MINNESOTA STATE BOARD OF INVESTMENT

MINNESOTA STATE BOARD
OF INVESTMENT
MEETING
September 9, 2015



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

STATE BOARD OF INVESTMENT AGENDA AND MINUTES September 9, 2015

AGENDA STATE BOARD OF INVESTMENT MEETING

Wednesday, September 9, 2015 10:00 A.M.

Retirement Systems Building Room 106 – Main Floor 60 Empire Drive, St. Paul, MN

		TAI
1.	Approval of Minutes of June 3, 2015	
2.	Report from the Executive Director (M. Perry)	
	A. Quarterly Investment Review (April 1, 2015 – June 30, 2015)	A
	B. Administrative Report	В
	 Reports on Budget and Travel Legislation Sudan Update Iran Update Litigation Update 	
3.	Report from the SBI Administrative Committee (L. Hacking)	C
4.	Investment Advisory Council Report (K. Faust)	
	A. Private Markets Report	D
	1. Review of current strategy	
	 Consideration of investment commitments with three existing managers and three new managers 	
	B. Public Markets, Non-Retirement, and Defined Contribution Report	E
5.	Other Items	

Minutes State Board of Investment June 3, 2015

The State Board of Investment (SBI) met at 10:00 A.M. Wednesday, June 3, 2015 in Room 106, Retirement Systems Building, St. Paul, Minnesota. Governor Mark Dayton, State Auditor Rebecca Otto, Secretary of State Steve Simon, and Attorney General Lori Swanson were present. The minutes of the March 4, 2015 meeting were approved.

Executive Director's Report

Executive Director Mansco Perry 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 March 31, 2015 (Combined Funds 8.0% vs. Composite 7.7%) and had provided a real rate of return of 6.5% above inflation over the latest 20 year period (Combined Funds 8.8% vs. CPI 2.3%).

Mr. Perry said that assets increased over the quarter by 0.8% (Combined Funds ending value of \$60.4 versus a beginning value of \$60.0 billion), due to investment returns outweighing net outflows. The Combined Funds return was twenty basis points (bps) above the benchmark for the quarter (Combined Funds 1.6% vs. Composite 1.4%) and 10 bps higher for the year (Combined Funds 8.1% vs. Composite 8.0%). The Combined Funds also outperformed for longer time periods.

Mr. Perry reported that the domestic stock manager group outperformed its target for the quarter (Domestic Stocks 2.2% vs. Domestic Equity Asset Class Target 1.8%), performed in-line for the year (Domestic Stocks 12.4% vs. Domestic Equity Asset Class Target 12.4%), and outperformed in longer time periods. He said the international stock manager group outperformed its target for the quarter (International Stocks 3.8% vs. International Equity Asset Class Target 3.5%) and outperformed over longer time periods. Mr. Perry then stated that the bond segment surpassed its target for the quarter (Bonds 1.7% vs. Fixed Income Asset Class Target 1.6%) and outperformed its target in all other time periods. He stated that the alternative investments detracted from performance for the quarter (-3.0% for the quarter) due to the downward impact of oil prices on the Resources portfolio. Mr. Perry concluded his report noting that, as of March 31, 2015, the SBI was responsible for managing more than \$80 billion of assets.

Mr. Perry referred members to Tab B of the meeting materials for the administrative report. He reported that fiscal year to date, the SBI was running below budget. Mr. Perry then described the three items of legislation that impacted the SBI that were signed during the concluded legislative session – the Omnibus Retirement Bill, the Omnibus State Government Finance Bill, and the Achieving a Better Life Experience Program. Next, Mr. Perry stated that Sudan and Iran holdings updates were provided. Mr. Perry stated that there was currently no litigation involving the SBI.

Mr. Perry referred members to Tab C and discussed the Administrative Committee Report. He provided background on the first action item, which was a review of the Executive Director's Proposed Workplan for FY16. State Auditor Otto moved approval of the recommendation, which

reads, "The Committee recommends that the SBI approve the FY16 Executive Director's Workplan. Further, the Committee recommends that the Workplan serve as the basis for the Executive Director's performance evaluation for FY16." The motion passed.

Mr. Perry detailed the second action item in the Administrative Committee Report, which was a review of the Budget Plan for FY16 and FY17. State Auditor Otto moved approval of the recommendation, which reads, "The Committee recommends that the SBI approve the FY16 and FY17 Administrative Budget Plan, as presented to the Committee, and that the Executive Director have the flexibility to reallocate funds between budget categories if the Executive Director deems necessary. The motion passed.

Mr. Perry proceeded to the third action item in the Administrative Committee Report, which was a review of the Continuing Fiduciary Education Plan. He explained the importance of the Plan in ensuring that Board members are kept apprised on fiduciary matters. State Auditor Otto moved approval of the recommendation, which reads, "The Committee recommends that the SBI adopt the attached Continuing Fiduciary Education Plan." The motion passed.

Mr. Perry discussed the fourth action item in the Administrative Committee Report, which was a review of the International Equity Manager Country Guidelines Report and Process. He provided the background of the process and the reasoning behind the proposal to discontinue the process. Secretary of State Simon moved approval of the recommendation, which reads, "The SBI Administrative Committee concurs with Staff's recommendation that the SBI authorize the Executive Director to discontinue the International Equity Manager Country Guidelines Process, effective upon approval. Further, if the SBI approves the discontinuance of the International Equity Manager Country Guidelines Process, the SBI Administrative Committee recommends that the SBI authorize the Executive Director to make the appropriate revisions to the International Equity Investment Manager Guidelines to reflect that the provisions of the International Equity Manager Country Guidelines are no longer in effect." The motion received two votes in favor and two votes against the proposal. A brief discussion followed whereby Mr. Perry explained how investing in international financial markets has evolved and that the International Equity Manager Country Guidelines Report and Process adds no value to the investment process. In response to a question from the Board, he clarified that renewing these guidelines would have no impact on the investment managers' ability to carry out their fiduciary duty. Another vote was called and the motion passed.

Mr. Perry discussed the fifth action item in the Administrative Committee Report, which was a review of the Executive Director's Evaluation and Salary Process. He provided background on the item. State Auditor Otto moved approval of the recommendation, which reads, "The Committee recommends that the SBI delegate the review of the current evaluation process and timeline to the Administrative Committee. The Administrative Committee will determine if any changes to the evaluation and salary process and/or timeline for the Executive Director's FY15 performance evaluation should be recommended. In addition, the Administrative Committee recommends that the following procedures should continue until the Committee recommends any changes to the process.

- The SBI deputies/designees will develop an appropriate evaluation form for use by each member, which will reflect the categories in the Executive Director's position description and workplan.
- Governor's office will coordinate distribution and collection of the evaluation forms and will forward the completed forms to the Executive Director. Board members are encouraged to meet individually with the Executive Director to review their own evaluation. The motion passed.

Mr. Perry informed the Board of the update to the SBI's Business Continuity Plan.

The Chair of the Investment Advisory Council (IAC), Jeff Bailey reported on the agenda items covered in the May 19th IAC meeting. Mr. Bailey reviewed the four alternative investment proposals brought to the IAC. Three managers were existing managers (TA Realty (Real Estate): CarVal Investors (Private Equity); and Blackstone (Private Equity)) and one was a new manager (EnerVest (Resources)). Secretary of State Simon moved approval of all recommendations in Tab D of the meeting materials, which read, "The Investment Advisory Council concurs with Staff's recommendation 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 Fund 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 TA Realty 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 TA Realty or reduction or termination of the commitment.

The Investment Advisory Council concurs with Staff's recommendation that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of up to \$150 million, or 20% of CVI 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 CarVal 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 CarVal or reduction or termination of the commitment.

The Investment Advisory Council concurs with Staff's recommendation that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of up to \$150 million, or 20% of BCP VII, 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 Blackstone 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 Blackstone or reduction or termination of the commitment.

The Investment Advisory Council concurs with Staff's recommendation 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 EnerVest XIV, 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 EnerVest 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 EnerVest or reduction or termination of the commitment."

The motion passed.

The meeting adjourned at 11:03 a.m.

Mansce Lerry W

Respectfully submitted,

Mansco Perry III

Executive Director and

Chief Investment Officer

TAB A

LONG TERM OBJECTIVES

Period Ending 6/30/15

COMBINED FUNDS: \$60.1 Billion	Result	Compared to Objective (2)
Match or Exceed Composite Index (10 Yr.)	7.8% (1)	0.3 percentage point above the target
Outperform a composite market index weighted 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.)	8.4%	6.1 percentage point above CPI
Provide returns that are 3-5 percentage points greater than inflation over the latest 20 year period.		

- (1) Performance is calculated net of fees.
- (2) Differential from composite may occur due to rounding.

EXECUTIVE SUMMARY

Combined Funds (Net of Fees)

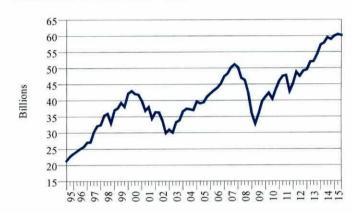
Asset Growth

The market value of the Combined Funds decreased 0.5% during the second quarter of 2015. The negative net contributions outweighed the positive investment return for the quarter.

Asset Growth During Second Quarter 2015

	(Millions)	
Beginning Value	\$60,432	
Net Contributions	-515	
Investment Return	208	7.4
Ending Value	\$60,125	

Combined Funds Market Value



Asset Mix

There was a slight increase to the international equities and alternative investment allocations from positive investment return and a slight decrease to the fixed income allocation as a result of negative performance.

	Policy Targets	Actual Mix 6/30/15	Actual Market Value (Millions)
Domestic Stocks	45.0%	47.3%	\$28,440
International Stocks	15.0%	14.9%	8,960
Bonds	18.0%	23.6%	14,160
Alternative Assets*	20.0%	12.3%	7,425
Cash	2.0%	1.9%	1,140
	100.0%	100.0%	\$60,125



Fund Performance (Net of Fees)

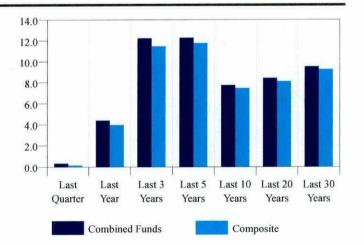
The Combined Funds outperformed its benchmark for the quarter and for the year.

Periods Ended 6/30/15

			Last	Last	Last	Last	Last
	Last	Last	3	5	10	20	30
	Quarter	· Year	Years	Years	Years	Years	Years
Combined	0.3%	4.4%	12.2%	12.3%	7.8%	8.4%	9.5%
Funds	0.2%	4 00/	11.50/	11 00/	7.50/	0 10/	0.20/
Composite	0.2%	4.0%	11.5%	11.070	1.070	0.170	9.570

Note: All periods over one year are annualized.

Column sums throughout this report may not add due to rounding.



^{*} Any uninvested allocation is held in bonds.

EXECUTIVE SUMMARY

Stock and Bond Manager Performance (Net of Fees)

Domestic Stocks

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

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

		Period	ls Ended	6/30/15	
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Dom. Stocks	0.1%	7.7%	18.2%	17.8%	8.1%
Asset Class Target*	0.1%	7.3%	17.7%	17.5%	8.2%

^{*} 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) outperformed its target for the quarter and for the year.

MSCI ACWI Free ex USA (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.

	Periods Ended 6/30/15						
	Last Ouarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years		
Int'l Stocks	1.3%	-3.8%	10.7%	8.4%	6.1%		
Asset Class Target*	0.5%	-5.3%	9.4%	7.8%	5.6%		

^{*} 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 USA (net). From 10/1/03 to 9/30/07 the target was MSCI ACWI ex USA (net).

Bonds

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

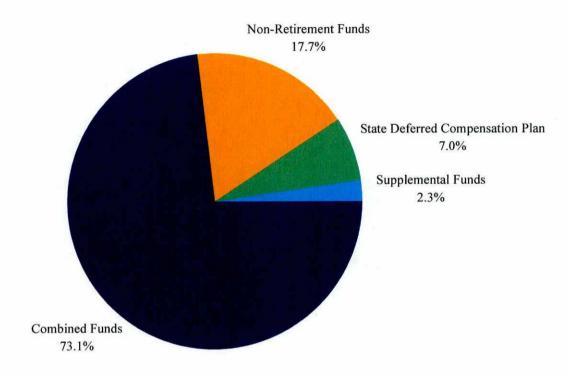
Barclays Aggregate: The Barclays Aggregate Bond Index reflects the performance of the broad bond market for investment grade (Baa or higher) bonds, U.S. treasury and agency securities, and mortgage obligations with maturities greater than one year.

		Periods Ended 6/30/15						
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years			
Bonds	-1.5%	2.1%	2.6%	4.2%	4.8%			
Asset Class Target	-1.7%	1.9%	1.8%	3.3%	4.4%			

Alternative Investments

		Period	s Ended 6	/30/15	
	Last		Last 3	Last 5	Last 10
	Quarter	Last Year	Years	Years	Years
Alternatives	3.7%	7.6%	12.5%	13.1%	13.6%

EXECUTIVE SUMMARYFunds Under Management



	6/30/15
	Market Value
	(Billions)
Retirement Funds	A C A
Combined Funds	\$60.1
Supplemental Investment Fund	1.9
(Excluding Deferred Compensation Plan Assets)	
State Deferred Compensation Plan	5.8
Non-Retirement Funds	
Assigned Risk Plan	0.3
Permanent School Fund	1.2
Environmental Trust Fund	0.9
Closed Landfill Investment Fund	0.1
Miscellaneous Trust Accounts	0.1
Other Post Employment Benefits Accounts	0.5
State Cash Accounts	10.2
Minnesota College Savings Plan	1.2
Total	\$82.3

Note: Amounts and percentages may not add due to rounding.

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MINNESOTA STATE BOARD OF INVESTMENT

QUARTERLY INVESTMENT REPORT

Second Quarter 2015 (April 1, 2015 - June 30, 2015)

Table of Contents Page Capital Market Indices_____ Financial Markets Review_____ Combined Funds 5 Stock and Bond Manager Pools Alternative Investments_______10 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 Plan_____ Minnesota College Savings Plan Accounts Permanent School Fund 22 Environmental Trust Fund_____ Closed Landfill Investment Fund 24 State Cash Accounts_____

VARIOUS CAPITAL MARKET INDICES

Periods Ended June 30, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Equity					
Russell 3000 (broad market)	0.1%	7.3%	17.7%	17.5%	8.2%
Russell 1000 (large cap)	0.1	7.4	17.7	17.6	8.1
Russell 2000 (small cap)	0.4	6.5	17.8	17.1	8.4
Dow Jones Wilshire Composite	0.1	7.2	17.6	17.5	8.3
Dow Jones Industrials	-0.3	7.2	13.8	15.4	8.3
S&P 500	0.3	7.4	17.3	17.3	7.9
Domestic Fixed Income					
Barclays Aggregate (1)	-1.7	1.9	1.8	3.3	4.4
Barclays Gov't/Credit	-2.1	1.7	1.8	3.5	4.4
3 month U.S. Treasury Bills	0.0	0.0	0.1	0.1	1.4
International					
MSCI Emerging Markets Free Index (2)	0.7	-5.1	3.7	3.7	8.1
MSCI ACWI ex USA (3)	0.5	-5.3	9.4	7.8	5.5
MSCI EAFE (4)	0.6	-4.2	12.0	9.5	5.1
MSCI World ex USA (5)	0.5	-5.3	11.1	9.0	5.2
Salomon Non U.S. Gov't Bond	-1.5	-13.5	-3.9	0.3	2.6
Inflation Measure					and the second
Consumer Price Index CPI-U (6)	1.1%	0.1%	1.3%	1.8%	2.1%
Consumer Price Index CPI-W (7)	1.2%	-0.4%	1.1%	1.8%	2.1%

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

Note: All periods over one year are annualized.

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

⁽³⁾ Morgan Stanley Capital International All Country World Index ex USA (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 USA 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 0.1% return for the second quarter of 2015. Volatility reemerged late in the second quarter, reclaiming some of investors' gain. Ironically, the increased volatility arose despite signs of economic stabilization in the United States. A severe decline in China's stock market amid deceleration in Asia's most important economy also weighed on Wall Street sentiment. Within the Russell 3000, Health Care was the best performing sector with a 3.4% return while Utilities was the weakest sector with -3.2% return for the quarter. Growth stocks outperformed value stocks during the quarter.

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

Large Growth	Russell 1000 Growth	0.1%
Large Value	Russell 1000 Value	0.1%
Small Growth	Russell 2000 Growth	2.0%
Small Value	Russell 2000 Value	-1.2%

The Russell 3000 index returned 7.3% for the year ending June 30, 2015.

DOMESTIC BONDS

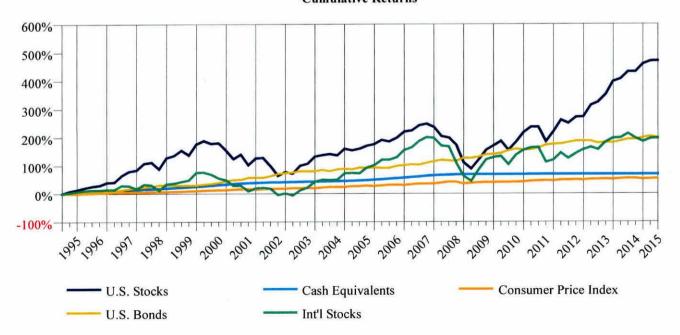
The U.S. bond market, as measured by the Barclays Capital U.S. Aggregate Bond Index, produced a total return of -1.7% for the quarter. The 2-year U.S. Treasury yield ended the quarter higher by 11 basis points at 0.7%, the 5-year increased by 34 basis points to 1.65%, the 10-year increased by 49 basis points to 2.4%, and the 30-year increased by 66 basis points to 3.1%. The Asset-Backed sector detracted the least from performance, while corporates were the worst performing sector.

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

U.S. Treasury	-1.6%
Agency	-0.6%
Corporates	-3.2%
Agency MBS	-0.8%
Commercial Mortgages	-1.1%
Asset-Backed	-0.1%

The U.S. Aggregate Bond Index returned 1.9% for the year ending June 30, 2015.

PERFORMANCE OF CAPITAL MARKETS Cumulative Returns



FINANCIAL MARKETS REVIEW

DEVELOPED INTERNATIONAL MARKETS

In aggregate, developed international stock markets (as measured by MSCI World ex USA index net) provided a return of 0.5% for the quarter. World equities posted negative returns in local currencies. However, given a weaker U.S. dollar, returns in U.S. dollar terms were modestly positive. Markets continued to be driven by macro themes as investors remained heavily influenced by slowing economic growth, interest rate expectations, changes in oil prices, and foreign exchange trends. Also, negative sentiment was strongly influenced by concerns regarding the debt and fiscal crisis in Greece. The top performing sectors for the quarter were Telecommunication Services, Financials and Utilities. The worst performing sectors were Information Technology, Materials and Health Care. The quarterly performance of the six largest stock markets, which comprise about 73% of the MSCI World ex USA index, is shown below:

Japan	3.1%
United Kingdom	3.0%
France	0.3%
Canada	-0.9%
Switzerland	1.0%
Germany	-5.6%

The MSCI World ex USA index returned -5.3% during the last year.

EMERGING INTERNATIONAL MARKETS

Emerging markets (as measured by MSCI Emerging Markets Free index net) provided a return of 0.7% for the quarter. The quarterly performance of the six largest stock markets in the index is shown below:

6.0%
-3.7%
1.0%
6.7%
-0.7%
-3.6%

The Emerging Markets Free index returned -5.1% during the last year.

The Emerging Markets Free (EMF) index is compiled by MSCI and measures performance of 23 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 75% of the value of the emerging international markets in the index.

REAL ESTATE

During the second quarter of 2015, private real estate posted its 22nd consecutive quarter of positive returns with the NCREIF Property Index posting a return of 3.1%. Real Estate markets have seen a healthy recovery since the 2008-2009 crash. An aggregate \$27 billion in private real estate funds was raised in 2Q 2015, with the largest fund being the \$5.8 billion Lone Star Real Estate Fund IV. While fundraising is on pace to exceed the 2014 total, fewer vehicles have closed in recent years, continuing the trend where a handful of managers are dominating the fundraising landscape. (Source: NCREIF; Preqin)

PRIVATE EQUITY

During the second quarter of 2015, an aggregate \$113 billion in private equity funds was raised across 243 funds. Real Estate funds topped the list of aggregate capital raised with \$27 billion and Venture Capital closed the most funds with 80. Limited Partners, as surveyed by Preqin, continue to be bullish on the asset class. This is evidenced by the recent successful fundraises by General Partners and the record level of dry powder, \$1.3 trillion, ready to be deployed. (Source: Preqin)

Buyout activity in 2Q 2015, as measured by deal activity, decreased to 765 compared to the 830 deals in 1Q 2015. The aggregate value of deals stayed roughly the same (\$99.4 billion in 2Q vs. \$99.7 billion in 1Q), with the largest deal being the \$9.1 billion Suddenlink Communications. The number of private-equity backed exits increased slightly in 2Q 2015 to 381, and the aggregate value of exits increased to \$117 billion. (Source: Preqin)

RESOURCE FUNDS

During the second quarter of 2015, crude oil traded between a range of \$49/bbl and \$61/bbl. The average price for the second quarter of 2015 was \$58/bbl, which was \$9 above the average price from the first quarter. Increased consumer demand globally lifted oil prices in the quarter. (Source: Bloomberg, Wall Street Journal)

COMBINED FUNDS

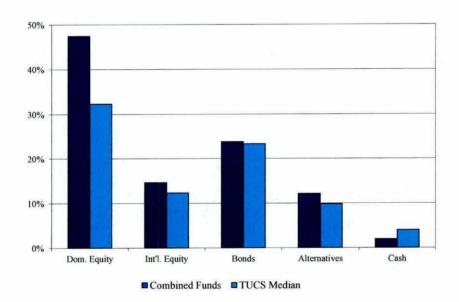
The comparison universe used by the SBI is the Trust Universe Comparison Service (TUCS). Only funds with assets over \$1 billion are included in the comparisons shown in this section.

Asset Mix Compared to Other Pension Funds

On 6/30/15, the asset mix of the Combined Funds was:

	\$ Million	%
Domestic Stocks	\$28,440	47.3%
International Stocks	8,960	14.9%
Bonds	14,160	23.6%
Alternative Assets	7,425	12.3%
Unallocated Cash	1,140	1.9%
Total	\$60,125	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:



	Domestic	Int'l			
	Equity	Equity	Bonds	Alternatives	Cash
Combined Funds	47.3%	14.9%	23.6%	12.3%	1.9%
Median Allocation in TUCS*	32.8%	11.6%	23.0%	10.6%**	4.3%

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

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

COMBINED FUNDS

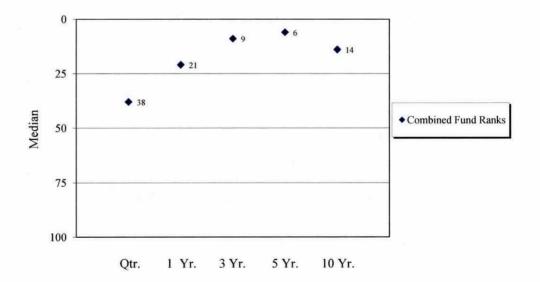
Performance Compared to Other Pension Funds

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.



Periods Ended 6/30/15

	Quarter	1 Year	3 Years	5 Years	10 Years
Combined Funds					
Percentile Rank in TUCS*	38th	21st	9th	6th	14th

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

Note: All periods over one year are annualized.

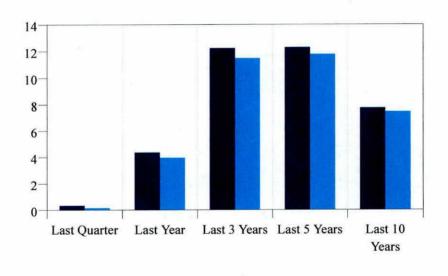
COMBINED FUNDS

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:

	Maret Index	Combined Funds Composite 2Q/15
Domestic Stocks	Russell 3000	45.0%
Int'l Stocks	MSCI ACWI Free ex USA	15.0%
Bonds	Barclays Capital Aggregate	25.9%*
Alternative Investments	Alternative Investments	12.1%*
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.



Periods Ended 6/30/15

Combined Funds **	0.3%	4.4%	12.2%	12.3%	7.8%
Composite	0.2%	4.0%	11.5%	11.8%	7.5%

Note: All periods over one year are annualized.

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

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STOCK AND BOND MANAGERS

Performance of Asset Pools (Net of Fees)

Domestic Stocks

Target: Russell 3000

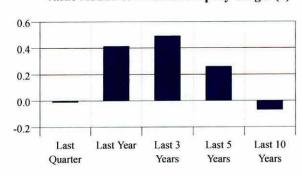
Expectation: If one-third of the pool is actively managed, one-third is semi-passively managed, and one-third is passively managed, the entire pool is expected to exceed the target by .18% - .40% annualized over time.

Periods Ended 6/30/15

	Last Ouarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Domestic Stocks	0.1%	7.7%	18.2%	17.8%	8.1%
Asset Class Target*	0.1%	7.3%	17.7%	17.5%	8.2%

^{*} 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.

Value Added to Domestic Equity Target (1)



International Stocks

Target: Standard MSCI ACWI Free ex U.S. (net)

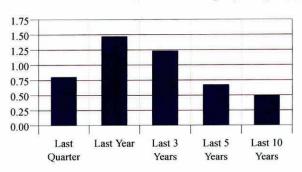
Expectation: If at least one-third of the pool is managed actively, no more than one-third is semi-passively managed, and at least one-quarter is passively managed, the entire pool is expected to exceed the target by .25% - .75% annualized, over time.

Periods Ended 6/30/15

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Int'l Stocks	1.3%	-3.8%	10.7%	8.4%	6.1%
Asset Class Target*	0.5%	-5.3%	9.4%	7.8%	5.6%

^{*} The Int'l Equity Asset Class Target is MSCI ACWI Free ex U.S. (net) effective 10/1/03.

Value Added to International Equity Target (1)



Bonds

Target: Barclays Capital Aggregate Bond Index

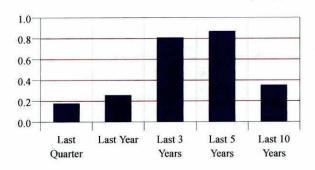
Expectation: If half of the pool is actively managed and half is managed semi-passively, the entire pool is expected to exceed the target by .20% - .35% annualized, over time.

Periods Ended 6/30/15

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Bonds	-1.5%	2.1%	2.6%	4.2%	4.8%
Asset Class Target	-1.7%	1.9%	1.8%	3.3%	4.4%

Note: All periods over one year are annualized.

Value Added to Fixed Income Target (1)



⁽¹⁾ Graph data is based on actual return and may not match table due to rounding.

ALTERNATIVE INVESTMENTS

Performance of Asset Categories (Net of Fees)

Alternative	Invactmente

Expectation: The Alternative investments are measured			Period	s Ended	6/30/15	
against themselves using actual portfolio returns.		Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
	Alternatives	3.7%	7.6%	12.5%	13.1%	13.6%
	Inflation	1.1%	0.1%	1.3%	1.8%	2.1%

Real Estate Investments (Equity emphasis)

Expectation:	Real	estate	investments	are	expected	to
exceed the rate	of infl	ation by	5% annualize	ed, o	ver the life	of
the investment.						

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

	Periods Ended 6/30/15							
	Last	Last	Last 3	Last 5	Last 10			
	Quarter	Year	Years	Years	Years			
Real Estate	9.2%	19.5%	15.3%	14.8%	7.5%			

Private Equity Investments (Equity emphasis)

Expectation:	Private	equity	investments	are	expected	to
exceed the rate	of inflat	ion by 1	0% annualized	d, ov	er the life	of
the investment						

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

		Periods Ended 6/30/15								
	Last	Last	Last 3	Last 5	Last 10					
	Quarter	Year	Years	Years	Years					
Private Equity	5.5%	11.9%	15.0%	14.5%	14.4%					

Resource Investments (Equity emphasis)

Expectation :	Resource in	vestments ar	e expected	d to exceed
the rate of in	flation by 5%	6 annualized,	over the	life of the
investment.				

The SBI began its resource program	in the mid-1980's and
periodically makes new investments.	Some of the existing
investments are relatively immature a	and returns may not be
indicative of future results.	

	Periods Ended 6/30/15						
	Last	Last	Last 3	Last 5	Last 10		
	Quarter	Year	Years	Years	Years		
Resource	-3.6%	-7.8%	2.6%	8.4%	18.1%		

Yield Oriented Investments (Debt emphasis)

Expectation: Yield oriented investments are expected to exceed the rate of inflation by 5.5% annualized, over the life of the investment.

The SBI began its yield oriented program in 1994. Some of
the existing investments are relatively immature and returns
may not be indicative of future results.

	Periods Ended 6/30/15							
	Last	Last	Last 3	Last 5	Last 10			
	Quarter	Year	Years	Years	Years			
Yield Oriented	1.5%	2.8%	12.8%	12.9%	16.3%			

SUPPLEMENTAL INVESTMENT FUND

The Minnesota Supplemental Investment Fund (SIF) is a multi-purpose investment program that offers a range of investment options to state and local public employees.

The SIF provides some or all of the investment options to the Unclassified Employees Retirement Plan, Minnesota Deferred Compensation Plan, Public Employees Defined Contribution Plan, Hennepin County Supplemental Retirement Plan, Health Care Savings Plan, local police and firefighter retirement plans and 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 June 30, 2015 the market value of the entire Fund was \$1.9 billion.

Investment Ontions

Investment Options	
	6/30/15
	Market Value
	(In Millions)
Income Share Account - a balanced portfolio utilizing both common stocks and bonds.	\$369
Growth Share Account - an actively managed, all common stock portfolio.	\$219
Common Stock Index Account - a passively managed, all common stock	\$473
portfolio designed to track the performance of the entire U.S. stock market.	
International Share Account - a portfolio of non U.S. stocks that incorporates both active and passive management.	\$191
Bond Market Account - an actively managed, all bond portfolio.	\$126
Money Market Account - a portfolio utilizing short-term, liquid debt securities.	\$266
Fixed Interest Account - a portfolio of stable value instruments, including	\$194
security backed contracts and insurance company and bank investment contracts.	
Volunteer Firefighter Account - a balanced portfolio only used by the Voluntary	\$32
Statewide Volunteer Firefighter Plan.	

SUPPLEMENTAL INVESTMENT FUND ACCOUNTS

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.

		Period	s Ended	6/30/15	
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Total Account	-0.4%	5.1%	11.6%	12.1%	7.2%
Benchmark*	-0.5%	5.1%	11.1%	11.7%	6.6%

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%
 59.5%

 Bonds
 35.0%
 35.4%

 Cash
 5.0%
 5.1%

 100.0%
 100.0%

GROWTH SHARE ACCOUNT

Investment Objective

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

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Total Account	0.1%	7.9%	18.5%	18.0%	8.0%
Benchmark*	0.1%	7.3%	17.7%	17.5%	8.2%

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.

* Russell 3000.

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.

	Last	Last Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Total Account	0.1%	7.3%	17.7%	17.5%	8.2%
Benchmark*	0.1%	7.3%	17.7%	17.5%	8.2%

Periods Ended 6/30/15

^{* 60%} Russell 3000/35% Barclays Aggregate Bond Index/5% T-Bills Composite.

The Account is invested 100% in common stock.

^{*} Russell 3000.

SUPPLEMENTAL INVESTMENT FUND ACCOUNTS

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 25% 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 MSCI World ex USA 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.

		Periods Ended 6/30/15				
	Last Quarter	Last Year	Last 3 Years		Last 10 Years	
Total Account	1.3%	-3.8%	10.7%	8.4%	6.1%	
Benchmark*	0.5%	-5.3%	9.4%	7.8%	5.6%	

^{*} The Int'l Equity Asset Class Target is MSCI ACWI ex USA (net).

BOND MARKET ACCOUNT

Investment Objective

The investment objective of the Bond Market Account is to exceed the return of the broad domestic bond market by investing in fixed income securities.

	Last Ouarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Total Account	-1.5%	2.1%	2.6%	4.2%	4.8%
Barclays Agg	-1.7%	1.9%	1.8%	3.3%	4.4%

Asset Mix

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

MONEY MARKET ACCOUNT

Investment Objective

The investment objective of the Money Market Account is to protect principal by investing in short-term, liquid U.S. Government securities.

		Periods Ended 6/30/15				
	Last Quarter	Last Year	14600	Last 5 Years	Last 10 Years	
Total Account	0.0%	0.1%	0.2%	0.2%	1.6%	
3 month T-Bills	0.0%	0.0%	0.1%	0.1%	1.4%	

Asset Mix

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

SUPPLEMENTAL INVESTMENT FUND ACCOUNTS

FIXED INTEREST ACCOUNT

Investment Objective

The investment objectives of the Fixed Interest Account are to protect investors from loss of their original investment and to provide competitive interest rates using somewhat longer-term investments than typically found in a money market account.

	Last Quarter	Last Year		Last 5 Years	Last 10 Years
Total Account	0.5%	1.9%	2.1%	2.6%	3.6%
Benchmark*	0.3%	1.4%	1.1%	1.1%	2.3%

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.

VOLUNTEER FIREFIGHTER ACCOUNT

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

The Account is invested in a balanced portfolio:

	Target	Actual
Domestic Stocks	35.0%	34.7%
International Stocks	15.0%	14.6%
Bonds	45.0%	45.6%
Cash	5.0%	5.1%
	100.0%	100.0%

		Periods Ended 6/30/15				
	Last	Last	Last 3	Last 5	Last 10	
	Quarter	Year	Years	Years	Years	
Total Account	-0.4%	3.0%	9.0%	9.3%		
Benchmark*	-0.6%	2.7%	8.4%	8.9%		

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

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

DEFERRED COMPENSATION PLAN ACCOUNTS

The Deferred Compensation Plan provides public employees with a tax-sheltered retirement savings plan that is supplemental 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.

On June 30, 2015, the market value of the entire Fund was \$5.8 billion.

Investment Options		
	6/30/1 Market V (In Millio	alue
Vanguard Index Institutional Plus Shares (passive)	\$987.	.1
Janus Twenty (active)	\$531.	.0
Vanguard Mid Cap Index Institutional Shares (passive)	\$436.	.7
T. Rowe Price Small-Cap Stock (active)	\$602.	.2
Fidelity Diversified International (active)	\$292.	.8
Vanguard Total International Stock Index Institutional Plus (passive)	\$167.	.6
Vanguard Balanced Index Institutional Shares (passive)	\$683.	.5
Dodge & Cox Income Fund (active)	\$206.	.4
Vanguard Total Bond Market Index Institutional Shares (passive)	\$190.	.3
SIF Money Market Account	\$61.	.3
SIF Fixed Interest Account (stable value)	\$1,299.	.4
State Street Global Advisors MN Target Retirement Funds Income Fund 2020 Fund 2025 Fund 2030 Fund 2035 Fund 2040 Fund 2045 Fund 2050 Fund	\$307. \$71.5 \$73.7 \$55.5 \$34.9 \$26.8 \$16.5 \$11.7 \$8.1	2
2055 Fund 2060 Fund	\$3.8 \$4.7	

DEFERRED COMPENSATION PLAN ACCOUNTS

LARGE	CAP	EQUITY	7
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Vanguard Index Institutional Plus (passive)			Periods End	ed 6/30/15	d 6/30/15			
A passive domestic stock portfolio that tracks the S&P 500.		Last Quarter	Last Year	Last 3 Years	Last 5 Years			
	Fund	0.3%	7.4%	17.3%	17.3%			
	S&P 500	0.3%	7.4%	17.3%	17.3%			
Janus Twenty (active)		Last		Last 3	Last 5			
A concentrated fund of large cap stocks which is expected to		Quarter	Last Year	Years	Years			
outperform the S&P 500, over time.	Fund	0.8%	7.8%	16.4%	14.8%			
outpersonn me deer doo, dres miles	S&P 500	0.3%	7.4%	17.3%	17.3%			

MID CAP EQUITY

Vanguard Mid Cap Index (passive)		Per	iods En	ded 6/30/	15
A fund that passively invests in companies with medium market capitalizations that tracks the CRSP US Mid-Cap Index.		Last Quarter	Last Year	Last 3 Years	Last 5 Years
	Fund	-1.2%	8.7%	19.7%	18.3%
	CRSP U.S. Mid Cap	-1.2%	8.7%	19.8%	18.3%

SMALL CAP EQUITY

T Rowe Price Small Cap (active)		1	Periods End	led 6/30/15	5
A fund that invests primarily in companies with small market		Last		Last 3	Last 5
capitalizations and is expected to outperform the Russell 2000.		Quarter	Last Year	Years	Years
	Fund	-0.8%	5.7%	17.4%	18.8%
	Russell 2000	0.4%	6.5%	17.8%	17.1%

INTERNATIONAL EQUITY

Fidelity Diversified International (active)		1	Period	s Ende	ed 6/30/15	
A fund that invests primarily in stocks of companies located outside of the United States and is expected to outperform the		Last Quarter	Last	Year	Last 3 Years	Last 5 Years
MSCI index of Europe, Australasia and the Far East (EAFE), over time.	Fund MSCI EAFE	2.2% 0.6%		1 % 2%	14.1% 12.0%	11.4% 9.5%
Vanguard Total International Stock Index (passive) A fund that seeks to track the investment performance of the	7		ast arter	Last Year	Last 3 Years	Last 5 Years
MSCI All Country World ex USA Investable Market Index, an	Fund	1.3	3%	-4.5%	9.9%	

ACWI ex USA IMI

1.2%

-4.2%

10.3%

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.

