying index funds weighted by the Fund's asset allocation.

The underlying index funds are listed below.

	Qua	rter	1 Y	ear	3 Y	ears	5 Ye	ears		
SSgA Index Funds	Actual		Actual	Bmk	Actual	Bmk	Actual	Bmk		
	%	%	%	%	%	%	%	%		
S&P 500 Index Fund (S&P 500)	-0.4	-0.4	16.0	16.0	10.9	10.9	1.7	1.7	7.7	7.7
DJ-UBS Roll Select Commodity Index Fund (DJ-UBS Roll Select Commodity Index)	-5.4	-5.3							4.1	4.2
Russell Small/Mid Cap Index Fund (Russell Small Cap Completeness Index)	3.1	3.0							8.7	8.7
Global All Cap Equity ex US Index Fund (MSCI ACWI ex U.S. IMI)	6.6	5.7	18.2	17.0					-1.3	-2.1
Global Real Estate Securities Index Fund (FTSE EPRA/NAREIT Dev Liquid)	6.1	5.5	28.9	27.5					9.8	8.7
Long Government Bond Index Fund (Barclays Capital Long Government)	-0.8	-0.7	3.8	3.8	13.6	13.6	9.6	9.6	19.6	19.7
Bond Index Fund (Barclays Capital Aggregate)	0.2	0.2	4.2	4.2	6.2	6.2	6.1	5.9	6.2	6.2
Inflation Protection Bond Index Fund (Barclays Capital U.S. TIPS)	0.7	0.7	6.9	7.0	8.8	8.9	7.0	7.0	9.6	9.6
High Yield Bond Index Fund (Barclays Capital U.S. High Yield Very Liquid	3.4 l)	3.5	14.8	15.4					10.4	10.9
U.S. Short-Term Govt/Credit Index Fund (Barclays Capital 1-3 Yr Govt/Credit)	0.1	0.2	3.9	1.3					2.9	1.2

Numbers in blue include returns prior to retention by SBI.

Benchmarks for the Funds are noted in parenthesis below the Fund names.

^{*}Target Retirement Funds inception date is July 2011.

MN STATE 457 DEFERRED COMPENSATION PLAN FUND OPTIONS (1) Calendar Year Returns

	201	2012		2011		2010		2009		2008	
457 Mutual Funds	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	
	%	%	%	%	%	%	%	%	%	%	
Large Cap Equity:											
Janus Twenty	22.3	16.0	-8.2	2.1	7.0	15.1	43.3	26.5	-42.0	-37.0	
(S&P 500)											
Vanguard Institutional Index Plus (S&P 500)	16.0	16.0	2.1	2.1	15.1	15.1	26.7	26.5	-36.9	-37.0	
Mid Cap Equity:											
Vanguard Mid-Cap Index	16.0	16.0	-2.0	-1.9	25.7	25.7	40.5	40.5	-41.8	-41.8	
(MSCI US Mid-Cap 450)											
Small Cap Equity:											
T. Rowe Price Small-Cap Stock	18.0	16.3	-0.1	-4.2	32.5	26.9	38.5	27.2	-33.4	-33.8	
(Russell 2000)											
Balanced:											
Vanguard Balanced Index Inst. Fund (60% MSCI US Broad Market, 40% Barclays Capital Agg)	11.5	11.6	4.3	4.1	13.3	13.5	20.2	19.7	-22.1	-22.4	
Bond:											
Dodge & Cox Income Fund	8.0	4.2	4.8	7.8	7.2	6.5	16.1	5.9	-0.3	5.2	
(Barclays Capital Aggregate)											
Vanguard Total Bond Market Index Inst.	4.2	4.2	7.7	7.8	6.6	6.5	6.1	5.9	5.2	5.2	
(Barclays Capital Aggregate)											
International:											
Fidelity Diversified International	23.9	17.3	-13.8	-12.1	9.7	7.7	31.8	31.8	-45.2	-43.4	
(MSCI EAFE-Free)											
Vanguard Total International Stock Index (ACWI ex US IMI) (2)	18.3	17.0	-14.6	-14.3	11.1	10.7	36.7	40.4	-44.1	-45.5	

Numbers in blue include returns prior to retention by SBI.

Benchmarks for the Funds are noted in parentheses below the Fund names.

- (1) Money Market Account and Fixed Interest Accounts are also offered in the Supplemental Investment Fund, which is described within Tab A. Performance for these accounts are reported under the Deferred Compensation Plan accounts within Tab A.
- (2) Benchmark is the MSCI ACWI ex US IMI beginning December 2010; MSCI EAFE and Emerging Markets Index beginning August 2006. Prior to that date it was the total International Composite Index, which is the MSCI EAFE Index and the Select Emerging Markets Free Index.

MN STATE 457 DEFERRED COMPENSATION PLAN FUND OPTIONS Calendar Year Returns

	2012		2011		201	10	2009		2008	
SSgA Target Retirement Funds	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk	Actual	Bmk
Income Fund	% 9.7	% 9.8	% 4.6	% 4.8	% 9.6	% 10.1	% 14.8	% 15.0	% -12.9	% -13.2
2015 Fund	11.0	11.0	6.9	7.1	12.1	12.5	15.3	14.4	-16.7	-17.6
2020 Fund	12.5	12.5	7.3	7.4	13.6	13.9	18.3	17.5	-22.2	-23.1
2025 Fund	13.7	13.7	5.9	6.0	14.6	14.7	20.3	19.6	-25.2	-26.1
2030 Fund	14.3	14.1	4.9	5.0	15.1	15.3	21.9	21.4	-28.1	-29.0
2035 Fund	14.9	14.7	3.5	3.6	15.7	15.8	24.3	23.9	-30.9	-31.6
2040 Fund	15.5	15.3	1.5	1.6	15.9	16.1	26.7	26.5	-33.6	-34.1
2045 Fund	16.0	15.8	0.0	0.1	16.2	16.2	27.2	27.0	-33.7	-34.1
2050 Fund	15.9	15.8	0.1	0.1	16.1	16.2	27.2	27.0	-33.5	-34.1
2055 Fund	15.9	15.8	0.1	0.1	16.1	16.2	27.2	27.0	-33.5	-34.1
2060 Fund	16.0	15.8								

Note: Each Fund benchmark is the aggregate of the returns of the Fund's underlying index funds weighted by the Fund's asset allocation. The underlying index funds are listed below.

	201	12	20	11	20	10	200)9	200	08
SSgA Index Funds	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %	Actual %	Bmk %
S&P 500 Index Fund	16.0	16.0	2.1	2.1	15.1	15.1	26.7	26.5	-36.9	200
(S&P 500)										
DJ-UBS Roll Sheet Commodity Index Fund										
(DJ-UBS Roll Select Commodity Index)										
Russell Small/Mid Cap Index Fund										
(Russell Small Cap Completeness Index)										
Global All Cap Equity ex U.S. Index Fund	18.2	17.0								
(MSCI ACWI ex U.S. IMI)										
Global Real Estate Securities Index Fund	28.9	27.5	-5.4	-5.8	19.1	18.4				
(FTSE EPRA/NAREIT Dev Liquid)										
Long Government Bond Index Fund	3.8	3.8	29.2	29.1	9.5	9.4	-12.2	-12.2	22.6	22.7
(Barclays Capital Long Government)										
Bond Index Fund	4.2	4.2	7.8	7.8	6.6	6.5	6.4	5.9	5.6	5.2
(Barclays Capital Aggregate)										
Inflation Protection Bond Index Fund	6.9	7.0	13.5	13.6	6.2	6.3	11.3	11.4	-2.4	-2.4
(Barclays Capital U.S. TIPS)										
High Yield Bond Index Fund	14.8	15.4	5.7	6.1	12.5	15.1				
(Barclays Capital U.S. High Yield Very Liquid)										
U.S. Short-Term Govt/Credit Bond Index Fund	3.9	1.3	1.5	1.6	2.4	2.8				
(Barclays Capital 1-3 Yr Govt/Credit)										

Numbers in blue include returnsprior to retention by SBI.

Benchmarks for the Funds are noted in parenthesis below the Fund names.

MN STATE 457 DEFERRED COMPENSATION PLAN LARGE CAP EQUITY – JANUS TWENTY

Periods Ending December, 2012

State's Participation in Fund:

\$415,110,259

Portfolio Manager: Ron Sachs Total Assets in Fund:

\$8,300,000,000

Investment Philosophy Janus Twenty

The investment objective of this fund is long-term growth of capital from increases in the market value of the stocks it owns. The fund will concentrate its investments in a core position of between twenty to thirty common stocks. This non-diversified fund seeks to invest in companies that the portfolio manager believes have strong current financial positions and offer growth potential.

Staff Comments

No long-term performance concerns. No organizational concerns.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	-0.1%	-0.4%
Last 1 year	22.3	16.0
Last 2 years	6.0	8.8
Last 3 years	6.3	10.9
Last 4 years	14.5	14.6
Last 5 years	0.0	1.7
Since Retention	2.1	2.2
by SBI (7/99)		

Recommendation

No action required.

LARGE CAP EQUITY - JANUS TWENTY Rolling Five Year VAM



^{*}Benchmark is the S&P 500.

MN STATE 457 DEFERRED COMPENSATION PLAN EQUITY INDEX – VANGUARD INSTITUTIONAL INDEX PLUS Periods Ending December, 2012

Portfolio Manager: Mike Buek

State's Participation in Fund:

\$657,887,203

Total Assets in Fund:

\$49,286,000,000

Investment Philosophy Vanguard Institutional Index

This fund attempts to provide investment results, before fund expenses, that parallel the performance of the Standard & Poor's 500 Index. The fund invests in all 500 stocks listed in the S&P 500 index in approximately the same proportions as they are represented in the index. The managers have tracked the S&P 500's performance with a high degree of accuracy. The fund may use futures and options for temporary purposes, but generally remains fully invested in common stock.

Staff Comments

Long-term CIO, Gus Sauter retired; Tim Buckley, Managing Director, Vanguard veteran succeeds Sauter January 2013. No tracking issues.