DEFERRED COMPENSATION PLAN ACCOUNTS

LARGE CA	AP EOUITY
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Vanguard Balanced Index (passive)		Periods Ended 6/30/15				
A fund that passively invests in a mix of domestic stocks and		Last		Last 3	Last 5	
bonds. The fund is expected to track a weighted benchmark of		Quarter	Last Year	Years	Years	
60% CRSP US Total Market Index/40% Barclays Aggregate.	Fund	-0.7%	5.1%	11.1%	11.9%	
00,000000000000000000000000000000000000	Benchmark	-0.6	5.1	11.2	11.9	

Dodge & Cox Income Fund (active)		F	Periods End	ed 6/30/15	
A fund that invests primarily in investment grade securities in the U.S. bond market which is expected to outperform the		Last Quarter	Last Year	Last 3 Years	Last 5 Years
Barclays Aggregate, over time.	Fund Barclays Agg	-1.2% -1.7%	1.0% 1.9%	3.2% 1.8%	4.3% 3.3%
Vanguard Total Bond Market Index (passive) A fund that passively invests in a broad, market weighted		Last Quarter	Last Year	Last 3 Years	Last 5 Years
bond index that is expected to track the Barclays Aggregate.	Fund Barclays Agg	-1.8% -1.7%	1.7% 1.9%	1.7% 1.8%	3.3% 3.3%
				1 4 2	Last 5
SIF Money Market Account		Last		Last 3	Last 5
SIF Money Market Account A fund that invests in short-term debt instruments which is	Fund	Last Quarter 0.0%	Last Year	Years 0.2%	Years 0.2%

Bills.

	Last		Last 3	Last 5
	Quarter	Last Year	Years	Years
Fund	0.0%	0.1%	0.2%	0.2%
3-Mo. Treas.	0.0%	0.0%	0.1%	0.1%

SIF 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.

	Periods Ended 6/30/15					
	Last		Last 3	Last 5		
	Quarter	Last Year	Years	Years		
Fund	0.5%	1.9%	2.1%	2.6%		
Benchmark	0.3%	1.4%	1.1%	1.1%		

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 the "Performance Summaries" section of the Public Markets, Non-Retirement, and **Defined Contribution Report.**

MN COLLEGE SAVINGS PLAN ACCOUNTS

The Minnesota College Savings Plan is an education savings plan designed to help families set aside funds for future college costs. The SBI is responsible for the investments and the Minnesota Office of Higher Education (OHE) is responsible for the overall administration of the Plan.

The SBI and OHE contract jointly with TIAA-CREF to provide administrative, marketing, communication, recordkeeping and investment management services.

On June 30, 2015, the market value of the entire Fund as \$1.2 billion.

Investment Option	ons
	6/30/15
	Market Value
	(In Millions)
Age Based Managed Allocation	
Age Band 0-4 Years	\$25.4
Age Band 5-8 Years	\$82.4
Age Band 9-10 Years	\$80.6
Age Band 11-12 Years	\$110.2
Age Band 13-14 Years	\$118.8
Age Band 15 Years	\$57.4
Age Band 16 Years	\$61.4
Age Band 17 Years	\$51.5
Age Band 18 Years and over	\$137.7
Risk Based Managed Allocations	
Aggressive	\$4.6
Moderate	\$50.5
Conservative	\$2.8
Static Options:	
U.S. Large Cap Equity	\$5.0
International Equity	\$2.9
U.S. and International Equity	\$279.7
Equity and Interest Accumulation	\$0.4
100% Fixed Income	\$10.5
Money Market	\$8.6
Principal Plus Interest	\$107.0

MN COLLEGE SAVINGS PLAN ACCOUNTS

AGE-BASED MANAGED ALLOCATIONS

The Age-Based Managed Allocation Option seeks to align the investment objective and level of risk, which will become more conservative as the beneficiary ages and moves closer to entering an eligible educational institution.

See the "Performance Summaries" section of the Public Markets, Non-Retirement, and Defined Contribution Report.

RISK BASED ALLOCATIONS

The Risk Based Allocation Option offers three separate allocation investment options: Aggressive, Moderate and Conservative, which have a fixed risk level and does not change as the Beneficiary ages.

See the "Performance Summaries" section of the Public Markets, Non-Retirement, and Defined Contribution Report.

U.S. LARGE CAP EQUITY INDEX

A passive domestic stock portfolio that tracks the S&P 500.

	Periods Ended 6/30/15					
	Last		Last 3	Last 5		
	Quarter	Last Year	Years	Years		
Fund	0.3%		1 575 .			
S&P 500	0.3%	-				

INTERNATIONAL EQUITY INDEX

A fund that passively invests in a mix of developed and emerging market equities. The fund is expected to track a weighted benchmark of 80% MSCI ACWI World ex USA and 20% Emerging Markets Free Index.

	Periods Ended 6/30/15						
	Last		Last 3	Last 5			
	Quarter	Last Year	Years	Years			
Fund	1.0%	-4.3%					
Benchmark	0.7%	-4.3%	<u> </u>				

U.S. AND INTERNATIONAL EQUITY INDEX

A fund that invests in a mix of equities, both U.S. and international, across all capitalization ranges and real estate-related securities. The fund is expected to track a weighted benchmark of 60% Russell 3000, 24% International, 6% Emerging Markets, and 10% Real Estate Securities Fund.

	Periods Ended 6/30/15				
	Last		Last 3	Last 5	
	Quarter	Last Year	Years	Years	
Fund	-0.7%	3.4%	14.3%	14.6%	
Benchmark	-0.6%	3.5%	14.8%	14.9%	

MN COLLEGE SAVINGS PLAN ACCOUNTS

EQUITY AND INTEREST ACCUMULATION

A fund that passively invests half of the portfolio in equities across all capitalization ranges and the other half in a funding agreement. The fund is expected to track a weighted benchmark of 50% Russell 3000 and 50% 3-month T-Bill.

	Periods Ended 6/30/15				
	Last		Last 3	Last 5	
	Quarter	Last Year	Years	Years	
Fund	0.2%	-			
Benchmark	0.1%				

100% FIXED INCOME

A fund that passively invests in fixed income holdings that tracks the Barclays Aggregate and two active funds that invest in inflation-linked bonds and high yield securities. The fund is expected to track a weighted benchmark of 70% Barclays Aggregate, 20% inflation-linked bond, and 10% high yield.

	Periods Ended 6/30/15				
	Last		Last 3	Last 5	
	Quarter	Last Year	Years	Years	
Fund	-1.5%	0.8%	0.7%	2.8%	
Benchmark	-1.4%	1.1%	1.2%	3.4%	

MONEY MARKET

An active fund that invests in high-quality, short-term money market instruments of both domestic and foreign issuers that tracks the iMoneyNet Average All Taxable benchmark.

	Periods Ended 6/30/15				
	Last		Last 3	Last 5	
	Quarter	Last Year	Years	Years	
Fund	0.0%	0.0%	0.0%	-0.1%	
iMoney Net	0.0%	0.0%	0.0%	0.0%	
Average All					
Taxable					

PRINCIPAL PLUS INTEREST OPTION

A passive fund where contributions are invested in a Funding Agreement issued by TIAA-CREF Life. The funding agreement provides for a return of principal plus a guaranteed rate of interest which is made by the insurance company to the policyholder, not the account owners. The account is expected to outperform the return of the 3-month T-Bill.

	Periods Ended 6/30/15				
	Last		Last 3	Last 5	
	Quarter	Last Year	Years	Years	
Fund	0.3%	1.2%	1.3%	1.7%	
3-Month T-Bill	0.0%	0.0%	0.0%	0.1%	

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 ongoing 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.

	6/30/15	6/30/15	
	Target	Actual	
Stocks	20.0%	20.2%	
Bonds	80.0%	79.8%	
Total	100.0%	100.0%	

Investment Management

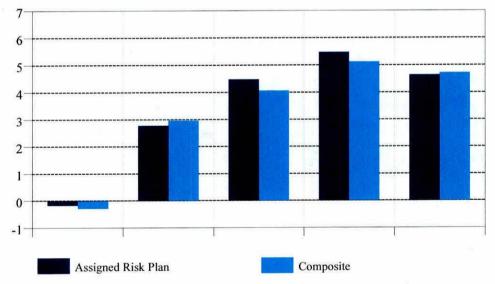
RBC Global Asset Management (US) manages the bond segment of the Fund. GE Investment Management manages the equity segment.

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 June 30, 2015 the market value of the Assigned Risk Plan was \$307 million.



Periods Ended 6/30/15

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Total Fund*	-0.2%	2.8%	4.5%	5.5%	4.6%
Composite	-0.3%	3.0%	4.1%	5.1%	4.7%
Equity Segment*	0.5%	6.7%	18.1%	16.5%	8.1%
S&P 500	0.3%	7.4%	17.3%	17.3%	7.9%
Bond Segment*	-0.4%	1.7%	0.9%	2.5%	3.5%
Barclays Int Gov Index	-0.4%	1.8%	0.9%	2.1%	3.7%

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

Note: All periods over one year are annualized.

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 transferred to the school endowment fund and distributed to Minnesota's public schools.

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.

	6/30/15	6/30/15	
	Target	Actual	
Stocks	50.0%	51.3%	
Bonds	48.0%	46.7%	
Cash	2.0%	2.0%	
Total	100.0%	100.0%	

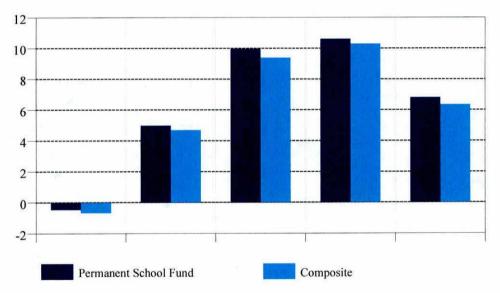
Prior to FY98, the Fund was invested entirely in fixed income securities in order to maximize current income. It is understood that the change in asset mix will reduce portfolio income in the short term, but will enhance the value of the fund, over time.

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 June 30, 2015 the market value of the Permanent School Fund was \$1.2 billion.



Periods Ended 6/30/15

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Total Fund*	-0.5%	5.0%	10.0%	10.6%	6.8%
Composite	-0.7%	4.7%	9.4%	10.3%	6.3%
Equity Segment*	0.3%	7.5%	17.3%	17.4%	7.9%
S&P 500	0.3%	7.4%	17.3%	17.3%	7.9%
Bond Segment*	-1.3%	2.5%	3.0%	3.9%	5.1%
Barclays Agg	-1.7%	1.9%	1.8%	3.3%	4.4%

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

Note: All periods over one year are annualized.

ENVIRONMENTAL TRUST FUND

Investment Objectives

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

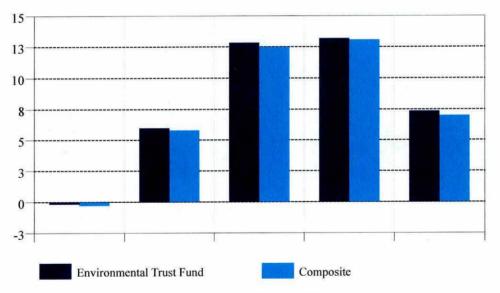
	6/30/15	6/30/15
	Target	Actual
Stocks	70.0%	69.9%
Bonds	28.0%	28.1%
Cash	2.0%	2.0%
Total	100.0%	100.0%

Investment Management

SBI staff manages 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 June 30, 2015 the market value of the Environmental Trust Fund was \$893 million.



Periods Ended 6/30/15

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Total Fund*	-0.2%	6.0%	12.8%	13.2%	7.4%
Composite	-0.3%	5.8%	12.5%	13.1%	7.0%
Equity Segment*	0.3%	7.5%	17.3%	17.4%	8.0%
S&P 500	0.3%	7.4%	17.3%	17.3%	7.9%
Bond Segment*	-1.3%	2.5%	3.0%	3.9%	5.1%
Barclays Agg	-1.7%	1.9%	1.8%	3.3%	4.4%

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

Note: All periods over one year are annualized.

CLOSED LANDFILL INVESTMENT FUND

Investment Objectives

The investment objective of the Closed Landfill Investment Fund is to increase the market value of the Fund and to reduce volatility to meet future expenditures. By statute, the assets of the Fund are unavailable for expenditure until after the fiscal year 2020 to pay for long-term costs of maintaining the integrity of landfills in Minnesota once they are closed.

Asset Mix

The Closed Landfill Investment 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. From July of 1999 to September of 2014 the Closed Landfill Investment Fund was invested entirely in common stock.

	6/30/15	6/30/15
	Target	Actual
Stocks	70.0%	69.8%
Bonds	30.0%	30.2%
Total	100.0%	100.0%

Investment Management

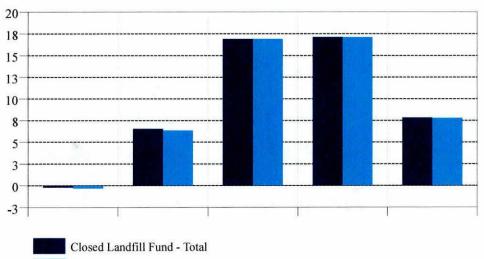
SBI staff manage all assets of the Closed Landfill Investment Fund. The bond segment is actively managed to add incremental value through sector, security and yield The stock segment is managed to curve decisions. passively track the performance of the S&P 500.

Legislation

In FY 2011 \$48 million was transferred out of the general fund, leaving a balance of \$1 million in the account. Legislation was enacted in 2013 to replenish the principle and earnings back into the fund and FY 2014 was the first of four scheduled payments to the fund.

Market Value

On June 30, 2015, the market value of the Closed Landfill Investment Fund was \$69 million.



Closed Landfill Fund - Total - Benchmark

Periods Ended 6/30/15

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Total Fund (1)	-0.2%	6.6%	16.9%	17.1%	7.9%
Composite (3)	-0.3%	6.4%	16.9%	17.1%	7.8%
Equity Segment (1)	0.3%	7.5%	17.3%	17.4%	8.0%
S&P 500	0.3%	7.4%	17.3%	17.3%	7.9%
Bond Segment (1,2)	-1.3%		100		V . S. S. Y
Barclays Agg	-1.7%	■ ■33	r 		(-)

(1) Actual returns are calculated net of fees.

(2) Bond Segment admission date 9/10/14. Returns to be reported upon first full quarter of history (12/31/2014)

(3) The benchmark of the fund is the S&P 500 from mid July 1999 to 9/9/14. As of 9/10/14 the benchmark consist of S&P 500 (70%) and Barclays Aggregate (30%). Note: All periods over one year are annualized.

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STATE CASH ACCOUNTS

Description

State Cash Accounts represent the 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. 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 level of current income consistent with the goal of preserving capital.

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 Ending 6/30/15

	Market Value (Millions)	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
Treasurer's Cash Pool* Custom Benchmark**	\$10,255	0.1% 0.0%	0.5% 0.0%	0.5% 0.0%	0.5% 0.0%	2.1% 1.3%
3 month T-Bills		0.0%	0.0%	0.1%	0.1%	1.4%

^{*} 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.

MINNESOTA STATE BOARD OF INVESTMENT

Composition of State Investment Portfolios By Type of Investment Market Value June 30, 2015 (in Thousands)

	Cash & ST	Bonds Int	Bonds Ext	Stock Int	Stock Ext	Ext Intl	Alternative	Total
COMBINED RETIREMENT FUNDS								
Teachers Retirement Fund	400,181 1.97%	0	4,804,240 23.53%	0	9,649,269 47.27%	3,040,212 14.89%	2,519,315 12.34%	20,413,217 100%
Public Employees Retirement Fund	340,076 1.92%	0	4,166,256 23.54%	0	8,367,869 47.29%	2,636,482 14.90%	2,184,772 12.35%	17,695,455 100%
State Employees Retirement Fund	205,232 1.77%	0	2,736,251 23.58%	0	5,495,724 47.36%	1,731,549 14.92%	1,434,881 12.37%	11,603,637 100%
Public Employees Police & Fire	138,492 1.89%	0	1,727,568 23.55%	0	3,469,796 47.30%	1,093,236 14.90%	905,931 12.35%	7,335,023 100%
Highway Patrol Retirement Fund	11,828 1.78%	0	156,362 23.58%	0	314,051 47.35%	98,949 14.92%	81,996 12.36%	663,186 100%
Judges Retirement Fund	3,363 1.93%	0	40,967 23.54%	0	82,281 47.28%	25,924 14.90%	21,483 12.35%	174,018 100%
Correctional Employees Retirement	16,724 1.85%	0	213,537 23.56%	0	428,887 47.33%	135,130 14.91%	111,978 12.36%	906,256 100%
Public Employees Correctional	9,817 2.00%	0	115,387 23.53%	0	231,754 47.25%	73,019 14.89%	60,509 12.34%	490,486 100%
Legislative Retirement Fund	57 1.65%	0	817 23.61%	0	1,641 47.41%	517 14.94%	429 12.40%	3,461 100%
PERA Minneapolis Retirement	13,964 1.66%	0	198,352 23.61%	0	398,389 47.41%	125,521 14.94%	104,015 12.38%	840,241 100%
TOTAL COMBINED FUNDS	1,139,734 1.90%	0	14,159,737 23.55%	0	28,439,661 47.30%	8,960,539 14.90%	7,425,309 12.35%	60,124,980 100%

	Cash & ST	Bonds Int	Bonds Ext	Stock Int	Stock Ext	Ext Intl	Alternative	Total
MINNESOTA SUPPLEMENTAL FUNDS								
Income Share Account	18,609 5.04%	130,648 35.44%	0	0	219,438 59.52%	0	0	368,695 100%
Growth Share Account	0	0	0	0	219,019 100.00%	0	0	219,019 100%
Money Market Account	265,984 100.00%	0	0	0	0	0	0	265,984 100%
Common Stock Index	0	0	0	0	472,733 100.00%	0	0	472,733 100%
Bond Market Account	0	0	126,271 100.00%	0	0	0	0	126,271 100%
International Share Account	0	0	0	0	0	191,492 100.00%	0	191,492 100%
Fixed Interest Account	0	0	193,888 100.00%	0	0	0	0	193,888 100%
Volunteer Firefighters Account	1,646 5.12%	0	14,660 45.58%	0	11,172 34.73%	4,686 14.57%	0	32,164 100%
TOTAL SUPPLEMENTAL FUNDS	286,239 15.30%	130,648 6.99%	334,819 17.90%	0	922,362 49.32%	196,178 10.49%	0	1,870,246 100%
MN DEFERRED COMP PLAN	65,989 1.14%	0	2,103,148 36.48%	0	3,075,336 53.35%	520,894 9.03%	0	5,765,367 100%
TOTAL RETIREMENT FUNDS	1,491,962 2.20%	130,648 0.19%	16,597,704 24.49%	0	32,437,359 47.87%	9,677,611 14.28%	7,425,309 10.96%	67,760,593 100%

	Cash & ST	Bonds Int	Bonds Ext	Stock Int	Stock Ext	Ext Intl	Alternative	Total
ASSIGNED RISK PLAN	1,594 0.52%	0	243,602 79.29%	0	62,041 20.19%	0	0	307,237 100%
ENVIRONMENTAL FUND	17,842 2.00%	250,698 28.07%	0	624,419 69.93%	0	0	0	892,959 100%
PERMANENT SCHOOL FUND	23,288 2.00%	544,947 46.71%	0	598,335 51.29%	0	0	0	1,166,570 100%
CLOSED LANDFILL FUND	0	20,822 30.19%	0	48,141 69.81%	0	0	0	68,963 100%
MISCELLANEOUS TRUST FUND	491 0.33%	62,210 41.63%	0	86,740 58.04%	0	0	0	149,441 100%
Other Post Employment Funds (OPEB's)	28,871 5.72%	69,977 13.86%	0	405,991 80.42%	0	0	0	504,839 100%
TREASURERS CASH	10,021,653 100.00%	0	0	0	0	0	0	10,021,653 100%
MISCELLANEOUS STATE ACCOUNTS	0	233,827 100.00%	0	0	0	0	0	233,827 100%
MN COLLEGE SAVINGS PLAN	8,558 0.71%	0	573,554 47.92%	0	429,971 35.93%	184,935 15.45%	0	1,197,018 100%
TOTAL CASH AND NON-RETIREMENT	10,102,297 69.47%	1,182,481 8.13%	817,156 5.62%	1,763,626 12.13%	492,012 3.38%	184,935 1.27%	0	14,542,507 100%
GRAND TOTAL	11,594,259 14.09%	1,313,129 1.60%	17,414,860 21.16%	1,763,626 2.14%	32,929,371 40.01%	9,862,546 11.98%	7,425,309 9.02%	82,303,100 100%

TAB B

EXECUTIVE DIRECTOR'S ADMINISTRATIVE REPORT

DATE:

September 2, 2015

TO:

Members, State Board of Investment

FROM:

Mansco Perry III

1. Reports on Budget and Travel

A report on the SBI's administrative budget for the Fiscal Year 2015 is included as **Attachment A**.

A report on travel for the period from April 1, 2015 – June 30, 2015 is included as **Attachment B**.

2. Legislation

Conservation Easement Accounts

Description

During the 2015 1st special session, MN Statute 84.69 and MN Statute 103B.103 were added by Session Law Chapter 4, Article 4, creating easement accounts to pool previous and future appropriations to cover the monitoring and enforcement costs associated with conservation easement efforts.

Conservation easements are an interest in real property that places certain restrictions on the use of property for conservation purposes. In Minnesota, conservation easements can be acquired and held by governmental entities otherwise authorized to hold real property. They are a commonly used tool to protect land for natural, scenic, or open-space values and are also used to protect natural resources, such as forests, in which harvesting may occur. Conservation easements, as an alternative method of land protection, are often used when the acquisition of the land is not possible.

These accounts, one administered by Department of Natural Resources (DNR) and two by the Board of Water and Soil Resources (BWSR), are to be invested by the State Board of Investment (SBI) to maximize long-term investment gain. According to statute, five percent of the balance of each account will be withdrawn on July 1 of each year.

Objective and Asset Allocation

The objective is to grow the accounts to maximize long-term investment gains while providing for 5% annual spending withdrawals.

Staff believes that a 70% equities and 30% bond allocation would be most appropriate for these accounts. The long-term rate of return generated from this balanced asset allocation should position the fund to meet the demand for annual spendable income of 5% and provide the long-term investment growth needed to maintain the real purchasing power of the fund into perpetuity. The funds would be invested in the SBI Internal Equity Pool and the SBI Internal Bond Pool.

RECOMMENDATION:

The Executive Director of the State Board of Investment recommends that the SBI approve the investment of the three Conservation Easement Accounts in the SBI Internal Equity and Bond Pools with an asset allocation of 70% to equities and 30% to bonds.

• Minnesota Achieving a Better Life Experience (ABLE) Act

The Minnesota Achieving a Better Life Experience Act, or Minnesota ABLE Act was enacted. This legislation, in *Minnesota Statutes*, Chapter 256Q.01, establishes a savings plan for certain persons with disabilities and is subject to 529A(b) of IRS Code. The Minnesota Department of Human Services (DHS) is responsible for administration of the Plan. The State Board of Investment (SBI) will work with DHS to determine the most appropriate means to invest plan assets. If deemed desirable, the statute allows the Commissioner of Human Services and the SBI to jointly contract with third party providers for investment management, record keeping, administration and other services. Staff has been working with the Human Services Department to determine how to proceed with this mandate.

3. 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 second quarter, SBI managers divested 74,799 shares in companies on the divestment list.

Attachment C is a copy of the June 23, 2015 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.

4. 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% shall be sold within nine months after the company appeared on the scrutinized list; and
- 100% within fifteen months after the company appeared on the scrutinized list.

In the second quarter, SBI was not required to divest any shares of companies on the divestment list.

Attachment E is a copy of the June 23, 2015 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.

5. Litigation Update

SBI legal counsel will give the Board a verbal update on status of litigation at the Board meeting on September 9, 2015.

STATE BOARD OF INVESTMENT FISCAL YEAR 2015 ADMINISTRATIVE BUDGET REPORT FISCAL YEAR TO DATE THROUGH JUNE 30, 2015

	FISC	CAL YEAR	FISC	ISCAL YEAR	
	2015			2015	
ITEM	В	UDGET	6/30/2015		
PERSONAL SERVICES					
FULL TIME EMPLOYEES	\$	4,151,000	\$	3,505,011	
PART TIME EMPLOYEES		\$ 0		\$ 0	
MISCELLANEOUS PAYROLL		100,000		67,524	
SUBTOTAL	S	4,251,000	\$	3,572,535	
STATE OPERATIONS					
RENTS & LEASES		242,000		207,109	
REPAIRS/ALTERATIONS/MAINTENANCE		12,000		8,906	
PRINTING & BINDING		5,000		8,210	
PROFESSIONAL/TECHNICAL SERVICES		150,000		14,396	
COMPUTER SYSTEMS SERVICES		20,000		13,931	
COMMUNICATIONS		30,000		25,338	
TRAVEL, IN-STATE		1,000		390	
TRAVEL, OUT-STATE		56,000		57,200	
SUPPLIES		52,000		23,756	
EQUIPMENT		33,000		2,613	
EMPLOYEE DEVELOPMENT		25,000		18,491	
OTHER OPERATING COSTS	1+	221,000		125,230	
SUBTOTAL		847,000	\$	505,570	
TOTAL ADMINISTRATIVE BUDGET	\$	5,098,000	\$	4,078,105	

STATE BOARD OF INVESTMENT

Travel Summary by Date SBI Travel April 1, 2015 – June 30, 2015

Purpose	Name(s)	Destination and Date	Total Cost
Manager Monitoring Alternative Investment Managers: Paine & Partners; Warburg Pincus	A. Krech	New York, NY 4/28-4/30	\$1,815.42
Conference: National Association of State Investment Professionals (NASIP)	M. Menssen T. Brusehaver A. Griga R. Weiler	Sioux Falls, SD 4/28-5/1	\$4,952.14
Conference: Institutional Investor Services (IIS) Client Advisory Council Meeting sponsored by: State Street Bank	L. Stagg	Boston, MA 5/5-5/6	\$1,775.27
Manager Monitoring Domestic Equity Manager: BlackRock Conference: Scientific Active Equity (SAE) Symposium sponsored by: BlackRock	S. Gleeson	San Francisco, CA 5/13-5/15	\$2,445.90
Conference: Catalyzing Finance for The New Economy Sponsored by: First Affirmative Financial Network	N. Blumenshine M. Ndungu	Minneapolis, MN 5/21	\$110.00
Conference: GFOA 109 th Annual Conference Manager Monitoring Accounting Services: QED Financial Systems, Inc.	B. Nicol	Philadelphia, PA Marlton, NJ 6/4-6/5	\$2,730.59

STATE BOARD OF INVESTMENT

Travel Summary by Date SBI Travel April 1, 2015 – June 30, 2015

Purpose	Name(s)	Destination and Date	Total Cost
Conference: Institutional Limited Partners Association (ILPA) Conference	A. Krech	Los Angeles, CA 6/2-6/4	\$2,543.35
Manager Monitoring Master Custodian: State Street Bank Manager Monitoring Record Keeper Services: NRS	S. Baribeau I. Shafir	Boston, MA 6/10-6/13	\$1,477.97
Manager Monitoring Alternative Investment Managers: Advent International; Summit Partners Manager Search Alternative Investment Managers: Bain Capital; TA Associates; Thomas H. Lee	R. Hill J. Stacy	Boston, MA 6/15-6/17	\$4,243.97
Manager Monitoring Alternative Investment Manager: KKR's 2015 Americas Investors' Meeting	R. Hill	Los Angeles, CA 6/22-6/24	\$1,397.63
Manager Monitoring Accounting Services: QED Financial Systems, Inc.	S. Baribeau B. Nicol	Marlton, NJ 6/22-6/25	\$3,265.00
Manager Search Alternative Investment Managers: Crow Holdings Capital; Pharos Capital	A. Krech	Dallas, TX 6/24-2/25	\$1,349.15

STATE BOARD OF INVESTMENT

Travel Summary by Date SBI Travel April 1, 2015 – June 30, 2015

		Destination	Total
Purpose	Name(s)	and Date	Cost
Conference:	S. Kuettel	Minneapolis, MN	\$42.00
Crane's Money Fund		6/24-6/26	
Symposium			

Letter to SBI International and Domestic Equity Managers

June 23, 2015

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> be <u>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 March 20, 2015 letter you received. This new list is effective June 30, 2015.

The following company has been **added** to the Restricted List:

• Shanghai Electric Group Co. Ltd.

China

The following company has been **removed** from the Restricted List:

China Machinery Engineering Corporation

China

Attachment 2 is the List of Sudan Stocks Requiring Divestment. There have been no changes to this 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 your assigned SBI Investment Officer or Patricia Ammann.

Sincerely,

LeaAnn M. Stagg Chief Operating Officer

Enclosures

cc: Michael J. Menssen, Director, Public Markets
Tammy Brusehaver, Investment Officer, Public Markets
Inma Conde Goldman, Investment Officer, Public Markets
Stephanie Gleeson, Investment Officer, Public Markets
Robert Weiler, Investment Officer, Public Markets
Patricia Ammann, Investment Officer, DC & Trust Services
Mercy Ndungu, Investment Officer, DC & Trust Services
Nate Blumenshine, Investment Analyst

Restricted Sudan Stocks

Company Name	Country of Origin
Andritz AG	Austria
Orca Gold Inc.	Canada
Statesman Resources Limited	Canada
AKM Industrial Company Limited	China
China Gezhouba Group Company Limited	China
China North Industries Group Corporation AKA CNGC/NORINCO	China
China Petroleum and Chemical Corporation AKA Sinopec Corp.	China
China Poly Group Corporation	China
Daqing Huake Group Company Limited	China
Dongfeng Motor Group Company Limited	China
Harbin Electric Company Ltd.	China
Jiangxi Hongdu Aviation	China
Jinan Diesel Company Limited	China
Kingdream PLC	China
NORINCO International Cooperation Ltd	China
North Huajin Chemical Industries Co.	China
North Navigation Control Technology Co. Ltd	China
Petrochina Co. Ltd AKA China National Petroleum Corporation (CNPC)	China
	A5 WAND TO THE TOTAL THE TOTAL TO THE TOTAL
Poly Property Group Co. Ltd. Power Construction Corporation of China Ltd.	China China
	China
Shanghai Electric Group Co. Ltd.	
Sichuan Nitrocell Co. Ltd	China
Sinopec Engineering Group Co. Ltd.	China
Sinopec Shanghai Petrochemicals Ltd	China
Sinopec Yizheng Chemical Fibre Co Ltd	China
ASEC Company for Mining (ASCOM)	Egypt
Egypt Kuwait Holding Company	Egypt
Alstom	France
MAN SE	Germany
Renk AG	Germany
Volkswagan AG	Germany
Kunlun Energy Co. Ltd	Hong Kong
Sinopec Kanton Holdings Limited	Hong Kong
Alstom India Ltd	India
Alstom T&D India Ltd. (formerly Areva T&D India)	India
Bharat Electronics Limited	India
Bharat Heavy Electricals Limited	India
Chennai Petroleum Corporation Ltd. AKA CPCL	India
Indian Oil Corporation Ltd.	India
Lanka IOC Limited	India
Mangalore Refinery and Petrochemicals Limited	India
Oil and Natural Gas Corp. Ltd.	India
Oil India Limited	India
Energy House Holding Co KSCC, The	Kuwait
Engen Botswana Ltd. AKA Engen	Malaysia
KLCCP Stapled Group AKA KLCC Property Holdings	Malaysia
Malaysia International Shipping Company AKA MISC Berhad	Malaysia
Malaysia Marine and Heavy Engineering Holdings Bhd	Malaysia
Petroliam Nasional Berhad AKA Petronas	Malaysia
Petronas Chemicals Group Berhad	Malaysia

Restricted Sudan Stocks

Company Name	Country of Origin
Petronas Dagangan Berhad	Malaysia
Petronas Gas Berhad	Malaysia
Scomi Energy Services Bhd	Malaysia
Scomi Engineering Berhad	Malaysia
Scomi Group Berhad	Malaysia
Managem	Morocco
Societe Metallurgique D'imiter	Morocco
GAZ Auto Plant	Russia
GAZ Group	Russia
Pavlovsky Bus Plant	Russia
LS Industrial Systems	South Korea

Note:

List contains parent companies and subsidiaries publicly traded.

AKA means "Also Known As"

Source: EIRIS Conflict Risk Network

Effective Date: June 30, 2015

Unless noted, the SBI does not have exposure in any of these companies

Sudan Stocks Requiring Divestment

Company Name	Country of Origin	Divest 50 Percent By this Date	Divest 100 Percent By this date
Volkswagen AG	Germany	June 30, 2015	December 31, 2015

Effective Date: June 30, 2015

Historical Divestments

Company Name	Country of Origin	Divest 50 Percent By this Date	Divest 100 Percent By this date
China Petroleum and Chemical	v 8		•
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
Andritz AG	Austria	September 30, 2014	March 31, 2015
Bharat Electronics Limited	India	September 30, 2014	March 31, 2015
Bharat Heavy Electricals	India	September 30, 2014	March 31, 2015
MAN SE	Germany	December 31, 2014	June 30, 2015
Poly Property Group	China	March 31, 2015	September 30, 2015



Security Identifiers for "Scrutinized" Stocks

The following security identifiers correlate with the Second Quarter 2015 Sudan Company Report and are current as of May 14, 2015

ALL DATA IS FROM BLOOMBERG LP UNLESS OTHERWISE NOTED.