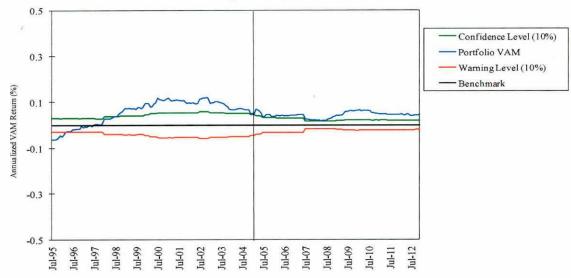
Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	-0.4%	-0.4%
Last 1 year	16.0	16.0
Last 2 years	8.8	8.8
Last 3 years	10.9	10.9
Last 4 years	14.6	14.6
Last 5 years	1.7	1.7
Since Retention	2.2	2.2
by SBI (7/99)		

Recommendation

No action required.

EQUITY INDEX - VANGUARD INSTITUTIONAL INDEX PLUS Rolling Five Year VAM



^{*}Benchmark is the S&P 500.

MN STATE 457 DEFERRED COMPENSATION PLAN MID CAP EQUITY – VANGUARD MID-CAP INDEX

Periods Ending December, 2012

State's Participation in Fund:

\$244,169,305

Total Assets in Fund:

\$7,057,000,000

Investment Philosophy Vanguard Mid-Cap Index

Portfolio Manager: Donald Butler

The fund employs a "passive management"- or indexing-investment approach designed to track the performance of the MSCI US Mid Cap 450 Index, a broadly diversified index of stocks of medium-size U.S. companies. The fund attempts to replicate the target index by investing all, or substantially all, of its assets in the stocks that make up the index, holding each stock in approximately the same proportion as its weighting within the index.

Staff Comments

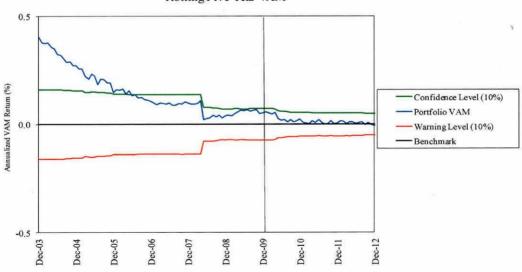
Long-term CIO, Gus Sauter retired; Tim Buckley, Managing Director, Vanguard veteran succeeds Sauter January 2013. No tracking issues.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	2.8%	2.8%
Last 1 year	16.0	16.0
Last 2 years	6.7	6.7
Last 3 years	12.6	12.7
Last 4 years	19.0	19.1
Last 5 years	3.2	3.2
Since Retention	7.7	7.6
by SBI (1/04)		

No action required.

MID CAP EQUITY - VANGUARD MID-CAP INDEX Rolling Five Year VAM



Recommendation

^{*}Benchmark is the MSCI US Mid Cap 450.

MN STATE 457 DEFERRED COMPENSATION PLAN SMALL CAP EQUITY – T. ROWE PRICE SMALL CAP STOCK FUND Periods Ending December, 2012

State's Participation in Fund:

\$451,114,270

Portfolio Manager: Gregory A. McCrickard

Total Assets in Fund: \$7,400,889,914

Investment Philosophy T. Rowe Price Small Cap Equity Fund

The strategy of this fund is to invest primarily in stocks of small to medium-sized companies that are believed to offer either superior earnings growth or appear undervalued. The fund normally invests at least 80% of assets in equities of small companies in the Russell 2000 or S&P Small-Cap 600. The manager does not favor making big bets on any particular sector or any particular stock. The fund's combination of growth and value stocks offers investors relatively more stable performance compared to other small cap stock funds.

Staff Comments

No long-term performance concerns. No organizational concerns.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	1.8%	1.9%
Last 1 year	18.0	16.3
Last 2 years	8.6	5.6
Last 3 years	16.0	12.2
Last 4 years	21.3	15.8
Last 5 years	7.6	3.6
Since Retention	9.0	6.1
by SBI (7/99)		

No action required.

SMALL CAP EQUITY - T. ROWE PRICE SMALL CAP STOCK FUND Rolling Five Year VAM



Recommendation

^{*}Benchmark is the Russell 2000.

MN STATE 457 DEFERRED COMPENSATION PLAN BALANCED – VANGUARD BALANCED INDEX INSTITUTIONAL FUND Periods Ending December, 2012

State's Participation in Fund:

\$516,637,528

Total Assets in Fund: Portfolio Manager: Michael Perre

\$5,554,000,000

Investment Philosophy Vanguard Balanced Index Fund

The fund's assets are divided between stocks and bonds, with an average of 60% of its assets in stocks and 40% in bonds. The fund's stock segment attempts to track the performance of the MSCI US Broad Market Index, an unmanaged index representing the overall U.S. equity market. The fund's bond segment attempts to track the performance of the Barclays Capital Aggregate Bond Index, an unmanaged index that covers virtually all taxable fixed-income securities.

Staff Comments

Long-term CIO, Gus Sauter retired; Tim Buckley, Managing Director, Vanguard veteran succeeds Sauter January 2013. No tracking issues.

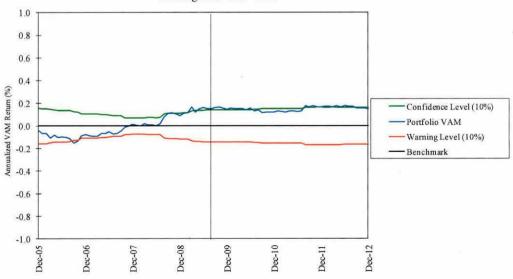
Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	0.2%	0.2%
Last 1 year	11.5	11.6
Last 2 years	7.8	7.8
Last 3 years	9.6	9.6
Last 4 years	12.2	12.1
Last 5 years	4.3	4.1
Since Retention	6.2	6.1
by SBI (12/03)		

Recommendation

No action required.

BALANCED - VANGUARD BALANCED INDEX Rolling Five Year VAM



^{*}Benchmark is 60% MSCI US Broad Market, 40% Barclays Capital Aggregate. Equity benchmark was Wilshire 5000 prior to April 1, 2005.

MN STATE 457 DEFERRED COMPENSATION PLAN BOND – DODGE & COX INCOME FUND

Periods Ending December, 2012

Portfolio Manager: Dana Emery

State's Participation in Fund:

\$206,488,354

Total Assets in Fund:

\$26,538,551,094

Investment Philosophy Dodge & Cox Income Fund

The objective of this fund is a high and stable rate of current income with capital appreciation being a secondary consideration. This portfolio is invested primarily in intermediate term, investment-grade quality corporate and mortgage bonds and, to a lesser extent, government issues. While the fund invests primarily in the U.S. bond market, it may invest a small portion of assets in dollar-denominated foreign securities. The duration of the portfolio is kept near that of the bond market as a whole.

Staff Comments

No long-term performance concerns. No organizational concerns.

Quantitative Evaluation

Actual Benchmark* 1.0% 0.2% Last Quarter 4.2 Last 1 year 8.0 Last 2 years 6.3 6.0 6.2 Last 3 years 6.6 Last 4 years 8.9 6.1 Last 5 years 7.0 5.9 Since Retention 6.1 6.6 By SBI (7/99)

Recommendation

No action required.

BOND - DODGE & COX INCOME FUND Rolling Five Year VAM



^{*}Benchmark is the Barclays Capital Aggregate.

MN STATE 457 DEFERRED COMPENSATION PLAN BOND - VANGUARD TOTAL BOND MARKET INDEX INSTITUTIONAL

Periods Ending December, 2012

Portfolio Manager: Kenneth Volpert

State's Participation in Fund: \$194,312,179 **Total Assets in Fund:** \$22,494,000,000

Investment Philosophy Vanguard Total Bond Market Index Institutional

The fund attempts to track the performance of the Barclays Capital Aggregate Bond Index, which is a widely recognized measure of the entire taxable U.S. bond market. The index consists of more than 7,800 U.S. Treasury, federal agency, mortgage-backed, and investment-grade corporate securities. Because it is not practical or cost-effective to own every security in the index, the fund invests in a large sampling that matches key characteristics of the index (such as market-sector weightings, coupon interest rates, credit quality, and maturity). To boost returns, the fund holds a higher percentage than the index in short-term, investmentgrade corporate bonds and a lower percentage in shortterm Treasury securities.

Staff Comments

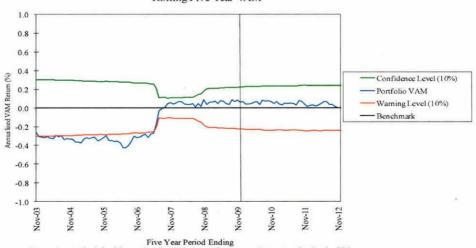
Long-term CIO, Gus Sauter retired; Tim Buckley, Managing Director, Vanguard veteran succeeds Sauter January 2013. No tracking issues.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	0.1%	0.2%
Last 1 year	4.2	4.2
Last 2 years	5.9	6.0
Last 3 years	6.2	6.2
Last 4 years	6.1	6.1
Last 5 years	5.9	5.9
Since Retention	5.4	5.4
by SBI (12/03)		

No action required.

BOND INDEX - VANGUARD TOTAL BOND MARKET INDEX Rolling Five Year VAM



Note: Area to the left of the vertical line includes performance prior to retention by the SBI.

Recommendation

^{*}Benchmark is the Barclays Capital Aggregate.

MN STATE 457 DEFERRED COMPENSATION PLAN INTERNATIONAL – FIDELITY DIVERSIFIED INTERNATIONAL

Periods Ending December, 2012

State's Participation in Fund:

\$234,092,057

Portfolio Manager: William Bower

Total Assets in Fund:

\$13,545,140,000

Investment Philosophy Fidelity Diversified International

The goal of this fund is capital appreciation by investing in securities of companies located outside of the United States. While the fund invests primarily in stocks, it may also invest in bonds. Most investments are made in companies that have a market capitalization of \$100 million or more and which are located in developed countries. To select the securities, the manager uses fundamental analysis of companies supplemented by relevant economic and regulatory factors and computer-aided quantitative analysis. The manager rarely invests in currency to protect the account from exchange fluctuations.

Staff Comments

No long-term performance concerns. No organizational concerns.

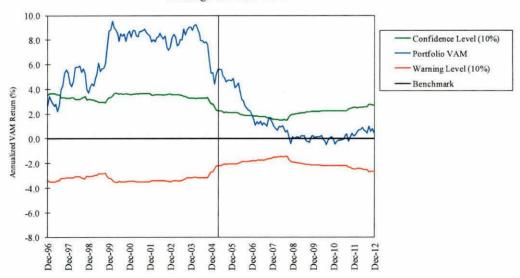
Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	5.0%	6.6%
Last 1 year	23.9	17.3
Last 2 years	3.4	1.5
Last 3 years	5.4	3.6
Last 4 years	11.5	10.0
Last 5 years	-3.3	-3.7
Since Retention	6.6	3.2
By SBI (7/99)		

Recommendation

No action required.