STOCKS ADDED SINCE LAST REPORT ARE HIGHLIGHTED

Company	Primary Company (Affiliate/Parent)	Exchange	Security Type	Security Name	State of Tight	WPK Number	SERGI	CUSIP Sicovam	ISW			
ALSTOM INDIA LTD	ALSTOM	Nati India (XNSE)	Common Stock	ALSTOM PROJECTS INDIA LTD	ALST IB	AGEAYM	6230834 IN	SIGOVANI	INE878A01011	COMMON	CIVS	Fondscode
ALSTOM INDIA LTD	ALSTOM	Nati India (XNSE)	Common Stock	ALSTOM PROJECTS INDIA LTD	ALST IN	ADEAYM	6230834 IN		NE878A01011			
ALSTOM INDIA LTD ALSTOM SA	ALSTOM ALSTOM	Nati India (XNSE)	Common Stock	ALSTOM PROJECTS INDIA LTD	ALST IS	AOEAYM	6230834 IN		INE878A01011			
ALSTOM SA	ALSTON	Equiduct (XEQT) BATS Europe (BATE)	Common Stock	ALSTOM	ALO BQ	A0F7BK	B0DJ8Q5 FR		FR0010220475	022581074		
ALSTOM SA	ALSTOM	EN Paris (XPAR)	Common Stock Common Stock	ALSTOM ALSTOM	ALO EB	A0F7BK	B0DJ8Q5 FR		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Aguis Excha (AQXE)	Common Stock	ALSTOM	ALO FP ALO QX	A0F7BK A0F7BK	BODJ8Q5 FR		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Sigma X MTF (SGMX)	Common Stock	ALSTOM	ALO S1	ADF7BK	B0DJ8Q5 FR B0DJ8Q5 FR		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Turquoise (TRQX)	Common Stock	ALSTOM	ALO TQ	A0F7BK	BODJBQ5 FR		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Chi-X Alt TS (CHIX)	Common Stock	ALSTOM	ALSP IX	A0F7BK	B0DJ8Q5 FR		FR0010220475 FR0010220475	022581074 022581074		
ALSTOM SA	ALSTOM	Frankfurt (XFRA)	Common Stock	ALSTOM	AOMD GB	A0F7BK	B0G0412 DE		FR0010220475	022581074		
ALSTOM SA ALSTOM SA	ALSTOM ALSTOM	Frankfurt (XFRA) Frankfurt (XFRA)	Common Stock	ALSTOM	AOMD GD	A0F7BK	B0G0412 DE		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Frankfurt (XFRA)	Common Stock Common Stock	ALSTOM ALSTOM	AOMD GE	A0F7BK	B0G0412 DE		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Frankfurt (XFRA)	Common Stock	ALSTOM	AOMD GF AOMD GH	A0F7BK A0F7BK	B0G0412 DE		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Frankfurt (XFRA)	Common Stock	ALSTOM	AOMD GI	A0F7BK	B0G0412 DE B0G0412 DE		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Frankfurt (XFRA)	Common Stock	ALSTOM	AOMD GM	A0F7BK	B0G0412 DE		FR0010220475 FR0010220475	022581074 022581074		
ALSTOM SA	ALSTOM	Frankfurt (XFRA)	Common Stock	ALSTOM	AOMD GR	A0F7BK	B0G0412 DE		FR0010220475	022581074		
ALSTOM SA ALSTOM SA	ALSTOM	Frankfurt (XFRA)	Common Stock	ALSTOM	AOMD GS	A0F7BK	B0G0412 DE		FR0010220475	022581074		
ALSTOM SA	ALSTOM ALSTOM	Frankfurt (XFRA)	Common Stock	ALSTOM	AOMD GY	A0F7BK	B0G0412 DE		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Quotrix Exch (XQTX) Tradegate (XGAT)	Common Stock Common Stock	ALSTOM	AOMD QT	A0F7BK	B0G0412 DE		FR0010220475	022581074		
ALSTOM SA	ALSTOM	OTC US (OOTC)	Common Stock	ALSTOM ALSTOM	AOME PO	A0F7BK	B0G0412 DE		FR0010220475	022581074		
ALSTOM SA	ALSTOM	OTC US (OOTC)	Common Stock	ALSTOM	AOMFF PQ AOMFF US	A0F7BK A0F7BK	BOGLY93 US BOGLY93 US		FR0010220475	022581074	F0259M475	
ALSTOM SA	ALSTOM	OTC US (OOTC)	Common Stock	ALSTOM	AOMFF UV	ADF7BK	BOGLY93 US		FR0010220475 FR0010220475	022581074	F0259M475	
ALSTOM SA	ALSTOM	Euro Comp (XLON)	Common Stock	ALSTOM	ALO EU	A0F7BK	BOYLTQ7 GB		FR0010220475	022581074	F0259M475	
ALSTOM SA ALSTOM SA	ALSTOM ALSTOM	LSE EuropeQS (XLON)	Common Stock	ALSTOM	ALO LI	A0F7BK	BOYLTQ7 GB		FR0010220475	022581074		
ALSTOM SA ALSTOM SA	ALSTOM ALSTOM	LSE EuropeQS (XLON)	Common Stock	ALSTOM	ALO LO	A0F7BK	BOYLTQ7 GB		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Euro OTC (XLON) Euro OTC (XLON)	Common Stock	ALSTOM	ALO XB	A0F7BK	B0YLTQ7 GB		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Euro OTC (XLON)	Common Stock Common Stock	ALSTOM ALSTOM	ALO XD ALO XE	A0F7BK A0F7BK	BOYLTQ7 GB		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALO XO	AUF7BK AUF7BK	B0YLTQ7 GB B0YLTQ7 GB		FR0010220475 FR0010220475	022581074		
ALSTOM SA	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALO XS	A0F7BK	BOYLTQ7 GB		FR0010220475	022581074 022581074		
ALSTOM SA	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALO XV	A0F7BK	BOYLTQ7 GB		FR0010220475	022581074		
ALSTOM SA ALSTOM SA	ALSTOM ALSTOM	Euro TLX (ETLX)	Common Stock	ALSTOM	ALO TE	A0F7BK	B3NVFN8 IT		FR0010220475	022581074		
ALSTOM SA	ALSTOM	SIX Swiss Ex (XSWX) SIX Swiss Ex (XSWX)	Common Stock	ALSTOM	ALO SE	A0F7BK	BRTM7F9 CH		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Euro OTC (XLON)	Common Stock Common Stock	ALSTOM ALSTOM	ALO SW	A0F7BK	BRTM7F9 CH		FR0010220475	022581074		
ALSTOM SA	ALSTOM	Euro OTC (XLON)	Common Stock	ALSTOM	ALO XA ALO XL	A0F7BK A0F7BK			FR0010220475	022581074		
ALSTOM SA	ALSTOM	Blockmatch (BLOX)	Common Stock	ALSTOM	ALOP B3	A0F7BK			FR0010220475 FR0010220475	022581074		
ALSTOM SA	ALSTOM	Blockmatch (BLOX)	Common Stock	ALSTOM	ALOP L3	A0F7BK			FR0010220475			
ALSTOM SA ALSTOM SA	ALSTOM ALSTOM	Blockmatch (BLOX)	Common Stock	ALSTOM	ALOP S2	A0F7BK			FR0010220475			
ALSTOM SA	ALSTOM	Euro Comp (XLON) EN Paris (XPAR)	Common Stock Common Stock	ALSTOM-NEW	ALON1EUR EU	200 C 200 21 200 C 2			FR0012395374			
ALSTOM SA	ALSTOM	OTC US (OOTC)	GDR	ALSTOM-NEW ALSTOM	ALONV FP ALSMY PQ	BWNGZ14 FR		Table 200 Care Land	FR0012395374			
ALSTOM SA	ALSTOM	OTC US (OOTC)	GDR	ALSTOM	ALSMY US	A1CS4B A1CS4B	B3DY4Z2 US B3DY4Z2 US	021244207 021244207	US0212442075	081982660		
ALSTOM SA	ALSTOM	OTC US (OOTC)	GDR	ALSTOM	ALSMY UV	A1CS4B	B3DY4Z2 US	021244207	US0212442075 US0212442075	081982660 081982660		
ALSTOM T&D INDIA LTD	ALSTOM	Natl India (XNSE)	Common Stock	AREVA T&D INDIA LTD	ATD IB	AORB87	6139890 IN	DE1E-14201	INE200A01026	001902000		
ALSTOM T&D INDIA LTD	ALSTOM ALSTOM	Natl India (XNSE) Natl India (XNSE)	Common Stock	AREVA T&D INDIA LTD	ATD IN	A0RB87	6139890 IN		INE200A01026			
ANDRITZ AG	ANDRITZ GROUP	Vienna (WBAH)	Common Stock	AREVA T&D INDIA LTD ANDRITZ AG	ATD IS	A0RB87	6139890 IN		INE200A01026			
ANDRITZ AG	ANDRITZ GROUP	BATS Europe (BATE)	Common Stock	ANDRITZ AG	ANDR AV ANDR EB	632305 632305	B1WVF68 AT B1WVF68 AT		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Chi-X Europe (CHIX)	Common Stock	ANDRITZ AG	ANDR IX	632305	B1WVF68 AT		AT0000730007 AT0000730007	013042748 013042748		
ANDRITZ AG	ANDRITZ GROUP	Sigma X MTF (SGMX)	Common Stock	ANDRITZ AG	ANDR S1	632305	B1WVF68 AT		AT0000730007	013042748		
ANDRITZ AG ANDRITZ AG	ANDRITZ GROUP ANDRITZ GROUP	Turquoise (TRQX)	Common Stock	ANDRITZ AG	ANDR TQ	632305	B1WVF68 AT		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Xetra (XETR) Xetra (XETR)	Common Stock	ANDRITZ AG	AZZ GB	632305	B1X9FH2 DE		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Xetra (XETR)	Common Stock Common Stock	ANDRITZ AG ANDRITZ AG	AZ2 GD AZ2 GF	632305	B1X9FH2 DE		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Xetra (XETR)	Common Stock	ANDRITZ AG	AZ2 GH	632305 632305	B1X9FH2 DE B1X9FH2 DE		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Xetra (XETR)	Common Stock	ANDRITZ AG	AZ2 GM	632305	B1X9FH2 DE		AT0000730007 AT0000730007	013042748 013042748		
ANDRITZ AG	ANDRITZ GROUP	Xetra (XETR)	Common Stock	ANDRITZ AG	AZ2 GR	632305	B1X9FH2 DE		AT0000730007	013042748		
ANDRITZ AG ANDRITZ AG	ANDRITZ GROUP ANDRITZ GROUP	Xetra (XETR)	Common Stock	ANDRITZ AG	AZ2 GS	632305	B1X9FH2 DE		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Xetra (XETR) Quotrix Exch (XQTX)	Common Stock	ANDRITZ AG	AZ2 GY	632305	B1X9FH2 DE		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Tradegate (XGAT)	Common Stock	ANDRITZ AG ANDRITZ AG	AZ2 QT AZ2 TH	632305 632305	B1X9FH2 DE		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Euro Comp (XLON)	Common Stock	ANDRITZ AG	ANDR EU	632305	B1X9FH2 DE B28F3F6 GB		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	LSE EuropeQS (XLON)	Common Stock	ANDRITZ AG	ANDR LI	632305	B28F3F6 GB		AT0000730007 AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	LSE EuropeQS (XLON)	Common Stock	ANDRITZ AG	ANDR LO	632305	B28F3F6 GB		AT0000730007	013042748		
ANDRITZ AG ANDRITZ AG	ANDRITZ GROUP ANDRITZ GROUP	Euro OTC (XLON)	Common Stock	ANDRITZ AG	ANDR XA	632305	B28F3F6 GB		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Euro OTC (XLON) Euro OTC (XLON)	Common Stock Common Stock	ANDRITZ AG	ANDR XB	632305	B28F3F6 GB		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Euro OTC (XLON)	Common Stock	ANDRITZ AG ANDRITZ AG	ANDR XD ANDR XE	632305	B28F3F6 GB		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Euro OTC (XLON)	Common Stock	ANDRITZ AG	ANDR XL	632305 632305	B28F3F6 GB B28F3F6 GB		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Euro OTC (XLON)	Common Stock	ANDRITZ AG	ANDR XV	632305	B28F3F6 GB		AT0000730007 AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	BX Worldcaps (XBRN)	Common Stock	ANDRITZ AG	ANDR BW	632305	BHZL8M4 CH		AT0000730007	013042748 013042748		
ANDRITZ AG ANDRITZ AG	ANDRITZ GROUP ANDRITZ GROUP	SIX Swiss Ex (XSWX)	Common Stock	ANDRITZ AG	ANDR SE	632305	BHZLBM4 CH		AT0000730007	013042748		
ANDRITZ AG ANDRITZ AG	ANDRITZ GROUP ANDRITZ GROUP	BX Worldcaps (XBRN)	Common Stock	ANDRITZ AG	ANDR SW	632305	BHZL8M4 CH		AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Euro OTC (XLON) Blockmatch (BLOX)	Common Stock Common Stock	ANDRITZ AG ANDRITZ AG	ANDR XS	632305			AT0000730007	013042748		
ANDRITZ AG	ANDRITZ GROUP	Liquidnet (LIQU)	Common Stock	ANDRITZ AG	ANDRV B3 ANDRV L3	632305 632305			AT0000730007			
ANDRITZ AG	ANDRITZ GROUP	UBS MTF (XUBS)	Common Stock	ANDRITZ AG	ANDRV S2	632305			AT0000730007 AT0000730007			
ANDRITZ AG	ANDRITZ GROUP	OTC US (OOTC)	ADR	ANDRITZ AG-UNSPON ADR	ADRZY PQ	(U.S. 20, U.S. 20)	B3DY4P2 US	034522102	US0345221024			

ANDRITZ AG ASEC COMPANY FOR MINING (ASCOM)	ANDRITZ GROUP ASEC COMPANY FOR MINING (ASCOM) aka	OTC US (OOTC)	ADR	ANDRITZ AG-UNSPON ADR	ADRZY US		B3DY4P2 US	034522102		US0345221024	
ka ASEK COMPANY FOR MINING	ASEK COMPANY FOR MINING	EGX (XCAI)	Common Stock	ASEK CO FOR MINING	ASCM EC	A0Q78K	804CCH2 EG			EGS10001C013	
SEC COMPANY FOR MINING (ASCOM) ka ASEK COMPANY FOR MINING	ASEC COMPANY FOR MINING (ASCOM) aka ASEK COMPANY FOR MINING	EGX (XCAI)	C Ct!							200100010013	
HARAT ELECTRONICS LIMITED	BHARAT ELECTRONICS LIMITED	Natl India (XNSE)	Common Stock Common Stock	ASEK CO FOR MINING BHARAT ELECTRONICS LIMITED	ASCM EY BHE IB	A0Q78K 120304	B04CCH2 EG 6139715 IN			EGS10001C013	
HARAT ELECTRONICS LIMITED HARAT ELECTRONICS LIMITED	BHARAT ELECTRONICS LIMITED	Natl India (XNSE)	Common Stock	BHARAT ELECTRONICS LIMITED	BHE IN	120304	6139715 IN			INE263A01016 INE263A01016	
HARAT HEAVY ELECTRICALS	BHARAT ELECTRONICS LIMITED BHARAT HEAVY ELECTRICALS LIMITED	Natl India (XNSE) Natl India (XNSE)	Common Stock Common Stock	BHARAT ELECTRONICS LIMITED BHARAT HEAVY ELECTRICALS	BHE IS BHEL IB	120304	6139715 IN			INE263A01016	
HARAT HEAVY ELECTRICALS	BHARAT HEAVY ELECTRICALS LIMITED	Natl India (XNSE)	Common Stock	BHARAT HEAVY ELECTRICALS	BHEL IN	A1JLKM A1JLKM	B6SNRV2 IN B6SNRV2 IN			INE257A01026 INE257A01026	
HARAT HEAVY ELECTRICALS	BHARAT HEAVY ELECTRICALS LIMITED	Nati India (XNSE)	Common Stock	BHARAT HEAVY ELECTRICALS BHARAT HEAVY ELECTRICALS-	BHEL IS	A1JLKM	B6SNRV2 IN			NE257A01026	
HARAT HEAVY ELECTRICALS HARAT HEAVY ELECTRICALS	BHARAT HEAVY ELECTRICALS LIMITED	Natl India (XNSE)	Second Lending	SLB BHARAT HEAVY ELECTRICALS-	BHEL/S IN						
ATERPILLAR INC	BHARAT HEAVY ELECTRICALS LIMITED CATERPILLAR INC	Natl India (XNSE) BM&F Bovespa (BVMP)	Second Lending BDR	SLB CATERPILLAR-BDR	BHEL/S IS CATP34 BS		D464070 DD				
ATERPILLAR INC ATERPILLAR INC	CATERPILLAR INC	BM&F Bovespa (BVMP)	BDR	CATERPILLAR-BDR	CATP34 BZ		B463G79 BR B463G79 BR			BRCATPBDR003 BRCATPBDR003	
ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	Euro OTC (XLON) Euro Comp (XLON)	Common Stock Common Stock	CATERPILLAR INC	CAT XS	850598	0180162 GB	149123101		US1491231015	009986537
ATERPILLAR INC	CATERPILLAR INC	Euro OTC (XLON)	Common Stock	CATERPILLAR INC	CATEUR EU CATEUR XL	850598 850598	0180162 GB 0180162 GB	149123101 149123101		US1491231015 US1491231015	009986537 009986537
ATERPILLAR INC ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	Euro OTC (XLON) New York (XNYS)	Common Stock Common Stock	CATERPILLAR INC	CATEUR XS	850598	0180162 GB	149123101		US1491231015	009986537
ATERPILLAR INC	CATERPILLAR INC	New York (XNYS)	Common Stock	CATERPILLAR INC	CAT UB CAT UD	850598 850598	2180201 US 2180201 US	149123101 149123101	005976 005976	US1491231015 US1491231015	009986537 009986537
ATERPILLAR INC ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	New York (XNYS)	Common Stock	CATERPILLAR INC	CAT UF	850598	2180201 US	149123101	005976	US1491231015	009986537
ATERPILLAR INC	CATERPILLAR INC	New York (XNYS) New York (XNYS)	Common Stock Common Stock	CATERPILLAR INC CATERPILLAR INC	CAT UM CAT UN	850598 850598	2180201 US 2180201 US	149123101	005976	US1491231015	009986537
ATERPILLAR INC	CATERPILLAR INC	New York (XNYS)	Common Stock	CATERPILLAR INC	CAT UP	850598	2180201 US	149123101 149123101	005976 005976	US1491231015 US1491231015	009986537 009986537
ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	New York (XNYS) New York (XNYS)	Common Stock Common Stock	CATERPILLAR INC	CATUS	850598	2180201 US		005976	US1491231015	009986537
TERPILLAR INC	CATERPILLAR INC	New York (XNYS)	Common Stock	CATERPILLAR INC CATERPILLAR INC	CAT UT CAT UX	850598 850598	2180201 US 2180201 US	149123101 149123101	005976	US1491231015 US1491231015	009986537 009986537
ATERPILLAR INC ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	New York (XNYS) New York (XNYS)	Common Stock	CATERPILLAR INC	CAT VJ	850598	2180201 US	149123101	005976	US1491231015	009986537
ATERPILLAR INC	CATERPILLAR INC	New York (XNYS)	Common Stock Common Stock	CATERPILLAR INC CATERPILLAR INC	CAT VK CAT VY	850598 850598	2180201 US 2180201 US	149123101 149123101	005976 005976	US1491231015	009986537
TERPILLAR INC	CATERPILLAR INC	Mexico (XMEX)	Common Stock	CATERPILLAR INC	CAT* MM	850598	2665979 MX	149123101	005976	US1491231015 US1491231015	009986537 009986537
ATERPILLAR INC ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	EN Paris (XPAR) SIX Swiss Ex (XSWX)	Common Stock Common Stock	CATERPILLAR INC CATERPILLAR INC	CATR FP	850598	4180254 FR	149123101	005976	US1491231015	009986537
TERPILLAR INC	CATERPILLAR INC	SIX Swiss Ex (XSWX)	Common Stock	CATERPILLAR INC	CAT BW CAT SE	850598 850598	4516310 CH 4516310 CH	149123101 149123101	919161 919161	US1491231015 US1491231015	009986537 009986537
TERPILLAR INC TERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	SIX Swiss Ex (XSWX) Frankfurt (XFRA)	Common Stock Common Stock	CATERPILLAR INC	CAT SW	850598	4516310 CH	149123101	919161	US1491231015	009986537
TERPILLAR INC	CATERPILLAR INC	Frankfurt (XFRA)	Common Stock	CATERPILLAR INC	CAT1 GB CAT1 GD	850598 850598	5626520 DE 5626520 DE	149123101 149123101	919161	US1491231015	009986537
TERPILLAR INC	CATERRILLAR INC	Frankfurt (XFRA)	Common Stock	CATERPILLAR INC	CAT1 GF	850598	5626520 DE	149123101	919161	US1491231015 US1491231015	009986537 009986537
TERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	Frankfurt (XFRA) Frankfurt (XFRA)	Common Stock Common Stock	CATERPILLAR INC CATERPILLAR INC	CAT1 GH CAT1 GI	850598 850598	5626520 DE	149123101	919161	US1491231015	009986537
TERPILLAR INC	CATERPILLAR INC	Frankfurt (XFRA)	Common Stock	CATERPILLAR INC	CAT1 GM	850598	5626520 DE 5626520 DE	149123101 149123101	919161	US1491231015 US1491231015	009986537 009986537
TERPILLAR INC TERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	Dusseldorf (XDUS) Frankfurt (XFRA)	Common Stock Common Stock	CATERPILLAR INC CATERPILLAR INC	CAT1 GQ	850598	5626520 DE		919161	US1491231015	009986537
TERPILLAR INC	CATERPILLAR INC	Frankfurt (XFRA)	Common Stock	CATERPILLAR INC	CAT1 GR CAT1 GS	850598 850598	5626520 DE 5626520 DE	149123101 149123101	919161 919161	US1491231015 US1491231015	009986537 009986537
ATERPILLAR INC ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	Frankfurt (XFRA)	Common Stock	CATERPILLAR INC	CAT1 GY	850598	5626520 DE	149123101	919161	US1491231015	009986537
ATERPILLAR INC	CATERPILLAR INC	Quotrix Exch (XQTX) Tradegate (XGAT)	Common Stock Common Stock	CATERPILLAR INC CATERPILLAR INC	CAT1 QT CAT1 TH	850598 850598	5626520 DE 5626520 DE	149123101 149123101	919161	US1491231015	009986537
ATERPILLAR INC ATERPILLAR INC	CATERPILLAR INC	EuroTLX (ETLX)	Common Stock	CATERPILLAR INC	CAT TE	850598	B83WZ14 IT	149123101	919161 005976	US1491231015 US1491231015	009986537 009986537
ATERPILLAR INC	CATERPILLAR INC CATERPILLAR INC	Santiago Comercio (XSGO) Santiago Comercio (XSGO)	Common Stock Common Stock	CATERPILLAR INC	CAT CC CAT CI	850598	B8BLXY2 CL	149123101	005976	US1491231015	009986537
ATERPILLAR INC	CATERPILLAR INC	Euro Comp (XLON)	Common Stock	CATERPILLAR INC	CATCHF EU	850598 850598	B8BLXY2 CL	149123101 149123101	005976	US1491231015 US1491231015	009986537 009986537
HINA GEZHOUBA GROUP COMPANY D	CHINA GEZHOUBA GROUP COMPANY LTD	Shanghai (XSHG)	Common Stock	CHINA GEZHOUBA GROUP CO LT A	600068 CG	A0M31Z	6377214 CN			CNE000000QF1	
HINA GEZHOUBA GROUP COMPANY	CHINA GEZHOUBA GROUP COMPANY LTD	Shanghai (XSHG)	Common Stock	CHINA GEZHOUBA GROUP CO LT A		A0M31Z	6377214 CN			CNE000000QF1	
HINA GEZHOUBA GROUP COMPANY	CHINA GEZHOUBA GROUP COMPANY LTD	Nth SSE-SEHK (XSSC)	Common Stock	CHINA GEZHOUBA GROUP CO LT A		A0M31Z	BP3R693 CN				
CHINA LTD	CHINA HYDRAULIC AND HYDROELECTRIC CONSTRUCTION GROUP (SINOHYDRO)	Shanghai (XSHG)	Common Stock	SINOHYDRO GROUP LTD-A	601669 CG	A1JNL6	B4TH690 CN			CNE000000QF1 CNE1000017G1	
OWER CONSTRUCTION CORPORATION F CHINA LTD	CHINA HYDRAULIC AND HYDROELECTRIC CONSTRUCTION GROUP (SINOHYDRO)	Shanghai (XSHG)	Common Stock	SINOHYDRO GROUP LTD-A	601669 CH	A1JNL6	B4TH690 CN			CNE1000017G1	
OWER CONSTRUCTION CORPORATION F CHINA LTD	CHINA HYDRAULIC AND HYDROELECTRIC CONSTRUCTION GROUP (SINOHYDRO)	Nth SSE-SEHK (XSSC)	Common Stock	SINOHYDRO GROUP LTD-A	601669 C1		BP3R4M2 CN			CNE1000017G1	
AQING HUAKE GROUP CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Shenzhen (XSHE)	Common Stock			4011100				WAS THE CONTRACTOR OF T	_
AQING HUAKE GROUP CO LTD	CHINA NATIONAL PETROLEUM CORP aka	Shenzhen (XSHE)	Common Stock	DAQING HUAKE GROUP CO.A	000985 CH	A0M4C2	6277949 CN			CNE000001402	
NAN DIESEL ENGINE CO LTD	CHINA NATIONAL PETROLEUM CORP aka	Shenzhen (XSHE)	Common Stock	DAQING HUAKE GROUP CO-A JINAN DIESEL ENGINE CO-A	000985 CS	A0M4C2	6277949 CN			CNE000001402	
NAN DIESEL ENGINE CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Shenzhen (XSHE)	Common Stock	JINAN DIESEL ENGINE CO-A	000617 CH	A0M3ZT	6486109 CN			CNE000000MS3	
UNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	KUNLUN ENERGY CO LTD	000617 CS CTJ1 GB	A0M3ZT	6486109 CN		050101	CNE000000MS3	
UNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	KUNLUN ENERGY CO LTD	CTJ1 GD	A1CV3E	5387753 DE		952131	BMG5320C1082	
UNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	KUNLUN ENERGY CO LTD	CTJ1 GF	A1CV3E	5387753 DE		952131	BMG5320C1082	
UNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	KUNLUN ENERGY CO LTD	CTJ1 GM	A1CV3E	5387753 DE 5387753 DE		952131	BMG5320C1082	
JNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	KUNLUN ENERGY CO LTD	CTJ1 GR	A1CV3E	5387753 DE		952131	BMG5320C1082	
JNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	KUNLUN ENERGY CO LTD	CTJ1 GS	A1CV3E	5387753 DE		952131 952131	BMG5320C1082 BMG5320C1082	
INLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Tradegate (XGAT)	Common Stock	KUNLUN ENERGY CO LTD	CTJ1 TH	A1CV3E	5387753 DE		952131	BMG5320C1082	
INLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Hong Kong (XHKG)	Common Stock	KUNLUN ENERGY CO LTD	135 HK	A1CV3E	6340078 HK		952131	BMG5320C1082	
UNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka	OTC Exchange (OOTC)	Common Stock	KUNLUN ENERGY CO LTD	KUNUF PQ	A1CV3E	B01DDZ3 US		952131	BMG5320C1082	
UNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	OTC Exchange (OOTC)	Common Stack	KUNLUN ENERGY CO LTD	KUNUF US	A1CV3E	B01DDZ3 US		952131		
UNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	OTC Exchange (OOTC)	Common Stock	KUNLUN ENERGY CO LTD	KUNUF UV	A1CV3E	B01DDZ3 US		952131	BMG5320C1082 BMG5320C1082	050092003
	CHINA NATIONAL PETROLEUM CORP aka				200200731 IBW		231002003		332131	01110002001002	030032003
INLUN ENERGY CO LTD		SH SSE SERK ISHES	Common Stook	KUBILLINI CHEDOVI OD 1 TT	405.114						
UNLUN ENERGY CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka CNPC	Sth SSE-SEHK (SHSC) OTC Exchange (OOTC)	Common Stock ADR	KUNLUN ENERGY CO LTD CNPC HONG KONG LTD-UNSP ADR	135 H1 KLYCY PQ	A1CV3E	BP3RW39 HK		952131	BMG5320C1082	050092003

1		COUNTY AND THE COUNTY											
	KUNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	OTC Exchange (OOTC)	ADR	CNPC HONG KONG LTD-UNSP ADR	KLYCY US	A1J7V7	B3L2812 US	50126A101	US50126A1016			1
	KUNLUN ENERGY CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	OTC Exchange (OOTC)	ADR	CNPC HONG KONG LTD-UNSP ADR	KLYCY UV	A1J7V7	B3L2812 US	50126A101	US50126A1016			- 1
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	PETROCHINA CO LTD-H	PC6 GB	A0M4YQ	5939507 DE		CNE1000003W8	011011074		- 1
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	PETROCHINA CO LTD-H	PC6 GD	ADM4YQ	5939507 DE		CNE1000003V8			1
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	PETROCHINA CO LTD-H	PC6 GF	A0M4YQ	5939507 DE					- 1
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	PETROCHINA CO LTD-H	PC6 GH	A0M4YQ	5939507 DE		CNE1000003W8			1
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	PETROCHINA CO LTD-H	PC6 GM	A0M4YQ			CNE1000003W8			- 1
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	PETROCHINA CO LTD-H	PC6 GR	A0M4YQ	5939507 DE 5939507 DE		CNE1000003W8			
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	PETROCHINA CO LTD-H	PC6 GS	A0M4YQ	5939507 DE		CNE1000003W8			
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	PETROCHINA CO LTD-H	PC6 GY	A0M4YQ			CNE1000003W8			
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Quotrix Exch (XQTX)	Common Stock	PETROCHINA CO LTD-H	PC6 QT	A0M4YQ	5939507 DE		CNE1000003W8			
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Frankfurt (XFRA)	Common Stock	PETROCHINA CO LTD-H	PC6 TH		5939507 DE		CNE1000003W8			
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Hong Kong (XHKG)	Common Stock	PETROCHINA CO LTD-H	857 HK	A0M4YQ	5939507 DE		CNE1000003W8			- 1
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	OTC US (DOTC)	Common Stock	PETROCHINA CO LTD-H		A0M4YQ	6226576 HK		CNE1000003W8	011014674		
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka	OTC US (OOTC)	Common Stock		PCCYF US	A0M4YQ	B01DNL9 US		CNE1000003W8	011014674	Y6883Q104	
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Sth SSE-SEHK (SHSC)		PETROCHINA CO LTD-H	PCCYF UV	A0M4YQ	B01DNL9 US		CNE1000003W8	011014674	Y6883Q104	
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC		Common Stock	PETROCHINA CO LTD-H	857 H1	A0M4YQ	BP3RWW8 HK		CNE1000003W8	011014674		
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka	Shanghai (XSHG)	Common Stock	PETROCHINA CO LTD-A	601857 CG	ADNANC	B28SLD9 CN		CNE1000007Q1	033421664		
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka	Shanghai (XSHG)	Common Stock	PETROCHINA CO LTD-A	601857 CH	AONANC	B28SLD9 CN		CNE1000007Q1	033421664		1
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka CNPC	Nth SSE-SEHK (XSSC)	Common Stock	PETROCHINA CO LTD-A	601857 C1	AONANC	BP3R206 CN		CNE1000007Q1	033421664		
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR UB	936983	2568841 US	74646E100	US71646E1001	011511449		
		CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR UD	936983	2568841 US	74646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR UF	936983	2568841 US	74646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR UN	936983	2568841 US	74646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR UP	936983	2568841 US	74646E100	US71646E1001	011511449		
9	PETROCHINA CO LTD	CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR US	936983	2568841 US	74646E100	US71646E1001	011511449		- 1
Ĩ	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR UT	936983	2568841 US	74646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR UX	936983	2568841 US	74646E100	US71646E1001	011511449		1
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR VJ	936983	2568841 US	74646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR VK	936983	2568841 US	74646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	New York (XNYS)	ADR	PETROCHINA CO LTD -ADR	PTR VY	936983	2568841 US	74646E100	US71646E1001	011511449		- 1
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	Frankfurt (XFRA)	ADR	PETROCHINA CO LTD -ADR	PC6A GB	936983	4633327 DE	71646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	Frankfurt (XFRA)	ADR	PETROCHINA CO LTD -ADR	PC6A GF	936983	4633327 DE	71646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	Frankfurt (XFRA)	ADR	PETROCHINA CO LTD -ADR	PC6A GM	936983	4633327 DE	71646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	Frankfurt (XFRA)	ADR	PETROCHINA CO LTD -ADR	PC6A GR	936983	4633327 DE	71646E100	US71646E1001	011511449		1
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	Frankfurt (XFRA)	ADR	PETROCHINA CO LTD -ADR	PC6A GS	936983	4633327 DE	71646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	Frankfurt (XFRA)	ADR	PETROCHINA CO LTD -ADR	PC6A GY	936983	4633327 DE	71646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	Singapore (XSES)	ADR	PETROCHINA CO LTD -ADR	PTR SP	936983	B3KTK63 SG		US71646E1001	011511449		
	PETROCHINA CO LTD	CNPC CHINA NATIONAL PETROLEUM CORP aka	Mexico (XMEX)	ADR	PETROCHINA CO LTD -ADR	PTRN MM	936983	B569834 MX	74646E100	US71646E1001	011511449		
	PETROCHINA CO LTD	CNPC CHINA NORTH INDUSTRIES GROUP	Tradegate (XGAT)	ADR	PETROCHINA CO LTD -ADR	PC6A TH	936983		74646E100	US71646E1001	011511449		
- 1	AKM INDUSTRIAL CO. LTD.	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Hong Kong (XHKG)	Common Stock	AKM INDUSTRIAL CO LTD	1639 HK	A0D86T	B02J0J3 HK		HK8298013897	021553654		
- 1	AKM INDUSTRIAL CO. LTD.	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Berlin (XBER)	Common Stock	AKM INDUSTRIAL CO LTD	AIQ GB	A0D86T	B06L0H3 DE		HK8298013897	021553654		
- 1	AKM INDUSTRIAL CO. LTD. NORINCO INTERNATIONAL	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Berlin (XBER)	Common Stock	AKM INDUSTRIAL CO LTD	AIQ GR	A0D86T	B06L0H3 DE		HK8298013897	021553654		
- 1	COOPERATION LTD. NORINCO INTERNATIONAL	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Shenzhen (XSHE)	Common Stock	NORINCO INTL COOPERATION -A	000065 CH	A0M35VV	6112125 CN		CNE000000VZ9			
-1	COOPERATION LTD. NORTH HUAJIN CHEMICAL INDUSTRIES	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Shenzhen (XSHE)	Common Stock	NORINCO INTL COOPERATION -A	000065 CS	A0M35W	6112125 CN		CNE000000VZ9			1
- 1	CO LTD NORTH HUAJIN CHEMICAL INDUSTRIES	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Shenzhen (XSHE)	Common Stock	NORTH HUAJIN CHEMICAL INDU-A	000059 CH A0	M30T	6796143 CN		CNE000000NY9			
	CO LTD NORTH NAVIGATION CONTROL	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Shenzhen (XSHE)	Common Stock	NORTH HUAJIN CHEMICAL INDU-A NORTH NAVIGATION CONTROL T-		мзот	6796143 CN		CNE000000NY9			
- 1	TECHNOLOGY CO. LTD. NORTH NAVIGATION CONTROL	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Shenzhen (XSHE)	Common Stock	A NORTH NAVIGATION CONTROL T-	600435 CG	A0M4L5	6649946 CN		CNE000001F88			
- 1	TECHNOLOGY CO. LTD. NORTH NAVIGATION CONTROL	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Shenzhen (XSHE)	Common Stock	A NORTH NAVIGATION CONTROL T-	600435 CH	A0M4L5	6649946 CN		CNE000001F88			
- 1	TECHNOLOGY CO. LTD.	CORPORATION (CNGC/NORINCO) CHINA NORTH INDUSTRIES GROUP	Nth SSE-SEHK (XSSC)	Common Stock	A A	600435 C1	A0M4L5	BP3RB54 CN		CNE000001F88			
ļ	SICHUAN NITROCELL CO. LTD.	CORPORATION (CNGC/NORINCO)	Shenzhen (XSHE)	Common Stock	SICHUAN NITROCELL CO LTD-A	002246 CH	AORPGJ	B39G5K4 CN		CNE100000BW7			

SICHUAN NITROCELL CO. LTD.	CHINA NORTH INDUSTRIES GROUP CORPORATION (CNGC/NORINCO)	Shenzhen (XSHE)	Common Stock	SICHUAN NITROCELL CO LTD-A	002246 CS	AORPGJ	B39G5K4 CN		CHEADCOCCO		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Buenos Floor (XBUE)	CEDEAR	CHINA PETROLEUM & CHEM- CEDEA		AURPGJ	Hamilton Control		CNE100000BW7		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP			CHINA PETROLEUM & CHEM-	SNP AF		B1C5SX8 AR	16941R108	ARDEUT114071		
CHINA PETROLEUM & CHEMICAL CORP	CHINA PETROCHEMICAL CORP aka	Buenos Floor (XBUE)	CEDEAR	CEDEA CHINA PETROLEUM & CHEMICAL-	SNP AR		B1C5SX8 AR	16941R108	ARDEUT114071		
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Shanghai (XSHG)	Common Stock	A CHINA PETROLEUM & CHEMICAL-	600028 CH	A0M4G4	6373728 CN		CNE0000018G1		
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Hong Kong (XHKG)	Common Stock	H CHINA PETROLEUM & CHEMICAL	386 HK	A0M4XN	6291819 HK		CNE1000002Q2	012150504	
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Frankfurt (XFRA)	Common Stock	Н	CHU GB	A0M4XN	7027756 DE		CNE1000002Q2	012150504	
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Frankfurt (XFRA)	Common Stock	CHINA PETROLEUM & CHEMICAL H	CHU GD	A0M4XN	7027756 DE		CNE1000002Q2	012150504	
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	CHINA PETROLEUM & CHEMICAL - H	CHU GF	A0M4XN	7027756 DE		CNE1000002Q2		
aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	CHINA PETROLEUM & CHEMICAL H	CHU GH	A0M4XN	7027756 DE		CNE1000002Q2		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	CHINA PETROLEUM & CHEMICAL H	CHU GM	A0M4XN	7027756 DE		CNE1000002Q2		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	CHINA PETROLEUM & CHEMICAL -	CHU GR	A0M4XN	7027756 DE				
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	CHINA PETROLEUM & CHEMICAL	CHU GS	A0M4XN			CNE1000002Q2		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Quotrix Exch (XQTX)	Common Stock	CHINA PETROLEUM & CHEMICAL			7027756 DE		CNE1000002Q2	012150504	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	OTC US (OOTC)	Common Stock	CHINA PETROLEUM & CHEMICAL-	CHUQT	A0M4XN	7027756 DE		CNE1000002Q2	012150504	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP			CHINA PETROLEUM & CHEMICAL-	SNPMF PQ	A0M4XN	B01XKR4 US		CNE1000002Q2	012150504	Y15010104
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka	OTC US (OOTC)	Common Stock	H CHINA PETROLEUM & CHEMICAL-	SNPMF US	A0M4XN	B01XKR4 US		CNE1000002Q2	012150504	Y15010104
CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	OTC US (OOTC)	Common Stock	H CHINA PETROLEUM & CHEMICAL-	SNPMF UV	A0M4XN	B01XKR4 US		CNE1000002Q2	012150504	Y15010104
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Sth SSE-SEHK (SHSC)	Common Stock	H CHINA PETROLEUM & CHEMICAL-	386 H1	A0M4XN	BP3RSM0 HK		CNE1000002Q2	012150504	
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Shanghai (XSHG)	Common Stock	A CHINA PETROLEUM & CHEMICAL-	600028 CG	A0M4G4	6373728 CN		CNE1000018G1		
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Nth SSE-SEHK (XSSC)	Common Stock	A CHINA PETROLEUM & CHEMICAL-	600028 C1	A0M4G4	BP3R240 CN		CNE1000018G1		
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP ake	New York (XNYS)	ADR	ADR	SNP UB	578971	2639189 US	16941R108	US16941R1086	011899374	
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	New York (XNYS)	ADR	CHINA PETROLEUM & CHEMICAL- ADR	SNP UD	578971	2639189 US	16941R108	US16941R1086	011899374	
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	New York (XNYS)	ADR	CHINA PETROLEUM & CHEMICAL- ADR	SNP UF	578971	2639189 US	16941R108	US16941R1086	011899374	
aka SINOPEC CORP	SINOPEC GROUP	New York (XNYS)	ADR	CHINA PETROLEUM & CHEMICAL- ADR	SNP UM	578971	2639189 US	16941R108	US16941R1086	011899374	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	CHINA PETROLEUM & CHEMICAL- ADR	SNP UN	578971	2639189 US	16941R108	US16941R1086		
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	CHINA PETROLEUM & CHEMICAL- ADR	SNP UP	578971	2639189 US	16941R108		011899374	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	CHINA PETROLEUM & CHEMICAL- ADR	SNP US	578971		1094 11(100	US16941R1086	011899374	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	CHINA PETROLEUM & CHEMICAL- ADR			2639189 US	1000	US16941R1086	011899374	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	CHINA PETROLEUM & CHEMICAL- ADR		578971	2639189 US	16941R108	US16941R1086	011899374	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	CHINA PETROLEUM & CHEMICAL- ADR		578971	2639189 US	16941R108	US16941R1086	011899374	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP			CHINA PETROLEUM & CHEMICAL-		578971	2639189 US	16941R108	US16941R1086	011899374	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	ADR CHINA PETROLEUM & CHEMICAL-		578971	2639189 US	16941R108	US16941R1086	011899374	
CHINA PETROLEUM & CHEMICAL CORP aka SINOPEC CORP	CHINA PETROCHEMICAL CORP aka	New York (XNYS)	ADR	ADR CHINA PETROLEUM & CHEMICAL-	SNP VY	578971	2639189 US	16941R108	US16941R1086	011899374	
CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Munich (XMUN)	ADR	ADR CHINA PETROLEUM & CHEMICAL-	CHUA GB	578971	BORSWOO DE	16941R108	US16941R1086	011899374	
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Munich (XMUN)	ADR	ADR CHINA PETROLEUM & CHEMICAL-	CHUA GF	578971	BORSWOO DE	16941R108	US16941R1086	011899374	
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Munich (XMUN)	ADR	ADR CHINA PETROLEUM & CHEMICAL-	CHUA GM	578971	BORSWOO DE	16941R108	US16941R1086	011899374	
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Munich (XMUN)	ADR	ADR CHINA PETROLEUM & CHEMICAL-	CHUA GR	578971	BORSWOO DE	16941R108	US16941R1086	011899374	
aka SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Munich (XMUN)	ADR	ADR	CHUA GS	578971	BORSW00 DE	16941R108	US16941R1086	011899374	
AKA SINOPEC CORP CHINA PETROLEUM & CHEMICAL CORP	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Mexico (XMEX)	ADR	CHINA PETROLEUM & CHEMICAL- ADR	SNPN MM	578971	B4QSP22 MX	16941R108	US16941R1086	011899374	
aka SINOPEC CORP	SINOPEC GROUP	Tradegate (XGAT)	ADR	CHINA PETROLEUM & CHEM-ADR	CHUA TH	578971		16941R108	US16941R1086	011899374	
KINGDREAM PLC	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Shenzhen (XSHE)	Common Stock	KINGDREAM PUBLIC LIMITED - A	000852 CH	A0M37A	6136385 CN		CNE000000XK7	medica 16.	
KINGDREAM PLC	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Shenzhen (XSHE)	Common Stock	KINGDREAM PUBLIC LIMITED - A	000852 CS	A0M37A	6136385 CN		CNE000000XK7		
SINOPEC ENGINEERING GROUP CO LTD		Sth SSE-SEHK (SHSC)	Common Stock	SINOPEC ENGINEERING GROUP- H	2386 H1	A1T97T	B92NYC9		CNE100001NV2	003502250	
SINOPEC ENGINEERING GROUP CO LTD		Hong Kong (XHKG)	Common Stock	SINOPEC ENGINEERING GROUP- H	2386 HK	A1T97T					
SINOPEC ENGINEERING GROUP CO LTD		Munich (XMUN)	Common Stock	SINOPEC ENGINEERING GROUP-	INS GF	A1T97T	B92NYC9		CNE100001NV2	080502256	
SINOPEC ENGINEERING GROUP CO LTD	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Munich (XMUN)	Common Stock	SINOPEC ENGINEERING GROUP-	INS GM		B96WKB3		CNE100001NV2		
SINOPEC ENGINEERING GROUP CO LTD	CHINA PETROCHEMICAL CORP aka	Munich (XMUN)	Common Stock	SINOPEC ENGINEERING GROUP-		A1T97T	B96WKB3		CNE100001NV2		
SINOPEC ENGINEERING GROUP CO LTD	CHINA PETROCHEMICAL CORP aka			SINOPEC ENGINEERING GROUP-	1NS GR	A1T97T	B96WKB3		CNE100001NV2		
SINOPEC ENGINEERING GROUP CO LTD	CHINA PETROCHEMICAL CORP aka	Munich (XMUN)	Common Stock	H SINOPEC ENGINEERING GROUP-	1NS GS	A1T97T	B96WKB3		CNE100001NV2		
Anne de esta presidente esta espara de esta especial.	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Quotrix Exch (XQTX)	Common Stock	Н	1NS QT	A1T97T	B96WKB3 DE		CNE100001NV2		
SINOPEC KANTON HOLDINGS LTD	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Frankfurt (XFRA)	Common Stock	SINOPEC KANTONS HOLDINGS	SAK GB	923923	4601197 DE		BMG8165U1009	011563384	
SINOPEC KANTON HOLDINGS LTD	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Frankfurt (XFRA)	Common Stock	SINOPEC KANTONS HOLDINGS	SAK GF	923923	4601197 DE		BMG8165U1009	011563384	
SINOPEC KANTON HOLDINGS LTD	SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	SINOPEC KANTONS HOLDINGS	SAK GR	923923	4601197 DE		BMG8165U1009	011563384	

Ĺ	CHINA PETROCHEMICAL CORP aka												
SINOPEC KANTON HOLDINGS LTD	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Frankfurt (XFRA)	Common Stock	SINOPEC KANTONS HOLDINGS	SAK GS	923923	4601197 DE			BMG8165U1009	011563384		
SINOPEC KANTON HOLDINGS LTD	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Hong Kong (XHKG)	Common Stock	SINOPEC KANTONS HOLDINGS	934 HK	923923	6162692 HK			BMG8165U1009	011563384		
SINOPEC KANTON HOLDINGS LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Hong Kong (XHKG)	Common Stock	SINOPEC KANTONS HOLDINGS SINOPEC SHANGHAI PETROCHE-	934 H1	923923	BP3RXQ9 HK			BMG8165U1009	011563384		
LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Shanghai (XSHG)	Common Stock	A	600688 CG	A0M3RA	6802794			CNE000000BB2			
LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Shanghai (XSHG)	Common Stock	SINOPEC SHANGHAI PETROCHE-	600688 CH	A0M3RA	6802794			CNE000000BB2			
LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP	Nth SSE-SEHK (XSSC)	Common Stock	SINOPEC SHANGHAI PETROCHE-A	600688 C1	A0M3RA	BP3R596 CN			CNE000000BB2			
LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	SINOPEC SHANGHAI PETROCHEN	SGJH GB	A0M4Y5	5888632 DE		908303	CNE1000004C8	005096162		
LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Frankfurt (XFRA)	Common Stock	SINOPEC SHANGHAI PETROCHEM	SGJH GD	A0M4Y5	5888632 DE		908303	CNE1000004C8	005096162		
LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Frankfurt (XFRA)	Common Stock	SINOPEC SHANGHAI PETROCHEM	SGJH GF	A0M4Y5	5888632 DE		908303	CNE1000004C8	005096162		
LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Frankfurt (XFRA)	Common Stock	SINOPEC SHANGHAI PETROCHEM	SGJH GH	A0M4Y5	5888632 DE		908303	CNE1000004C8	005096162		
LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Frankfurt (XFRA)	Common Stock	SINOPEC SHANGHAI PETROCHEM	SGJH GM	A0M4Y5	5888632 DE		908303	CNE1000004C8	005096162		
LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Frankfurt (XFRA)	Common Stock	SINOPEC SHANGHAI PETROCHEN H	SGJH GR	A0M4Y5	5888632 DE		908303	CNE1000004C8	005096162		
LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP	Frankfurt (XFRA)	Common Stock	SINOPEC SHANGHAI PETROCHEN H	SGJH GS	A0M4Y5	5888632 DE		908303	CNE1000004C8	005096162		
LTD	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Quotrix Exch (XQTX)	Common Stock	SINOPEC SHANGHAI PETROCHEN H	SGJH QT	A0M4Y5	5888632 DE		908303	CNE1000004C8	005096162		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Hong Kong (XHKG)	Common Stock	SINOPEC SHANGHAI PETROCHEN H	338 HK	A0M4Y5	6797458 HK		908303	CNE1000004C8	005096162		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Sth SSE-SEHK (SHSC)	Common Stock	SINOPEC SHANGHAI PETROCHEN H	1. 338 H1	A0M4Y5	BP3RXR0 HK		908303	CNE1000004C8	005096162		
SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHIUB	887169	2800059 US		908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS LTD	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI UD	887169	2800059 US		908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS LTD	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI UF	887169	2800059 US		908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS LTD	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI UN	887169	2800059 US		908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHIUP	887169	2800059 US		908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHIUT	887169	2800059 US		908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI UX	887169	2800059 US		908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI VJ	887169	2800059 US		908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI VK	887169	2800059 US		908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS LTD SINOPEC SHANGHAI PETROCHEMICALS	SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI VY	887169	2800059 US		908289	US82935M1099	012248750		
LTD	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Frankfurt (XFRA)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI GB	887169	5734638 DE	82935M109	908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Frankfurt (XFRA)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI GF	887169	5734638 DE	82935M109	908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Frankfurt (XFRA)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI GM	887169	5734638 DE	82935M109	908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Frankfurt (XFRA)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI GR	887169	5734638 DE	82935M109	908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS LTD SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Frankfurt (XFRA)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHI GS	887169	5734638 DE	82935M109	908289	US82935M1099	012248750		
LTD	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Singapore (XSES)	ADR	SINOPEC SHANGHAI -SPONS ADR	SHISP	887169	B3MNGN2	82935M109	908289	US82935M1099	012248750		
SINOPEC SHANGHAI PETROCHEMICALS	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	New York (XNYS)	ADR	SINOPEC SHANGHAI-SPONS ADR	SHIUS	887169	2800059 US		908289	US82935M1099	012248750		
SINOPEC YIZHENG CHEMICAL FIBRE CO	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Shanghai (XSHG)	Common Stock	SINOPEC YIZHENG CHEMICAL -A	600871 CG	A0M3V6	6986740 CN			CNE000000HS3			
SINOPEC YIZHENG CHEMICAL FIBRE CO	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Shanghai (XSHG)	Common Stock	SINOPEC YIZHENG CHEMICAL -A	600871 CH	A0M3V6	6986740 CN			CNE000000HS3			
SINOPEC YIZHENG CHEMICAL FIBRE CO LTD SINOPEC YIZHENG CHEMICAL FIBRE CO	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP	Nth SSE-SEHK (XSSC)	Common Stock	SINOPEC YIZHENG CHEMICAL -A	600871 C1	A0M3V6	BWT5TJ1 CN			CNE000000HS3			
LTD SINOPEC YIZHENG CHEMICAL FIBRE CO	CHINA PETROCHEMICAL CORP aka SINOPEC GROUP CHINA PETROCHEMICAL CORP aka	Hong Kong (XHKG)	Common Stock	SINOPEC YIZHENG CHEMICAL-H	1033 HK	A0M4Y6	6984669 HK		917709	CNE1000004D6	008069662		
LTD CHEMICAL FIBRE CO	SINOPEC GROUP	Sth SSE-SEHK (SHSC)	Common Stock	SINOPEC YIZHENG CHEMICAL-H	1033 H1	A0M4Y6			917709	CNE1000004D6	008069662		
POLY PROPERTY GROUP CO LTD	CHINA POLY GROUP CORPORATION	Hong Kong (XHKG)	Common Stock	POLY PROPERTY GROUP CO LTD	119 HK	885546	6220987 HK	9.11		HK0119000674	004580702		
POLY PROPERTY GROUP CO LTD	CHINA POLY GROUP CORPORATION	Frankfurt (XFRA)	Common Stock	POLY PROPERTY GROUP CO LTD	CMJ GB	885546	B1HJJS7 DE			HK0119000674	004580702		
POLY PROPERTY GROUP CO LTD	CHINA POLY GROUP CORPORATION	Frankfurt (XFRA)	Common Stock	POLY PROPERTY GROUP CO LTD	CMJ GF	885546	B1HJJS7 DE			HK0119000674	004580702		
POLY PROPERTY GROUP CO LTD	CHINA POLY GROUP CORPORATION	Frankfurt (XFRA)	Common Stock	POLY PROPERTY GROUP CO LTD	CMJ GR	885546	B1HJJS7 DE			HK0119000674	004580702		
POLY PROPERTY GROUP CO LTD	CHINA POLY GROUP CORPORATION	Frankfurt (XFRA)	Common Stock	POLY PROPERTY GROUP CO LTD	CMJ GS	885546	B1HJJS7 DE			HK0119000674	004580702		
POLY PROPERTY GROUP CO LTD	CHINA POLY GROUP CORPORATION	OTC US (OOTC)	Common Stock	POLY PROPERTY GROUP CO LTD	PHKIF US	885546	B23CST1 US			HK0119000674	004580702	Y7064G105	
POLY PROPERTY GROUP CO LTD	CHINA POLY GROUP CORPORATION	OTC US (OOTC)	Common Stock	POLY PROPERTY GROUP CO LTD	PHKIF UV	885546	B23CST1 US			HK0119000674	004580702	Y7064G105	
POLY PROPERTY GROUP CO LTD	CHINA POLY GROUP CORPORATION	Sth SSE-SEHK (SHSC)	Common Stock	POLY PROPERTY GROUP CO LTD	119 H1	885546	BP3RQJ3 HK			HK0119000674	004580702		
POLY PROPERTY GROUP CO LTD	CHINA POLY GROUP CORPORATION	OTC US (OOTC)	Receipt	POLY PROPERTY GROUP CO LTD	PHKIY PQ		BJTXRN4 US			US7316541090			
POLY PROPERTY GROUP CO LTD DONGFENG MOTOR GROUP COMPANY	CHINA POLY GROUP CORPORATION DONGFENG MOTOR GROUP COMPANY	OTC US (OOTC)	Receipt	POLY PROPERTY GROUP CO LTD DONGFENG MOTOR GRP CO LTD-	PHKIY US		BJTXRN4 US			US7316541090			
LIMITED DONGFENG MOTOR GROUP COMPANY	LIMITED DONGFENG MOTOR GROUP COMPANY	OTC US (OOTC)	Common Stock	H DONGFENG MOTOR GRP CO LTD-	DNFGF PQ	A0M4XY	B0XZY65 US			CNE 100000312	023857456	Y21042109	
LIMITED	LIMITED	OTC US (OOTC)	Common Stock	H	DNFGF UV	A0M4XY	B0XZY65 US	•		CNE 100000312	023857456	Y21042109	

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DONGFENG MOTOR GROUP COMPANY LIMITED	DONGFENG MOTOR GROUP COMPANY LIMITED	Hang Kong (XHKG)	Common Stock	DONGFENG MOTOR GRP CO LTD-			222					
DONGFENG MOTOR GROUP COMPANY	DONGFENG MOTOR GROUP COMPANY			DONGFENG MOTOR GRP CO LTD-	489 HK	A0M4XY	B0PH5N3 HK			CNE100000312	023857456	
LIMITED DONGFENG MOTOR GROUP COMPANY	LIMITED DONGFENG MOTOR GROUP COMPANY	Frankfurt (XFRA)	Common Stock	H DONGFENG MOTOR GRP CO LTD-	D4D GB	A0M4XY	BOTBB66 DE			CNE100000312	023857456	
LIMITED DONGFENG MOTOR GROUP COMPANY	LIMITED	Frankfurt (XFRA)	Common Stock	н	D4D GF	A0M4XY	BOTBB66 DE			CNE100000312	023857456	
LIMITED	DONGFENG MOTOR GROUP COMPANY LIMITED	Frankfurt (XFRA)	Common Stock	DONGFENG MOTOR GRP CO LTD-	D4D GM	A0M4XY	BOTBB66 DE					
DONGFENG MOTOR GROUP COMPANY	DONGFENG MOTOR GROUP COMPANY LIMITED			DONGFENG MOTOR GRP CO LTD						CNE100000312	023857456	
DONGFENG MOTOR GROUP COMPANY	DONGFENG MOTOR GROUP COMPANY	Frankfurt (XFRA)	Common Stock	H DONGFENG MOTOR GRP CO LTD	D4D GR	A0M4XY	BOTBB66 DE			CNE100000312	023857456	
LIMITED DONGFENG MOTOR GROUP COMPANY	LIMITED DONGFENG MOTOR GROUP COMPANY	Frankfurt (XFRA)	Common Stock	H	D4D GS	A0M4XY	BOTBB66 DE			CNE100000312	023857456	
LIMITED	LIMITED	Quotrix Exch (XQTX)	Common Stock	DONGFENG MOTOR GRP CO LTD- H	D4D QT	ADM4XY	BOTBB66 DE			CNE100000312	023857456	
DONGFENG MOTOR GROUP COMPANY LIMITED	DONGFENG MOTOR GROUP COMPANY LIMITED	OTC US (OOTC)	Common Stock	DONGFENG MOTOR GRP CO LTD-	DNFGF US							
DONGFENG MOTOR GROUP COMPANY LIMITED	DONGFENG MOTOR GROUP COMPANY LIMITED			DONGFENG MOTOR GRP CO LTD	DNFGF US	A0M4XY	B0XZY65 US			CNE100000312	023857456	Y21042109
DONGFENG MOTOR GROUP COMPANY	DONGFENG MOTOR GROUP COMPANY	Hong Kong (XHKG)	Common Stock	H DONGFENG MOTOR GRP CO LTD	489 H1	A0M4XY	BP3RTP0 HK			CNE100000312	023857456	
LIMITED DONGFENG MOTOR GROUP COMPANY	LIMITED DONGFENG MOTOR GROUP COMPANY	OTC US (OOTC)	Common Stock	Н	DNFGY PQ		B3SQPT4 US	257738203		US2577382037		
LIMITED	LIMITED	OTC US (OOTC)	ADR	DONGFENG MOTOR GRP-H-UNS ADR	DNFGY US		B3SQPT4 US	257738203		US2577382037		
DONGFENG MOTOR GROUP COMPANY LIMITED	DONGFENG MOTOR GROUP COMPANY LIMITED	OTC US (OOTC)	Common Stock	DONGFENG MOTOR GRP CO LTD	DNFGY UV							
EGYPT KUWAIT HOLDING CO		OR 0-000-				ATTENDED FOR THE STATE OF THE S	B3SQPT4 US	257738203		US2577382037		
	EGYPT KUWAIT HOLDING CO	Kuwait (XKUW)	Common Stock	EGYPT KUWAIT HOLDING CO SAE	EKHOLDIN KK	A0H1G7	B0S8H15 KW			EG69082C013		
EGYPT KUWAIT HOLDING CO	EGYPT KUWAIT HOLDING CO	Cairo (XCAI)	Common Stock	EGYPT KUWAIT HOLDING CO SAE	EKHO EC	A0H1G7	BOQMD00 EG			EGS69082C013		
EGYPT KUWAIT HOLDING CO	EGYPT KUWAIT HOLDING CO	Cairo (XCAI)	Common Stock	EGYPT KUWAIT HOLDING CO SAE	EKHO EY	A0H1G7	B0QMD00 EG			EGS69082C013		
ENERGY HOUSE HOLDING CO KSCC/THE GAZ AUTO PLANT	ENERGY HOLDING CO KSCC/THE GAZ GROUP	Kuwait (XKUW)	Common Stock	ENERGY HOLDING CO KSCC/THE		A0KD4C	B13BW99 KW			KW0EQ0601801		
GAZ AUTO PLANT	GAZ GROUP	MICEX Main (MISX) MICEX Main (MISX)	Common Stock Common Stock	GAZ-CLS GAZ-CLS	GAZA RM GAZA RX	903426 903426	B5BKBJ9 RU B5BKBJ9 RU		950579	RU0009034268	034991693	
GAZ AUTO PLANT GAZ AUTO PLANT	GAZ GROUP	MICEX Main (MISX)	Preference	GAZ-CLS-PFD	GAZAP RM	910283	B5BKC29 RU		950579	RU0009034268 RU0009102834	034991693	
PAVLOVSKY BUS PLANT	GAZ GROUP GAZ GROUP	MICEX Main (MISX)	Preference Common Stock	GAZ-CLS-PFD	GAZAP RX	910283	B5BKC29 RU			RU0009102834		
PAVLOVSKY BUS PLANT	GAZ GROUP	MICEX Main (MISX)	Common Stock	PAVLOVSKY BUS-CLS PAVLOVSKY BUS-CLS	PAZA RM PAZA RX	908324 908324	B57MPG4 RU B57MPG4 RU			RU0009083240		
GLENCORE PLC GLENCORE PLC	GLENCORE PLC	Hong Kong (XHKG)	Common Stock	GLENCORE PLC	805 HK	A1JAGV	B3NFYS8 HK			RU0009083240 JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC GLENCORE PLC	OTC US (OOTC) OTC US (OOTC)	Common Stock Common Stock	GLENCORE PLC GLENCORE PLC	GLCNF PQ GLCNF US	A1JAGV	B4MSCG9 US			JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	OTC US (OOTC)	Common Stock	GLENCORE PLC	GLCNF UV	A1JAGV A1JAGV	B4MSCG9 US B4MSCG9 US			JE00B4T3BW64	063082236	
GLENCORE PLC GLENCORE PLC	GLENCORE PLC	BATS Europe (BATE)	Common Stock	GLENCORE PLC	GLEN EB	A1JAGV	B4T3BW6 GB			JE00B4T3BW64 JE00B4T3BW64	063082236 063082236	
GLENCORE PLC	GLENCORE PLC GLENCORE PLC	Chi-X Europe (CHIX) London Intl (XLON)	Common Stock Common Stock	GLENCORE PLC GLENCORE PLC	GLEN IX GLEN LN	A1JAGV A1JAGV	B4T3BW6 GB			JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Aquis Exchg (AQXE)	Common Stock	GLENCORE PLC	GLEN QX	AIJAGV	B4T3BW6 GB B4T3BW6 GB			JE00B4T3BW64 JE00B4T3BW64	063082236 063082236	
GLENCORE PLC GLENCORE PLC	GLENCORE PLC GLENCORE PLC	Turquoise (TRQX)	Common Stock	GLENCORE PLC	GLEN TQ	A1JAGV	B4T3BW6 GB			JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Sigma X MTF (SGMX) Frankfurt (XFRA)	Common Stock Common Stock	GLENCORE PLC GLENCORE PLC	GLENL S1 8GC GB	A1JAGV A1JAGV	B4T3BW6 GB B55NST3 DE			JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Frankfurt (XFRA)	Common Stock	GLENCORE PLC	8GC GD	AIJAGV	B55NST3 DE			JE00B4T3BW64 JE00B4T3BW64	063082236 063082236	
GLENCORE PLC GLENCORE PLC	GLENCORE PLC GLENCORE PLC	Frankfurt (XFRA) Frankfurt (XFRA)	Common Stock	GLENCORE PLC	8GC GF	A1JAGV	B55NST3 DE			JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Frankfurt (XFRA)	Common Stock Common Stock	GLENCORE PLC GLENCORE PLC	8GC GH 8GC GM	A1JAGV A1JAGV	B55NST3 DE B55NST3 DE			JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Frankfurt (XFRA)	Common Stock	GLENCORE PLC	8GC GR	A1JAGV	B55NST3 DE			JE00B4T3BW64 JE00B4T3BW64	063082236 063082236	
GLENCORE PLC GLENCORE PLC	GLENCORE PLC GLENCORE PLC	Frankfurt (XFRA) Frankfurt (XFRA)	Common Stock Common Stock	GLENCORE PLC GLENCORE PLC	8GC GS	A1JAGV	B55NST3 DE			JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Mexico (XMEX)	Common Stock	GLENCORE PLC	8GC GY GLENN MM	A1JAGV A1JAGV	B55NST3 DE B77NQY6 MX			JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Johannesburg (XJSE)	Common Stock	GLENCORE PLC	GLN SJ	AIJAGV	BG6MV64 ZA			JE00B4T3BW64 JE00B4T3BW64	063082236 063082236	
GLENCORE PLC GLENCORE PLC	GLENCORE PLC GLENCORE PLC	Quotrix Exch (XQTX) Tradegate (XGAT)	Common Stack Common Stack	GLENCORE PLC GLENCORE PLC	8GC QT	A1JAGV				JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Equiduct (XEQT)	Common Stock	GLENCORE PLC	8GC TH GLEN BQ	A1JAGV A1JAGV				JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Euro Comp (XLON)	Common Stock	GLENCORE PLC	GLEN EU	A1JAGV				JE00B4T3BW64 JE00B4T3BW64	063082236 063082236	
GLENCORE PLC GLENCORE PLC	GLENCORE PLC GLENCORE PLC	Euro OTC (XLON) Euro OTC (XLON)	Common Stock Common Stock	GLENCORE PLC	GLEN XB	A1JAGV				JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Euro Comp (XLON)	Common Stock	GLENCORE PLC GLENCORE PLC	GLEN XV GLENEUR EU	A1JAGV A1JAGV				JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Euro OTC (XLON)	Common Stock	GLENCORE PLC	GLENEUR XD	ATJAGV				JE00B4T3BW64 JE00B4T3BW64	063082236 063082236	
GLENCORE PLC GLENCORE PLC	GLENCORE PLC GLENCORE PLC	Euro OTC (XLON) Blockmatch (BLOX)	Common Stock	GLENCORE PLC	GLENEUR XS	A1JAGV				JE00B4T3BW64	063082236	
GLENCORE PLC	GLENCORE PLC	Liquidnet (LIQU)	Common Stock Common Stock	GLENCORE PLC GLENCORE PLC	GLENL B3 GLENL L3	A1JAGV A1JAGV				JE00B4T3BW64		
GLENCORE PLC	GLENCORE PLC	UBS MTF (XUBS)	Common Stock	GLENCORE PLC	GLENL S2	ATJAGV				JE00B4T3BW64 JE00B4T3BW64		
GLENCORE PLC GLENCORE PLC	GLENCORE PLC GLENCORE PLC	OTC US (OOTC) OTC US (OOTC)	Common Stock Common Stock	GLENCORE PLC -UNSP ADR GLENCORE PLC -UNSP ADR	GLNCY PQ	A1WY82	B99L415 US	37827X100		US37827X1000	093358236	
GLENCORE PLC	GLENCORE PLC	OTC US (OOTC)	Common Stock	GLENCORE PLC -UNSP ADR	GLNCY US GLNCY UV	A1WY82 A1WY82	B99L415 US B99L415 US	37827X100 37827X100		US37827X1000 US37827X1000	093358236	
GLENCORE PLC GLENCORE PLC	GLENCORE PLC	Frankfurt (XFRA)	ADR	GLENCORE PLC -UNSP ADR	8GCA GF	A1WY82	BCZW866 DE	37827X100		US37827X1000 US37827X1000	093358236	
GLENCORE PLC GLENCORE PLC	GLENCORE PLC GLENCORE PLC	Frankfurt (XFRA) Frankfurt (XFRA)	ADR ADR	GLENCORE PLC -UNSP ADR GLENCORE PLC -UNSP ADR	8GCA GR 8GCA GS	A1WY82	BCZW866 DE	37827X100		US37827X1000		
HARBIN ELECTRIC CO LTD	HARBIN ELECTRIC CO LTD	Hong Kong (XHKG)	Common Stock	HARBIN ELECTRIC CO LTD-H	1133 HK	A1WY82 A0M4X8	BCZW866 DE 6422761 HK	37827X100	930709	US37827X1000 CNE10000003C0	011043780	
HARBIN ELECTRIC COLLTD	HARBIN ELECTRIC CO LTD	Frankfurt (XFRA)	Common Stock	HARBIN ELECTRIC CO LTD-H	HP6H GB	A0M4X8	B1HJDX0 DE		930709	CNE10000003C0		
HARBIN ELECTRIC CO LTD HARBIN ELECTRIC CO LTD	HARBIN ELECTRIC CO LTD HARBIN ELECTRIC CO LTD	Frankfurt (XFRA) Frankfurt (XFRA)	Common Stock Common Stock	HARBIN ELECTRIC CO LTD-H HARBIN ELECTRIC CO LTD-H	HP6H GF	A0M4X8	B1HJDX0 DE		930709	CNE10000003C0	011043780	
HARBIN ELECTRIC CO LTD	HARBIN ELECTRIC CO LTD	OTC US (OOTC)	Common Stock	HARBIN ELECTRIC CO LTD-H	HP6H GR HBPWF US	A0M4X8 A0M4X8	B1HJDX0 DE B3BHKK0 US		930709 930709	CNE10000003C0 CNE10000003C0		Y30683109
HARBIN ELECTRIC CO LTD CHENNAI PETROLEUM CORPORATION	HARBIN ELECTRIC CO LTD	OTC US (OOTC)	Common Stock	HARBIN ELECTRIC CO LTD-H	HBPWF UV	A0M4X8	взвнкко us		930709	CNE10000003C0		Y30683109
LIMITED CHENNAI PETROLEUM CORPORATION	INDIAN OIL CORP LTD aka IOCL	Mumbai (XBOM)	Common Stock	CHENNAI PETROLEUM CORP LTD	MRLIB	A0B968	6121563 IN			INE178A01016		
LIMITED	INDIAN OIL CORP LTD aka IOCL	Mumbai (XBOM)	Common Stock	CHENNAI PETROLEUM CORP LTD	MRLIN	A0B968	6121563 IN			INE178A01016		
CHENNAI PETROLEUM CORPORATION LIMITED	INDIAN OIL CORP LTD aka IOCL	Mumbai (XBOM)	Common Stock	CHENNAI PETROLEUM CORP LTD								
INDIAN OIL CORP LTD	INDIAN OIL CORP LTD aka IOCL	Natl India (XNSE)	Common Stock	INDIAN OIL CORPORATION LTD		A0B968 A0B9FM	6121563 IN 6253767 IN			INE178A01016 INE242A01010		
INDIAN OIL CORP LTD	INDIAN OIL CORP LTD aka IOCL INDIAN OIL CORP LTD aka IOCL	Natl India (XNSE)	Common Stock	INDIAN OIL CORPORATION LTD	IOCL IN	A0B9FM	6253767 IN			INE242A01010		
INDIAN OIL CORRITO		Natl India (XNSE) Colombo (XCOL)	Common Stock Common Stock	INDIAN OIL CORPORATION LTD LANKA IOC PLC	IOCL IS LIOC SL	A0B9FM	6253767 IN			INE242A01010		
INDIAN OIL CORP LTD LANKA IOC PLC	INDIAN OIL CORP LTD aka IOCL		- onthings office		LIGO OL	A0D83L	B0591G4 LK			LK0345N00005		
LANKA IOC PLC JIANGXI HONGDU AVIATION INDUSTRY	JIANGXI HONGDU AVIATION INDUSTRY CO		_									
LANKA IOC PLC JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY		Shanghai (XSHG)	Common Stock	JIANGXI HONGDU AVIATION-A	600316 CG	A0M4EK	6304375 CN			CNE0000015N3		
LANKA IOC PLC JIANGXI HONGDU AVIATION INDUSTRY CO LTD	JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD		Common Stock	JIANGXI HONGDU AVIATION-A	600316 CG 600316 CH	A0M4EK A0M4EK	6304375 CN 6304375 CN			CNE0000015N3 CNE0000015N3		
LANKA IOC PLC JIANOXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD	JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD	Shanghai (XSHG) Shanghai (XSHG) Nth SSE-SEHK (XSSC)	Common Stock	JIANGXI HONGDU AVIATION-A	600316 CH 600316 C1	A0M4EK	6304375 CN BP3R8J7 CN					
LANKA IOC PLC JIANOXI HONGDU AVIATION INDUSTRY CO LTD JIANOXI HONGDU AVIATION INDUSTRY CO LTD JIANOXI HONGDU AVIATION INDUSTRY CO LTD JIANOXI HONGDU AVIATION INDUSTRY CJ LTD JX HOLDINGS INC	JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD JX HOLDINGS INC JX HOLDINGS INC	Shanghai (XSHG) Shanghai (XSHG)	Common Stock	JIANGXI HONGDU AVIATION-A JIANGXI HONGDU AVIATION-A JX HOLDINGS INC	600316 CH 600316 C1 JHJ QT	A0M4EK A0M4EK A1CS9H	6304375 CN BP3R8J7 CN B55WTC0 DE		0	CNE0000015N3 CNE0000015N3 JP3386450005	049326777	
LANKA IOC PLC JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY JIANGXI HONGDU AVIATION INDUSTRY JIANGXI HONGS INC	JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD JIANGXI HONGDU AVIATION INDUSTRY CO LTD JX HOLDINGS INC	Shanghai (XSHG) Shanghai (XSHG) Nth SSE-SEHK (XSSC) Quotrix Exch (XQTX)	Common Stock Common Stock Common Stock	JIANGXI HONGDU AVIATION-A	600316 CH 600316 C1	A0M4EK	6304375 CN BP3R8J7 CN		2	CNE0000015N3	049326777 049326777 049326777	No. of the last of