INTERNATIONAL - FIDELITY DIVERSIFIED INTERNATIONAL Rolling Five Year VAM



^{*}Benchmark is the MSCI EAFE-Free.

MN STATE 457 DEFERRED COMPENSATION PLAN INTERNATIONAL - VANGUARD TOTAL INTERNATIONAL STOCK INDEX Periods Ending December, 2012

\$109,381,624 State's Participation in Fund: **Total Assets in Fund:**

Portfolio Manager: Michael Perre

Investment Philosophy Vanguard Total International Stock Index

The fund seeks to track the performance of the MSCI All Country World ex USA Investable Market Index, an index designed to measure equity market performance in developed and emerging markets, excluding the United States. The fund assets are invested in the small, mid, and large cap common stocks included in the target index. The fund assets are allocated based on each region's weighting in the index.

Quantitative Evaluation

	Actual	Benchmark*
Last Quarter	6.7%	5.7%
Last 1 year	18.3	17.0
Last 2 years	0.5	0.1
Last 3 years	3.9	3.5
Last 4 years	11.3	11.7
Last 5 years	-3.0	-3.2
Since Retention	-1.7	-2.1
by SBI (7/11)		

Staff Comments

\$13,840,000,000

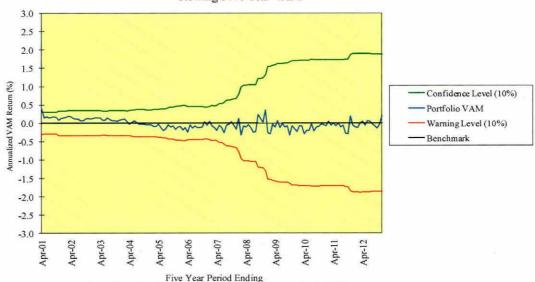
Long-term CIO, Gus Sauter retired; Tim Buckley, Managing Director, Vanguard veteran succeeds Sauter January 2013. Tracking error due to fair value pricing.

Recommendation

No action required.

Numbers in blue include returns prior to retention by SBI.

INTERNATIONAL - VANGUARD TOTAL INTERNATIONAL INDEX Rolling Five Year VAM



^{*} Benchmark is the MSCI ACWI ex US IMI Index beginning December 2010; MSCI EAFE + Emerging Markets Index beginning August 2006. Prior to that date it was the Total International Composite Index, which is the MSCI EAFE Index and the Select Emerging Markets Free Index.

MN STATE 457 DEFERRED COMPENSATION PLAN TARGET RETIREMENT FUNDS – STATE STREET GLOBAL ADVISORS (SSgA) Periods Ending December, 2012

Portfolio Manager: Various Index Fund Managers

State's Participation in Fund:

\$108,049,377

Total Assets in Fund:

\$1,222,683,402

Investment Philosophy Target Retirement Funds

The most important factor in determining the asset allocation mix is the time horizon of each fund. Funds with longer time horizons are assigned initial risk and return objectives which reflect the need to outpace inflation, the ability to take on more short-term volatility, and a reduced need for regular income. This results in larger starting equity allocations. Funds with shorter time horizons are assigned risk and return objectives that reflect a lower tolerance for volatility and an increased need for regular income, and therefore lower equity allocations.

The broad equity/fixed allocations are driven by the risk and return objectives for each fund. In determining the mix, the following factors are considered:

- The time horizon of each fund, which translates into a specific risk/return objective.
- SSgA current capital market assumptions and their impact on the forward looking risk/return of the portfolio.
- The need to differentiate the risk/return profiles for each portfolio so as to offer distinctly different options for plan participants.

Staff Comments

No tracking issues. No organizational concerns.

Recommendation

No action required.

Targeted Asset Allocations: Rebalanced Quarterly

Fund	Total Equity	Total Fixed Income	US 1-3 Yr Gov't Credit	US TIPS	US Agg - Bonds	US High Yield Bonds	US Long- Term Gov't Bonds	Large US Stocks	Small/ Mid Cap Stocks	Commodities	Non- US Stocks	Global REITs
2060	90.0	10.0	0.0	0.0	0.0	0.0	10.0	38.9	17.3	3.5	30.3	0.0
2055	90.0	10.0	0.0	0.0	0.0	0.0	10.0	38.9	17.3	3.5	30.3	0.0
2050	90.0	10.0	0.0	0.0	0.0	0.0	10.0	38.9	17.3	3.5	30.3	0.0
2045	90.0	10.0	0.0	0.0	0.0	0.0	10.0	38.9	17.3	3.5	30.3	0.0
2040	85.0	15.0	0.0	0.0	5.0	0.0	10.0	38.4	15.0	3.5	28.1	0.0
2035	80.0	20.0	0.0	0.0	10.0	0.0	10.0	38.0	12.6	3.5	25.9	0.0
2030	72.5	27.5	0.0	2.1	12.5	2.9	10.0	35.5	10.4	3.5	23.1	0.0
2025	65.0	35.0	0.0	4.2	15.0	5.8	10.0	32.0	8.0	3.5	20.0	1.5
2020	52.5	47.5	0.0	6.5	25.0	6.0	10.0	25.2	5.4	3.5	14.4	4.0
2015	40.0	60.0	10.0	18.0	21.2	7.0	3.8	19.2	3.1	3.5	9.2	5.0
Income	35.0	65.0	20.0	18.0	20.0	7.0	0.0	15.8	3.0	3.5	7.7	5.0

Note: Totals may not add due to rounding.

This page left blank intentionally.

TAB E

INVESTMENT ADVISORY COUNCIL REPORT

DATE: February 27, 2013

TO: Members, State Board of Investment

FROM: Members, Investment Advisory Council

The Investment Advisory Council met on February 19, 2013 and reviewed the following information and action agenda items:

1. Review of current strategy.

- 2. New investment with one new private equity manager, Apax Partners.
- 3. Review of Core Open-End Real Estate Fund holdings with Prudential Real Estate Investors, UBS Realty, and Morgan Stanley.

Board action is required on the last two items.

INFORMATION ITEMS:

1) Review of Current Strategy.

To increase overall portfolio diversification, 20% of the Combined Funds is allocated to alternative investments. Alternative investments include real estate, private equity, resource, and yield-oriented investments in which Minnesota State Board of Investment (SBI) participation is limited to commingled funds or other pooled vehicles. Charts summarizing the Board's current commitments are attached (see Attachments A and B).

- a. The real estate investment strategy is to establish and maintain a broadly diversified real estate portfolio comprised of investments that provide overall diversification by property type and location. The main component of this portfolio consists of investments in diversified Real Estate Investment Trusts (REITs), open-end commingled funds and closed-end commingled funds. The remaining portion of the portfolio can include investments in less diversified, more focused (specialty) commingled funds and REITs.
- b. The private equity investment strategy, which includes leveraged buyouts and venture capital, is to establish and maintain a broadly diversified private equity portfolio comprised of investments that provide diversification by industry type, stage of corporate development and location.

- c. The strategy for resource investments is to establish and maintain a portfolio of resource investment vehicles that provide an inflation hedge and additional diversification. Resource investments will include oil and gas investments, energy service industry investments and other investments that are diversified geographically and by type.
- d. The strategy for yield-oriented investments is to target funds that typically provide a current return and may have an equity component such as subordinated debt or mezzanine investments. Yield-oriented investments will provide diversification by including investments in the private equity, resource and real estate categories.

ACTION ITEMS:

1) Investment with a new private equity manager, Apax Partners (Apax), in Apax VIII.

Apax is seeking investors for a new €9 billion private equity fund, Apax VIII. This fund is a successor to four flagship buyout funds managed by Apax. The SBI has never invested with Apax. Like the prior private equity funds, this fund will focus on buyouts in Europe and the U.S. in targeted sectors.

In addition to reviewing the attractiveness of the Apax VIII investment offering, staff has conducted on-site due diligence, reference checks, a literature database search and reviewed the potential investor base for the fund.

More information on the Apax VIII fund is included as **Attachment C**.

RECOMMENDATION:

The Investment Advisory Council recommends that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of \$200 million, or 20% of Apax VIII, whichever is less. Approval by the SBI of this potential commitment is not intended to be, and does not constitute in any way, a binding or legal agreement or impose any legal obligations on the State Board of Investment and neither the State of Minnesota, the Investment Advisory Council, the State Board of Investment nor its Executive Director have any liability for reliance by Apax upon this approval. Until the Executive Director on behalf of the SBI executes a formal agreement, further due diligence and negotiations may result in the imposition of additional terms and conditions on Apax or reduction or termination of the commitment.

2) Review of Core Open-End Real Estate Fund holdings with Prudential Real Estate Investors, UBS Realty, and Morgan Stanley.

At the inception of the SBI's alternative investment program in 1981, real estate as an asset in a broadly diversified institutional portfolio had exhibited characteristics which made it a desirable investment option for the SBI. These characteristics included the ability of real estate to provide additional diversification, an inflation hedge and attractive long-term rates of return. The determination was made by the SBI to make initial investments in open-end core real estate funds which would provide instant access to known, diversified, high quality real estate assets. These initial investments were made in Aetna's Real Estate Separate Account (now named UBS-Trumball Property Fund), Equitable's Separate Account 8 (now named Morgan Stanley Prime Property Fund), and Prudential's PRISA fund. These open-end core real estate fund investments formed the initial foundation of the SBI's alternative investment allocation. The three investments were with, at the time, three of the largest and most established real estate funds of their kind in the market.

Today, the alternative investment allocation consists of these same three open-end real estate funds in addition to 160 closed-end funds in a wide variety of alternative investment strategies, including real estate, private equity, yield-oriented investments and resource investments. All together, the Combined Funds' open-end real estate investments are valued at \$565 million as of June 30, 2012, compared to total alternative investments of \$7.4 billion.

With the build-out of the SBI's alternative investment portfolio over the last 30 years, staff has re-examined the role and performance of the SBI's initial real estate investments in the three open-end core real estate funds. Staff analyzed the fit of open-end core real estate fund investments within the SBI's current alternative investment program by examining the performance of open-end core real estate funds relative to the SBI's goals and expectations.