JX HOLDINGS INC JX HOLDINGS INC	JX HOLDINGS INC JX HOLDINGS INC	Frankfurt (XFRA)	Common Stack	JX HOLDINGS INC	JHJ GR	A1CS9H	B55WTCO DE			JP3386450005	049326777	Apr.
JX HOLDINGS INC	JX HOLDINGS INC	Frankfurt (XFRA) Tokyo (XTKS)	Common Stock Common Stock	JX HOLDINGS INC JX HOLDINGS INC	JHJ GS 5020 JE	A1CS9H A1CS9H	B55WTCO DE B627LW9 JP			JP3386450005	049326777	
JX HOLDINGS INC	JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	JX HOLDINGS INC	5020 JI	A1CS9H	B627LW9 JP			JP3386450005 JP3386450005	049326777	
JX HOLDINGS INC JX HOLDINGS INC	JX HOLDINGS INC JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	JX HOLDINGS INC	5020 JJ	A1CS9H	B627LW9 JP			JP3386450005	049326777	
JX HOLDINGS INC	JX HOLDINGS INC	Tokyo (XTKS) Tokyo (XTKS)	Common Stock Common Stock	JX HOLDINGS INC JX HOLDINGS INC	5020 JN 5020 JP	A1CS9H A1CS9H	B627LW9 JP			JP3386450005	049326777	
JX HOLDINGS INC	JX HOLDINGS INC	Takya (XTKS)	Common Stock	JX HOLDINGS INC	5020 JT	A1CS9H	B627LW9 JP B627LW9 JP			JP3386450005 JP3386450005	049326777	3
JX HOLDINGS INC JX HOLDINGS INC	JX HOLDINGS INC JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	JX HOLDINGS INC	5020 JU	A1CS9H	B627LW9 JP			JP3386450005	049326777	
DX HOLDINGS INC	JA HOLDINGS INC	Tokyo (XTKS)	Common Stock	JX HOLDINGS INC	5020 JW	A1CS9H	B627LW9 JP			JP3386450005	049326777	
JX HOLDINGS INC	JX HOLDINGS INC	OTC US (OOTC)	Common Stock	JX HOLDINGS INC - UNSPON ADR	N JXHGF US	A1CS9H	B6R59M4 US			ID2206450005	040000777	
JX HOLDINGS INC	IN LIPI PINOP NO					11100011	DONOSM4 US			JP3386450005	049326777	
JX HOLDINGS INC	JX HOLDINGS INC JX HOLDINGS INC	OTC US (OOTC) BX Worldcaps (XBRN)	Common Stock Common Stock	JX HOLDINGS INC - UNSPON ADR JX HOLDINGS INC		A1CS9H	B6R59M4 US			JP3386450005	049326777	the second second
JX HOLDINGS INC	JX HOLDINGS INC	BX Worldcaps (XBRN)	Common Stock	JX HOLDINGS INC	5020 BW 5020 SW	A1CS9H A1CS9H	BHZL2R7 CH BHZL2R7 CH			JP3386450005	049326777	
IN HOLDINGS ING		900001 (005) (0052 0000)	AND DOOR THE PRODUCTION OF THE CO			Aldosii	BHZLZKI CH			JP3386450005	049326777	3
JX HOLDINGS INC	JX HOLDINGS INC	OTC US (OOTC)	ADR	JX HOLDINGS INC - UNSPON ADR	R JXHLY PQ	A1CVU3	B588TZ8 US	466295102		US4662951023		
JX HOLDINGS INC	JX HOLDINGS INC	OTC US (OOTC)	ADR	JX HOLDINGS INC - UNSPON ADR	PLI Y HXI.	A1CVU3	B588TZ8 US	400000400	000555			
						AICVUS	6566128 US	466295102	968503	US4662951023		
JX HOLDINGS INC NIPPO CORP	JX HOLDINGS INC JX HOLDINGS INC	OTC US (OOTC) Tokyo (XTKS)	ADR	JX HOLDINGS INC - UNSPON ADR	R JXHLY UV	A1CVU3	B588TZ8 US	466295102		US4662951023		1
NIPPO CORP	JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	NIPPO CORP	1881 JE 1881 JI	857846 857846	6640789 JP 6640789 JP		968503	JP3750200002	001227858	
NIPPO CORP	JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	NIPPO CORP	1881 JJ	857846	6640789 JP		968503 968503	JP3750200002 JP3750200002	001227858	1
NIPPO CORP	JX HOLDINGS INC JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	NIPPO CORP	1881 JP	857846	6640789 JP		968503	JP3750200002	001227858	
NIPPO CORP	JX HOLDINGS INC	Tokyo (XTKS) Tokyo (XTKS)	Common Stock Common Stock	NIPPO CORP	1881 JT	857846	6640789 JP		968503	JP3750200002	001227858	
TOHO TITANIUM CO	JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	TOHO TITANIUM CO LTD	1881 JU 5727 JE	857846 857914	6640789 JP 6894627		968503	JP3750200002	001227858	
TOHO TITANIUM CO	JX HOLDINGS INC JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	TOHO TITANIUM CO LTD	5727 JI	857914	6894627			JP3601800000 JP3601800000	006339204	
TOHO TITANIUM CO	JX HOLDINGS INC JX HOLDINGS INC	Tokyo (XTKS) Tokyo (XTKS)	Common Stock Common Stock	TOHO TITANIUM CO LTD	5727 JJ	857914	6894627			JP3601800000	006339204	
TOHO TITANIUM CO	JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	TOHO TITANIUM CO LTD TOHO TITANIUM CO LTD	5727 JP 5727 JT	857914 857914	6894627 6894627			JP3601800000	006339204	
TOHO TITANIUM CO	JX HOLDINGS INC	Tokyo (XTKS)	Common Stock	TOHO TITANIUM CO LTD	5727 JU	857914	6894627			JP3601800000 JP3601800000	006339204	
LS INDUSTRIAL SYSTEMS CO. LTD LS INDUSTRIAL SYSTEMS CO. LTD	LS INDUSTRIAL SYSTEMS CO. LTD. LS INDUSTRIAL SYSTEMS CO. LTD	Korea (XKRX) Korea (XKRX)	Common Stock	LS INDUSTRIAL SYSTEMS	010120 KP	895497	6378217 KR			KR7010120004	000009204	
MAN SE	MAN SE	Equiduct (XEQT)	Common Stock Common Stock	LS INDUSTRIAL SYSTEMS MAN SE	010120 KS MAN BQ	895497 593700	6378217 KR 5563520 DE		011000	KR7010120004		
MAN SE MAN SE	MAN SE	BX Worldcaps (XBRN)	Common Stock	MAN SE	MAN BW	593700	5563520 DE		944020 944020	DE0005937007 DE0005937007	001117254 001117254	
MAN SE	MAN SE MAN SE	BATS Europe (BATE) Xetra (XETR)	Common Stock	MAN SE	MAN EB	593700	5563520 DE		944020	DE0005937007	001117254	1
MAN SE	MAN SE	Xetra (XETR)	Common Stock Common Stock	MAN SE MAN SE	MAN GB MAN GD	593700	5563520 DE		944020	DE0005937007	001117254	1
MAN SE	MAN SE	Xetra (XETR)	Common Stock	MAN SE	MAN GF	593700 593700	5563520 DE 5563520 DE		944020 944020	DE0005937007 DE0005937007	001117254	¥.
MAN SE MAN SE	MAN SE	Xetra (XETR)	Common Stock	MAN SE	MAN GH	593700	5563520 DE		944020	DE0005937007	001117254	
MAN SE	MAN SE MAN SE	Xetra (XETR) Xetra (XETR)	Common Stock Common Stock	MAN SE MAN SE	MAN GI	593700	5563520 DE		944020	DE0005937007	001117254	1
MAN SE	MAN SE	Xetra (XETR)	Common Stock	MAN SE	MAN GM MAN GR	593700 593700	5563520 DE 5563520 DE		944020	DE0005937007	001117254	1
MAN SE	MAN SE	Xetra (XETR)	Common Stock	MAN SE	MAN GS	593700	5563520 DE		944020 944020	DE0005937007 DE0005937007	001117254	1
MAN SE MAN SE	MAN SE MAN SE	Xetra (XETR) Quotrix Exch (XQTX)	Common Stock	MAN SE	MAN GY	593700	5563520 DE		944020	DE0005937007	001117254	1
MAN SE	MAN SE	Sigma X MTF (SGMX)	Common Stock Common Stock	MAN SE MAN SE	MAN QT	593700	5563520 DE		944020	DE0005937007	001117254	
MAN SE	MAN SE	BX Worldcaps (XBRN)	Common Stock	MAN SE	MAN S1 MAN SW	593700 593700	5563520 DE 5563520 DE		944020 944020	DE0005937007 DE0005937007	001117254	
MAN SE MAN SE	MAN SE	Tradegate (XGAT)	Common Stock	MAN SE	MAN TH	593700	5563520 DE		944020	DE0005937007	001117254	
MAN SE	MAN SE MAN SE	Turquoise (TRQX) Chi-X Europe (CHIX)	Common Stock Common Stock	MAN SE MAN SE	MAN TQ	593700	5563520 DE		944020	DE0005937007	001117254	
MAN SE	MAN SE	SIX Swiss Ex (XSWX)	Common Stock	MAN SE	MANG IX MAN SE	593700 593700	5563520 DE 5628883 CH		944020	DE0005937007	001117254	1
MAN SE	MAN SE	OTC US (OOTC)	Common Stock	MAN SE	MAGOF US	593701	B0318P0 US		944020 944020	DE0005937007 DE0005937007	001117254	D51716104
MAN SE MAN SE	MAN SE MAN SE	OTC US (OOTC) Euro Comp (XLON)	Common Stock	MAN SE	MAGOF UV	593701	B0318P0 US		944020	DE0005937007	001117254	D51716104 D51716104
MAN SE	MAN SE	LSE EuropeQS (XLON)	Common Stock Common Stock	MAN SE MAN SE	MAN EU MAN LI	593700 593700	B10LRX1 GB		V2000000000000000000000000000000000000	DE0005937007	001117254	
MAN SE	MAN SE	LSE EuropeQS (XLON)	Common Stock	MAN SE	MAN LO	593700	B10LRX1 GB B10LRX1 GB		944020 944020	DE0005937007 DE0005937007	001117254	1
MAN SE MAN SE	MAN SE MAN SE	Euro OTC (XLON)	Common Stock	MAN SE	MAN XB	593700	B10LRX1 GB		3.11020	DE0005937007	001117254	1
MAN SE	MAN SE	Euro OTC (XLON) Euro OTC (XLON)	Common Stock Common Stock	MAN SE MAN SE	MAN XD MAN XE	593700	B10LRX1 GB			DE0005937007	001117254	1
MAN SE	MAN SE	Euro OTC (XLON)	Common Stock	MAN SE	MAN XO	593700 593700	B10LRX1 GB B10LRX1 GB			DE0005937007 DE0005937007	001117254	1
MAN SE MAN SE	MAN SE	Euro OTC (XLON)	Common Stock	MAN SE	MAN XS	593700	B10LRX1 GB			DE0005937007	001117254	
MAN SE	MAN SE MAN SE	Euro OTC (XLON) Euro TLX (ETLX)	Common Stock Common Stock	MAN SE MAN SE	MAN XV MAN TE	593700	B10LRX1 GB			DE0005937007	001117254	1
MAN SE	MAN SE	Euro OTC (XLON)	Common Stock	MAN SE	MAN XL	593700 593700	B88FOL3 IT		944020	DE0005937007 DE0005937007	001117254	
MAN SE	MAN SE	Blockmatch (BLOX)	Common Stock	MAN SE	MAND B3	593700				DE0005937007	001117254	1
MAN SE MAN SE	MAN SE MAN SE	UBS MTF (XUBS) Xetra (XETR)	Common Stock Preference	MAN SE VORZUGSAKTIEN	MAND S2	593700			CQCQCMANAC.	DE0005937007	001117254	1
MAN SE	MAN SE	Xetra (XETR)	Preference	MAN SE-VORZUGSAKTIEN MAN SE-VORZUGSAKTIEN	MAN3 GB MAN3 GD	593703 593703	5563531 DE 5563531 DE		944021 944021	DE0005937031	001114816	T T
MAN SE MAN SE	MAN SE	Xetra (XETR)	Preference	MAN SE-VORZUGSAKTIEN	MAN3 GF	593703	5563531 DE		944021	DE0005937031 DE0005937031	001114816	
MAN SE	MAN SE MAN SE	Xetra (XETR) Xetra (XETR)	Preference Preference	MAN SE-VORZUGSAKTIEN	MAN3 GH	593703	5563531 DE		944021	DE0005937031	001114816	I
MAN SE	MAN SE	Xetra (XETR)	Preference Preference	MAN SE-VORZUGSAKTIEN MAN SE-VORZUGSAKTIEN	MAN3 GI MAN3 GM	593703 593703	5563531 DE 5563531 DE		944021	DE0005937031	001114816	1
MAN SE	MAN SE	Xetra (XETR)	Preference	MAN SE-VORZUGSAKTIEN	MAN3 GR	593703	5563531 DE		944021	DE0005937031 DE0005937031	001114816	1
MAN SE MAN SE	MAN SE MAN SE	Xetra (XETR)	Preference	MAN SE-VORZUGSAKTIEN	MAN3 GS	593703	5563531 DE		944021	DE0005937031	001114816	
MAN SE	MAN SE	Xetra (XETR) Quotrix Exch (XQTX)	Preference Preference	MAN SE-VORZUGSAKTIEN MAN SE-VORZUGSAKTIEN	MAN3 GY MAN3 QT	593703	5563531 DE		944021	DE0005937031	001114816	1
MAN SE	MAN SE	Turquoise (TRQX)	Preference	MAN SE-VORZUGSAKTIEN	MAN3 TQ	593703 593703	5563531 DE 5563531 DE		944021	DE0005937031 DE0005937031	001114816	
MAN SE MAN SE	MAN SE MAN SE	Equiduct (XEQT)	Preference	MAN SE-VORZUGSAKTIEN	MAN3D BQ	593703	5563531 DE		944021	DE0005937031	001114816	
MAN SE	MAN SE	Chi-X Europe (CHIX) Euro Comp (XLON)	Preference Preference	MAN SE-VORZUGSAKTIEN MAN SE-VORZUGSAKTIEN	MAN3D IX	593703	5563531 DE		944021	DE0005937031	001114816	ŀ
MAN SE	MAN SE	Euro OTC (XLON)	Preference	MAN SE-VORZUGSAKTIEN	MAN3 EU MAN3 XA	593703 593703	B28K2R6 GB B28K2R6 GB			DE0005937031	001114816	
MAN SE	MAN SE	Euro OTC (XLON)	Preference	MAN SE-VORZUGSAKTIEN	MAN3 XD	593703	B28K2R6 GB			DE0005937031 DE0005937031	001114816	
MAN SE MAN SE	MAN SE MAN SE	Euro OTC (XLON) Euro OTC (XLON)	Preference Preference	MAN SE-VORZUGSAKTIEN	MAN3 XO	593703	B28K2R6 GB			DE0005937031	001114816	
MAN SE	MAN SE	Tradegate (XGAT)	Preference	MAN SE-VORZUGSAKTIEN MAN SE-VORZUGSAKTIEN	MAN3 XS MAN3 TH	593703 593703	B28K2R6 GB		044004	DE0005937031	001114816	
MAN SE	MAN SE	OTC US (OOTC)	ADR	MAN SE-UNSSPONSORED ADR	MAGOY PQ	A0YF6N	B3DY656 US	561641101	944021	DE0005937031 US5616411014	001114816 054361637	
MAN SE MAN SE	MAN SE MAN SE	OTC US (OOTC)	ADR ADR	MAN SE-UNSSPONSORED ADR	MAGOY US	A0YF6N	B3DY656 US	561641101		US5616411014	054361637	
MAN SE	MAN SE	Frankfurt (XFRA)	ADR	MAN SE-UNSSPONSORED ADR MAN SE-UNSSPONSORED ADR	MAGOY UV MANC GF	A0YF6N A0YF6N	B3DY656 US	561641101		US5616411014	054361637	
MAN SE	MAN SE	Frankfurt (XFRA)	ADR	MAN SE-UNSSPONSORED ADR	MANC GR	AOYF6N AOYF6N	B5900P0 DE B5900P0 DE	561641101		US5616411014 US5616411014	054361637 054361637	
MAN SE RENK AG	MAN SE	Frankfurt (XFRA)	ADR	MAN SE-UNSSPONSORED ADR	MANC GS	A0YF6N	B5900P0 DE	561641101		US5616411014	054361637	
	MAN SE	Frankfurt (XFRA)	Common Stock	RENK AG RENK AG	ZAR GB ZAR GF	785000	5555969 DE		916291	DE0007850000	001121936	
	MAN SF	Frankfurt /YCD 11										
RENK AG RENK AG	MAN SE MAN SE	Frankfurt (XFRA) Frankfurt (XFRA)	Common Stock Common Stock			785000	5555969 DE		916291	DE0007850000	001121936	
RENK AG RENK AG RENK AG	MAN SE MAN SE	Frankfurt (XFRA) Frankfurt (XFRA)	Common Stock Common Stock	RENK AG RENK AG	ZAR GF ZAR GM ZAR GR	785000	5555969 DE		916291	DE0007850000	001121936	
RENK AG RENK AG RENK AG RENK AG	MAN SE MAN SE MAN SE	Frankfurt (XFRA) Frankfurt (XFRA) Frankfurt (XFRA)	Common Stock Common Stock Common Stock	RENK AG RENK AG RENK AG	ZAR GM ZAR GR ZAR GS	785000 785000 785000	5555969 DE 5555969 DE 5555969 DE				001121936 001121936	
RENK AG RENK AG RENK AG	MAN SE MAN SE	Frankfurt (XFRA) Frankfurt (XFRA)	Common Stock Common Stock	RENK AG RENK AG	ZAR GM ZAR GR	785000 785000	5555969 DE 5555969 DE		916291 916291	DE0007850000 DE0007850000	001121936	

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RENK AG VOLKSWAGEN AG	MAN SE MAN SE	Euro OTC (XLON)	Common Stock	RENK AG	ZAR XL	785000			DE0007850000	001121936
VOLKSWAGEN AG	MAN SE	LSE EuropeQS (XLON) LSE EuropeQS (XLON)	Common Stock Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOW LI	766400 766400	0308908 DE 0308908 DE		DE0007664005	001115308
VOLKSWAGEN AG	MAN SE	EURO OTC (XLON)	Common Stock	VOLKSWAGEN AG	VOW XA	766400	0308908 GB		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	EURO OTC (XLON) EURO OTC (XLON)	Common Stock Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOW XB	766400	0308908 GB		DE0007664005	001115308
VOLKSWAGEN AG	MAN SE	EURO OTC (XLON)	Common Stock	VOLKSWAGEN AG	VOW XD	766400 766400	0308908 GB 0308908 GB		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	EURO OTC (XLON) EURO OTC (XLON)	Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOW XL	766400	0308908 GB		DE0007664005	001115308
VOLKSWAGEN AG	MAN SE	EURO OTC (XLON)	Common Stock	VOLKSWAGEN AG	VOW XO VOW XS	766400 766400	0308908 GB 0308908 GB		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	EURO OTC (XLON) SIX Swiss Ex (XSWX)	Common Stock	VOLKSWAGEN AG	VOW XV	766400	0308908 G8		DE0007664005	001115308
VOLKSWAGEN AG	MAN SE	SIX Swiss Ex (XSWX)	Common Stock Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOW BW VOW SE	766400 766400	5496994 CH 5496994 CH		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	SIX Swiss Ex (XSWX) BATS Europe (BATE)	Common Stock	VOLKSWAGEN AG	vow sw	766400	5496994 CH		DE0007664005	001115306
VOLKSWAGEN AG	MAN SE	EN Amsterdam (XAMS)	Common Stock Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VW EB VWA NA	766400 766400	5496994 CH 5497016 NL	996800	DE0007664005 DE0007664005	001115308
VOLKSWAGEN AG	MAN SE MAN SE	Luxembourg (XLUX) Equiduct (XEQT)	Common Stock	VOLKSWAGEN AG	VOW LX	766400	5497061 LU		DE0007664005	001115308 001115308
VOLKSWAGEN AG	MAN SE	BATS Europe (BATE)	Common Stock Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOW BQ VOW EB	766400 766400	5497102 DE 5497102 DE		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Xetra (XETR) Xetra (XETR)	Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOW GB	766400	5497102 DE		DE0007664005	001115308
VOLKSWAGEN AG	MAN SE	Xetra (XETR)	Common Stock Common Stock	VOLKSWAGEN AG	VOW GD VOW GF	766400 766400	5497102 DE 5497102 DE		DE0007664005	001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Xetra (XETR)	Common Stock	VOLKSWAGEN AG	VOW GH	766400	5497102 DE		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG	MAN SE	Xetra (XETR) Xetra (XETR)	Common Stock Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOW GI VOW GM	766400 766400	5497102 DE 5497102 DE		DE0007664005	001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Xetra (XETR)	Common Stock	VOLKSWAGEN AG	VOW GR	766400	5497102 DE		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG	MAN SE	Xetra (XETR) Xetra (XETR)	Common Stock Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOW GS VOW GY	766400 766400	5497102 DE		DE0007664005	001115308
VOLKSWAGEN AG	MAN SE	Quotrix Exch (XQTX)	Common Stock	VOLKSWAGEN AG	VOW QT	766400	5497102 DE 5497102 DE		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Sigma X MTF (SGMX) Tradegate (XGAT)	Common Stock Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOW S1	766400	5497102 DE		DE0007664005	001115308
VOLKSWAGEN AG	MAN SE	Turquoise (TRQX)	Common Stock	VOLKSWAGEN AG	VOW TH VOW TQ	766400 766400	5497102 DE 5497102 DE		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Chi-X Europe (CHIX) OTC US (OOTC)	Common Stock Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOWG IX	766400	5497102 DE		DE0007664005	001115308
VOLKSWAGEN AG	MAN SE	OTC US (OOTC)	Common Stock	VOLKSWAGEN AG	VLKAF PQ VLKAF US	766400 766400	B01DRL7 US B01DRL7 US		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	OTC US (OOTC) EuroTLX (ETLX)	Common Stock Common Stock	VOLKSWAGEN AG	VLKAF UV	766400	B01DRL7 US		DE0007664005	001115308
VOLKSWAGEN AG	MAN SE	Euro Comp (XLON)	Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOW TE VOW EU	766400 766400	B7N7B69 IT		DE0007664005 DE0007664005	001115308 001115308
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Euro Comp (XLON) Biockmatch (BLOX)	Common Stock Common Stock	VOLKSWAGEN AG VOLKSWAGEN AG	VOWCHF EU	766400			DE0007664005	001115308
VOLKSWAGEN AG	MAN SE	UBS MTF (XUBS)	Common Stock	VOLKSWAGEN AG	VOWD B3 VOWD S2	766400 766400			DE0007664005 DE0007664005	
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	LSE EuropeQS (XLON) LSE EuropeQS (XLON)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	50IT LI	766403	0309291 GB		DE0007664039	001117432
VOLKSWAGEN AG	MAN SE	EURO OTC (XLON)	Preference	VOLKSWAGEN AG-PREF	50IT LO VOW3 XA	766403 766403	0309291 GB 0309291 GB		DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	EURO OTC (XLON) EURO OTC (XLON)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VOW3 XB	766403	0309291 GB		DE0007664039	001117432
VOLKSWAGEN AG	MAN SE	EURO OTC (XLON)	Preference	VOLKSWAGEN AG-PREF	VOW3 XD	766403 766403	0309291 GB 0309291 GB		DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	EURO OTC (XLON) EURO OTC (XLON)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VOW3 XI	766403	0309291 GB		DE0007664039	001117432
VOLKSWAGEN AG	MAN SE	EURO OTC (XLON)	Preference	VOLKSWAGEN AG-PREF	VOW3 XL	766403 766403	0309291 GB 0309291 GB		DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	EURO OTC (XLON) EURO OTC (XLON)	Preference	VOLKSWAGEN AG-PREF	VOW3 XS	766403	0309291 GB		DE0007664039	001117432
VOLKSWAGEN AG	MAN SE	SIX Swiss Ex (XSWX)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VOW3 XV	766403 766403	0309291 GB 5497146 CH		DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	SIX Swiss Ex (XSWX) SIX Swiss Ex (XSWX)	Preference	VOLKSWAGEN AG-PREF	VW/V SE	766403	5497146 CH		DE0007664039	001117432
VOLKSWAGEN AG	MAN SE	Equiduct (XEQT)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VW/V SW VOW3 BQ	766403 766403	5497146 CH 5497168 DE		DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	BATS Europe (BATE) Xetra (XETR)	Preference	VOLKSWAGEN AG-PREF	VOW3 EB	766403	5497168 DE		DE0007664039	001117432
VOLKSWAGEN AG	MAN SE	Xetra (XETR)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VOW3 GB VOW3 GD	766403 766403	5497168 DE 5497168 DE		DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Xetra (XETR) Xetra (XETR)	Preference	VOLKSWAGEN AG-PREF	VOW3 GF	766403	5497168 DE		DE0007664039	001117432
VOLKSWAGEN AG	MAN SE	Xetra (XETR)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VOW3 GH VOW3 GI	766403 766403	5497168 DE 5497168 DE		DE0007664039 DE0007664039	001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Xetra (XETR)	Preference	VOLKSWAGEN AG-PREF	VOW3 GM	766403	5497168 DE		DE0007664039	001117432 001117432
VOLKSWAGEN AG	MAN SE	Xetra (XETR) Xetra (XETR)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VOW3 GR VOW3 GS	766403 766403	5497168 DE 5497168 DE		DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Xetra (XETR)	Preference	VOLKSWAGEN AG-PREF	VOW3 GY	766403	5497168 DE		DE0007664039	001117432
VOLKSWAGEN AG	MAN SE	Chi-X Europe (CHIX) Quotrix Exch (XQTX)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VOW3 IX VOW3 QT	766403 766403	5497168 DE 5497168 DE		DE0007664039	001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE	Aguis Exchg (AQXE)	Preference	VOLKSWAGEN AG-PREF	VOW3 QX	766403	5497168 DE		DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG	MAN SE	Sigma X MTF (SGMX) Tradegate (XGAT)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VOW3 S1 VOW3 TH	766403 766403	5497168 DE 5497168 DE	90900	DE0007664039	001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Turquoise (TRQX)	Preference	VOLKSWAGEN AG-PREF	VOW3 TQ	766403	5497168 DE		DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG	MAN SE	Luxembourg (XLUX) OTC US (OOTC)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VOWP LX VLKPF PQ	766403 766403	5497221 LU B1GXSC7 US		DE0007664039	001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE	OTC US (OOTC)	Preference	VOLKSWAGEN AG-PREF	VLKPF US	766403	B1GXSC7 US		DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG	MAN SE	OTC US (OOTC) Euro Comp (XLON)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VLKPF UV VOW3 EU	766403 766403	B1GXSC7 US		DE0007664039	001117432
VOLKSWAGEN AG	MAN SE	Euro Comp (XLON)	Preference	VOLKSWAGEN AG-PREF	VOW3CHF EU	766403			DE0007664039 DE0007664039	001117432 001117432
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Blockmatch (BLOX) Liquidnet (LIQU)	Preference Preference	VOLKSWAGEN AG-PREF VOLKSWAGEN AG-PREF	VOW3D B3 VOW3D L3	766403 766403			DE0007664039	NAME OF THE PROPERTY OF THE PR
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	UBS MTF (XUBS)	Preference	VOLKSWAGEN AG-PREF	VOW3D S2	766403			DE0007664039 DE0007664039	
VOLKSWAGEN AG	MAN SE	OTC US (OOTC) OTC US (OOTC)	ADR ADR	VOLKSWAGEN AG-SPONS ADR VOLKSWAGEN AG-SPONS ADR	VLKAY PQ VLKAY US	879511 879511	2930484 US 2930484 US	928662303 928662303	US9286623031	011526233
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE	OTC US (OOTC)	ADR	VOLKSWAGEN AG-SPONS ADR	VLKAY UV	879511	2930484 US	928662303	US9286623031 US9286623031	011526233 011526233
VOLKSWAGEN AG	MAN SE	Frankfurt (XFRA) Frankfurt (XFRA)	ADR ADR	VOLKSWAGEN AG-SPONS ADR VOLKSWAGEN AG-SPONS ADR	VOW4 GF VOW4 GR	879511 879511	B62V8T7 DE B62V8T7 DE	928662303 928662303	US9286623031 US9286623031	011526233 011526233
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE MAN SE	Frankfurt (XFRA)	ADR	VOLKSWAGEN AG-SPONS ADR	VOW4 GY	879511	B62V8T7 DE	928662303	US9286623031	011526233
VOLKSWAGEN AG	MAN SE	OTC US (OOTC)	ADR ADR	VOLKSWAGEN AG-SPONS ADR PF VOLKSWAGEN AG-SPONS ADR PF	VLKPY PQ VLKPY US	A0DPR2 A0DPR2	2265960 US 2265960 US	928662402 928662402	US9286624021 US9286624021	042872202
VOLKSWAGEN AG VOLKSWAGEN AG	MAN SE	OTC US (OOTC)	ADR	VOLKSWAGEN AG-SPONS ADR PF	VLKPY UV	A0DPR2	2265960 US	928662402	US9286624021	042872202 042872202
VOLKSWAGEN AG	MAN SE	Frankfurt (XFRA) Frankfurt (XFRA)	ADR ADR	VOLKSWAGEN AG-SPONS ADR PF VOLKSWAGEN AG-SPONS ADR PF	VOW5 GF	A0DPR2 A0DPR2	B603118 DE B603118 DE	928662402 928662402	US9286624021 US9286624021	042872202 042872202
DIOL MOMEORN AG	MAN SE	Frankfurt (XFRA) Frankfurt (XFRA)	ADR	VOLKSWAGEN AG-SPONS ADR PR	VOW5 GR	A0DPR2	B603118 DE	928662402	US9286624021	042872202
VOLKSWAGEN AG	mr m OL	riankium (APKA)	ADR	VOLKSWAGEN AG-SPONS ADR PE MANAGEM	MNG MC	A0DPR2 165414	B603118 DE 6287454 MA	928662402	US9286624021 MA0000011058	042872202
VOLKSWAGEN AG MANAGEM	MANAGEM	Casablanca (XCAS)	Common Stock							
VOLKSWAGEN AG MANAGEM SOCIETE METALLURGIQUE D'IMITER	MANAGEM MANAGEM	Casablanca (XCAS) Casablanca (XCAS)	Common Stock	SOCIETE METALLURGI D'IMITER	SMI MC	256307	6007759 MA		MA0000010068	
VOLKSWAGEN AG MANAGEM SOCIETE METALLURGIQUE D'IMITER MANGALORE REFINERY & PETROCHEMICALS LIMITED	MANAGEM			SOCIETE METALLURGI D'IMITER MANGALORE REFINERY & PETROCHEMICALS LIMITED				NOIS-	MA0000010068	
VOLKSWAGEN AG MANAGEM SOCIETE METALLURGIQUE D'IMITER MANGALORE REFINERY &	MANAGEM MANAGEM	Casablanca (XCAS)	Common Stock Common Stock	SOCIETE METALLURGI D'IMITER MANGALORE REFINERY & PETROCHEMICALS LIMITED MANGALORE REFINERY &	SMI MC MRPL IB	256307 A0NANW	6007759 MA 6121530 IN		MA0000010068 INE103A01014	
VOLKSWAGEN AG MANAGEM SOCIETE METALLURGIQUE D'IMITER MANGALORE REFINERY & PETROCHEMICALS LIMITED MANGALORE REFINERY &	MANAGEM MANAGEM OIL & NATURAL GAS CORP	Casablanca (XCAS) Mumbai (XBOM)	Common Stock	SOCIETE METALLURGI D'IMITER MANGALORE REFINERY & PETROCHEMICALS LIMITED	SMI MC	256307	6007759 MA		MA0000010068	

OIL & NATURAL GAS CORP LTD	OIL & NATURAL GAS CORP	Natl India (XNSE)	Common Stock	OIL & NATURAL GAS CORP LTD	ONGC IN	A1H6P4	6139362 IN			INE213A01029		
OIL & NATURAL GAS CORP LTD OIL & NATURAL GAS CORP LTD	OIL & NATURAL GAS CORP OIL & NATURAL GAS CORP	Natl India (XNSE) Natl India (XNSE)	Common Stock	OIL & NATURAL GAS CORP LTD	ONGC IB	A1H6P4	6139362 IS			INE213A01029		
OIL INDIA LTD	OIL INDIA LTD	Nati India (XNSE)	Common Stock Common Stock	OIL & NATURAL GAS CORP LTD OIL INDIA LTD	ONGC IS OINL IB	A1H6P4 A0X9PF	6139362 IS B409HQ9 IN			INE213A01029		
OIL INDIA LTD	OIL INDIA LTD	Natl India (XNSE)	Common Stock	OIL INDIA LTD	OINL IN	A0X9PF	B409HQ9 IN			INE274J01014 INE274J01014		
OIL INDIA LTD ORCA GOLD INC	OIL INDIA LTD ORCA GOLD INC	Natl India (XNSE) Venture (XTSX)	Common Stock	OIL INDIA LTD	OINL IS	A0X9PF	B409HQ9 IN			INE274J01014		
ORCA GOLD INC	ORCA GOLD INC	Venture (XTSX)	Common Stock Common Stock	ORCA GOLD INC	ORG CJ ORG CN	A1T8LS A1T8LS	B84J7Q3 CA B84J7Q3 CA	68558N102 68558N102		CA68558N1024 CA68558N1024	091768224	
ORCA GOLD INC	ORCA GOLD INC	Venture (XTSX)	Common Stock	ORCA GOLD INC	ORG CV	A1T8LS	B84J7Q3 CA	68558N102		CA68558N1024	091768224 091768224	
ORCA GOLD INC	ORCA GOLD INC ORCA GOLD INC	Venture (XTSX) Venture (XTSX)	Common Stock Common Stock	ORCA GOLD INC ORCA GOLD INC	ORG DS ORG DV	A1T8LS	B84J7Q3 CA	68558N102		CA68558N1024	091768224	
ORCA GOLD INC	ORCA GOLD INC	Venture (XTSX)	Common Stock	ORCA GOLD INC	ORG OF	A1T8LS A1T8LS	B84J7Q3 CA B84J7Q3 CA	68558N102 68558N102		CA68558N1024 CA68558N1024	091768224 091768224	
ORCA GOLD INC	ORCA GOLD INC	Venture (XTSX)	Common Stock	ORCA GOLD INC	ORG QH	A1T8LS	B84J7Q3 CA	68558N102		CA68558N1024	091768224	
ORCA GOLD INC	ORCA GOLD INC	Venture (XTSX) Venture (XTSX)	Common Stock Common Stock	ORCA GOLD INC ORCA GOLD INC	ORG TG ORG TJ	A1T8LS A1T8LS	B84J7Q3 CA	68558N102		CA68558N1024	091768224	
ORCA GOLD INC	ORCA GOLD INC	Venture (XTSX)	Common Stock	ORCA GOLD INC	ORG TN	A1T8LS	B84J7Q3 CA B84J7Q3 CA	68558N102 68558N102		CA68558N1024 CA68558N1024	091768224 091768224	
ORCA GOLD INC	ORCA GOLD INC ORCA GOLD INC	Venture (XTSX) OTC US (OOTC)	Common Stock Common Stock	ORCA GOLD INC	ORG TV	A1T8LS	B84J7Q3 CA	68558N102		CA68558N1024	091768224	
ORCA GOLD INC	ORCA GOLD INC	OTC US (OOTC)	Common Stock	ORCA GOLD INC	CANWF PQ CANWF US	A1T8LS A1T8LS	B8JYMF7 US B8JYMF7 US	68558N104 68558N103		CA68558N1024 CA68558N1024	091768224 091768225	
ORCA GOLD INC	ORCA GOLD INC ORCA GOLD INC	OTC US (OOTC)	Common Stock	ORCA GOLD INC	CANWF UV	A1T8LS	BBJYMF7 US	68558N102		CA68558N1024	091768225	
ORCA GOLD INC	ORCA GOLD INC	Frankfurt (XFRA) Frankfurt (XFRA)	Common Stock Common Stock	ORCA GOLD INC ORCA GOLD INC	HJ6A GB HJ6A GF	A1T8LS A1T8LS	B9L55S9 DE	68558N102		CA68558N1024	091768224	
ORCA GOLD INC	ORCA GOLD INC	Frankfurt (XFRA)	Common Stock	ORCA GOLD INC	HJ6A GR	A1T8LS	B9L55S9 DE B9L55S9 DE	68558N102 68558N102		CA68558N1024 CA68558N1024	091768224 091768224	
ORCA GOLD INC	ORCA GOLD INC PETROLIAM NASIONAL BERHAD aka	Frankfurt (XFRA)	Common Stock	ORCA GOLD INC	HJ6A GS	A1T8LS	B9L55S9 DE	68558N102		CA68558N1024	091768224	
ENGEN BOTSWANA LTD	PETRONAS	Gaborone (XBOT)	Common Stock	ENGEN	ENGN BG	546632	B063G04			BW000000058		
KLCCP STAPLED GROUP MALAYSIA INTERNATIONAL SHIPPING	PETROLIAM NASIONAL BERHAD aka PETRONAS PETROLIAM NASIONAL BERHAD aka	Bursa Malaysia (XKLS)	Common Stock	KLCC PROPERTY HOLDINGS BHD		A1T91X	B92NSW7 MY			MYL5235SS008		
COMPANY aka MISC BHD MALAYSIA MARINE AND HEAVY	PETRONAS	Bursa Malaysia (XKLS)	Common Stock	MISC BHD	MISC MK	880504	6557997 MY		905279	MYL3816OO005	003527883	
ENGINEERING HOLDINGS BHD	PETROLIAM NASIONAL BERHAD aka PETRONAS	Bursa Malays (XKLS)	Common Stock	MALAYSIA MARINE AND HEAVY E	N MMHE MK	A1C7U6	B3W5NN7			MYL5186OO001	055049394	
PETRONAS CHEMICALS GROUP BHD	PETROLIAM NASIONAL BERHAD aka PETRONAS PETROLIAM NASIONAL BERHAD aka	Bursa Malaysia (XKLS)	Common Stock	PETRONAS CHEMICALS GROUP BHD	PCHEM MK	A1C891	B5KQGT3 MY			MYL5183OO008		
PETRONAS DAGANGAN BHD	PETROLIAM NASIONAL BERHAD aka PETROLIAM NASIONAL BERHAD aka	Bursa Malaysia (XKLS)	Common Stock	PETRONAS DAGANGAN BHD	PETO MK	B95131	6695938 MY			MYL568100001	005378044	
PETRONAS GAS BHD NETWORK 18 MEDIA & INVESTMENTS	PETROLIAM NASIONAL BERHAD aka PETRONAS	Bursa Malaysia (XKLS)	Common Stock	PETRONAS GAS BHD	PTG MK	896633	6703972 MY			MYL6033OO004		
LTD NETWORK 18 MEDIA & INVESTMENTS	RELIANCE INDUSTRIES LTD	Natl India (XNSE)	Common Stock	NETWORK 18 MEDIA & INVESTMENTS LTD NETWORK 18 MEDIA &	NETM IB	AORBYT	B1JRSG0 IN			INE870H01013		
LTD NETWORK 18 MEDIA & INVESTMENTS	RELIANCE INDUSTRIES LTD	Natl India (XNSE)	Common Stock	INVESTMENTS LTD NETWORK 18 MEDIA &	NETM IN	AORBYT	B1JRSG0 IN			INE870H01013		
LTD	RELIANCE INDUSTRIES LTD	Natl India (XNSE)	Common Stock	INVESTMENTS LTD	NETM IS	AORBYT	B1JRSG0 IN			INE870H01013		
RELIANCE INDUSTRIES LTD RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD RELIANCE INDUSTRIES LTD	Natl India (XNSE) Natl India (XNSE)	Common Stock Common Stock	RELIANCE INDUSTRIES LTD RELIANCE INDUSTRIES LTD	RIL IB	946078	6099626 IN		964067	INE002A01018		
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Nati India (XNSE)	Common Stock	RELIANCE INDUSTRIES LTD	RIL IN RIL IS	946078 946078	6099626 IN 6099626 IN		964067 964067	INE002A01018 INE002A01018		
RELIANCE INDUSTRIES LTD RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD RELIANCE INDUSTRIES LTD	Natl India (XNSE)	Second Lending	RELIANCE INDUSTRIES LTD-SLB	RIL/S IN		5505025 114		204007	N.A.		
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Natl India (XNSE) Luxembourg (XLUX)	Second Lending GDR	RELIANCE INDUSTRIES LTD-SLB RELIANCE INDUSTRIES LTD	RIL/S IS RIGDS LX	884241	4731146 LU	759470107	004000	N.A.		
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD							759470107	964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Frankfurt (XFRA) Frankfurt (XFRA)	GDR	RELIANCE INDS-SPONS GDR 144		884241	5732568 DE	759470107	964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Frankfurt (XFRA)	GDR	RELIANCE INDS-SPONS GDR 144		884241	5732568 DE	759470107	964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Frankfurt (XFRA)	GDR	RELIANCE INDS-SPONS GDR 144		884241	5732568 DE	759470107	964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Frankfurt (XFRA)	GDR	RELIANCE INDS-SPONS GDR 144		884241 884241	5732568 DE 5732568 DE	759470107 759470107	964066 964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	BATS Europe (BATE)	GDR	RELIANCE INDS-SPONS GDR 144		884241	B16CYP9 GB	759470107	964066	US7594701077 US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Chi-X Europe (CHIX)	GDR	RELIANCE INDS-SPONS GDR 144		884241	B16CYP9 GB	759470107	964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	London Intl (XLON)	GDR	RELIANCE INDS-SPONS GDR 144		884241	B16CYP9 GB	759470107	964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Turquoise (TRQX)	GDR	RELIANCE INDS-SPONS GDR 144	A RIGO TQ	884241	B16CYP9 GB	759470107	964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Equiduct (XEQT)	GDR	RELIANCE INDS-SPONS GDR 144/	A RIGDL BQ	884241	B16CYP9 GB	759470107	964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	BX Worldcaps (XBRN)	GDR	RELIANCE INDS-SPONS GDR 144	A RIGD BW	884241	BHZLQV9 CH		964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	BX Worldcaps (XBRN)	GDR	RELIANCE INDS-SPONS GDR 144	A RIGD SW	884241	BHZLQV9 CH		964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Euro Comp (XLON)	Receipt	RELIANCE INDS-SPONS GDR 144/	A RIGD EU	884241		759470107	964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Blockmatch (BLOX)	GDR	RELIANCE INDS-SPONS GDR 144/	A RIGDL B3	884241		759470107		US7594701077		
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	UBS MTF (XUBS)	GDR	RELIANCE INDS-SPONS GDR 144/		884241		759470107	964066	US7594701077	010146160	
RELIANCE INDUSTRIES LTD	RELIANCE INDUSTRIES LTD	Euro OTC (XLON)	GDR	RELIANCE INDS-SPONS GDR 144/ NETWORK 18 MEDIA &		884241		759470107	964066	US7594701077	010146160	
TV18 BROADCAST LTD	RELIANCE INDUSTRIES LTD	Natl India (XNSE)	Common Stock	INVESTMENTS LTD NETWORK 18 MEDIA &	TV18 IB	AORNSF	B1CKQW8 IN			INE886H01027		
TV18 BROADCAST LTD	RELIANCE INDUSTRIES LTD RELIANCE INDUSTRIES LTD	Natl India (XNSE)	Common Stock	INVESTMENTS LTD NETWORK 18 MEDIA &	TV18 IN	AORNSF	B1CKQW8 IN			INE886H01027		
SCOMI ENERGY SERVICES BHD	SCOMI GROUP BERHAD	Natl India (XNSE) Bursa Malays (XKLS)	Common Stock Common Stock	SCOMI ENERGY SERVICES BHD	TV18 IS SES MK	A0RNSF 215406	B1CKQW8 IN 6081593			INE886H01027 MYL7045OO007		
SCOMI ENGINEERING BERHAD SCOMI GROUP BERHAD	SCOMI GROUP BERHAD SCOMI GROUP BERHAD	Bursa Malaysia (XKLS) Bursa Malaysia (XKLS)	Common Stock Common Stock	SCOMI ENGINEERING BHD SCOMI GROUP BHD	SEB MK	903056	6098452 MY			MYL7366OO007		
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Hong Kong (XHKG)	Common Stock	SHANGHAI ELECTRIC GRP CO L-I-	SGB MK 1 2727 HK	120745 A0M4YX	B00PKJ3 MY B07J656 HK			MYL715800008		
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Frankfurt (XFRA)	Common Stock	SHANGHAI ELECTRIC GRP CO L-F		A0M4YX	B072G10 DE			CNE100000437	021854387	
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Frankfurt (XFRA)	Common Stock	SHANGHAI ELECTRIC GRP CO L-H		A0M4YX	B07ZG10 DE			CNE100000437	021854387	
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Frankfurt (XFRA)	Common Stock	SHANGHAI ELECTRIC GRP CO L-H		A0M4YX	807ZG10 DE			CNE100000437	021854387	
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Frankfurt (XFRA)	Common Stock	SHANGHAI ELECTRIC GRP CO L-H	USR GR	A0M4YX	B07ZG10 DE			CNE100000437		
											A. T. Washington (C. F.)	

SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Frankfurt (XFRA)	Common Stock	SHANGHAI ELECTRIC GRP CO L-H USR GS	A0M4YX	B07ZG10 DE			CNE100000437	021854387		
HANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Tradegate (XGAT)	Common Stock	SHANGHAI ELECTRIC GRP CO L-H USR TH	A0M4YX	B07ZG10 DE			CNE100000437	021854387		
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	OTC US (OOTC)	Common Stock	SHANGHAI ELECTRIC GRP CO L-H SIELF US	A0M4YX	BOXNVSO US			CNE100000437	021854387	Y76824104	
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	OTC US (OOTC)	Common Stock	SHANGHAI ELECTRIC GRP CO L-H SIELF UV	A0M4YX	BOXNVSO US			CNE100000437	021854387	Y76824104	
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Sth SSE-SEHK (SHSC)	Common Stock	SHANGHAI ELECTRIC GRP CO L-H 2727 H1	A0M4YX	BP3RX69 HK			CNE100000437	021854387	176824104	
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Shanghai (XSHG)	Common Stock	SHANGHAI ELECTRIC GRP CO L-A 601727 CG	AUYAVL	B3FJ9X8 CN			CNE100000055	021004387		
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Shanghai (XSHG)	Common Stock	SHANGHAI ELECTRIC GRP CO L-A 601727 CH	AUYAVL	B3FJ9X8 CN			CNE100000D55			
SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Nth SSE-SEHK (XSSC)	Common Stock	SHANGHAI ELECTRIC GRP CO L-A 601727 C1	AOYAVL	BP3R3T2 CN			CNE100000D55			
SHANGHAI ELECTRIC GROUP CO LTD SHANGHAI ELECTRIC GROUP CO LTD	SHANGHAI ELECTRIC GROUP CO LTD SHANGHAI ELECTRIC GROUP CO LTD	OTC US (OOTC)	ADR ADR	SHANGHAI ELECTRIC-UNSP ADR SIELY PQ SHANGHAI ELECTRIC-UNSP ADR SIELY US	A1H9PU A1H9PU	B3L2823 US B3L2823 US	81943J108 81943J108		US81943J1088 US81943J1088			
SHANGHAI ELECTRIC GROUP CO LTD SHANGHAI MECHANICAL AND	SHANGHAI ELECTRIC GROUP CO LTD	OTC US (OOTC)	ADR	SHANGHAI ELECTRIC-UNSP ADR SIELY UV SHANGHAI MECHANICAL AND EL-	A1H9PU	B3L2823 US	81943J108		US81943J1088			
LECTRICAL INDUSTRY CO LTD HANGHAI MECHANICAL AND	SHANGHAI ELECTRIC GROUP CO LTD	Shanghai (XSHG)	Common Stock	A 600835 CG SHANGHAI MECHANICAL AND EL-	A0M654	6785851 CN			CNE000000B91			
ELECTRICAL INDUSTRY CO LTD SHANGHAI MECHANICAL AND	SHANGHAI ELECTRIC GROUP CO LTD	Shanghai (XSHG)	Common Stock	A 600835 CH SHANGHAI MECHANICAL AND EL-	A0M654	6785851 CN			CNE000000B91			
LECTRICAL INDUSTRY CO LTD HANGHAI MECHANICAL AND	SHANGHAI ELECTRIC GROUP CO LTD	Nth SSE-SEHK (XSSC)	Common Stock	A 600835 C1 SHANGHAI MECHANICAL AND EL-	A0M654	BP3R7Q7 CN			CNE000000B91			
LECTRICAL INDUSTRY CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Shanghai (XSHG)	Common Stock	B 900925 CG SHANGHAI MECHANICAL AND EL-	ADM3UQ	6797436 CN		916599	CNE000000G39	032099050		
ELECTRICAL INDUSTRY CO LTD	SHANGHAI ELECTRIC GROUP CO LTD	Shanghai (XSHG)	Common Stock	B 900925 CH	ADM3UQ	6797436 CN		040500	01/200000000000000000000000000000000000			
STATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED	Venture (XTSX)	Common Stock	STATESMAN RESOURCES LTD SRR CN	A1J2NC	B80L116 CA	857652200	916599	CNE000000G39 CA8576522004	032099050 025302885		
STATESMAN RESOURCES LIMITED STATESMAN RESOURCES LIMITED	STATESMAN RESOURCES LIMITED STATESMAN RESOURCES LIMITED	Venture (XTSX) Venture (XTSX)	Common Stock Common Stock	STATESMAN RESOURCES LTD SRR CV STATESMAN RESOURCES LTD SRR TG	A1J2NC A1J2NC	B80L116 CA B80L116 CA	857652200 857652200		CA8576522004 CA8576522004	025302885 115183605		

EIRIS Conflict Risk Network (CRN) List of "Scrutinized" Companies in Sudan List Effective June 30, 2015

Company Name	Country of Origin
Alstom	France
Alstom India Ltd	India
Alstom T&D India Ltd.	India
Andritz AG	Austria
ASEC Company for Mining	Egypt
Bharat Electronics Limited	India
Bharat Heavy Electricals Limited	India US
Caterpillar Inc. China Gezhouba Group Company Ltd.	China
China Hydraulic and Hydroelectric Construction Group (Sinohydro)	China
Power Construction Corporation of China Ltd.	China
PowerChina Hydropower Development Group Ltd.	China
Sinohydro Bureau 7 Co. Ltd.	China
Sinohydro Engineering Bureau 8 Co. Ltd	China
China National Petroleum Corporation	China
CNPC General Capital Ltd.	British Virgin Islands
CNPC HK Overseas Capital Ltd.	Hong Kong
Daqing Huake Group Co. Ltd.	China
Jinan Diesel Engine Co. Ltd.	China
Kunlun Energy Co. Ltd. PetroChina Co. Ltd.	Hong Kong China
China North Industries Group Corporation	China
AKM Industrial Co. Ltd.	China
NORINCO International Cooperation Ltd.	China
North Huajin Chemical Industries	China
North Navigation Control Technology Co. Ltd	China
Sichuan Nitrocell Co. Ltd	China
China Petrochemical Corporation (Sinopec Group)	China
China Petroleum and Chemical Corporation a.k.a. Sinopec Corp	China
Kingdream PLC	China
Sinopec Capital 2013 Ltd.	British Virgin Islands
Sinopec Engineering Group Co. Ltd.	China
Sinopec Group Overseas Development 2012 Ltd.	British Virgin Islands
Sinopec Group Overseas Development 2013 Ltd. Sinopec Kanton Holdings Ltd.	British Virgin Islands Hong Kong
Sinopec Shanghai Petrochemicals Ltd.	China
Sinopec Yizheng Chemical Fibre Co. Ltd.	China
China Poly Group Corporation	China
Poly Energies Holding Co. Ltd.	Hong Kong
Poly Property Group Co. Ltd.	China
Dongfeng Motor Group Co. Ltd.	China
Egypt Kuwait Holding Company	Egypt
Energy House Holding Co. K.S.C.C., The	Kuwait
GAZ Group	Russia
GAZ Auto Plant Pavlovsky Bus Plant	Russia Russia
Glencore PLC	Switzerland
Glencore Canada Corp.	Canada
Glencore Canada Financial Corp.	Canada
Glencore Finance Canada Ltd.	Canada
Glencore Finance Dubai Ltd.	Dubai
Glencore Finance Europe	Germany
Glencore Funding LLC	USA
Viterra Inc.	Canada
Harbin Electric Company Ltd.	China
Indian Oil Corporation Ltd. Chennai Petroleum Corporation Ltd.	India India
Lanka IOC PLC	India India
Jiangxi Hongdu Aviation Industry Co. Ltd.	China
JX Holdings Inc.	Japan
Eneos Globe Company	Japan
Nippo Corp.	Japan
Toho Titanium Co.	Japan
LS Industrial Systems	South Korea

MAN SE Germany Renk AG Germany Volkswagen AG Germany Managem Morocco ONA S.A. Morocco Societe Metallurgique D'imiter Morocco Oil and Natural Gas Corporation Limited India Mangalore Refinery and Petrochemicals Ltd. a.k.a MRPL India ONGC Videsh Limited a.k.a OVL India Oil India Ltd. India Orca Gold Inc. Canada Pertamina Persero PT Indonesia Petroliam Nasional Berhad (Petronas) Malaysia Engen Botswana Ltd. Malyasia Gas District Cooling Putrajaya Sdn Bhd Malyasia KLCC Property Holdings Bhd Malaysia Malaysia International Shipping Company a.k.a MISC Berhad Malaysia Malaysia Marine and Heavy Engineering Holdings Bhd Malyasia Petronas Capital Ltd. Malyasia Petronas Chemicals Group Berhad Malaysia Petronas Dagangan Bhd Malaysia Petronas Gas Bhd Malaysia Putrajaya Holdings Sdn Bhd Malaysia Reliance Industries Ltd. India Network 18 Media & Investments Ltd. India Reliance Holdings USA Inc India Reliance Jio Infocomm Ltd. India TV18 Broadcast Ltd. India Scomi Group Berhad Malaysia KMCOB Capital Berhad Malaysia Scomi Energy Services Bhd Malyasia Scomi Engineering Berhad Malaysia Shanghai Electric Group Co. Ltd. China Statesman Resources Limited Canada Trafigura Beheer Netherlands

Note: List contains parent companies and subsidiaries publicly traded

EIRIS Conflict Risk Network (CRN) List of Companies in Sudan for "Substantial Action" <u>List Effective June 30, 2015</u>

Company Name	Country of Origin	
Atlas Copco AB	Sweden	
Wartsila OYJ	Finland	

EIRIS 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 June 30, 2015

Company Name	Country of Origin
Abdel Hadi Abdullah Al-Qahtani & Sons Group of Companies	Saudi Arabia
Abdel Moniem International Petroleum Co. Ltd. (Petromoniem)	Sudan
ACES (Arab Center for Engineering Studies) Khartoum	Jordan
Africa Energy Sa Nigeria Ltd.	Nigeria
Ansan Wikfs Investments Ltd.	Yemen
Antonov	Ukraine
APS Engineering Company Roma S.p.A.	Italy
Arcadia Petroleum Ltd.	UK
Ariab Mining Company	Sudan
Blue Coat Systems	USA
China International Water & Electric Corporation	China
Concorp Petroleum Limited	Sudan
Daedong Industrial Machinery Co., Ltd	South Korea
Dindir Petroleum International	Jordan
European Marmot Co. Group	Switzerland
Express Petroleum and Gas Company	Nigeria
GIAD Motor Co Ltd.	Sudan
Hemia II AS	MAZININANA
Hi-Tech Petroleum Group Co., Ltd.	Norway Sudan
HTC Yemen International Ltd.	
IGS (International Geoscience Services) Ltd.	Yemen
Lahmeyer International	United Kingdom
MAM Holding Group Co. Ltd.	Germany
Mott MacDonald	Sudan UK
Niel Petroleum S.A.	
	Luxembourg
Petroneeds Service International Company	Sudan
PetroTrans Company Ltd.	Hong Kong
Quest Qualitas FZCO	United Arab Emirates
RAM Energy	Sudan
SFTUE Belspetsvneshtechnika	Belarus
Shandong Electric Power Construction Corporation	China
SMEC Holdings Limited	Australia
Soma Group	Turkey
Star Petroleum S.A.	Spain
STR Projetos e Participacoes	Brazil
Sudanese Petroleum Pipeline Holding Co. Ltd.	Sudan
Sudan Petroleum Corporation (Sudapet)	Sudan
Toro Gold Ltd.	UK_
UAE for Gold Minerals and Investment Company Ltd.	United Arab Emirates
Vitol Group	Switzerland

Source: EIRIS Conflict Risk Network (May 29, 2015)

ATTACHMENT E

Letter to SBI International and Domestic Equity Managers

June 23, 2015

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 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 Iran Companies that was attached to the March 20, 2015 letter you received. This new list is effective June 30, 2015.

The following company has been added to the Restricted List:

Lukoil Oil Co.

Russia

Attachment 2 is the List of Iran Companies Requiring Divestment.

The following company has been added to this list:

Gazprom OAO

Russia

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 either your assigned SBI Investment Officer or Patricia Ammann.

Sincerely,

LeaAnn M. Stagg Chief Operating Officer

Enclosures

cc: Michael J. Menssen, Director, Public Markets
Patricia Ammann, Investment Officer, DC & Trust Services
Mercy Ndungu, Investment Officer, DC & Trust Services
Tammy Brusehaver, Investment Officer, Public Markets
Inma Conde Goldman, Investment Officer, Public Markets
Stephanie Gleeson, Investment Officer, Public Markets
Robert Weiler, Investment Officer, Public Markets
Nate Blumenshine, Investment Analyst

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

COMPANY NAME	COUNTRY
Bharat Petroleum Corporation Ltd.	India
China Petroleum & Chemical Corp	China
Gail (India) Ltd.	India
Gubre Fabrikalari T.A.S.	Turkey
Gazprom OAO	Russia
Harbin Electric Company Ltd.	China
Indian Oil Corporation Ltd.	India
L G International	South Korea
Lukoil Oil Co.	Russia
Marie Tecnimont S.p.A.	Italy
Mitsui & Co. Ltd	Japan
Oil & Natural Gas Corporation Ltd.	India
PetroChina Co. Ltd.	China
Toyota Tsusho Corporation	Japan

Effective Date: June 30, 2015

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	December 31, 2015	June 30, 2016

Effective Date: June 30, 2015

HISTORICAL DIVESTMENTS

Company Name	Country of Origin	Divest 50 Percent By this Date	Divest 100 Percent By this Date
Mitsui & Company, Ltd.	Japan	September 30, 2012	March 31, 2013
Toyota Tsusho	Japan	September 30, 2012	March 31, 2013

ATTACHMENT 3 IRAN RESTRICTED COMPANIES Security Identifiers

COMPANY_NAME	SEDOL	ISIN	SYMBOL	CUSIP	COUNTRY
Bharat Petroleum Corporation Ltd.	6099723	INE029A01011	500547		India
China Petroleum & Chemical Corp	B4QSP22	US16941R1086	386	16941R108	China
China Petroleum & Chemical Corp	2639189	US16941R1086	386	16941R108	China
China Petroleum & Chemical Corp	BORSW00	US16941R1086	386	16941R108	China
China Petroleum & Chemical Corp	2654375	US16941R1086	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	B01XKR4	CNE1000002Q2	386	16941R108	China
China Petroleum & Chemical Corp	6373728	CNE0000018G1	386	16941R108	China
China Petroleum & Chemical Corp	B1C5SX8	ARDEUT114071	386	16941R108	China
Gail (India) Ltd.	B1HJ0L7	US36268T2069	532155	36268T206	India
Gail (India) Ltd.	3235520	US36268T2069	532155	36268T206	India
Gail (India) Ltd.	B2NTDN1	US36268T2069	532155	36268T206	India
Gail (India) Ltd.	B033102	US36268T2069	532155	36268T206	India
Gail (India) Ltd.	2498517	US36268T1079	532155	36268T206	India
Gail (India) Ltd.	3235490	US36268T1079	532155	36268T206	India
Gail (India) Ltd.	6133405	INE129A01019	532155	36268T206	India
Gazprom OAO	5385003	US3682873068	GAZP		Russia
Gazprom OAO	B0338T0	US3682873068	GAZP		Russia
Gazprom OAO	2016629	US3682872078	GAZP		Russia
Gazprom OAO	B54DNZ5	US3682872078	GAZP		Russia
Gazprom OAO	5140989	US3682872078	GAZP		Russia
Gazprom OAO	BNC9DM8	US3682872078	GAZP		Russia
Gazprom OAO	5259528	US3682872078	GAZP		Russia
Gazprom OAO	3313181	US3682871088	GAZP		Russia
Gazprom OAO	2398899	US3682871088	GAZP		Russia
Gazprom OAO	B59L4L7	RU0007661625	GAZP		Russia
Gazprom OAO	4364928	RU0007661625	GAZP		Russia
Gazprom OAO	B0ZNNX7	RU0007661625	GAZP		Russia
Gazprom OAO	B2NH841	ARDEUT114261	GAZP		Russia
Gubre Fabrikalari T.A.S.	B188YV1	TRAGUBRF91E2	GUBRF		Turkey
Gubre Fabrikalari T.A.S.	B03MTC7	TRAGUBRF91E2	GUBRF		Turkey
Harbin Electric Company Ltd.	2407665	US4114591005	1133		China
Harbin Electric Company Ltd.	6422761	CNE1000003C0	1133		China
Harbin Electric Company Ltd.	взвнкко	CNE1000003C0	1133		China
Harbin Electric Company Ltd.	B1HJDX0	CNE1000003C0	1133		China
Indian Oil Corporation Ltd.	6253767	INE242A01010	530965		India
L G International	B02PV43	KR7001120005	A001120		Korea South
L G International	6537115	KR7001120005	A001120		Korea South
Lukoil Oil Co.	2538059	US78306P5070	LKOH	677862104	Russia
Lukoil Oil Co.	3188453	US6778628726	LKOH	677862104	Russia
Lukoil Oil Co.	B3BHZF0	US6778628726	LKOH	677862104	Russia
Lukoil Oil Co.	2121051	US6778628072	LKOH	677862104	Russia
Lukoil Oil Co.	3188464	US6778628072	LKOH	677862104	Russia
Lukoil Oil Co.	2149707	US6778627082	LKOH	677862104	Russia
Lukoil Oil Co.	2149785	US6778626092	LKOH	677862104	Russia
Lukoil Oil Co.	B00HSJ5	US6778622034	LKOH	677862104	Russia
		Page 1-24			

ATTACHMENT 3 IRAN RESTRICTED COMPANIES Security Identifiers

COMPANY_NAME	SEDOL	ISIN	SYMBOL	CUSIP	COUNTRY
Lukoil Oil Co.	2539580	US6778622034	LKOH	677862104	Russia
Lukoil Oil Co.	B442LL7	US6778621044	LKOH	677862104	Russia
Lukoil Oil Co.	B9DK6C3	US6778621044	LKOH	677862104	Russia
Lukoil Oil Co.	3189876	US6778621044	LKOH	677862104	Russia
Lukoil Oil Co.	5060388	US6778621044	LKOH	677862104	Russia
Lukoil Oil Co.	2537432	US6778621044	LKOH	677862104	Russia
Lukoil Oil Co.	BGHVTJ9	US6778621044	LKOH	677862104	Russia
Lukoil Oil Co.	B0330Z0	US6778621044	LKOH	677862104	Russia
Lukoil Oil Co.	5353873	US5498742049	LKOH	677862104	Russia
Lukoil Oil Co.	B02P187	RU0009024277	LKOH	677862104	Russia
Lukoil Oil Co.	3189809	RU0009024277	LKOH	677862104	Russia
Lukoil Oil Co.	B59SNS8	RU0009024277	LKOH	677862104	Russia
Lukoil Oil Co.	4560588	RU0009024277	LKOH	677862104	Russia
Lukoil Oil Co.	4559014	KYG772401447	LKOH	677862104	Russia
Lukoil Oil Co.	B1FRJY9	ARDEUT114253	LKOH	677862104	Russia
Maire Tecnimont S.p.A.	B68TGK2	US56064T1016	MT	56064T101	Italy
Maire Tecnimont S.p.A.	B2N7CX8	IT0004931058	MT	56064T101	Italy
Maire Tecnimont S.p.A.	B4XXV22	IT0004931058	MT	56064T101	Italy
Maire Tecnimont S.p.A.	BBHGQ65	IT0004931058	MT	56064T101	Italy
Maire Tecnimont S.p.A.	BBGTNT7	IT0004931058	MT	56064T101	Italy
Mitsui & Co. Ltd	4597058	XS0029348686	8031	606827202	Japan
Mitsui & Co. Ltd	2597061	US6068272029	8031	606827202	Japan
Mitsui & Co. Ltd	B1HHX89	US6068272029	8031	606827202	Japan
Mitsui & Co. Ltd	B03KWZ5	JP3893600001	8031	606827202	Japan
Mitsui & Co. Ltd	6597302	JP3893600001	8031	606827202	Japan
Mitsui & Co. Ltd	4594071	JP3893600001	8031	606827202	Japan
Mitsui & Co. Ltd	5736463	JP3893600001	8031	606827202	Japan
Mitsui & Co. Ltd	B0ZGPX0	JP3893600001	8031	606827202	Japan
Oil & Natural Gas Corporation Ltd.	6139362	INE213A01029	500312		India
Oil & Natural Gas Corporation Ltd.	6139362	INE213A01011	500312		India
PetroChina Co. Ltd.	B3KTK63	US71646E1001	857	71646E100	China
PetroChina Co. Ltd.	4633327	US71646E1001	857	71646E100	China
PetroChina Co. Ltd.	B569834	US71646E1001	857	71646E100	China
PetroChina Co. Ltd.	2568841	US71646E1001	857	71646E100	China
PetroChina Co. Ltd.	B28SLD9	CNE1000007Q1	857	71646E100	China
PetroChina Co. Ltd.	6226576	CNE1000003W8	857	71646E100	China
PetroChina Co. Ltd.	B17H0R7	CNE1000003W8	857	71646E100	China
PetroChina Co. Ltd.	B01DNL9	CNE1000003W8	857	71646E100	China
PetroChina Co. Ltd.	5939507	CNE1000003W8	857	71646E100	China
PetroChina Co. Ltd.	B1C5SR2	ARDEUT113958	857	71646E100	China
Toyota Tsusho Corporation	B3DTSN3	US89240C1062	8015		Japan
Toyota Tsusho Corporation	6900580	JP3635000007	8015		Japan
Toyota Tsusho Corporation	B3BK3N3	JP3635000007	8015		Japan
Toyota Tsusho Corporation	B6361P8	JP3635000007	8015		Japan

Letter to SBI Fixed Income Managers

June 23, 2015

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 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 Iran Companies that was attached to the March 20, 2015 letter you received. This new list is effective June 30, 2015.

The following company has been <u>added</u> to the Restricted List:

• Lukoil Oil Co.

Russia

Attachment 2 is the List of Iran Companies Requiring Divestment.

The following company has been **added** to this list:

Gazprom OAO

Russia

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 Aaron Griga, Cassandra Boll or Patricia Ammann.

Sincerely,

LeaAnn M. Stagg Chief Operating Officer

Enclosures

cc: Michael J. Menssen, Director, Public Markets
Aaron Griga, Investment Officer, Public Markets
Cassandra Boll, Investment Officer, Cash Mgmt. Services & Public Markets
Steve Kuettel, Investment Officer, Cash Mgmt. Services
Patricia Ammann, Investment Officer
Nate Blumenshine, Investment Analyst

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

COMPANY NAME	COUNTRY
Bharat Petroleum Corporation Ltd.	India
China Petroleum & Chemical Corp	China
Gail (India) Ltd.	India
Gubre Fabrikalari T.A.S.	Turkey
Gazprom OAO	Russia
Harbin Electric Company Ltd.	China
Indian Oil Corporation Ltd.	India
L G International	South Korea
Lukoil Oil Co.	Russia
Marie Tecnimont S.p.A.	Italy
Mitsui & Co. Ltd	Japan
Oil & Natural Gas Corporation Ltd.	India
PetroChina Co. Ltd.	China
Toyota Tsusho Corporation	Japan

Effective Date: June 30, 2015

ATTACHMENT 2

LIST OF IRAN COMPANIES REQUIRING DIVESTMENT

Company Name	Country of Origin	Divest 50 Percent By this Date	Divest 100 Percen By this Date
Gazprom OAO	Russia	December 31, 2015	June 30, 2016

Effective Date: June 30, 2015

HISTORICAL DIVESTMENTS

Company Name	Country of Origin	Divest 50 Percent By this Date	Divest 100 Percent By this Date
Mitsui & Company, Ltd.	Japan	September 30, 2012	March 31, 2013
Toyota Tsusho	Japan	September 30, 2012	March 31, 2013

TAB C

SBI ADMINISTRATIVE COMMITTEE REPORT

DATE:

September 2, 2015

TO:

Members, State Board of Investment

FROM:

Members, SBI Administrative Committee

SUBJECT:

Review of Executive Director's Evaluation and Salary Process

On August 11, 2015, the SBI Administrative Committee met to finalize the process for the SBI Executive Director Evaluation and Salary process as delegated by the SBI Board at its June 3, 2015 meeting.

RECOMMENDATION:

The Committee recommends that the SBI adopt the following performance evaluation and salary process for the SBI Executive Director:

- The evaluation will be completed by October 1.
- The evaluation will be based on the results of the Executive Director's workplan for the fiscal year ending the previous June 30.
- The SBI deputies/designees will develop an appropriate evaluation form for use by each member.
- As Chair of the Board, the Governor (or his representative) will coordinate
 distribution of the evaluation forms. Board members will forward completed
 evaluations to the Executive Director with a copy to the Governor or the
 Governor's designee and are encouraged to meet individually with the Executive
 Director to review their own evaluation.
- Upon satisfactory performance evaluations from a majority of responding Board Members, the Executive Director's annual salary adjustment will be any Cost-of-Living Adjustment (COLA)/Across the Board (ATB)/General Salary Increase approved by the Managerial Plan for a Fiscal Year as submitted to the Legislature to the extent that it is within the Executive Director's salary range. The adjustment shall be effective January 1 of the next calendar year.

TAB D

INVESTMENT ADVISORY COUNCIL REPORT

DATE: Sept

September 2, 2015

TO:

Members, State Board of Investment

FROM:

Members, Investment Advisory Council

The Investment Advisory Council met on August 18, 2015 to review the following information and action agenda items:

Review of current strategy.

Consideration of new commitments.

1)	Private Equity	Warburg Pincus Private Equity XII	(existing manager)
2)	Private Equity	Summit Partners Growth Equity IX	(existing manager)
3)	Yield-Oriented	Audax Mezzanine IV	(existing manager)
4)	Private Equity	Brookfield Capital Partners IV	(new manager)
5)	Private Equity	Thomas H. Lee Equity VII	(new manager)
6)	Private Equity	TPG Partners VII	(new manager)

Board action is required on the last six items.

INFORMATION ITEM:

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) 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 an existing private equity manager, Warburg Pincus LLC ("Warburg Pincus"), in Warburg Pincus Private Equity XII L.P. ("WP XII").

Warburg Pincus is seeking investors for a new \$12 billion private equity fund, WP XII. This fund is a successor to 11 previous private equity funds managed by Warburg Pincus. The SBI has invested in six of the prior Warburg Pincus funds.

WP XII will seek to generate returns by investing in a globally diversified portfolio of approximately 60-90 private equity opportunities. Warburg Pincus intends to make equity commitments averaging approximately \$150 million alongside experienced management teams. However, when appropriate situations arise, Warburg Pincus will also lift out single business units or intellectual property to create new stand-alone companies. WP XII intends to focus on investing in growth companies in the following industries: energy, financial services, healthcare, consumer, technology, media, telecommunications, industrial services and business services. The key investment themes for WP XII are expected to be technological advancements that increase efficiency, growth in developing markets and long-term growth in energy markets.

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

More information on WP XII is included as Attachment C.

RECOMMENDATION:

The Investment Advisory Council concurs with Staff's recommendation that the SBI authorize the Executive Director, with assistance from the SBI's legal counsel, to negotiate and execute a commitment of up to \$150 million, or 20% of Fund XII 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.

2) Investment with an existing private equity manager, Summit Partners L.P. ("Summit"), in Summit Partners Growth Equity Fund IX ("Summit IX").

Summit is seeking investors for a new \$3.0 billion private equity fund, Summit IX. This fund is a successor to eight previous private equity funds managed by Summit. The SBI has invested in four of the prior Summit funds.

Summit IX will seek to generate returns by providing capital to category-leading companies for growth initiatives, expansion and/or shareholder liquidity. Summit IX intends to make 10-15 growth equity commitments per year of a variety of sizes but generally greater than \$50 million. Summit will continue to focus on investing in the technology, healthcare and growth products and services industries. A key element of Summit's strategy is using its relationship intelligence platform to proactively reach out to thousands of potential investment opportunities. Once an investment is made Summit attempts to create value by providing its portfolio companies with the option of receiving support from Summit's operational experts to improve efficiency, grow revenue, strengthen infrastructure and/or develop strategic plans.

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

More information on Summit IX is included as Attachment D.

RECOMMENDATION:

The Investment Advisory Council concurs with Staff's recommendation 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 Summit 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 Summit 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 Summit or reduction or termination of the commitment.

3) Investment with an existing yield-oriented manager, Audax Management Company ("Audax"), in Audax Mezzanine Fund IV L.P. ("Audax IV").

Audax is seeking investors for a new \$1.0 billion mezzanine debt fund, Audax IV. This fund is a successor to three previous mezzanine debt funds managed by Audax. The SBI has invested in one of the prior Audax funds.

Audax IV will seek to generate returns by investing in a diversified portfolio of mezzanine securities in 30-40 middle market US companies while also focusing on principal preservation. Investment sizes are expected to range between \$15 and \$65 million per transaction. Audax will continue to source investments from private equity firms and intermediaries targeting companies with \$10-40 million EBITDA. Audax IV intends to invest in companies able to demonstrate the following characteristics: leading market position, attractive financial profile, diversified business model, experienced management team, strong private equity sponsor, and appropriate capitalization.

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

More information on Audax IV is included as Attachment E.

RECOMMENDATION:

The Investment Advisory Council concurs with Staff's recommendation 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 Audax IV, 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 Audax 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 Audax or reduction or termination of the commitment.

4) Investment with a new private equity manager, Brookfield Asset Management ("Brookfield"), in Brookfield Capital Partners IV ("Brookfield IV").

Brookfield is seeking investors for a new \$3.5 billion private equity fund, Brookfield IV. This fund is a successor to three private equity funds managed by Brookfield.

Brookfield IV will seek to generate returns by making value investments in 12-15 underperforming companies, platform opportunities and opportunistic buyouts. Most of the commitments are expected to be \$100-300 million of equity value with one or two being larger. Brookfield believes that its 100 year history as a global operator of real assets gives it additional market knowledge and operational expertise in related industries such as energy, metals, mining, forest products, building products, construction, engineering, paper, industrials, manufacturing, financial services and business services. Brookfield IV will seek to use this expertise to create value by making investments in out-of-favor sectors, improving operations, and managing complex transactions.

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

More information on Brookfield IV is included as **Attachment F**.

RECOMMENDATION:

The Investment Advisory Council concurs with Staff's recommendation 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 Brookfield IV, 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 Brookfield 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 Brookfield or reduction or termination of the commitment.

5) Investment with a new private equity manager, Thomas H. Lee Partners ("THL"), in Thomas H. Lee Equity Fund VII ("THL VII").

THL is seeking investors for a new \$3.0 billion private equity fund, THL VII. This fund is a successor to six previous private equity funds managed by THL.

THL VII will seek to generate returns by investing in 12-16 growth-oriented businesses and implementing organizational, operational and strategic improvements. The average investment size is expected to be between \$150-240 million. THL combines top-down analysis to identify secular growth themes with a bottoms-up approach to find investment opportunities in its industries of focus: business services, financial services, consumer, healthcare, media services and information services. THL believes that its 40 year history and well-known brand in private equity has given it a strong network to assist in sourcing investment opportunities and the operational capabilities to create value in its portfolio companies.

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

More information on THL VII is included as Attachment G.

RECOMMENDATION:

The Investment Advisory Council concurs with Staff's recommendation 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 THL VII, 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 THL 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 THL or reduction or termination of the commitment.

6) Investment with a new private equity manager, TPG Capital Advisors ("TPG"), in TPG Partners VII ("TPG VII").

TPG is seeking investors for a new \$8-10 billion private equity fund, TPG VII. This fund is a successor to six private equity funds managed by TPG.

TPG VII will seek to generate returns by making investments in operating companies through acquisitions and restructurings. TPG believes that its large scale of over \$75 billion alternative assets under management improves its returns for investors by allowing TPG to identify attractive entry positions and then create value with the help of its dedicated operations team during the hold period. TPG VII intends to invest in five core sectors: energy, healthcare, industrials, retail and technology. TPG seeks to invest in companies that have one of the following attributes: a market leading position in a sector of TPG expertise, a potential for transformative growth under TPG ownership, or an attractive risk/reward profile in an unconventional transaction.

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

More information on TPG VII is included as Attachment H.

RECOMMENDATION:

The Investment Advisory Council concurs with Staff's recommendation 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 TPG VII, 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 TPG 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 TPG or reduction or termination of the commitment.

Pooled Alternative Investments Combined Funds June 30, 2015

Combined Funds Market Value

\$60,124,981,569

Amount Available for Investment

\$4,678,689,738

	Current Level	Target Level	Difference
Market Value (MV)	\$7,346,306,576	\$12,024,996,314	\$4,678,689,738
MV +Unfunded	\$12,343,229,207	\$21,043,743,549	\$8,700,514,342

		Unfunded	
Asset Class	Market Value	Commitment	Total
Private Equity	\$4,677,169,639	\$2,708,375,806	\$7,385,545,445
Real Estate	\$643,485,129	\$283,576,244	\$927,061,373
Resource	\$1,245,195,139	\$1,114,845,692	\$2,360,040,831
Yield-Oriented	\$780,456,669	\$890,124,889	\$1,670,581,558
Total	\$7,346,306,576	\$4,996,922,631	\$12,343,229,207

Cash Flows June 30, 2015

Year	Capital Calls	Distributions	Net Invested
2015 (as of 6/30)	\$714,983,856	(\$973,807,567)	(\$258,823,711)
2014	\$1,378,984,263	(\$2,133,698,037)	(\$754,713,774)
2013	\$1,257,559,066	(\$2,522,817,494)	(\$1,265,258,428)
2012	\$882,478,614	(\$1,458,621,458)	(\$576,142,844)

ATTACHMENT B

Minnesota State Board of Investment

The state of the s		As of Julie 30, 2						
Investment	Total Commitment	Funded Commitment	MarketValue	Distributions	Unfunded Commitment	IRR %	MOIC*	Period Years
I. REAL ESTATE								
Blackstone								
Blackstone Real Estate Partners V	100,000,000	97,030,342	83,426,927	115,897,247	4,174,052		2.05	9.17
Blackstone Real Estate Partners VI	100,000,000	99,049,644	84,264,431	129,266,658	5,178,649			
Blackstone Real Estate Partners VII	100,000,000	87,221,243	99,872,225	39,423,938	23,790,432			
Blackstone Real Estate Partners VIII	150,000,000	0	0	0	150,000,000	0.00	0.00	0.27
Blackstone Strategic Partners (CSFB)	25 000 000	25 752 910	9 144 022	6 601 006	0.006	0.30	0.57	10.00
Strategic Partners III RE Strategic Partners IV RE	25,000,000 50,000,000	25,752,810 50,171,943	8,144,923 22,855,344	6,601,906 25,474,421	9,006		0.57 0.96	10.00 7.03
Colony Capital	30,000,000	30,171,943	22,633,344	23,474,421	1,798,305	-0.84	0.96	7.03
Colony Investors II	80,000,000	78,482,328	2,600	90,022,404	0	4.68	1.15	20.25
Colony Investors III	100,000,000	100,000,000	5,164,800	172,242,105	0		1.77	
Silverpeak Real Estate Partners	100,000,000	100,000,000	5,101,000	110,010,100		1 1.02	1.77	17.50
Silverpeak Legacy Pension Partners II	75,000,000	68,546,186	22,179,740	57,224,910	17,869,907	2.70	1.16	10.00
Silverpeak Legacy Pension Partners III	150,000,000	69,244,107	21,262,491	5,797,670	80,755,893		0.39	7.11
T.A. Associates Realty		T. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.			33.10.5.513.5.5		0.00	10000
Realty Associates Fund VII	75,000,000	75,000,000	39,966,218	38,247,397	0	0.62	1.04	10.62
Realty Associates Fund VIII	100,000,000	100,000,000	65,944,017	20,101,348	0	-2.12	0.86	9.00
Realty Associates Fund IX	100,000,000	100,000,000	85,109,723	61,712,868	0	10.59	1.47	6.84
Realty Associates Fund X	100,000,000	100,000,000	105,291,690	11,278,100	0	11.48	1.17	3.33
Real Estate Total	1,305,000,000	1,050,498,603	643,485,129	773,290,972	283,576,244		1.35	
II. RESOURCE								
Apache Corp.								
1986 Net Profits Interest	30,000,000	30,000,000	1,530,210	59,417,280	0	12.18	2.03	28.50
EIG Global Energy Partners								
EIG Energy Fund XIV	100,000,000	108,921,954	44,514,902	84,476,961	6,852,249	5.63	1.18	8.20
EIG Energy Fund XV	150,000,000	130,101,144	109,798,441	44,857,932	19,898,856	7.74	1.19	5.06
EIG Energy Fund XVI	200,000,000	60,699,981	35,069,111	0	139,300,019	-55.57	0.58	1.80
EnCap Energy								11417784784
EnCap Energy Capital Fund VII	100,000,000	94,395,472	19,193,459	127,991,376	6,157,271		1.56	8.00
EnCap Energy Capital Fund VIII	100,000,000	77,527,998	64,973,843	20,049,208	22,797,272	4.56	1.10	4.75
Encap Energy Fund IX	100,000,000	50,267,749	46,329,019	243	49,732,251	-8.34	0.92	2.56
EnCap Energy Capital Fund X	100,000,000	5,253,062	3,716,235	1,536,826	96,283,765	0.00	1.00	0.32
Energy & Minerals Group NGP Midstream & Resources	100,000,000	99,432,884	133,021,439	107,201,119	996 191	22.82	2.42	8.25
The Energy & Minerals Group Fund II	100,000,000	80,357,600	127,042,162	12,718,392	886,181 19,875,138		1.74	3.77
The Energy & Minerals Group Fund III	200,000,000	140,105,504	140,846,662	288,946	59,908,396	0.78	1.74	1.32
Energy Capital Partners	200,000,000	140,100,504	140,040,002	200,510	37,700,370	0.70	1.01	1.32
Energy Capital Partners II-A	100,000,000	76,869,650	65,333,100	65,105,903	70,452,497	18.10	1.70	4.95
Energy Capital Partners III	200,000,000	41,375,986	34,783,550	0	158,624,014		0.84	1.53
First Reserve								1100
First Reserve Fund X	100,000,000	100,000,000	540,481	182,429,002	0	31.07	1.83	10.66
First Reserve Fund XI	150,000,000	150,292,121	43,148,149	85,583,475	0	-3.45	0.86	8.52
First Reserve Fund XII	150,000,000	153,959,029	82,808,915	64,575,609	8,925,011	-1.29	0.96	6.66
First Reserve Fund XIII	200,000,000	24,595,553	20,543,545	2,279,302	175,404,447	-25.69	0.93	1.66
NGP								
Natural Gas Partners IX	150,000,000	158,339,565	56,189,580	199,415,166	4,836,934	14.51	1.61	7.69
NGP Natural Resources X	150,000,000	116,887,103	115,544,457	13,879,630	33,112,897	6.01	1.11	3.72
Natural Gas Capital Resources XI	150,000,000	6,351,506	6,231,850	0	143,648,494	-4.42	0.98	0.56
Sheridan								
Sheridan Production Partners I	100,000,000	100,000,000	51,159,992	82,750,000	0	7.39	1.34	8.25
Sheridan Production Partners II	100,000,000	100,000,000	41,957,035	7,000,000		-27.56	0.49	4.75
Sheridan Production Partners III-B	100,000,000	1,850,000	919,000	0	98,150,000	-65.40	0.50	0.56
Resource Total	2,930,000,000	1,907,583,861	1,245,195,139	1,161,556,369	1,114,845,692		1.26	
III. YIELD-ORIENTED								
Audax Group			State of the State			7/2p - 0710	NAME OF TAXABLE PARTY.	Secretary 11
Audax Mezzanine Fund III	100,000,000	78,992,860	53,907,466	36,349,981	29,515,136	8.14	1.14	5.24
Avenue Capital Partners	100 000 000	26.500.05	26.550.05		70 / · · · · · ·	0.7-	· · · · · · · · · · · · · · · · · · ·	
Avenue Energy Opportunities Fund	100,000,000	26,558,954	26,558,954	274,744	73,441,046	-2.25	1.01	0.27
Citicorp Mezzanine CM Liquidating Partnership	100,000,000	88,029,296	6,435,692	132,324,719	0	16.02	1.58	15.66
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Investment	Total Commitment	Funded Commitment	MarketValue	Distributions	Unfunded Commitment	IRR %	MOIC*	Period Years
Crescent Capital Group								
TCW/Crescent Mezzanine Partners III	75,000,000	68,835,269	5,458,111	156,868,939	29,733,852	35.97	2.36	14.25
Gold Hill Venture Lending								
Gold Hill Venture Lending	40,000,000	40,000,000	1,553,001	63,913,250	0	10.79	1.64	10.75
Gold Hill 2008	25,852,584	25,852,584	17,913,558	22,116,954	0	13.05	1.55	7.00
GS Mezzanine Partners				areas wearanas	contact means in an object			
GS Mezzanine Partners 2006 Institutional	100,000,000	74,999,888	16,059,458	115,467,794	5,000,112	4.74	1.75	
GS Mezzanine Partners V	150,000,000	112,057,963	10,071,947	150,535,760	61,343,845	7.59	1.43	7.69
Kohlberg Kravis Roberts KKR Lending Partners II	75,000,000	24 222 261	24 222 261	0	50 676 630	2.02	1.00	0.22
Merit Capital Partners	73,000,000	24,323,361	24,323,361	0	50,676,639	-3.02	1.00	0.32
William Blair Mezzan. Cap. Fd. III	60,000,000	57,243,241	497,649	112,755,951	2,756,759	15.51	1.98	15.49
Merit Mezzanine Fund IV	75,000,000	70,178,571	31,112,180	73,388,935	4,821,429	8.54	1.49	10.54
Merit Mezzanine Fund V	75,000,000	59,632,653	43,797,398	28,209,512	15,367,347	7.89		5.53
Merit Energy Partners	73,000,000	37,032,033	45,171,576	26,209,312	12,307,347	1.09	1.21	3.33
Merit Energy Partners B	24,000,000	24,000,000	20,946,619	179,405,232	0	24.51	8.35	19.00
Merit Energy Partners C	50,000,000	50,000,000	45,697,020	489,223,800	0	31.18		16.67
Merit Energy Partners D	88,000,000	70,938,303	64,739,850	299,261,151	0	23.41		14.10
Merit Energy Partners E	100,000,000	39,983,197	36,246,022	65,640,670	0	14.24	2.55	
Merit Energy Partners F	100,000,000	59,522,861	37,046,046	27,251,921	0	1.53	1.08	
Merit Energy Partners H	100,000,000	81,860,748	68,595,592	7,499,078	18,139,252	-3.82	0.93	4.41
Merit Energy Partners I	169,721,518	4,100,000	4,100,000	0	165,621,518	0.00	1.00	0.70
Oaktree Capital Management		.,,	1,100,000		100,021,010	0.00	1.00	0.70
Oaktree Opportunities Fund X	50,000,000	0	0	0	50,000,000	0.00	0.00	0.32
Oaktree Opportunities Fund Xb	100,000,000	0	0	0	100,000,000	0.00	0.00	0.32
Pimco Bravo**						2000		17375
Pimco Bravo Fund OnShore Feeder I	3,958,027	3,958,027	2,683,701	1,355,866	0	2.42	1.02	0.50
Pimco Bravo Fund OnShore Feeder II	5,243,670	5,243,670	5,396,436	0	0	2.93	1.03	0.50
Portfolio Advisors								
DLJ Investment Partners II	27,375,168	23,164,217	326,145	34,829,566	0	10.45	1.52	15.49
DLJ Investment Partners III	100,000,000	59,873,018	12,848,790	68,303,204	42,126,271	7.79	1.36	9.02
Prudential Capital Partners								
Prudential Capital Partners I	100,000,000	99,713,348	0	155,231,567	286,652	11.06	1.56	14.20
Prudential Capital Partners II	100,000,000	96,651,703	20,484,822	117,644,548	3,348,297	8.77	1.43	10.00
Prudential Capital Partners III	100,000,000	94,687,924	64,271,513	81,650,098	8,754,470	13.61	1.54	6.20
Prudential Capital Partners IV	100,000,000	49,933,877	44,379,437	13,920,780	50,066,123	14.36	1.17	3.44
Summit Partners				co suo llu				
Summit Subordinated Debt Fund II	45,000,000	40,500,000	154,668	93,649,473	4,500,000	56.28		17.91
Summit Subordinated Debt Fund III Summit Subordinated Debt Fund IV	45,000,000	42,750,000	6,849,426	53,725,767	2,250,000	8.50		11.37
	50,000,000	51,000,000	25,781,611	34,727,987	2,500,000	7.87	1.19	7.26
TCW Asset Management	100,000,000	27 141 017	22 400 000	2 741 017	76 600 000	2.02	1.00	0.45
TCW Direct Lending Windjammer Capital Investors	100,000,000	27,141,017	23,400,000	3,741,017	76,600,000	-2.03	1.00	0.45
Windjammer Mezzanine & Equity Fund II	66,708,861	56,569,498	1,746,806	83,626,444	10,139,363	9.02	1.51	16 24
Windjammer Senior Equity Fund III	75,000,000	61,619,620	30,378,608	103,974,003	13,380,380	18.29	2.18	15.24 9.49
Windjammer Senior Equity Fund IV	100,000,000	39,156,871	29,149,525	3,798,730	61,878,306		0.84	3.35
Yield-Oriented Total	2,783,234,828	1,809,072,540	780,456,669	2,810,667,441	890,124,889	-11.14	1.99	3.33
IV. PRIVATE EQUITY								
Adams Street Partners								
Adams Street Global Secondary Fund 5	100,000,000	50,470,000	39,918,583	11,368,624	49,530,000	1.78	1.02	3.03
Advent International								
Advent International GPE VI-A	50,000,000	48,025,005	56,010,224	34,262,980	1,974,995	17.42	1.88	7.24
Advent International GPE VII-B	90,000,000	62,370,000	72,430,723	4,140,083	27,630,000	15.34	1.23	2.78
Affinity Ventures								
Affinity Ventures IV	4,000,000	4,000,000	2,258,865	1,541,970	0	-1.07	0.95	11.00
Affinity Ventures V	5,000,000	4,500,000	2,828,332	1,218,342	500,000	-2.83	0.90	6.99
APAX Partners								
Apax VIII	200,000,000	75,727,016	85,049,163	0	124,272,984	9.48	1.12	2.31
Banc Fund								
Banc Fund VII	45,000,000	45,000,000	43,370,460	812,725	0	-0.22	0.98	10.25
Banc Fund VIII	98,250,000	98,250,000	130,602,841	15,521,973	0	12.55	1.49	7.18
Banc Fund IX	83,875,000	23,310,000	23,438,928	0	58,940,000	1.37	1.01	1.05

Investment	Total Commitment	Funded Commitment	MarketValue	Distributions	Unfunded Commitment	IRR %	MOIC*	Period Years
BlackRock								
BlackRock Tempus Fund	1,774,870	1,774,870	2,159,870	0	0	23.03	1.22	0.05
Blackstone								
Blackstone Capital Partners IV	70,000,000	72,205,775	20,255,568	176,030,952	2,065,533	37.31	2.72	12.97
Blackstone Capital Partners V	140,000,000	130,900,605	94,649,408	137,079,131	9,099,395	8.40	1.77	9.40
Blackstone Capital Partners VI	100,000,000	61,716,986	72,185,919	8,670,531	40,015,469	11.85	1.31	6.93
Blackstone Strategic Partners (CSFB/ DLJ)								
Strategic Partners I	100,000,000	95,050,622	2,401,739	170,948,907	3,399,378			14.44
Strategic Partners II-B	100,000,000	86,123,370	3,940,904	158,731,345	4,724,191			11.95
Strategic Partners III-B	100,000,000	77,964,271	40,754,063	77,877,167	15,194,577	7.10		10.08
Strategic Partners III VC	25,000,000	24,508,874	8,685,703	24,459,313	1,448,343	6.49		10.08
Strategic Partners IV-B	100,000,000	90,332,128	33,580,741	113,059,511	25,881,265	13.55	1.62	
Strategic Partners IV VC	40,500,000	39,295,372	24,329,241	34,110,479	3,719,144		1.49	7.03
Strategic Partners V	100,000,000	74,031,265	73,812,818	49,685,810	45,186,217		1.67	3.87
Strategic Partners VI	150,000,000	40,826,681	51,272,938	2,460,163	111,633,482	68.30	1.32	1.20
BLUM Capital Partners Blum Strategic Partners II	50,000,000	40,185,889	70,295	89,708,870	2 127 584	22.42	2 22	12.05
Blum Strategic Partners II	75,000,000	78,121,020	4,433,879	79,809,630	2,127,584 942,128	22.42 0.50	2.23 1.08	
Blum Strategic Partners III Blum Strategic Partners IV	150,000,000	170,916,780	80,557,911	94,389,141	5,896,033	0.20	1.08	
Carval Investors	130,000,000	170,910,780	00,337,711	24,302,141	5,090,033	0.20	1.02	7.01
CVI Global Value Fund	200,000,000	190,000,000	54,282,021	264,118,127	10,000,000	9.97	1.68	8.47
CVI Credit Value Fund I	100,000,000	95,000,000	112,681,270	82,041,237	5,000,000	20.79	2.05	4.75
CVI Credit Value Fund A II	150,000,000	142,500,000	171,824,736	428,690	7,500,000	10.66	1.21	2.67
CVI Credit Value Fund A III	150,000,000	15,000,000	15,000,000	0	135,000,000	0.00	1.00	0.07
Chicago Growth Partners (William Blair)	150,000,000	13,000,000	15,000,000	0.	133,000,000	0.00	1.00	0.07
William Blair Capital Partners VII	50,000,000	48,150,000	1,730,045	64,292,866	1,650,000	7.91	1.37	14.31
Chicago Growth Partners I	50,000,000	52,441,998	13,680,033	49,419,393	300,000	4.31	1.20	9.93
Chicago Growth Partners II	60,000,000	56,858,323	48,667,239	45,326,284	2,889,677	16.84	1.65	7.30
Court Square Capital Partners								
Court Square Capital Partners	100,000,000	80,813,422	722,315	180,966,005	1,934,741	28.91	2.25	13.55
Court Square Capital Partners II	175,000,000	158,206,726	122,375,446	142,518,176	17,840,472	12.03	1.67	8.82
Court Square Capital Partners III	175,000,000	62,948,309	54,847,548	9,556,108	118,428,647	0.40	1.02	3.08
Crescendo								
Crescendo IV	101,500,000	101,500,000	12,731,516	34,972,153	0	-7.36	0.47	15.30
CVC Capital Partners								
CVC European Equity Partners V	133,838,964	127,322,128	91,269,108	97,078,833	6,516,837	12.17	1.48	7.26
CVC Capital Partners VI	254,649,692	22,459,586	16,482,482	545,893	232,697,717	-24.33	0.76	1.98
Diamond Castle Partners				V				
Diamond Castle Partners IV	92,487,949	91,155,162	2,473,535	91,366,896	1,373,272	0.34	1.03	8.81
OSV Partners	10 000 000	10 000 000	21 102	20.107.002	0	10.61	2.02	20.22
DSV Partners IV	10,000,000	10,000,000	31,493	39,196,082	0	10.61	3.92	30.22
Elevation Partners	75 000 000	60 252 756	2 115 500	107 404 021	050 500	11.42	1.60	10.12
Elevation Partners	75,000,000	69,252,756	3,115,598	107,494,921	858,588	11.43	1.60	10.12
ox Paine & Company Fox Paine Capital Fund II	50,000,000	46,299,626	16,623,387	77,327,771	11,953,212	10.47	2.03	15.00
GHJM Marathon Fund	50,000,000	40,277,020	10,023,367	11,321,111	11,755,212	17.47	2.03	13.00
GHJM Marathon Fund V	50,000,000	50,061,808	10,004,686	87,295,039	14,903	12.40	1.94	10.74
TrailHead Fund	20,000,000	10,014,187	9,425,183	6,955	9,985,813	-2.63		3.35
S Capital Partners	20,000,000	10,01.,101	2,122,132	0,700	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2.05	0.54	3.33
GS Capital Partners 2000	50,000,000	50,000,000	3,911,112	109,659,356	0	23.46	2.27	14.83
GS Capital Partners V	100,000,000	73,958,901	21,101,791	184,499,108	3,441,099	17.98		10.25
GS Capital Partners VI	100,000,000	78,568,201	34,413,226	79,013,911	23,614,436	5.94		8.41
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GTCR VI	90,000,000	90,000,000	2,243,686	77,813,800	0	-3.84	0.89	17.00
GTCR VII	131,250,000	130,265,615	280,226	306,551,141	984,385	21.83		15.40
GTCR IX	75,000,000	69,539,933	29,358,544	95,682,851	5,460,067	14.05	1.80	9.00
GTCR X	100,000,000	83,698,604	92,795,285	41,200,635	16,301,396	18.30	1.60	4.56
GTCR Fund XI	110,000,000	26,400,000	26,942,071	0	83,600,000	4.34	1.02	1.63
arbourVest**								
Dover Street VII Cayman Fund	2,198,112	2,055,612	1,622,559	469,249	142,500	2.07	1.02	0.50
HarbourVest Intl PE Partners V-Cayman US	3,515,686	3,248,278	2,737,147	551,949	267,408	1.36	1.01	0.50
Harbourvest Intl PE Partners VI-Cayman	4,225,955	2,705,072	2,918,093	189,192	1,520,883	16.10	1.15	0.50
HarbourVest Partners VIII Cayman Buyout	4,506,711	3,986,711	3,368,235	813,237	520,000	5.25	1.05	0.50

160,000,000	146,115,880	4,440,257	413,799,372	8,120,384	27.95	2.86	10.58
175,000,000	168,841,628	58,143,154	258,846,784	7,280,991			
50,000,000	36,812,482	34,012,096	11,659,656	13,187,518			
			1 - 2014 Mail alternative and alternative con-	1000 000 100 000 100			
180,821,098	108,018,091	89,254,998	7,279,701	72,803,007	-12.21	0.89	1.79
	The state of the s		11.000111111111111111111111111111111111		0.5000000000000000000000000000000000000	00.000	****
200,000,000	200,000,000	62,339,209	354,062,203	2.093.304	16.52	2.08	12.5
200,000,000	209,050,944						
and the second s		The state of the s				1.07	0
200,000,000	116,248,316	127,833,710	3,315,255	85.002.701	10.28	1.13	3.29
100,000,000	98,365,297	38,201,988	102,918,205	1.634.703	8.25	1.43	9.51

150,000,000				The state of the s			
		more proposition production		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	00102	1100	1.0.2
75,000,000	6,750,000	6,380,134	0	68.250.000	-8.10	0.95	0.20
unertiana idea-enico.		500000000000000000000000000000000000000	,	,,		01/2	
75,000,000	63,768,881	16,363,693	112.510.597	0	24 35	2.02	8.25
			THE CONTROL OF THE CO		THE PROPERTY.		
	, ,	, 0,20,,000	,,,,	23,000,000	1.01	0.70	1.77
176,985,198	87,720,919	76,644,461	49.418	89 264 278	-15 34	0.87	1.80
		10,011,101	12,110	07,201,270	13.54	0.07	1.00
1,070,259	720,259	679,715	65,625	350.000	3 59	1.03	0.50
1,384,080				OBSTRUCTURE.			
	, and an overland of the second			,	2,12,0	1.05	0.50
100,000,000	9,750,000	6,026,566	5.320.571	95,570,571	25.94	1.16	0.50
		The second section of the sect	3010 Day 00 4 200 DO				
75,000,000	8,846,036	6,775,975	0	66,153,964	-85.72	0.77	0.55
				101-55-#102-500#PCM(022			300.000.00
5,337,098	4,097,098	3,619,482	660,487	1,240,000	5.20	1.04	0.50
			S0100 #01001	5.000.000.000.000.000.000.000.000.000.0			62112012
178,242,282	102,448,835	92,409,171	2,229,773	75,793,447	-11.09	0.92	1.50
92,000,000	2,887,446	2,887,446	0	89,112,554	-81.12	1.00	1.12
				18 30			
7,603,265	7,603,265	487,621	6,094,262	0	-4.54	0.87	9.00
20,000,000	20,000,000	0	8,648,898	0	-8.29	0.43	16.44
7,700,000	7,753,673	1,230,143	7,096,835	0	1.18		11.70
100,000,000	89,948,995	42,760,562	123,694,014	11,771,953	11.02	1.85	11.00
100,000,000	85,856,680	75,023,040	81,628,126	15,442,553	17.79	1.82	8.25
100,000,000	24,848,467	38,534,878	92,857	All the second second second			
	05% 5%		89)		17/8/18/2		5000
50,000,000	47,072,725	34,407,144	3,961,529	2.927.275	-3.23	0.82	10.16
	named Committees and American	and the second	5 - Samuel 15 - 15 - 15 - 15 - 15 - 15 - 15 - 15				7.17
100 M	E. 7	Committee Tourist Tourism	,,,,,,,,,,	0,020,000	0.51	0.77	, ,
25,000,000	24,125,000	100.150	33,274,796	875 000	8 1 1	1.38	17.2
				ACT 10.000 (Management)			
		and the state of t					4.13
0 1,7 10,2 17	01,710,115	11,105,711	32,777,720	v	11.72	1.13	
35,000,000	33.915.000	580 556	34 128 882	1 085 000	0.27	1.02	16.86
and the second s				25-15/1/20/1/20/20/20/20			
							9.16
	,,,	20,220,201	1.1,500,017	. , 0,000	21.20	2.71	7.10
30,000.000	29,400,000	8,820,863	10.504 694	600 000	-8 15	0.66	12.63
		TANK AND TRANSPORT ASSESSMENT	construction of the construction				9.00
50,000,000	10,123,000	21,707,307	17,317,703	2,072,000	17.73	2.31	9.00
100 000 000	100 000 000	36.052.585	162 658 400	0	14.42	1 00	7.02
							5.19
200,000,000	180,000,000	203,676,300	23,448,433	20,000,000	7.66		1.97
	180,821,098 200,000,000 200,000,000 200,000,000 100,000,000 150,000,000 75,000,000 176,985,198 1,070,259 1,384,080 100,000,000 75,000,000 75,000,000 75,000,000 75,000,000 76,000,000 75,000,000 76,000,000 7,000,000 7,000,000 100,000,000 100,000,000	180,821,098 108,018,091 200,000,000 200,000,000 200,000,000 209,050,944 200,000,000 116,248,316 100,000,000 98,365,297 200,000,000 155,558,883 150,000,000 10,618,752 75,000,000 63,768,881 100,000,000 100,000,000 125,000,000 100,000,000 176,985,198 87,720,919 1,070,259 720,259 1,384,080 1,277,830 100,000,000 9,750,000 75,000,000 8,846,036 5,337,098 4,097,098 178,242,282 102,448,835 92,000,000 2,887,446 7,603,265 7,603,265 20,000,000 35,856,680 100,000,000 89,948,995 100,000,000 24,125,000 25,000,000 24,125,000 100,000,000 50,000,000 70,000,000 68,932,574 30,000,000 46,125,000 100,000,000 100,000,000 <td>180,821,098 108,018,091 89,254,998 200,000,000 200,000,000 62,339,209 200,000,000 209,050,944 147,430,667 200,000,000 116,248,316 127,833,710 100,000,000 98,365,297 38,201,988 200,000,000 155,558,883 117,419,097 150,000,000 10,618,752 16,933,193 75,000,000 63,768,881 16,363,693 100,000,000 100,000,000 84,230,647 125,000,000 100,000,000 96,387,800 176,985,198 87,720,919 76,644,461 1,070,259 720,259 679,715 1,384,080 1,277,830 1,263,729 100,000,000 9,750,000 6,026,566 75,000,000 8,846,036 6,775,975 5,337,098 4,097,098 3,619,482 178,242,282 102,448,835 92,409,171 92,000,000 2,887,446 2,887,446 7,603,265 7,603,265 487,621 20,000,000 35,856,680 75,023,040<</td> <td>180,821,098 108,018,091 89,254,998 7,279,701 200,000,000 200,000,000 62,339,209 354,062,203 200,000,000 209,050,944 147,430,667 181,707,228 200,000,000 116,248,316 127,833,710 3,315,255 100,000,000 98,365,297 38,201,988 102,918,205 200,000,000 155,558,883 117,419,097 112,289,588 150,000,000 10,618,752 16,933,193 26,185 75,000,000 6,750,000 6,380,134 0 75,000,000 63,768,881 16,363,693 112,510,597 100,000,000 100,000,000 84,230,647 43,997,107 125,000,000 100,000,000 96,387,800 0 176,985,198 87,720,919 76,644,461 49,418 1,070,259 720,259 679,715 65,625 1,384,080 1,277,830 1,263,729 130,625 100,000,000 9,750,000 6,026,566 5,320,571 75,000,000 4,097,098 3,619,482</td> <td>180,821,098 108,018,091 89,254,998 7,279,701 72,803,007 200,000,000 200,000,000 200,000,000 20,933,004 200,000,000 20,933,004 200,000,000 116,248,316 127,833,710 3,315,255 85,002,701 100,000,000 98,365,297 38,201,988 102,918,205 1,634,703 200,000,000 155,558,883 117,419,097 112,289,588 50,196,104 150,000,000 10,618,752 16,933,193 26,185 139,381,248 75,000,000 6,750,000 6,380,134 0 68,250,000 75,000,000 63,768,881 16,363,693 112,510,597 0 100,000,000 100,000,000 84,236,647 43,997,107 0 125,000,000 100,000,000 96,387,800 0 25,000,000 176,985,198 87,720,919 76,644,461 49,418 89,264,278 1,070,259 720,259 679,715 65,625 350,000 1,384,080 1,277,830 1,263,729 130,625 166,250 <td>180,821,098 108,018,091 89,254,998 7,279,701 72,803,007 -12.21 200,000,000 200,000,000 200,050,944 147,430,667 181,707,228 5,372,567 8.38 200,000,000 116,248,316 127,833,710 3,315,255 85,002,701 10.28 100,000,000 98,365,297 38,201,988 102,918,205 1,634,703 8.25 200,000,000 155,558,883 117,419,097 112,289,588 50,196,104 17.70 150,000,000 10,618,752 16,933,193 26,185 139,381,248 60.82 75,000,000 6,750,000 6,380,134 0 68,250,000 -8.10 75,000,000 63,768,881 16,363,693 112,510,597 0 24,35 100,000,000 100,000,000 84,230,647 43,997,107 0 7.50 176,985,198 87,720,919 76,644,461 49,418 89,264,278 -15,34 1,070,259 720,259 679,715 65,625 350,000 3.59 1,384,080 1,277,830</td><td>180,821,098 108,018,091 89,254,998 7,279,701 72,803,007 -12.21 0.89 200,000,000 200,000,000 62,339,209 354,062,203 2,093,304 16.52 2.08 200,000,000 209,050,944 147,430,667 181,707,228 5,372,567 8.38 1.57 200,000,000 116,248,316 127,833,710 3,315,255 85,002,701 10.28 1.13 110,000,000 98,365,297 38,201,988 102,918,205 1,634,703 8.25 1.48 150,000,000 10,618,752 16,933,193 26,185 139,381,248 60.82 1.60 75,000,000 6,750,000 6,380,134 0 68,250,000 8.10 0.95 75,000,000 63,768,881 16,33,693 112,510,597 0 24.35 2.02 100,000,000 100,000,000 84,230,647 43,997,107 0 7.50 1.28 125,000,000 100,000,000 96,387,800 0 25,000,000 3.59 1.33 1,384,080</td></td>	180,821,098 108,018,091 89,254,998 200,000,000 200,000,000 62,339,209 200,000,000 209,050,944 147,430,667 200,000,000 116,248,316 127,833,710 100,000,000 98,365,297 38,201,988 200,000,000 155,558,883 117,419,097 150,000,000 10,618,752 16,933,193 75,000,000 63,768,881 16,363,693 100,000,000 100,000,000 84,230,647 125,000,000 100,000,000 96,387,800 176,985,198 87,720,919 76,644,461 1,070,259 720,259 679,715 1,384,080 1,277,830 1,263,729 100,000,000 9,750,000 6,026,566 75,000,000 8,846,036 6,775,975 5,337,098 4,097,098 3,619,482 178,242,282 102,448,835 92,409,171 92,000,000 2,887,446 2,887,446 7,603,265 7,603,265 487,621 20,000,000 35,856,680 75,023,040<	180,821,098 108,018,091 89,254,998 7,279,701 200,000,000 200,000,000 62,339,209 354,062,203 200,000,000 209,050,944 147,430,667 181,707,228 200,000,000 116,248,316 127,833,710 3,315,255 100,000,000 98,365,297 38,201,988 102,918,205 200,000,000 155,558,883 117,419,097 112,289,588 150,000,000 10,618,752 16,933,193 26,185 75,000,000 6,750,000 6,380,134 0 75,000,000 63,768,881 16,363,693 112,510,597 100,000,000 100,000,000 84,230,647 43,997,107 125,000,000 100,000,000 96,387,800 0 176,985,198 87,720,919 76,644,461 49,418 1,070,259 720,259 679,715 65,625 1,384,080 1,277,830 1,263,729 130,625 100,000,000 9,750,000 6,026,566 5,320,571 75,000,000 4,097,098 3,619,482	180,821,098 108,018,091 89,254,998 7,279,701 72,803,007 200,000,000 200,000,000 200,000,000 20,933,004 200,000,000 20,933,004 200,000,000 116,248,316 127,833,710 3,315,255 85,002,701 100,000,000 98,365,297 38,201,988 102,918,205 1,634,703 200,000,000 155,558,883 117,419,097 112,289,588 50,196,104 150,000,000 10,618,752 16,933,193 26,185 139,381,248 75,000,000 6,750,000 6,380,134 0 68,250,000 75,000,000 63,768,881 16,363,693 112,510,597 0 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200,000,000 62,339,209 354,062,203 2,093,304 16.52 2.08 200,000,000 209,050,944 147,430,667 181,707,228 5,372,567 8.38 1.57 200,000,000 116,248,316 127,833,710 3,315,255 85,002,701 10.28 1.13 110,000,000 98,365,297 38,201,988 102,918,205 1,634,703 8.25 1.48 150,000,000 10,618,752 16,933,193 26,185 139,381,248 60.82 1.60 75,000,000 6,750,000 6,380,134 0 68,250,000 8.10 0.95 75,000,000 63,768,881 16,33,693 112,510,597 0 24.35 2.02 100,000,000 100,000,000 84,230,647 43,997,107 0 7.50 1.28 125,000,000 100,000,000 96,387,800 0 25,000,000 3.59 1.33 1,384,080</td>	180,821,098 108,018,091 89,254,998 7,279,701 72,803,007 -12.21 200,000,000 200,000,000 200,050,944 147,430,667 181,707,228 5,372,567 8.38 200,000,000 116,248,316 127,833,710 3,315,255 85,002,701 10.28 100,000,000 98,365,297 38,201,988 102,918,205 1,634,703 8.25 200,000,000 155,558,883 117,419,097 112,289,588 50,196,104 17.70 150,000,000 10,618,752 16,933,193 26,185 139,381,248 60.82 75,000,000 6,750,000 6,380,134 0 68,250,000 -8.10 75,000,000 63,768,881 16,363,693 112,510,597 0 24,35 100,000,000 100,000,000 84,230,647 43,997,107 0 7.50 176,985,198 87,720,919 76,644,461 49,418 89,264,278 -15,34 1,070,259 720,259 679,715 65,625 350,000 3.59 1,384,080 1,277,830	180,821,098 108,018,091 89,254,998 7,279,701 72,803,007 -12.21 0.89 200,000,000 200,000,000 62,339,209 354,062,203 2,093,304 16.52 2.08 200,000,000 209,050,944 147,430,667 181,707,228 5,372,567 8.38 1.57 200,000,000 116,248,316 127,833,710 3,315,255 85,002,701 10.28 1.13 110,000,000 98,365,297 38,201,988 102,918,205 1,634,703 8.25 1.48 150,000,000 10,618,752 16,933,193 26,185 139,381,248 60.82 1.60 75,000,000 6,750,000 6,380,134 0 68,250,000 8.10 0.95 75,000,000 63,768,881 16,33,693 112,510,597 0 24.35 2.02 100,000,000 100,000,000 84,230,647 43,997,107 0 7.50 1.28 125,000,000 100,000,000 96,387,800 0 25,000,000 3.59 1.33 1,384,080

- Alternative Investments -As of June 30, 2015

Investment	Total Commitment	Funded Commitment	MarketValue	Distributions	Unfunded Commitment	IRR %	MOIC*	Period Years
Vestar Capital Partners								
Vestar Capital Partners IV	55,000,000	53,635,969	1,945,823	101,106,569	737,136	14.69	1.92	15.54
Vestar Capital Partners V	75,000,000	74,758,943	59,898,364	27,848,093	241,057	2.71	1.17	9.53
Vestar Capital Partners VI	100,000,000	54,182,025	59,487,241	4,464,332	45,817,975	18.98	1.18	3.77
Warburg Pincus								
Warburg Pincus Equity Partners	100,000,000	100,000,000	3,976,704	158,591,853	0	9.97	1.63	17.01
Warburg Pincus Private Equity VIII	100,000,000	100,000,000	34,955,986	195,254,161	0	15.14	2.30	13.21
Warburg Pincus Private Equity IX	100,000,000	100,000,000	22,772,708	153,792,706	0	10.26	1.77	9.93
Warburg Pincus Private Equity X	150,000,000	150,000,000	112,249,062	105,271,416	0	8.58	1.45	7.68
Warburg Pincus Private Equity XI	200,000,000	132,200,000	149,080,939	17,274,600	67,800,000	18.03	1.26	2.52
Wayzata								
Wayzata Opportunities Fund	100,000,000	93,180,000	20,899,047	146,120,677	18,920,000	9.33	1.79	9.53
Wayzata Opportunities Fund II	150,000,000	57,450,000	48,168,644	154,667,344	30,000,000	16.78	3.53	7.69
Wayzata Opportunities Fund III	150,000,000	38,700,000	34,661,965	136,917	111,300,000	-9.34	0.90	3.04
Welsh, Carson, Anderson & Stowe								
Welsh, Carson, Anderson & Stowe VIII	100,000,000	100,000,000	133,893	128,668,552	0	3.12	1.29	16.94
Welsh, Carson, Anderson & Stowe IX	125,000,000	123,750,000	19,442,816	186,559,084	1,250,000	11.22	1.66	15.01
Welsh, Carson, Anderson & Stowe X	100,000,000	98,000,000	53,085,358	105,534,256	2,000,000	7.79	1.62	9.54
Welsh, Carson, Anderson & Stowe XI	100,000,000	94,595,432	80,513,130	57,792,187	5,404,568	13.56	1.46	6.94
Welsh, Carson, Anderson & Stowe XII	150,000,000	30,951,462	30,951,462	0	119,048,538	0.00	1.00	0.50
Private Equity Total	10,568,022,265	7,853,456,321	4,677,169,639	7,598,417,871	2,708,375,806		1.56	
Alternatives Total	17,586,257,093	12,620,611,325	7,346,306,576	12,343,932,652	4,996,922,631		1.56	

Notes: 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 are difficult.

^{*} MOIC: Multiple of Invested Capital

^{**} Partnership interests transferred to the MSBI during 1Q2015. All data presented as of the transfer date.

PRIVATE EQUITY MANAGER SUMMARY PROFILE

I. Background Data

Name of Fund:	Warburg Pincus Private Equity XII L.P.				
Type of Fund:	Private Equity Limited Partnership				
Total Fund Size:	\$12 Billion				
Fund Manager:	Warburg Pincus LLC				
Manager Contact:	James W. Wilson				
<u> </u>	450 Lexington Ave.				
	New York, NY 10017				
	212-878-6126				

II. Organization and Staff

Warburg Pincus was founded in 1966 and raised its first institutional fund in 1971, making it one of the oldest private equity firms in the world. The 1971 fund, EMW Ventures, was the first of 14 Warburg Pincus private equity funds which collectively represented \$57 billion in committed capital – eleven prior global funds, two international-only companion funds, and an energy-only companion fund. The also established a \$1.2 billion global real estate fund in 2006 that is fully invested.

Warburg Pincus was founded in New York and remains headquartered there, but has a global presence with seven additional offices around the world focused on investing activities: Beijing, Hong Kong, London, Mumbai, San Francisco, Sao Paulo, and Shanghai. The firm also has administrative offices in New York, Luxembourg, Amsterdam, and Mauritius. Warburg Pincus made its first investment outside the U.S. in Europe in 1983, and today approximately half the firm's 180 investment professionals are based outside the U.S. The firm's investment activities are coordinated by a 22-person Executive Management Group led by the firm's Co-Chief Executive Officers. The members of the EMG have an average tenure of 14 years with the firm and an average age of 51.

Warburg successfully completed a leadership succession in 2000. At the time, the current Co-Chief Executive Officers - Charles R. Kaye and Joseph P. Landy – assumed the leadership of the firm succeeding the founders, Lionel Pincus and John Vogelstein. Messrs. Kaye and Landy, who are currently 51 and 54 years old, respectively, had each been at the firm for nearly 15 years when the succession took place. When Mr. Kaye and Mr. Landy assumed their leadership positions, the firm's economics and governance were concentrated in the hands of the two founders, a structure typical of founder-led firms. Today both the ownership of the firm and the carried interest pool are spread very broadly and deeply across the firm. Over 150 professionals now participate in the firm's carried interest program.

III. Investment Strategy

The Firm's predominant focus is on growth investing. Over the years, Warburg Pincus has successfully invested in growth companies as well as companies at other stages of development, from building early-stage and start-up companies, to providing capital to meet the needs of existing businesses, to investing in later-stage buyout transactions and special situations, typically in circumstances in which growth is a key aspect of the investment thesis. The firm's early stage and growth investing is often thesis-driven, pursuing extensively researched themes and ideas. The firm also prefers to invest with accomplished management teams who are investing in the transactions alongside the firm. When situations arise, Warburg Pincus can leverage its experience lifting out single business units or intellectual property to form new stand-alone companies with the backing of a management team.

The firm expects the Partnership to have a diversified portfolio of approximately 60-90 portfolio companies, with an average equity commitment of approximately \$150 million. The firm has no pre-determined, fixed allocations to any industry sector or geographic area, and the mix of investments in any one fund will reflect with the firm views as the best opportunities on a risk-adjusted basis at that time.

As is the case with prior Warburg Pincus funds, Fund XII will focus on the firm's five core industry sectors:

- Energy,
- Financial Services,
- Healthcare & Consumer.
- Industrial & Business Services,
- Technology, Media & Telecommunications.

While the firm maintains the flexibility to invest across geographic regions, it anticipates that WP XII will be 50%-60% invested in North America, 10%-15% in Europe, and 20%-35% in Asia and other developing markets. Investments in countries outside of North America and Developed Europe will not make up more than 49% of aggregate capital commitments without Advisory Committee approval.

There are three significant themes, apart from specific industries or geographies, that have guided the firm's investment approach in the past and the firm believes will continue to be significant areas of focus in the foreseeable future:

• Innovation/Technology: Warburg Pincus believes the world is in the middle of a technology revolution that is picking up speed and will create significant investment opportunities for many years affecting most sectors of the economy. The firm's investments in technology are particularly focused on technology applications that enable companies and individuals to do things they could not do before or increase efficiency (often at a lower cost). Given increased competition and tighter margins across many industries, Warburg Pincus believes that technology will be one of the key methods for increasing productivity and

profitability for companies. Investing in innovation includes investing in businesses that meet an unmet need as well as integrating and applying existing technology to traditional businesses.