Staff's evaluation of the open-end real estate funds' ability to achieve the goals and expectations that were assigned to them has yielded mostly disappointing results. The statistical analysis has shown that over time the SBI's core open-end real estate fund holdings have not consistently achieved the desired rate of return expectations on a nominal or real basis. The open-end real estate funds have provided some diversification benefits, but have proven to be inadequate inflation hedges. The open-end real estate funds did provide the Combined Funds with immediate access to the asset class when the initial investment was made, and they have also dampened the volatility of the Combined Funds.

In general, open-end core real estate funds seem better suited for investors starting an alternative investment program, given the instant access and liquidity these funds provide. The SBI's Alternative Investments Program, however, is no longer in a position in which liquidity is valued over total rate of return. These open-end real estate funds have, on the whole, provided far less risk-adjusted return than the Alternative investments aggregate.

RECOMMENDATION:

The Investment Advisory Council recommends that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a divestment from all three core open-end real estate funds, based upon the conclusion that these investments are no longer suitable for the SBI Alternative Investment program. This divestment should take place over a time period of up to three years. Staff further recommends that the funds generated from the liquidation of the open-end real estate fund holdings be reallocated to alternative investments broadly, subject to available investment opportunities.

Minnesota State Board of Investment

Pooled Alternative Investments Combined Funds December 31, 2012

Combined Funds Market Value

\$49,469,081,720

Amount Available for Investment

\$2,633,655,971

	Current Level	Target Level	Difference
Market Value (MV)	\$7,260,160,373	\$9,893,816,344	\$2,633,655,971
MV +Unfunded	\$11,045,434,056	\$14,840,724,516	\$3,795,290,461

		Unfunded		
Asset Class	Market Value	Commitment	Total	
Private Equity	\$4,039,594,024	\$2,222,759,265	\$6,262,353,289	
Real Estate	\$1,221,070,365	\$268,208,672	\$1,489,279,037	
Resource	\$984,137,778	\$605,931,487	\$1,590,069,264	
Yield-Oriented	\$1,015,358,206	\$688,374,259	\$1,703,732,465	
Total	\$7,260,160,373	\$3,785,273,682	\$11,045,434,056	

ATTACHMENT B

Minnesota State Board of Investment - Alternative Investments -

As of December 31, 2012

REAL ESTATE Blackstone Real Estate Partners V			As of December	31, 2012					
REAL ESTATE	Investment				Distributions			MOIC*	Period Years
Blacksiume Real Estate Paramers V	I. REAL ESTATE						0.40		
Bilacksinne Real Estate Pariners VI			100 000 000	nanana naroan arakar	1. 2000000440044400				
Blocksime Real Estate Paramers VII									
Colony Investors II									5.75
Colony Investors II		100,000,000	42,743,073	44,033,233	3,211,920	31,234,321	15.33	1.12	N/A
Color Investors III		80.000.000	78.482.328	2.600	90 022 404	1 517 672	4 68	1.15	17.75
CSFB Strategic Partners III RE								1.72	
CS Streepic Pertures IV PE \$0,000,000 48,334,304 31,102,487 7,111,348 2,05,37,60 -6,61 0,75 Silverpeak Laguey Perture Partners III 15,000,000 66,143,137 27,552,916 0 0 83,274,488 19,21 0,42 Prime Property Pund Partners III 15,000,000 64,000,000 27,244,396 0 0 83,274,488 19,21 0,42 Prime Property Fund Partners III 15,000,000 67,233,481 22,23,2916 0 0 83,274,488 19,21 0,42 Prime Property Fund Partners III 15,000,000 15,000,000 12,424,396 0 0 7,101 0,42 Prime Properties of America, Class B2 1,864 1,864 1,293 54 0 0,23 0,72 Reall Properties of America, Class B3 1,864 1,864 1,293 54 0 0,23 0,72 Reall Properties of America, Class B3 1,864 1,864 1,293 54 0 0,23 0,72 Reall Properties of America, Class B3 1,864 1,864 1,293 54 0 0,23 0,72 Reall Properties of America, Class B3 1,864 1,864 1,293 54 0 0,23 0,72 Really Associates Final V 50,000,000 50,000,000 23,163,033 37,603,37 0 1090 1,66 Really Associates Final V 50,000,000 50,000,000 23,163,033 37,603,37 0 1090 1,66 Really Associates Final V 50,000,000 0,000,000 0,733,960 0 5,035,866 0 0,000 0 0,000 Really Associates Final V 50,000,000 0,000,000 0,000,000 0,000,00					-				
Silverpuk Real Estate Partners 1		25,000,000	25,166,647	11,701,857	592,398	398,070	-14.48	0.49	7.50
Silverpok Leguey Pomline Partners II		50,000,000	48,534,804	31,102,487	7,111,348	2,053,409	-6.61	0.79	4.54
Silverpola Legacy Pennion Partners III		75 000 000	70 750 041	** *** ***			8.22		
Prime Property Fund PRISA Real Estate 9,111,000 9,111,00					Proposition Committee Comm				7.50
Resil Properties of America Seminary S									
Retail Properties of America A Common Nt 3,733 3,723 1,293 54 0 0.75 0.50 6.66									1.01
Real Properties of America, Case B3		*,,	*,,	3,511,613	370,023		0.21	1102	1.01
Retail Properties of America, Class B3 1,864 1,864 1,269 54 0 - 28 30 0.72 Really Associates Frind V 50,000,000 50,000,000 31,24,22 90,653,530 0 10.20 1.82 Really Associates Frind VI 75,000,000 75,000,000 47,313,996 28,446,770 0 1.51 1.01 Really Associates Frind VII 75,000,000 75,000,000 47,313,996 28,446,770 0 1.51 1.01 Really Associates Frind IX 100,000,000 60,000,000 103,529,663 18,096,425 4,000,000 100,000,000 100,000,000 0 0 0 100,000,000 0 0 0 Really Associates Frind X 100,000,000 0 0 0 0 0 100,000,000 0 0 0 0 0 0 0		3,723	3,723	1,293	940	0	-73.03	0.60	0.78
T.A. Associates Realty Realty Associates Fund V	Retail Properties of America, Class B2	1,864	1,864	1,293	54	0	-28.30	0.72	0.78
Reality Associates Fund V		1,864	1,864	1,293	54	0	-28.30	0.72	0.78
Really Associates Fund VI		55-0000000000000	50.50 (0.00						
Realpt Associates Fund VIII								1.82	13.60
Reality Associates Fund IX								1.66	10.51
Reality Associates Fund X									8.13
Real Property Fund						AND-0302-382-500	10000000		6.50 4.35
Real Estate Total 1,346,494,979 1,087,930,696 1,221,070,365 555,499,451 268,208,672 1,637 1,63		N. Water S. W. Water S. W. W. Water							0.84
II. RESOURCE								7.32	30.67
II. RESOURCE	Sign Address and Control of the Cont					269 209 672			
Apache Corp III		1,340,434,575	1,087,530,050	1,221,070,303	333,499,431	200,200,072		1.03	
EnCap Energy Capital Fund VII		30,000,000	30,000,000	5,158,500	56,468,585	0	12.25	2.05	26.00
EnCap Energy Capital Fund IXI									
Energy & Minerals Group NGP Midstream & Resources 100,000,000 95,493,964 100,843,446 100,844,446 100,8								1.49	5.50
Regry & Minerals Group								1.18	2.25
NGP Mintream & Resources		100,000,000	0	0	0	100,000,000	N/A	0.00	0.07
The Energy & Minerals Group Fund II 100,000,000 40,236,023 37,821,137 88,215 59,763,977 14.19 0.94 Energy Capital Partners II-A 100,000,000 49,323,919 57,594,229 5,080,855 54,616,614 15.39 1.27 First Reserve First Reserve Fund X 100,000,000 100,000,000 18,399,316 160,125,496 0 30.78 1.79 First Reserve Fund XI 15,000,000 149,318,555 125,439,832 42,999,746 681,445 3.46 1.13 First Reserve Fund XII 150,000,000 121,630,597 113,349,416 8,895,980 28,369,403 0.21 1.01 NGP Natural Gas Partners IX 150,000,000 129,111,388 138,970,123 24,268,243 18,228,421 10.28 1.26 NGP Natural Gas Partners IX 150,000,000 34,181,576 33,387,333 53,200 115,818,424 4.37 0.98 Sheridan Sheridan Production Partners I 100,000,000 36,250,000 30,235,001 0 63,750,000 26.52 0.83 EIG Global Energy Partners TCW Energy Partners XIV 100,000,000 36,250,000 30,235,001 0 63,750,000 26.52 0.83 EIG Global Energy Partners XIV 150,000,000 85,069,256 94,168,391 6,338,806 64,930,744 17.05 1.18 Reserve Fund III 100,000,000 85,069,256 94,168,391 6,338,806 64,930,744 17.05 1.18 Reserve Fund III 100,000,000 42,437,637 38,804,012 5,531,791 57,562,363 5.67 1.04 Citicory Mazzanine Fund III 100,000,000 42,437,637 38,804,012 5,531,791 57,562,363 5.67 1.04 Citicory Mazzanine Fund III 100,000,000 42,437,637 38,804,012 5,531,791 57,562,363 5.67 1.04 Citicory Mazzanine Fund III 100,000,000 42,437,637 38,804,012 5,531,791 57,562,363 5.67 1.04 Citicory Mazzanine Fund III 100,000,000 42,437,637 38,804,012 5,531,791 57,562,363 5.67 1.04 Citicory Mazzanine Fund III 100,000,000 42,437,637 38,804,012 5,531,791 57,562,363 5.67 1.04 Citicory Mazzanine Partners II 100,000,000 47,908,779 21,720,977 31,141,000,001 0.99 1.11 Citicory Mazzanine Partners II 100,000,000 47,908,779 21,720,977 31,407,639 54,090,510 0.79 1.11 Gold Hill Venture Lending 40,000,000 74,908,779 21,720,977 31,407,639 54,090,510 0.79 1.11 GS Mezzanine Partners V 15,000,000 67,933,424 50,000,510 3,939,21 1.00 1.25 Mezit Capital Partners V 15,000,000 67,933,424 50,000,510 3,939,500 5,966 65,3371 8.12 1.35 GS Mezzan		100 000 000	06 402 064	100 842 446	66 305 300	4 917 050	20.07	1.76	6 76
Energy Capital Partners II-A 100,000,000 49,323,919 57,594,229 5,080,856 54,616,614 15.39 1.27									5,75
First Reserve First Reserve Fund X First Reserve Fund X First Reserve Fund XI 150,000,000 149,318,555 125,439,832 12,999,746 681,445 3.46 1.13 First Reserve Fund XII 150,000,000 121,630,597 113,349,416 8,895,980 28,369,403 0.21 1.01 NGP Natural Gas Partners IX 150,000,000 129,111,388 138,970,123 24,268,243 18,228,421 10.28 12,870,884 13,387,333 13,200 115,818,424 13,370,088 Sheridan Sheridan Production Partners I 100,000,000 100,002,260 13,387,333 13,200 15,818,424 13,370,000 12,24 1,44 1,381,381,381,381,381,381,381,381,381,38									1.27 2.45
First Reserve Fund X	를 하지 않는데 있다면 하는데 있다면 하를 바다면 하게 되는데 보고 있는데 보고 있다면 보다 되었다면 보고 있다면	100,000,000	49,323,319	37,394,229	060,000,0	34,010,014	13.39	1.27	2.45
First Reserve Fund XI		100 000 000	100 000 000	18 390 316	160 125 496	0	30.78	1 79	8.16
First Reserve Fund XII 150,000,000 121,630,597 113,349,416 8,895,980 28,369,403 0.21 1.01 NGP Natural Gas Partners IX 150,000,000 129,111,388 138,970,123 24,268,243 18,228,421 10.28 1.26 NGP Natural Resources X 150,000,000 34,181,576 33,387,333 53,200 115,818,424 -4.37 0.98 Sheridan Production Partners I 100,000,000 100,002,260 84,376,984 59,250,000 0.12,24 1.44 Sheridan Production Partners II 100,000,000 36,250,000 30,235,001 0.63,750,000 -26.52 0.83 EIG Global Energy Partners XIV 150,000,000 99,402,333 76,176,227 55,244,190 15,211,103 11.42 1.32 Energy Partners XIV 150,000,000 85,069,256 94,168,391 6,338,806 64,930,744 17.05 1.18 Resource Total 1,780,000,000 1,190,828,317 984,137,778 585,600,908 605,931,487 1.32 III. YIELD-ORIENTED 100,000,000 42,437,637 38,804,012 5,531,791 57,562,363 5.67 1.04 Citicory Mezzanine Fund III 100,000,000 42,437,637 38,804,012 5,531,791 57,562,363 5.67 1.04 Citicory Mezzanine Fund Terrers II 27,375,168 23,164,217 506,392 34,731,888 4,955,172 10.52 1.52 DLJ Investment Partners II 27,375,168 23,164,217 506,392 34,731,888 4,955,172 10.52 1.52 DLJ Investment Partners III 100,000,000 47,908,779 21,720,977 31,407,639 54,090,510 0.79 1.11 Gold Hill Venture Lending 40,000,000 40,000,000 7,709,216 50,491,994 0 8.99 1.46 Gold Hill Venture Lending 40,000,000 40,000,000 7,709,216 50,491,994 0 8.99 1.46 GS Mezzanine Partners II 75,000,000 100,000,000 326,058 31,871,972 0 7.09 1.32 GS Mezzanine Partners II 75,000,000 61,390,770 56,114,936 20,517,465 79,593,217 11.01 1.25 Merit Capital Partners V 150,000,000 57,633,241 5,070,898 103,358,263 2,366,759 15.16 1.88 Merit Mezzanine Fund V 75,000,000 69,807,692 34,130,045 38,638,000 5,192,308 7.39 1.33 Merit Mezzanine Fund V 75,000,000 35,816,327 33,									6.03
Natural Gas Partners IX		1000		110				1.01	4.17
NGP Natural Resources X 150,000,000 34,181,576 33,387,333 53,200 115,818,424 4.437 0.98	NGP	DV AND DV AND PARTY OF	ELECTIVE STATE OF THE STATE OF	A CONTRACTOR CONTRACTOR	A. 18 A.	TO COMPOSE A CONTROL OF THE CONTROL			
Sheridan Sheridan Production Partners 1 100,000,000 100,002,260 84,376,984 59,250,000 0 12.24 1.44 Sheridan Production Partners 1 100,000,000 36,250,000 30,235,001 0 63,750,000 -26.52 0.83 EIG Global Energy Partners TCW Energy Partners XIV	Natural Gas Partners IX	150,000,000	129,111,388	138,970,123	24,268,243	18,228,421	10.28	1.26	5.19
Sheridan Production Partners 100,000,000 100,002,260 84,376,984 59,250,000 0 12.24 1.44		150,000,000	34,181,576	33,387,333	53,200	115,818,424	-4.37	0.98	1.22
Sheridan Production Partners II		ar ordenia salam braham		000000000000	12/2/2020/2020	620	1000000	0201927	272307
EIG Global Energy Partners TCW Energy Partners XIV 100,000,000 85,069,256 94,168,391 6,338,806 64,930,744 17.05 1.18 Resource Total 1,780,000,000 1,190,828,317 984,137,778 585,600,908 605,931,487 1.32 III. YIELD-ORIENTED Audax Mezzanine Fund III 100,000,000 42,437,637 38,804,012 5,531,791 57,562,363 5.67 1.04 Citicorp Mezzanine III 100,000,000 88,029,296 511,384 132,324,719 0 15.61 1.51 DLJ Investment Partners DLJ Investment Partners III 27,375,168 23,164,217 506,392 34,731,888 4,955,172 10.52 1.52 DLJ Investment Partners III 100,000,000 47,908,779 21,720,977 31,407,639 54,090,510 0.79 1.11 Gold Hill Venture Lending GS Mezzanine Partners II 100,000,000 40,000,000 7,709,216 50,491,994 0 8.99 1.46 GS Mezzanine Partners GS Mezzanine Partners III 100,000,000 74,934,629 8,256,582 90,965,966 65,371 8.12 1.32 GS Mezzanine Partners 2006 Institutional 100,000,000 74,939,888 35,082,847 66,136,993 25,000,112 1.41 1.35 GS Mezzanine Partners William Blair Mezzan. Cap. Fd. III 60,000,000 69,807,692 34,130,045 58,638,000 5,192,308 7,39 1.33 Merit Mezzanine Fund IV 75,000,000 75,000,000 75,000,000 75,000,000 75,000,000 75,000,000 75,000,000 76,907,692 34,130,045 76,174,057 775,000,000 775,									5.75
TCW Energy Partners XIV		100,000,000	36,250,000	30,235,001	0	63,750,000	-26.52	0.83	2.25
Resource Total 1,780,000,000 1,190,828,317 984,137,778 585,600,908 605,931,487 1.32		100 000 000	00 402 222	76 176 227	55 244 100	15 211 102	11.42	1 22	5.70
III. YIELD-ORIENTED									2.57
### Audax Mezzanine Fund III							11.00		2.57
Audax Mezzanine Fund III 100,000,000 42,437,637 38,804,012 5,531,791 57,562,363 5.67 1.04 Citicorp Mezzanine III 100,000,000 88,029,296 511,384 132,324,719 0 15.61 1.51 DLJ Investment Partners DLJ Investment Partners II 27,375,168 23,164,217 506,392 34,731,888 4,955,172 10.52 1.52 BLJ Investment Partners III 100,000,000 47,908,779 21,720,977 31,407,639 54,090,510 0.79 1.11 Gold Hill Venture Lending 40,000,000 40,000,000 7,709,216 50,491,994 0 8.99 1.46 Gold Hill Venture Lending 40,000,000 40,000,000 7,709,216 50,491,994 0 8.99 1.36 GS Mezzanine Partners 11 100,000,000 100,000,000 326,058 131,871,972 0 7.09 1.32 GS Mezzanine Partners III 75,000,000 74,934,629 8,256,582 90,965,966 65,371 8.12 1.32 GS Mezzanine Partners III		1,780,000,000	1,190,020,317	904,137,770	383,000,908	005,931,487		1.32	
Citicorp Mezzanine III 100,000,000 88,029,296 511,384 132,324,719 0 15.61 1.51 DLJ Investment Partners 1 27,375,168 23,164,217 506,392 34,731,888 4,955,172 10.52 1.52 DLJ Investment Partners III 100,000,000 47,908,779 21,720,977 31,407,639 54,090,510 0.79 1.11 Gold Hill Venture Lending 40,000,000 40,000,000 7,709,216 50,491,994 0 8.99 1.46 Gold Hill Venture Lending 25,852,584 23,525,851 23,931,037 8,506,138 2,326,732 15.70 1.38 GS Mezzanine Partners I 100,000,000 100,000,000 326,058 131,871,972 0 7.09 1.32 GS Mezzanine Partners III 75,000,000 74,993,4629 8,256,582 90,965,966 65,371 8.12 1.35 GS Mezzanine Partners 2006 Institutional 100,000,000 74,999,888 35,082,847 66,136,993 25,000,112 -1.41 1.35 GS Mezzanine Partners V 1		100 000 000	40 400 600	70 004 012	5 521 701	57 562 262	5 67	104	2.74
DLJ Investment Partners									13.17
DLJ Investment Partners II 27,375,168 23,164,217 506,392 34,731,888 4,955,172 10.52 1.52		100,000,000	88,029,290	311,364	132,324,719	0	15.01	1.51	13.17
DLJ Investment Partners III		27 375 168	23 164 217	506 392	34 731 888	4 955 172	10.52	1.52	13.00
Gold Hill Venture Lending 40,000,000 40,000,000 7,709,216 50,491,994 0 8.99 1.46									6.53
Gold Hill Venture Lending		100,000,000	11,500,115	21,120,211	31,107,032	34,050,510	0.72		0.55
Cold Hill 2008 25,852,584 23,525,851 23,931,037 8,506,138 2,326,732 15.70 1.38		40,000,000	40,000,000	7,709.216	50.491.994	0	8.99	1.46	8.26
GS Mezzanine Partners 100,000,000 100,000,000 326,058 131,871,972 0 7.09 1.32									4.50
GS Metzanine Partners III 75,000,000 74,934,629 8,256,582 90,965,966 65,371 8.12 1.32 GS Metzanine Partners 2006 Institutional 100,000,000 74,999,888 35,082,847 66,136,993 25,000,112 -1.41 1.35 GS Metzanine Partners V 150,000,000 61,390,770 56,114,936 20,517,465 79,593,217 11.01 1.25 Merit Capital Partners William Blair Metzan. Cap. Fd. III 60,000,000 57,633,241 5,070,898 103,358,263 2,366,759 15.16 1.88 Merit Metzanine Fund IV 75,000,000 69,807,692 34,130,045 58,638,000 5,192,308 7.39 1.33 Merit Metzanine Fund V 75,000,000 35,816,327 33,598,902 373,018 39,183,673 -4.17 0.95 Merit Energy Partners				an one of the second	WARRANCE TO THE PARTY OF THE PA	2-0-27-525-025-5			
GS Metzanine Partners 2006 Institutional 100,000,000 74,999,888 35,082,847 66,136,993 25,000,112 -1.41 1.35 GS Metzanine Partners V 150,000,000 61,390,770 56,114,936 20,517,465 79,593,217 11.01 1.25 Merit Capital Partners William Blair Metzan. Cap. Fd. III 60,000,000 57,633,241 5,070,898 103,358,263 2,366,759 15.16 1.88 Merit Metzanine Fund IV 75,000,000 69,807,692 34,130,045 58,638,000 5,192,308 7.39 1.33 Merit Metzanine Fund V 75,000,000 35,816,327 33,598,902 373,018 39,183,673 -4.17 0.95 Merit Energy Partners									12.84
GS Metzanine Partners V 150,000,000 61,390,770 56,114,936 20,517,465 79,593,217 11.01 1.25 Merit Capital Partners William Blair Metzan. Cap. Fd. III 60,000,000 57,633,241 5,070,898 103,358,263 2,366,759 15.16 1.88 Merit Metzanine Fund V 75,000,000 69,807,692 34,130,045 58,638,000 5,192,308 7.39 1.33 Merit Energy Partners 75,000,000 35,816,327 33,598,902 373,018 39,183,673 -4.17 0.95									9.48
Merit Capital Partners William Blair Metzan. Cap. Fd. III 60,000,000 57,633,241 5,070,898 103,358,263 2,366,759 15 16 1.88 Merit Metzanine Fund IV 75,000,000 69,807,692 34,130,045 58,638,000 5,192,308 7.39 1.33 Merit Energy Partners 75,000,000 35,816,327 33,598,902 373,018 39,183,673 -4.17 0.95									6.74
William Blair Metzan. Cap. Fd. III 60,000,000 57,633,241 5,070,898 103,358,263 2,366,759 15.16 1.88 Merit Metzanine Fund IV 75,000,000 69,807,692 34,130,045 58,638,000 5,192,308 7.39 1.33 Merit Metzanine Fund V 75,000,000 35,816,327 33,598,902 373,018 39,183,673 -4.17 0.95 Merit Energy Partners		150,000,000	61,390,770	56,114,936	20,517,465	79,593,217	11.01	1.25	5.19
Merit Mezzanine Fund IV 75,000,000 69,807,692 34,130,045 58,638,000 5,192,308 7.39 1.33 Merit Mezzanine Fund V 75,000,000 35,816,327 33,598,902 373,018 39,183,673 -4.17 0.95 Merit Energy Partners		£0.000.000	£7 (22 24)	E 070 000	102 250 252	2 3// 7/-	16.17	1.00	12.00
Merit Mezzanine Fund V 75,000,000 35,816,327 33,598,902 373,018 39,183,673 -4.17 0.95 Merit Energy Partners						- D			13.00
Merit Energy Partners									3.04
		75,000,000	33,610,327	33,398,902	3/3,018	37,183,073	-4.17	0.95	3.04
The state of the s		24 000 000	24 000 000	58 317 593	129 692 669	0	24 77	7.83	16.50
Merit Energy Partners C 50,000,000 50,000,000 170,090,709 293,584,270 0 31.36 9.27									14.18
Merit Energy Partners D 88,000,000 70,938,303 106,851,353 208,890,579 0 23.32 4.45									11.60
Merit Energy Partners E 100,000,000 39,983,197 50,303,924 47,761,408 0 15.71 2.45									8.21
Merit Energy Partners F-II 100,000,000 57,841,607 44,084,563 19,273,487 42,158,394 2.61 1.10									6.77
Merit Energy Partners H 100,000,000 32,547,044 27,267,612 1,385,483 67,452,956 -17.28 0.88	[- 1] - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -								1.91

Minnesota State Board of Investment - Alternative Investments -

As of December 31, 2012

As of December 31, 2012								
Investment	Total Commitment	Funded Commitment	Market Value	Distributions	Unfunded Commitment	IRR	MOIC*	Peri Yea
Prudential Capital Partners	Communicati	Communicat	ranuc	_Distributions	Communicati	/0	MOIC	1 ea
Prudential Capital Partners I	100,000,000	97,386,612	30,730,812	117,045,498	7,356,824	10.88	1,52	11.
Prudential Capital Partners II	100,000,000	93,553,902	39,415,605	90,616,388	6,848,066	8.77	1.39	7.
Prudential Capital Partners III	100,000,000	90,470,829	92,446,384	24,034,134	12,435,638			3.
Prudential Capital Partners IV Summit Partners	100,000,000	2,979,662	3,285,695	738	97,020,338	9.41	1.10	0.
Summit Fartners Summit Subordinated Debt Fund I	20,000,000	18,000,000	78,348	31,406,578	2,000,000	30.54		10
Summit Subordinated Debt Fund II	45,000,000	40,500,000	3,452,446	87,489,642	4,500,000	56.28		18.
Summit Subordinated Debt Fund III	45,000,000	42,690,965	20,512,060	33,870,368	2,850,000	8.59		8
Summit Subordinated Debt Fund IV	50,000,000	30,249,999	32,867,919	816,860	19,750,001	6.65		4
TCW/Crescent Mezzanine Partners III	75,000,000	68,868,042	5,340,591	156,103,491	29,701,079			11
Windjammer Capital Investors								
Windjammer Mezzanine & Equity Fund II	1000	52,082,565	9,995,609	67,156,653	14,372,929	8.31	1.48	12
Windjammer Senior Equity Fund III	75,000,000	64,335,083	54,133,752	48,074,624	13,256,327	16.42		6
Windjammer Senior Equity Fund IV	100,000,000	1,664,510	419,944	0	98,335,490	-86.57	0.25	0
Yield-Oriented Total	2,366,936,613	1,617,740,648	1,015,358,206	2,092,058,718	688,374,259		1.92	
V. PRIVATE EQUITY								
Adams Street Global Secondary Fund 5 Advent International	100,000,000	5,700,000	7,951,481	0	94,300,000	34.82	1.39	(
Advent International GPE VI-A	50,000,000	47,125,005	56,513,687	6,834,035	2,874,995	15.28	1.34	4
Advent International GPE VII	90,000,000	13,635,000	13,635,000	0	76,365,000	-0.81	1.00	(
Affinity Ventures					10.000 7.000 9.000.00			
Affinity Ventures IV	4,000,000	4,000,000	2,300,133	1,541,970	0	-1.23	0.96	
Affinity Ventures V	5,000,000	3,800,000	3,138,487	814,728	1,200,000	1.60	1.04	
Banc Fund VII	45,000,000	45 000 000	20 400 025	012 725				
Banc Fund VIII	98,250,000	45,000,000 64,845,000	28,488,825 73,196,323	812,725	33,405,000	-7.14 7.55	0.65 1.13	
Blackstone	30,230,000	04,845,000	73,170,323	•	33,403,000	1.33	1.13	
Blackstone Capital Partners IV	70,000,000	71,910,169	44,915,499	132,566,103	2,361,139	38.01	2.47	1
Blackstone Capital Partners V	140,000,000	129,997,627	122,690,121	18,408,494	11,925,078	1.16	1.09	
Blackstone Capital Partners VI	100,000,000	19,572,271	22,394,122	106,356	80,427,730	4.91	1.15	
BLUM Capital Partners								
Blum Strategic Partners I	50,000,000	49,158,307	117,191	99,450,576	2,009,928	12,69	2.03	1
Blum Strategic Partners II Blum Strategic Partners III	50,000,000 75,000,000	40,185,889 74,806,485	1,623,311	87,143,085	2,127,584	22.34	2.21	1
Blum Strategic Partners IV	150,000,000	147,168,674	15,758,360 82,531,915	56,282,692 30,436,993	193,515 15,258,645	-2.45 -6.73	0.96	
Carval Investors	130,000,000	147,100,074	02,331,713	30,430,553	15,256,045	-0.73	0.77	
CVI Global Value Fund	200,000,000	190,000,000	146,251,719	122,498,203	10,000,000	7.98	1.41	
CarVal Credit Value Fund I	100,000,000	95,000,000	123,892,920	63,000	5,000,000	18.30	1.30	
CarVal Credit Value Fund II	150,000,000	0	0	0	150,000,000	N/A	0.00	
Chicago Growth Partners	March March Co.	82300000000	1157 (100 E) (100 E)					
William Blair Capital Partners VII	50,000,000	48,150,000	6,440,185	63,741,199	1,650,000	9.06	1.46	1
Chicago Growth Partners I Chicago Growth Partners II	50,000,000	51,891,998 48,783,309	33,168,665	32,588,932	850,000	6.78	1.27	
Court Square Capital	00,000,000	40,703,309	45,387,698	19,328,440	10,964,691	15.16	1.33	
Court Square Capital Partners	100,000,000	80,271,218	3,855,849	177,179,433	10,528,927	28.95	2.26	1
Court Square Capital Partners II	175,000,000	158,692,575	181,284,647	34,620,619	17,947,631	10,60	1.36	
Court Square Capital Partners III	175,000,000	31,183,047	31,026,022	164,288	143,816,953	0.05	1.00	
Crescendo								
Crescendo III	25,000,000	25,000,000	753,922	10,854,713		-12.86	0.46	1
Crescendo IV	101,500,000	101,500,000	13,646,674	28,270,880	0	-9.55	0.41	1
SFB/ DLJ DLJ Merchant Banking Partners III	125,000,000	121 661 924	23,625,175	251 112 052	2 220 166	10.01		7.
DLJ Strategic Partners	100,000,000	121,661,834 94,982,875	7,620,622	251,112,952 165,390,543	3,338,166 3,467,125	19.21 22.52	2.26 1.82	1
CSFB Strategic Partners II-B	100,000,000	83,911,102	8,050,790	151,818,994	10,288,898	35.36	1.91	1
CSFB Strategic Partners III VC	25,000,000	24,045,841	13,579,087	17,218,612	954,159	6.43	1.28	
CSFB Strategic Partners III-B	100,000,000	76,386,415	66,240,437	38,343,909	16,771,489	6.39	1.37	
CS Strategic Partners IV-B	100,000,000	86,288,724	75,161,767	49,342,383	13,711,276	14.02	1.44	
CS Strategic Partners IV VC	40,500,000	37,116,846	34,336,650	16,071,624	3,218,260	11.07	1.36	
CS Strategic Partners V	100,000,000	43,972,714	51,702,187	6,217,305	56,027,286	68.85	1.32	
CVC European Equity Partners V	131,840,025	93,210,671	92,964,308	29,956,449	19,861,409	12.33	1.32	
Piamond Castle Partners IV PSV Partners IV	100,000,000	89,086,053	81,120,915	23,831,659	10,954,432	3.84	1.18	
BF and Associates	10,000,000	10,000,000	32,194	39,196,082	0	10.61	3.92	2
Merced Partners II	75,000,000	63,768,881	17,953,028	103,167,143	0	24.88	1.90	
Merced Partners III	100,000,000	70,000,000	78,802,920	0	30,000,000	6.61	1.13	
	75 000 000	68,595,072	30,980,792	59,599,863	12,490,518	7.76	1.32	- 8
	75,000,000			73,394,027	12,532,969	19.95	1.95	13
Clevation Partners Fox Paine Capital Fund II	50,000,000	45,719,869	15,657,801	13,394,027	12,332,909			
Clevation Partners Fox Paine Capital Fund II GHJM Marathon Fund	50,000,000							
Clevation Partners Fox Paine Capital Fund II GHJM Marathon Fund GHJM Marathon Fund IV	50,000,000 40,000,000	39,051,000	485,415	57,012,488	949,000	8.35	1.47	
Clevation Partners Fox Paine Capital Fund II GHJM Marathon Fund GHJM Marathon Fund IV GHJM Marathon Fund V	50,000,000 40,000,000 50,000,000	39,051,000 49,277,860	485,415 53,635,988	57,012,488 30,980,949	949,000 798,851	8.35 11.90	1.72	1
Elevation Partners Fox Paine Capital Fund II GHM Marathon Fund GHJM Marathon Fund IV GHJM Marathon Fund V TrailHead Fund	50,000,000 40,000,000 50,000,000 20,000,000	39,051,000 49,277,860 6,287,464	485,415 53,635,988 5,954,561	57,012,488 30,980,949 0	949,000 798,851 13,712,536	8.35 11.90 -9.80	1.72 0.95	8
Elevation Partners Fox Paine Capital Fund II SHJM Marathon Fund GHJM Marathon Fund IV GHJM Marathon Fund V TrailHead Fund Golder,Thoma, Cressey, Rauner Fund IV	50,000,000 40,000,000 50,000,000	39,051,000 49,277,860	485,415 53,635,988	57,012,488 30,980,949	949,000 798,851	8.35 11.90	1.72	8
Clevation Partners Fox Paine Capital Fund II GHJM Marathon Fund GHJM Marathon Fund IV GHJM Marathon Fund V Trailflead Fund Solder, Thoma, Cressey, Rauner Fund IV GS Capital Partners	50,000,000 40,000,000 50,000,000 20,000,000 20,000,000	39,051,000 49,277,860 6,287,464 20,000,000	485,415 53,635,988 5,954,561 77,624	57,012,488 30,980,949 0 42,300,018	949,000 798,851 13,712,536 0	8.35 11.90 -9.80 25.06	1.72 0.95 2.12	18
Elevation Partners Fox Paine Capital Fund II GHJM Marathon Fund GHJM Marathon Fund IV GHJM Marathon Fund V	50,000,000 40,000,000 50,000,000 20,000,000	39,051,000 49,277,860 6,287,464	485,415 53,635,988 5,954,561	57,012,488 30,980,949 0	949,000 798,851 13,712,536	8.35 11.90 -9.80	1.72 0.95	13 8 0 18

Minnesota State Board of Investment - Alternative Investments -

As of December 31, 2012

		As of Decembe						
Investment	Total Commitment	Funded Commitment	Market Value	Distributions	Unfunded Commitment	IRR %	MOIC*	Period Years
GTCR Golder Rauner	Committee	Communicati	Value	Distributions	Communicat		MOIC	1 cars
GTCR VI	90,000,000	90,000,000	717,312	77,813,800	0	-4.93	0.87	14.50
GTCR VII								
GTCR Fund VII	131,250,000	129,390,615	543,647	306,551,141	1,859,375	21.93	2.37	12.90
GTCR Fund VII-A	43,750,000	29,859,374	176,063	80,771,585	13,890,626	82.03	2.71	11.95
GTCR IX	75,000,000	69,539,933	61,218,808	31,590,915	5,460,067	9.94	1.33	6.50
GTCR X	100,000,000	61,448,604	59,749,059	0	38,551,396	-3.83	0.97	2.06
Hellman & Friedman				CONTRACTOR CONTRACTOR	1000000000000	Ungrassian	1000200	1000000
Hellman & Friedman Capital Partners V	160,000,000	145,400,966	79,580,557	288,026,934	16,632,056		2.53	8.08
Hellman & Friedman Capital Partners VI Hellman & Friedman Capital Partners VII	175,000,000 50,000,000	167,607,319 14,650,828	96,131,345	118,713,667	8,515,300	5.95	1.28	5.7
Kohlberg Kravis Roberts	30,000,000	14,030,828	12,252,678	1,388,758	35,349,172	-7.01	0.93	3.7
KKR 1996 Fund	200,000,000	199,902,841	126,241	374,566,859	0	13.17	1.87	16.3
KKR Millennium Fund	200,000,000	200,000,000	138,389,926	240,460,494	o	16.42	1.89	10.0
KKR 2006 Fund	200,000,000	200,371,411	153,513,286	111,214,088	12,932,787	6.47	1.32	6.20
Green Equity Investors VI	200,000,000	18,648,286	18,648,286	508,257	181,351,714	3.42	1.03	0.80
Lexington Capital Partners								
Lexington Capital Partners VI-B	100,000,000	95,279,295	63,485,531	57,367,984	4,720,705	6.98	1.27	7.03
Lexington Capital Partners VII	200,000,000	111,494,768	111,488,928	29,545,837	88,505,232	21.36	1.26	3.5
RWI Ventures	20,000,000,000	HESSO (NES	######################################		41			
RWI Group III	616,430	616,430	34,868	526,806	, 0	-3.25	0.91	6.5
RWI Ventures I	7,603,265	7,603,265	541,361	5,974,262	0	-5.27	0.86	6.5
Sightline Healthcare			222222	12/12/22/23/11	390	92/2/2/2		
Sightline Healthcare Fund III	20,000,000	20,000,000	2,216,141	5,465,766	0	-10.93	0.38	13.9
Sightline Healthcare Fund IV	7,700,000	7,753,673	2,370,897	4,621,834	0	-2.85	0.90	9.27
Silver Lake Partners Silver Lake Partners II	100,000,000	89,314,415	\$4 610 701	84,695,591	11,681,453	0.61	1.55	0.51
Silver Lake Partners III	100,000,000	73,401,330	54,610,781 63,525,191	43,976,513	27,334,097	9.61 16.48	1.56	8.50 5.75
Silver Lake Partners IV	100,000,000	75,401,530	03,323,191	43,970,313	100,000,000	N/A	0.00	0.26
Split Rock Partners	100,000,000	Ü	· ·	0	100,000,000	NA	0.00	0.20
Split Rock Partners	50,000,000	44,799,999	34,051,816	597,892	5,200,001	-6.04	0.77	7.67
Split Rock Partners II	60,000,000	24,960,000	20,465,791	479,262	34,340,000	-8.98	0.84	4.68
Summit Partners	Part Control of Control	200 an 100 a	000000000000000000000000000000000000000	500000000000000000000000000000000000000	SSIMS SIRKSSIM	(A	0.577.00	10110000
Summit Ventures V	25,000,000	24,125,000	304,825	32,936,046	875,000	8.06	1.38	14.75
Summit Partners Growth Equity Fund VIII	100,000,000	7,000,000	6,757,730	0	93,000,000	-4.74	0.97	1.66
T. Rowe Price	45,602,320	45,602,320	20,859,422	15,244,941	0	-23.58	0.79	6.43
Thoma Cressey								
Thoma Cressey Fund VI	35,000,000	33,915,000	4,687,495	30,693,447	1,085,000	0.50	1.04	14.37
Thoma Cressey Fund VII	50,000,000	50,000,000	16,308,510	85,422,640	0	23.72	2.03	12.35
Thoma Cressey Fund VIII	70,000,000	68,932,574	74,157,626	77,541,167	770,000	16.03	2.20	6.67
Thomas, McNerney & Partners	30 000 000	20.050.000	14 471 427	10 504 504				
Thomas, McNerney & Partners I	30,000,000	28,950,000	14,471,437	10,504,694	1,050,000	-3.44	0.86	10.15
Thomas, McNerney & Partners II Varde Fund	50,000,000	42,875,000	38,310,400	6,240,826	7,125,000	1.31	1.04	6,50
Varde Fund IX	100,000,000	100,000,000	108,474,428	54,893,193	0	12.51	1.63	4.52
Varde Fund X	150,000,000	142,500,000	161,866,890	0 0	7,500,000	7.63	1.14	2.70
Vestar Capital Partners	130,000,000	142,500,000	101,000,000		7,500,000	7.555	1.13	2,70
Vestar Capital Partners IV	55,000,000	52,761,494	9,315,761	84,094,802	746,945	13.38	1.77	13.05
Vestar Capital Partners V	75,000,000	73,865,049	53,029,292	22,488,956	1,460,180	0.58	1.02	7.04
Vestar Capital Partners VI	100,000,000	1,472,711	1,472,711	0	98,527,289	0.00	1.00	1.27
Warburg Pincus								
Warburg Pincus Equity Partners	100,000,000	100,000,000	3,675,852	157,951,853	0	9.97	1.62	14.52
Warburg Pincus Private Equity VIII	100,000,000	100,000,000	82,697,210	141,560,275	0	15.80	2.24	10.71
Warburg Pincus Private Equity IX	100,000,000	100,000,000	90,070,885	73,904,388	0	10.08	1.64	7.43
Warburg Pincus Private Equity X	150,000,000	146,910,914	145,185,139	23,668,047	3,150,000	5.01	1.15	5.19
Warburg Pincus Private Equity XI	200,000,000	0	0	0	200,000,000	N/A	0.00	0.03
Wayzata	100 000 000	02 180 000	70 124 470	84.020.100	< 820 000	0.05		7.03
Wayzata Opportunities Fund	100,000,000	93,180,000	78,124,478 134,640,215	84,939,109	6,820,000	9.85	1.75	7.03
Wayzata Opportunities Fund II Wayzata Opportunities Fund III	150,000,000	57,450,000 0	134,640,213	11,529,900	92,550,000	14.51 N/A	2.54 0.00	5.19 0.54
Welsh, Carson, Anderson & Stowe	130,000,000	U	U	.0	130,000,000	INIA	0.00	0.54
Welsh, Carson, Anderson & Stowe Welsh, Carson, Anderson & Stowe VIII	100,000,000	100,000,000	654,245	128,163,520	0	3.10	1.29	14.44
Welsh, Carson, Anderson & Stowe VIII	125,000,000	123,750,000	37,717,203		1,250,000	11.65	1.66	12.51
Welsh, Carson, Anderson & Stowe X	100,000,000	97,578,466	86,788,918	36,892,636	3,000,000	4.92	1.27	7.04
Welsh, Carson, Anderson & Stowe XI	100,000,000	66,259,646	74,235,808	4,310,834	33,740,354	10.04	1.19	4.45
Private Equity Total	8,557,612,040	6,313,007,451	4,039,594,024	5,426,886,747	2,222,759,265	*******	1.50	
Alternatives Total	13,801,043,632	10,209,507,112	7,260,160,373	8,660,045,824	3,535,273,682		1.56	
Americanes Ional	10,001,040,002	- 3,200,000,112	,,200,100,575	5,000,045,024	J. 10,002		1.50	

None of the data presented herein has been reviewed or approved by either the general partner or investment manager. The performance and valuation data presented herein is not a guarantee or prediction of future results. Ultimately, the actual performance and value of any investment is not known until final liquidation. Because there is no industry-standardized method for valuation or reporting, comparisons of performance and valuation data among different investments is difficult.

^{*} MOIC: Multiple of Invested Capital

PRIVATE EQUITY MANAGER SUMMARY PROFILE

I. Background Data

Name of Fund:	Apax VIII
Type of Fund:	Private Equity
Target Fund Size:	€9 billion
Fund Manager:	Apax Partners, LLP as adviser to ApaxVIII GP L.P. Inc, the General
	Partner
Manager Contact:	David Kim
	Apax Partners, L.P.
	601 Lexington Avenue
	53rd Floor
	New York, NY 10022
	Telephone: 212 753 6300

II. Organization and Staff

The history of Apax is interwoven with the development of the private equity asset class in Europe and the US. Throughout its 30 year history, Apax has successfully raised and advised 30 funds which have invested across all investment stages, and through several economic cycles.

Apax was born as a venture capital business and in its early years, during the 1980s and early 1990s, pioneered venture investing in Europe and in the US. This is when Apax started to specialise in specific sectors and to focus on driving growth in portfolio companies. This is also the period when country funds were raised (Germany, Israel, the UK and the US).

From 1993, Apax started to invest in buy-outs and raised 'balanced funds' with a growing portion of buy-outs rather than venture capital. At the same time, country teams were being merged and regional rather than domestic funds were raised. The first Buy-out Fund, Apax Europe V, was raised in 2001 with 79% of its capital invested in buy-outs. Apax no longer invests in venture capital but has retained a very strong focus on sector expertise, growth and the operational rather than financial backgrounds of its investment professionals.

The Apax team currently consists of approximately 300 people worldwide, of whom 109 are investment professionals. Apax's international presence, with eight offices across Europe, America and Asia and a team with 25 nationalities provides it with local knowledge to source and execute transactions. The Investment Adviser is 90% owned by the 16 partners. The remaining 10% is owned by three sovereign wealth funds who are strategically important business partners for Apax in the Asian markets.

III. Investment Strategy

Apax is seeking to raise Fund VIII to continue its proven strategy of investing in buy-outs in the €1-5bn enterprise value range across five sectors:

- Financial & Business Services
- · Healthcare
- · Media
- · Retail & Consumer
- Tech & Telecom

Apax's sector strategy, combined with its global platform and local knowledge has consistently generated unique investment opportunities. The vast majority of investments made by predecessor funds raised over the last ten years ("Buy-out Funds") were executed through proprietary or limited competition processes. Apax intends to invest the majority of the Fund in European or North American investments.

IV. Investment Performance

Previous fund performance as of September 30, 2012 for Apax and the SBI's investments with previous funds, where applicable, is shown below:

Fund	Inception Date	Total Commitments	SBI Investment	Net IRR from Inception*	Net MOIC from Inception*	
Apax Europe VII	2007	€11.2 billion		6.2%	1.2	
Apax US VII	2006	\$856 million		13.1%	1.6	
Apax Europe VI	2005	€4.3 billion		9.5%	1.4	
Apax Europe V	2001	€4.4 billion		28.6%	1.9	

^{*} Previous Fund investments may be relatively immature and, therefore, returns may not be indicative of future results. Net IRR and Multiple of Invested Capital (MOIC) were provided by Apax.

V. General Partner's Investment

The General Partner will procure that persons connected to the Investment Adviser (either themselves or vehicles through which they invest) will invest in and/or alongside the Fund an amount equal to at least €400 million (the "Apax Commitment") or 4.5% of the Fund's €9.0bn target.

VI. Management Fee

1.5% of capital committed to the Fund, declining after the investment period as the portfolio is liquidated.

VII. Distributions

80% of realized profits to the Limited Partners and 20% to the General Partner, subject to an 8% preferred return to the Limited Partners.

VIII. Investment Period and Term

The Fund will have a term of 10 years, subject to possible extension.

The Investment Period will last for a period of six years, subject to possible extension.

^{*} This document is a summary of more detailed information provided in the Confidential Private Placement Memorandum (the "PPM"). It is qualified in its entirety by the more detailed information provided in the PPM and any supplemental thereto.

TAB F

INVESTMENT ADVISORY COUNCIL REPORT

DATE:

February 27, 2013

TO:

Members, State Board of Investment

FROM:

Howard Bicker

SUBJECT:

Swaps

At its February 19, 2013 meeting the Investment Advisory Council discussed a staff memo concerning the swap market. The IAC discussed to what extent the SBI could use swaps and whether to support having the SBI seek legal authority to invest in swaps. A copy of the memo is in **Attachment A**.

RECOMMENDATION:

The Investment Advisory Council recommends the Board authorize the executive director to seek legislation authorizing the SBI to invest in swaps.

ATTACHMENT A

SWAPS

Staff is researching the swaps market to determine whether access to the swaps market would be beneficial to the SBI in regards to obtaining market exposure, additional potential excess returns, and risk management. If it is determined that access to the swaps market will materially benefit the SBI, staff will recommend that a bill be submitted during the current session to receive legislative approval to invest in the swap market.

Historically, the SBI has not invested in the swaps market because swaps are not traded "on a contract market regulated by a governmental agency or by a financial institution regulated by a governmental agency" (11A.24, subdivision 1). In addition, staff has had other concerns about the swaps market:

- 1) Swaps are traded on the over-the-counter (OTC) market through individually negotiated bilateral contracts that have no central clearinghouse which subjects the SBI to counterparty risk.
- 2) Swaps have no standardized margin requirements.
- 3) Swap prices have limited transparency.

Staff has determined that the swaps market could provide benefits to the SBI going forward due to the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act that provides for new federal regulation by the SEC and the CFTC. The most significant changes being made by the Dodd-Frank Act are the following:

- 1) Standardized swaps will be traded on a Swap Execution Facility (SEF) and cleared through a central counterparty (CCP) to mitigate counterparty risk.
- 2) Standardized margin requirements for swaps cleared through a CCP and for all bilateral contracts will be required.
- 3) Central trades repository reporting requirement will provide greater price transparency.

Staff currently believes that the final implementation of the Dodd-Frank Act could alleviate most of staffs' concerns about the swaps market.

The CFTC and the SEC are in the process of implementing the Dodd-Frank Act. The following is staffs' understanding of the current status of the regulations:

- 1) Interest rate swaps and credit index swaps (CDX swaps) will start to be cleared in March 2013 and will be phased in through September 2013.
- 2) A central clearinghouse can submit an application to the appropriate regulatory agency to clear a new swap. The regulatory agency has a review process that takes about 120 days to determine whether the application will be approved.

- 3) Regulations for the SEF's have not been released yet. The CFTC is scheduled to release them the third week of February for the start of the review process that will take at least 120 days.
- 4) Client suitability and monitoring/reporting of trade activity regulations were effective as of January 1, 2013.
- 5) The collateral required for clearing swap agreements will be materially higher than what is generally required for the futures market.
- 6) Rules and regulations related to SEF's and central clearing for total return swaps has not been determined.

If staff were to receive approval to invest in the swap market, some of the potential uses within the SBI portfolio will be:

- 1) Exposure to asset classes could be adjusted. Swaps could be used to adjust the asset allocation of a fund to gain or reduce exposure to particular markets. Total rate of return swaps could be used to gain exposure to the emerging international market where tax treatment, capital controls, and registration requirements make it difficult in the cash markets. Total return swaps could also be used to rebalance a fund without having to trade the actual physical securities. If a fund is overweighted to domestic equities and underweighted to domestic fixed income relative to its policy weights, staff could rebalance by selling a Russell 3000 swap and buying a swap tied to the Barclay's Aggregate. Another use of a total return swap would be to reduce the cash drag at the fund level. Staff could eliminate the need to include a cash allocation in a fund asset allocation policy but still hold cash in the fund by covering the fund with a total return swap tied to the appropriate asset class target.
- 2) A manager could gain exposure to various parts of the market and individual securities. By trading in index swaps a manager could increase or decrease its exposure to a particular part of the market. For example, a fixed income manager could decrease its exposure to the investment grade credit market by selling a swap tied to the IG Index, while maintaining exposure to individual credits that the manager feels are undervalued. Also, a manager could gain exposure to an individual credit by purchasing a credit default swap when the bond is difficult to obtain in the cash market.
- 3) A manager could adjust the duration of a fixed income portfolio by using an interest rate swap to increase or decrease the duration on some part of the interest rate curve. By paying a fixed rate and receiving a floating rate or the reverse of that transaction, a manager could decrease or increase the portfolio duration.

The rules and regulations related to the new swap market are evolving. The SBI is requesting guidance from the IAC as it considers the most appropriate next steps related to swaps.