- Growth in Developing Markets: Over the last 20 years, markets such as China, India, Brazil and other developing areas have seen remarkable growth in GDP, the creation of middle class consumers, the rise of technology and communications usage and rapid urbanization. Warburg Pincus' investment focus in these markets has been particularly centered on consumer growth and spending trends (retail, healthcare, financial services, the Internet, and housing), global supply chain (including services businesses and technology-enabled businesses) and earlier-stage infrastructure (consistent with the firm's focus on growth investing). Investing in the entrepreneurs who are building growth companies to meet these demands is expected to be one of the firm's principal areas of focus for years to come. The firm continues to expand its presence in China, India, and other developing markets, including the opening of an office in Brazil in early 2010.
- Long-Term Growth in Energy Markets: This broad theme covers not only oil and gas production and its distribution and sale, but also, in some cases, energy services companies and mining. While oil and gas currently trade at lower levels, primarily in response to increased supply from unconventional basis in the U.S., in the long term, the firm sees fossil fuel dependence continuing as global demand for energy grows. Lower prices for oil and gas have created opportunities to invest capital in several attractive areas of energy markets. Warburg Pincus has been investing in energy companies across several commodity price cycles for more than 25 years, and expects to see significant opportunities in a wide variety of energy and resource companies for the foreseeable future.

While the firm's investments generally follow these themes, Warburg Pincus has – throughout its history – made selective opportunistic, even contrarian, investments. The firm expects that this will continue to be the case, particularly for the firm's Financial Services team which often pursues dislocations in the industry, as well as the Industrial and Business Services team and other areas of the firm that may also take advantage of market changes, episodic events and innovative investment structures. The recent drop in oil prices potentially creates an interesting opportunity for this type of investment for the firm's Energy team.

IV. Investment Performance

Performance as of March 31, 2015 for prior Warburg Pincus funds is shown below, including the SBI's investment where applicable.

Fund	Inception Date	Total Invested Capital	SBI Commitment	Net IRR from Inception *	Net MOIC from Inception*	Fund Status
EMW Ventures Inc.	1971	\$41 million	N/A	14.9%	3.3x	Realized
Warburg Pincus Associates	1980	\$101 million	N/A	19.0%	3.3x	Realized
Warburg Pincus Capital Partners	1983	\$341 million	N/A	14.6%	2.8x	Realized
Warburg Pincus Capital Company	1986	\$1.2 billion	N/A	18.4%	4.4x	Realized
Warburg Pincus Investors	1989	\$1.8 billion	N/A	14.8%	2.4x	Realized
Warburg Pincus Ventures	1994	\$2 billion	\$50 million	49.5%	5.2x	Realized
Warburg Pincus Equity Partners	1998	\$5 billion	\$100 million	10.2%	1.6x	Realized
Warburg Pincus VIII	2001	\$5.3 billion	\$100 million	15.1%	2.3x	Realized
Warburg Pincus IX	2005	\$8 billion	\$100 million	10.3%	1.8x	Liquidating
Warburg Pincus X	2007	\$15.1 billion	\$150 million	8.8%	1.5x	Liquidating
Warburg Pincus XI	2012	\$11.2 billion	\$200 million	20.7%	1.3x	Active

^{*} 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) are provided by Warburg Pincus.

V. General Partner's Investment

Warburg Pincus partners and professionals will commit to invest at least \$300 million in and in parallel with WP XII.

VI. Takedown Schedule

The General Partner will call capital to make investments or pay partnership expenses, and will provide ten business days' written notice to the Limited Partners. Partners will not be required to contribute more than one-third of the aggregate commitments in any one calendar year without the approval of the Advisory Committee.

VII. Fees

An annual management fee equal to 1.4% of total commitments will be paid quarterly in advance during the 6 year investment period, stepping down to 1.25% of the cost of remaining investments through year eight, and stepping down to 1.0% of cost thereafter.

VIII. Distributions

Realized profits will be distributed 80% to Limited Partners and 20% to the General Partner, subject to a requirement that the value of each partners' net capital account must exceed 125% of cost basis before any distributions are made.

IX. Key-Person Termination

A key person event will occur if any six of more of the senior managers (Charles R. Kaye, Joseph P. Landy, Mark M. Colodny, Timothy F. Geithner, Peter R. Kagan, David Hui Li, Vishal Mahadevia, Michael E. Martin, James C. Neary, Joseph C. Schull, or any substitutes or successors to the foregoing individuals approved by the Advisory Committee) fail to be actively involved in the affairs of the General Partner and to devote the substantial majority of their business time to matters relating the activity of the Partnership, the companion funds, and prior and subsequent Warburg Pincus funds.

Upon notice of a key person event the obligation of the Limited Partners to make capital contributions will be suspended. A majority in interest of the Limited Partners may vote to make the suspension permanent.

X. Investment Period and Term

The Investment Period will last for six years from the initial closing date of the Fund.

The Fund's term will be twelve years from the commencement date of the Partnership's activities, subject to an extension of up to two years with the approval of the Advisory Committee.

^{*} 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.

PRIVATE EQUITY MANAGER SUMMARY PROFILE

I. Background Data

Name of Fund:	Summit Partners Growth Equity Fund IX
Type of Fund:	Private Equity Limited Partnership
Total Fund Size:	\$3.0 billion
Fund Manager:	Summit Partners, L.P.
Manager Contact:	Courtney Z. McCarthy 222 Berkeley Street
	Boston, MA 02116
	(617) 824-1015

II. Organization and Staff

Summit Partners, L.P. (together with its affiliates, "Summit" or the "Firm") is sponsoring Summit Partners Growth Equity Fund IX-A, L.P. and Summit Partners Growth Equity Fund IX-B, L.P.* (collectively, "SP GE IX" or the "Partnership") to invest primarily in U.S. growth equity opportunities. Since inception, Summit's principal strategy has been to invest in privately held companies with a proven business model, a record of revenue and earnings growth, and a leadership team capable of sustaining that growth.

Founded in 1984, Summit has managed or is managing 18 limited partnership funds across the equity and fixed income spectrum. Twelve funds with a combined committed capital of approximately \$12.6 billion have been dedicated to growth equity and venture capital, and 6 funds with a combined committed capital of approximately \$3.4 billion have been dedicated to subordinated debt and credit. Summit is headquartered in Boston, MA with additional offices in Menlo Park, California and London, England.

SP GE IX will be led by a seven person Board of Managers, which consists of current and retired managing directors. They are responsible for the overall strategic direction of the Firm. Investment decisions are overseen by the CEO, Peter Y. Chung, and a four-person Investment Committee.

III. Investment Strategy

Summit's principal strategy is to provide capital for growth initiatives, expansion, and/or shareholder liquidity to well-established, category-leading private companies. At the time of Summit's investment, targeted companies are typically profitable, founder-led, and growing at a rate significantly in excess of their industry peers. Summit believes that entrepreneurs who achieve and maintain profitability have demonstrated a unique discipline to manage growth despite limited resources. Summit's approach mitigates downside risk by investing in senior or preferred equity and equity-related securities.

Approximately 94% of Summit's investments since inception have been in senior securities.

Summit believes there are six components that are key to its strategy:

- 1. Experienced and Stable Team: Summit's managing directors have more than 300 collective years of experience investing in growth equity and have been with Summit for an average of 14 years. A recent change to strengthen the leadership structure was the appointment of Summit's first Chief Executive Officer and Chief Operating Officer. Summit believes the appointments will create a more focused approach to management, allow for more efficient decision making, and will increase investment productivity.
- 2. Proactive Investment Origination: Summit proactively originates many of their investment opportunities by identifying and researching industries of interest and directly contacting the leading companies within those industries. Summit investment professionals develop relationships with executives, industry analysts, industry associations, and other primary sources to enhance their network of contacts in each target market. All qualitative and quantitative data is stored in a proprietary relationship intelligence platform which currently holds information on more than 230,000 companies worldwide, with more than 10,000 new companies added each year.
- 3. <u>Industry Focus and Diversification</u>: Summit focuses their investment efforts on three industries Technology, Healthcare, and Growth Products and Services. Summit's investment professionals are dedicated to one industry vertical which allows them to recognize emerging growth trends early and employ a thesis-driven approach to identifying and engaging the leading companies within these sectors.
- 4. <u>Early Liquidity</u>: By investing primarily in later-stage growth companies, Summit believes liquidity can be achieved much earlier than in more traditional early-stage venture capital investments.
- 5. <u>Capital Preservation</u>: Summit typically seeks to structure their investments with preferred equity and equity-related securities, accruing or current yields, "exit right" and put/redemption provisions, and selective use of leverage. This approach provides a measure of downside protection by ensuring Summit is contractually entitled to receive the first proceeds to the equity holders in times of financial stress.
- 6. Portfolio Company Resources: Summit's four portfolio company resource groups have become a key competitive differentiator in their origination and value creation efforts. The Peak Performance Group collaborates with management teams to identify and prioritize initiatives to improve operational efficiency, grow revenue, and strengthen infrastructure. The Capital Markets Team works with portfolio companies to structure capital market transactions that support growth initiatives. The Talent and Recruiting Team assists portfolio companies with critical hiring needs and human capital strategy. Lastly, the Executives-in-Residence and Executive Advisor Network partnerships offer

portfolio companies access to a group of experienced senior executives and entrepreneurs who can provide mentoring and strategic guidance.

In pursuing their objective of achieving long-term capital appreciation by investing in profitable, growth-oriented companies, Summit applies strict investment criteria. This criteria focuses on five areas: management, market, product or service, financial performance, and terms of investment. Summit believes the most important determinant of the success of an investment is the senior management team. Summit seeks companies with a strong CEO who is supported by a well-balanced team with complementary skills and relevant industry experience. When analyzing a market, Summit focuses on sectors with sufficient size and growth potential to enable portfolio companies to increase their revenues and profits substantially. Within these markets, Summit targets companies whose products or services are proprietary. Although the product or service need not incorporate revolutionary technology, the company should have a significant, sustainable competitive advantage and command above-average gross and operating margins for its industry. Specifically, Summit targets companies with strong unit-level economics and a demonstrated capacity to generate consistent cash flow to finance growth and to fund financial obligations. In structuring the terms of the investment, Summit seeks the assumption of lead investor role, a flexible approach to investment size, limited participation in "marked-up" second-round or third-round financings, use of creative financial structures, and prudent use of senior leverage.

IV. Investment Performance

Previous fund performance as of March 31, 2015 for investments in Funds I through VIII is shown below:

Fund	Inception Date	Total Invested Capital	SBI Commitment	Net IRR from Inception *	Net MOIC from Inception*	Fund
Summit Ventures Fund I	1984	\$86 million	\$10 million	13%	2.0x	Realized
Summit Ventures Fund II	1988	\$203 million	\$30 million	30%	2.6x	Realized
Summit Ventures Fund III	1992	\$231 million	0	63%	3.6x	Realized
Summit Ventures Fund IV	1995	\$542 million	0	101%	7.6x	Realized
Summit Ventures Fund V	1998	\$915 million	\$25 million	8%	1.4x	Liquidating
Summit Ventures Fund VI	2001	\$1.9 billion	0	15%	2.1x	Active
Summit Partners Private Equity Fund VII	2006	\$3.1 billion	0	11%	1.7x	Active
Summit Partners Growth Equity Fund VIII	2012	\$3.0 billion**	\$100 million	11%	1.1x	Investing

^{*} 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) are provided by Summit Partners.

V. General Partner's Investment

The General Partner, together with its affiliates, will commit a minimum of 4% of the Partnership's aggregate commitments, directly in, indirectly to, or alongside, the Partnership and its investments up to \$120 million. The General Partner, together with its affiliates may commit in excess of such amount at the discretion of the General Partner.

VI. Takedown Schedule

The general partner will draw down capital commitments from time to time as needed to fund investments and operations. The general partner will give at least 10 days' written notice prior to any drawdown of unfunded capital commitments.

^{**} In this instance, Total Invested Capital amount is Total Committed Capital.

VII. Fees

The Partnership will pay the General Partner an annual management fee, payable monthly in advance, equal to 1.00% of committed capital ("Commitments") to the Partnership in year one, 1.85% of the Commitments in year two, and 2.00% of such Commitments thereafter, declining 10% in each year commencing with the date of the earliest of (i) the first day of year seven; (ii) the first draw down of capital by a successor fund occurring on or after the fifth anniversary of the First Draw-Down Date; and (iii) the occurrence of certain events set forth in the Partnership Agreements.

These fees will be reduced by 100% of directors' fees, consulting fees, or any transaction fees paid by Partnership portfolio companies to the General Partner and its affiliates and attributable to the Partnership. The General Partner reserves the right to waive all or a portion of any installment of the management fee. Any waived portion of a management fee installment may be treated as a deemed capital contribution by the General Partner in respect of the General Partner's Commitment.

VIII. Distributions

Distributions of cash or liquid securities will be made at the discretion of the General Partner. Net cash proceeds available for distribution to the Partners, shall be preliminarily apportioned among the Partners participating in the applicable investment in proportion to their respective participation in funding such investment. The amount so apportioned to any Partner generally will be distributed in the following order of priority:

- a) first, 100% to such Partner until such Partner has received distributions equal to such Partner's funded Commitment attributable to realized investments and unrealized investments to the extent they are written off as of such time;
- b) second, 100% to such Partner until such Partner has received distributions equal to such Partner's funded Commitment attributable to all organizational expenses, management fees and other expenses paid to date and allocated to realized investments and unrealized investments to the extent they are written off as of such time; and
- c) thereafter, 20% to the General Partner as carried interest and 80% to such Partner.

Regarding paragraph (c), with respect to any distribution of carried interest, the General Partner will only be entitled to receive its 20% carried interest to the extent that one of two conditions have been satisfied, (i) a 125% fair value test or (ii) a payout test in which such Partner has received distributions equal to its aggregate capital contributions in respect of investments.

IX. Investment Period and Term

The term of the Partnership is ten years commencing with the first draw-down date. There are options to extend for two additional periods each consisting of two years, each with the consent of the General Partner and two-thirds in interest of the Limited Partners. The Partnership's term is subject to early termination upon certain circumstances as set forth in the Partnership Agreements, including upon the requisite vote of the Limited Partners to terminate the Partnership for any reason.

- * Summit Partners is forming Fund IX-A and Fund IX-B for tax-related purposes. LPs that are UBTI-sensitive (unrelated business taxable income) or ECI-sensitive (effectively connected income) will be permitted to invest in Fund IX-B, which intends to make all such investments that would otherwise generate UBTI and ECI through blocker corporations or similar structures designed to prevent these LPs from recognizing UBTI or ECI.
- ** 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.

YIELD-ORIENTED MANAGER SUMMARY PROFILE

I. Background Data

Name of Fund:	Audax Mezzanine Fund IV L.P.
Type of Fund:	Yield-Oriented Limited Partnership
Total Fund Size:	\$1 billion
Fund Manager:	Audax Management Company, LLC
Manager Contact:	Edgar (Garz) W. Soule
	101 Huntington Ave.
	Boston, MA 02199
	(617) 859-1518

II. Organization and Staff

Audax Management Company (NY), LLC ("Audax" or the "Firm") is forming Audax Mezzanine Fund IV L.P. (the "Fund" or "Fund IV") with a goal of providing investors with attractive rates of return by investing primarily in a diversified portfolio of mezzanine securities, with a specific focus on middle market companies in the U.S.

Audax Mezzanine is part of Audax Group. Audax Group is an alternative asset management firm with 80 investment professionals across its three businesses. In addition to the mezzanine business, Audax has a private equity business ("Audax Private Equity") and a senior secured debt business ("Audax Senior Debt"). Founded in 1999 by Co-Chief Executive Officers, Geoffrey S. Rehnert and Marc B. Wolpow, Audax Group has raised over \$9 billion of capital to focus on middle market investing across its mezzanine debt, private equity and senior debt businesses. As they have for prior funds, Kevin P. Magid and U. Peter Gummeson will oversee the day-to-day investment activities of Fund IV, leading a team of 17 mezzanine investment professionals. Messrs. Magid and Gummeson, who have led Audax Mezzanine since inception, provide Audax Mezzanine with mezzanine and leveraged finance experience spanning over three decades; together they have invested or underwritten financings through numerous economic and capital markets cycles. The team's three other Managing Directors average greater than a decade of tenure at Audax Mezzanine. In addition, the Principals and Vice Presidents on the mezzanine team average nine years at the firm.

Since 2000, the senior principals of Audax Mezzanine have invested over \$2.0 billion in 84 companies in transactions with an aggregate value in excess of \$16 billion.

III. Investment Strategy

The Audax Mezzanine team plans to execute the same middle market investment strategy in Fund IV as it has across prior funds. The team will utilize a broad deal sourcing network to maximize deal flow from multiple sources and will perform credit analysis and due diligence, with a focus on principal preservation, on all relevant investment opportunities.

Audax believes the middle market provides opportunities to generate risk-adjusted returns in mezzanine investing. Fund IV will seek to capitalize on market inefficiencies resulting from U.S. middle market companies having a more limited set of financing options than larger companies. Audax will seek to source investment opportunities directly from middle market private equity firms that favor cultivating long-term financing relationships and "club-oriented" financings. The Firm's strategy is to directly negotiate the terms of the securities with the borrower and to avoid the terms and expected returns generally associated with comparatively larger corporate high yield and broadly-syndicated second lien markets. The Fund will target investments in companies with \$10 million to \$40 million of EBITDA.

The Firm's deal flow is generated through a combination of direct marketing efforts to middle market private equity sponsors and long-standing relationships with numerous deal intermediaries. As a result of marketing efforts, more than 90% of the Firm's current deal flow is sourced directly from private equity sponsors. Over the last 15 years, Audax Mezzanine has sourced multiple deals from 295 private equity sponsors, including four or more deals from 167 distinct sponsors. Audax Mezzanine does not provide mezzanine financing for Audax Private Equity transactions. Conversely, Audax Mezzanine and Audax Senior Debt have invested in the same company on 25 occasions since 2007. Each of these investments was originated by Audax Mezzanine investment professionals.

Once a potential investment is sourced, Audax conducts analytical due diligence prior to seeking Investment Committee approval. The Firm's investment professionals make an in-depth assessment of a company's management team, corporate strategy, and product lines or services offered. Audax also assesses the competitive dynamics within a potential issuer's industry, paying attention to the specific market growth dynamics of each company. The Firm uses these analyses to assess the growth strategy and financial projections of a company, which ultimately form the basis for numerous financial models designed to evaluate an issuer's overall creditworthiness and potential to deliver the desired investment return.

A critical element of the Firm's investment strategy is to perform thorough credit analysis on all investment opportunities. The fundamental goal underlying the credit analysis is the preservation of invested capital. As such, Audax will seek to invest Fund IV in companies that are able to demonstrate the following credit-oriented characteristics:

- Leading market position
- Attractive financial profile
- Diversified business model
- Avoid highly cyclical industries
- Proven and experienced management team
- Strong private equity sponsor/management team with significant stake in company
- Appropriate capitalization

A core tenet of Audax Mezzanine's strategy is to participate in the equity ownership of each investment for which the Firm is providing junior debt financing. Audax believes this allows them to create upside potential for their investors and better align interests with their private equity partners. Since inception, Audax Mezzanine has purchased equity securities in connection with its mezzanine debt securities in 83 of their 84 investments. Audax will seek to invest up to 20% of committed capital of Fund IV in equity securities. Equity investments are typically made on the same economic terms as the majority shareholder and structured to contractually benefit from most or all of the following: board observation rights, ability to advise and consult with management, financial information rights, tagalong rights on equity sales by the controlling shareholder, preemptive rights on new equity issuances, and equity registration rights.

Audax generally seeks to be the sole or lead mezzanine financing source in each transaction. Since inception, Audax has been the sole or lead investor in transactions representing 82% of invested capital.

IV. Investment Performance

Previous fund performance as of March 31, 2015 including subsequent investment activity through July 30, 2015, for investments in Funds I through III is shown below:

Fund	Inception Date	Total Invested Capital	SBI Commitment	Net IRR from Inception *	Net MOIC from Inception*	Fund Status
Audax I	2002	\$440 million	N/A	11.4%	1.4x	Liquidating
Audax II	2006	\$695 million	N/A	8.3%	1.3x	Liquidating
Audax III	2011	\$860 million	\$100 million	8.3%	1.2x	Investing

^{*} 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) are provided by Audax.

V. General Partner's Investment

The general partner will make commitments to Fund IV investments in an amount equal to at least 2% of aggregate capital commitments.

VI. Takedown Schedule

The general partner will draw down capital commitments from time to time as needed to fund investments and operations (including partnership expenses, organizational expenses and management fees). The general partner will give at least 10 days' written notice prior to any drawdown of unfunded capital commitments.

VII. Fees

Management fees will be payable quarterly in advance based on the following:

- a. During the investment period, 1.50% per annum charged on capital commitments.
- b. Thereafter, 1.0% of capital invested and not returned or written off.

VIII. Distributions

Distributions will be made in the following order and priority:

First, 100% to the limited partner until it has received distributions equal to its capital contributions.

Second, 100% to the limited partner until it has received an 8% preferred return on capital contributions.

Third, 100% to the general partner until it has received 20% of the sum of the amount distributed to the limited partner.

Thereafter, 80% to the limited partner and 20% to the general partner.

IX. Key-Person Termination

In the event that, at any time prior to such time as the general partner shall be permitted to form or manage a subsequent investment vehicle, two out of four of Geoffrey S. Rehnert, Marc B. Wolpow, Kevin P. Magid and U. Peter C. Gummeson cease to, in the case of Mr. Magid and Mr. Gummeson, devote substantially all of his business time and attention to the partnership, and in the case of Mr. Rehnert and Mr. Wolpow, maintain active involvement in all investment decisions of the Fund, the general partner shall not be permitted to call capital commitments to the Fund or make additional investments without consent from the LP advisory board. Additional information regarding termination or suspension of the Fund is available in the Agreement of Limited Partnership.

X. Investment Period and Term

The investment period for Fund IV will be the earlier of (i) five years from final closing and (ii) the date Audax Mezzanine receives management fees from a successor fund. The fund term is ten years from the final closing date of the Fund, but may be extended for an additional one-year period at the discretion of the general partner, and following such one-year extension, for an additional one-year period with the approval of the LP advisory board, and following such two one-year extensions, for one additional one-year period with the approval of the limited partners holding a majority of the aggregate commitments of Fund IV limited partners.

^{*} 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.

PRIVATE EQUITY MANAGER SUMMARY PROFILE

I. Background Data

Name of Fund:	Brookfield Capital Partners IV	
Type of Fund:	Private Equity Limited Partnership	
Total Fund Size:	\$3.5 billion	
Fund Manager:	Brookfield Asset Management	
Manager Contact:	Merope Pentogenis 250 Vesey Street, 15th Floor New York, New York 10281 (212) 978-1629	

II. Organization and Staff

Brookfield Asset Management Inc. (together with its affiliates, "the Firm" or "Brookfield") is forming Brookfield Capital Partners IV ("BCP IV" or the "Fund") to pursue value investments focused on opportunistic buyouts, platform opportunities, and underperforming businesses. The Fund will benefit from Brookfield's real asset and related operating platforms, leveraging Brookfield's deep operating experience to enhance transaction sourcing, execution, and add value post-acquisition.

Brookfield Asset Management has a 100 year history as a global operator and leading asset manager of high quality real asset and related businesses. Brookfield believes the global reach and extensive expertise inherent in the platforms provides a significant competitive advantage in transaction sourcing and deal execution. Brookfield's collaborative approach to investing helps facilitate this knowledge sharing.

Over the past 15 years, Brookfield has transitioned its business into an asset management model, establishing platforms for each of private equity, property, infrastructure, timberlands and agriculture. The Firm has approximately 700 investment professionals and 28,000 operating employees in over 100 offices and operating locations globally. The Private Equity Group is led by co-heads Cyrus Madon and Joe Freedman, with support from Senior Managing Partners Barry Blattman and Jon Haick (together, the "Leadership Team"), and over 40 investment professionals, 25% of which has operations experience. The Leadership Team has an average of 23 years of investment experience and have worked together at Brookfield for an average of 13 years.

III. Investment Strategy

Brookfield believes that its approach to private equity investing provides a powerful combination of being able to source attractive investment opportunities through market cycles and add value to portfolio companies post acquisition. In particular, Brookfield

believes the following attributes differentiate it from its peers and have enabled it to achieve superior risk-adjusted returns over a long period of time, as demonstrated by its investment track record.

Leveraging Brookfield's Industry Knowledge and Real Asset and Related Operating Platforms to Generate Deal Flow

Brookfield has deep industry knowledge and significant operating expertise within its Private Equity Group, and benefits from the firm's 100 year history as a global operator and leading asset manager of high quality real asset and related business. Core industry expertise includes real asset related sectors such as energy, metals & mining, forest products, building products, construction & engineering, packaging & specialty paper, industrials, manufacturing, and financial and business services, where information flow and expertise within Brookfield's operating platforms provide insight. Brookfield believes the global reach and extensive expertise inherent in the platforms provides a significant competitive advantage in transaction sourcing and deal execution. Brookfield's collaborative approach to investing helps facilitate this knowledge sharing.

• Operations-Oriented Approach

Brookfield is an active, hands-on investor, working closely with the management teams at its portfolio companies to build value through operational turnaround or improvement, rather than relying on excessive leverage.

Brookfield seeks to ensure each of its portfolio companies has a clear, concise business strategy built on its competitive advantages. Brookfield's investment thesis is typically premised on developing simple business plans focused on profitability and ensuring that portfolio companies operate with sustainable operating margins and cash flows. Where applicable, Brookfield seeks to create value by surfacing the value of hidden assets and executing accretive, add-on acquisitions.

Brookfield's operations-oriented approach leverages the expertise of its dedicated operations professionals to supplement management teams of portfolio companies, or to take on management roles in its businesses as required. Post-investment in a portfolio company, Brookfield analyzes the business to eliminate low margin activities, and ensure the right people and systems are in place to implement the business strategy. Brookfield's approach to operations emphasizes managing the business for cash, having discipline on capital investment and a safety first culture.

Nimble, Contrarian Approach Focused on Risk/Reward in all Economic Cycles

Brookfield often approaches investing from a contrarian view, targeting out-of-favor sectors where value opportunities are more frequently available. Brookfield recognizes that superior returns often require contrarian thinking and in any given point in the economic cycle, certain sectors will provide the greatest investment opportunities. Brookfield's private equity funds have the ability to invest up and down the balance

sheet opportunistically, in order to provide tailored solutions and establish an investment entry point that provides the optimal risk/reward. In combination with the firm's restructuring expertise and operational turnaround capability, this has enabled Brookfield to execute investment with highly asymmetrical risk/reward profiles during periods of capital markets dislocation or when financing markets are closed to a sector or particular business.

• Pursuit of Multi-Faceted Transactions to Acquire for Value

Brookfield believes the best value opportunities often reside in complex situations that many investors do not have the ability or willingness to pursue. By pursuing multifaceted transactions that are operationally or financially complex, competition tends to be limited, typically resulting in more transaction certainty and better entry pricing. Brookfield's history of completing multi-faceted transactions is a differentiator in the private equity space and often leads to proprietary deals where Brookfield is able to leverage its distressed investing and restructuring expertise.

• Long Tenured Team Integrated into the Brookfield Platform

The Firm is led by Brookfield CEO Bruce Flatt and a global team of 18 Senior Managing Partners who have worked together at Brookfield for an average of 18 years, including four Senior Managing Partners whose principal responsibilities are related to the activities of the Private Equity Group (the aforementioned Leadership Team).

The Leadership Team is supplemented by experienced investment professionals, comprised of over 40 executives with a complementary set of operational, financial and legal skills, stemming from their varied professional backgrounds. In addition, regional investment teams are a local presence, providing valuable insight into deal flow, market knowledge and culture through established relationships with industry professionals and business owners.

The Fund will also benefit from the extensive resources of the Firm for transaction and operational support. The private equity investment team is able to leverage resources when needed for due diligence, transaction execution and asset management in specialty areas such as finance, capital markets, tax, legal, human resources, information technology, risk management and compliance.

Significant Alignment of Interest Focused on Downside Protection and Capital Preservation

Brookfield's significant commitment to the Fund (\$1 billion of the proposed \$3.5 billion for BCP IV) provides alignment of interest between the Fund's investors, Brookfield, and the Private Equity Group. Brookfield's investment approach focuses on downside protection by investing in companies with underlying tangible assets in real asset and related sectors or industries where Brookfield believes it has an informational advantage. Brookfield's "no investment gets left behind" philosophy is demonstrated in its history of managing assets through difficult market conditions.

IV. Investment Performance

Data as of March 31, 2015

Fund	Inception Date	Total Capital Raised	Net IRR from Inception *	Net MOIC from Inception*	Fund Status
BCP I	2001	C\$416 million	24.5%	1.9x	Realized
BCP II	2006	C\$1 billion	15.9%	2.0x	Active
Credit Crisis Consortium Investments**	2009	US\$5.9 billion	34.5% (gross)	2.4x (gross)	Realized
BCP III	2011	US\$1 billion	13.5%	1.2x	Active

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

V. General Partner's Investment

Brookfield, as principal investor, is committing at least \$1.0 billion of the proposed \$3.5 billion for BCP IV, creating a significant alignment of interests with the Fund's investors.

VI. Takedown Schedule

Commitments will be drawn down as needed during the Commitment Period, generally with no less than 10 business days' prior written notice. The Commitment Period may be terminated (a) at any time after the first anniversary of the Final Closing by 80% in interest of the Limited Partners (excluding Brookfield), which termination will be effective upon the General Partner's receipt of written notice of such decision of the Limited Partners or (b) in connection with a Key Person Event.

VII. Fees

During the Commitment Period, 1.675% per annum of aggregate capital commitments; thereafter 1.425% per annum of invested capital. Fees are calculated in respect of each Limited Partner and payable quarterly in advance. Fees will begin to accrue from the date of the Initial Closing until the completion of the liquidation of the Fund. 100% of the Fund's share of transaction fees, monitoring fees, directors' fees, or break-up fees will be applied, net of the Fund's allocable share of applicable expenses, to reduce the Management Fee for the immediately succeeding fiscal year.

^{**} CCCI includes all investments made between 2009 and 2011 where members of the Brookfield private equity team were significantly involved in sourcing, evaluating or executing such investments.. Some of the CCCI were not made through fund structures or other structures in which any fund expenses, management fees (or equivalent fees) or carried interest were applicable, and therefore, a net IRR and net multiple are not available to reflect such reductions (the above CCCI figures are gross).

VIII. Distributions

Proceeds attributable to the disposition of an investment will be distributed as follows:

- 1) first, 100% will be distributed to such Limited Partner until such Limited Partner has received, on a cumulative basis, taking into account all prior distributions made pursuant to this clause 1, an aggregate amount equal to:
 - a) its capital contributions allocable to the investment giving rise to the distribution;
 - its capital contributions allocable to the Fund's other investments that have previously been disposed of or written-off, in whole or in part, at the time of such distribution;
 - c) its capital contributions made in respect of Fund Expenses at any time, that are not directly attributable to any particular Fund investment;
- 2) second, 100% will be distributed to such Limited Partner until such Limited Partner has received, on a cumulative basis, taking into account all prior distributions, an 8% cumulative internal rate of return in respect of amounts included in sub-clauses 1(a) through (c) above;
- 3) third, 100% will be distributed to the General Partner, until such time as the General Partner has received cumulative payments pursuant to this clause 3 equal to 20% of the sum of distributions made pursuant to clause 2 above and pursuant to this clause 3 in respect of such Limited Partner; and
- 4) thereafter, 80% will be distributed to such Limited Partner and 20% will be distributed to the General Partner.

IX. Key-Person Termination

As used herein, a "Key Person Event" means there ceases to be, during the Commitment Period, at least six (6) Principals whose principal responsibilities are related to the activities of the Brookfield group responsible for managing private equity investments, including the Fund (and its predecessor or successor funds), all Alternative Investment Vehicles (as defined below), all Holding Vehicles (as defined below), and each of their respective investments (collectively, the "Private Equity Group") including at least one (1) Senior Managing Partner of Brookfield Asset Management Inc. whose primary responsibility is overseeing and managing the activities of the Private Equity Group.

As used herein, the Principals are Barry Blattman, Joseph Freedman, Peter Gordon, John Haick, Cyrus Madon, Pierre McNeil, David Nowak, Jim Reid, Mark Weinberg, and any other senior officers of Brookfield who are designated as Principals by the General Partner and approved as such by the LP Advisory Committee.

X. Investment Period and Term

The Commitment Period for the Fund will terminate four (4) years from the Final Closing.

The Fund will terminate ten (10) years from the Initial Closing, subject to up to two (2) additional one-year extensions by the General Partner with the consent of the LP Advisory Committee.

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

PRIVATE EQUITY MANAGER SUMMARY PROFILE

I. Background Data

Name of Fund:	Thomas H. Lee Equity Fund VII, L.P.
Type of Fund:	Private Equity Limited Partnership
Total Fund Size:	\$3.0 billion
Fund Manager:	Thomas H. Lee Partners, L.P.
Manager Contact:	Beverly Berman 100 Federal Street
	Boston, MA 02110 (617) 946-2618

II. Organization and Staff

Thomas H. Lee Partners, L.P. ("THL" or the "Firm") is sponsoring Thomas H. Lee Equity Fund VII, L.P. (the "Fund" and, together with its parallel funds, "Fund VII"), a private investment fund that will acquire growth-oriented businesses, headquartered primarily in North America, in three core sectors: Business & Financial Services, Consumer & Healthcare, and Media & Information Services. THL intends to partner with portfolio company management to identify and implement organizational, operational, and strategic improvements and to accelerate sustainable revenue and profit growth, both organically and through acquisitions.

THL was founded in 1974 by Thomas Lee and is located in Boston, MA. Co-Presidents Tony DiNovi and Scott Sperling have led the firm since 2004 and each have been with THL for over 20 years.

Fund VII will be led by Tony DiNovi and Scott Sperling and an Investment Committee comprised of Co-Presidents DiNovi and Sperling, Tom Hagerty, and two managing directors on a rotating basis for each potential transaction.

III. Investment Strategy

Thomas H. Lee Partners has been investing in growth companies since 1974. Over the span of their six funds, the Firm has raised \$20 billion, invested in over 130 portfolio companies, and made more than 350 follow-on acquisitions.

THL is raising Fund VII to invest in middle-market growth companies headquartered in North America. The Firm combines a top-down approach to identify attractive secular growth themes with a bottoms-up approach to develop targeted opportunities in three sectors of focus: Business & Financial Services, Consumer & Healthcare, and Media &

Information Services. THL believes the following four areas aid the Firm in identifying opportunities:

- A deep domain knowledge in the three sectors of focus;
- A well-established network of industry executives and corporate relationships;
- Operating capabilities to identify and develop opportunities for growth and operational improvement; and
- A well-known brand and franchise.

The main driver of value within THL portfolio companies is operational improvement. THL deal team and Strategic Resource Group ("SRG") members seek to build value by ensuring the company's "four pillars" are structurally sound:

- Organizational Design: THL seeks to build industry-leading management teams, aims
 to improve the decision-making process at all levels, and looks to instill a culture of
 continuous improvement.
- 2. Operational Transformation: THL seeks to partner with portfolio company management to re-engineer key business processes to improve efficiency and to implant a return on invested capital discipline.
- 3. <u>Growth Acceleration</u>: THL seeks to drive organic revenue through pricing strategies, sales force effectiveness, and portfolio expansion, including new products, new markets, new geographies, and new channels of distribution.
- 4. <u>Strategic Repositioning</u>: THL seeks to build scale to enhance the strategic positioning and competitiveness of each company.

The Strategic Resource Group was formed in 2006 to provide THL deal teams and portfolio company management with another resource as they seek to accelerate revenue growth and achieve operating objectives. The SRG team currently has ten people, with expertise in both operating and consulting aspects of business. Typically, a SRG member will become involved in a portfolio company in the due diligence phase and will remain integrated until realization.

In addition to investing in portfolio companies in which THL seeks to improve the operational capabilities, the Firm also pursues more complex situations. Examples include corporate carve-outs, a company in need of significant capital structure improvements, or a company in a more fragmented industry sub-sector. For each investment opportunity, whether it's complex or more mainstream, THL seeks a proprietary angle to drive performance. Examples may include:

• Unique insights into a company and/or industry;

- An operating advantage or differentiated perspectives on what could be accomplished;
- A relationship advantage, typically either with a corporate partner or management team; or
- A timing advantage provided by developing target opportunities on a proactive basis.

THL employs a multi-stage investment process when vetting potential investments. Initially, a transaction team of typically four to seven investment and SRG professionals conducts a deep dive on the company and develops THL's angle on business improvement. This analysis and plan is critiqued by all THL professionals. Next, Managing Directors and the Investment Committee discuss key issues and opportunities, discuss portfolio construction, refine the investment thesis and THL angle, evaluate sensitivities, and finalize the investment range. If the investment proceeds past this stage, the Investment Committee will decide the bid strategy, arrive at a consensus final decision, and discuss portfolio construction again. Each quarter, deal teams produce a report on every portfolio company which measures its performance relative to budget, prior year, and the value creation plan. The THL portfolio management committee also conducts a more structured and detailed review semi-annually on each portfolio company. This committee is also tasked with evaluating the timing and potential method of realizations. A portfolio company's business prospects, the prevailing economic and capital market environments, combined with perspectives from the portfolio company management team, are important factors in the realization process.

IV. Investment Performance

Previous fund performance as of June 30, 2015 for investments in Funds I through VI is shown below:

Fund	Inception Date	Total Invested Capital	Net IRR from Inception *	Net MOIC from Inception*	Fund Status
Fund I	1984	\$42 million	50%	2.6x	Realized
Fund II	1989	\$435 million	54%	3.4x	Realized
Fund III	1995	\$965 million	32%	1.9x	Realized
Fund IV	1998	\$3.0 billion	(3%)	0.9x	Realized
Fund V	2000	\$5.9 billion	14%	1.7x	Liquidating
Fund VI	2006	\$7.6 billion	9%	1.6x	Active

^{*} 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) are provided by Thomas H. Lee.

V. General Partner's Investment

THL principals will commit to invest \$100 million (approximately 3.3% of target capital commitments) on a pro rata basis with the Limited Partners of Fund VII.

VI. Takedown Schedule

The general partner will draw down capital commitments from time to time as needed to fund investments and operations (including partnership expenses, organizational expenses, and management fees). The general partner will give at least 10 days written notice prior to any drawdown of unfunded capital commitments.

VII. Fees

Management fees will be payable semi-annually in advance based on the following:

- a. During the commitment period, 1.50% per annum charged on capital commitments.
- b. During the Follow-On Commitment Period, 1.0% per annum of the sum of the Remaining Capital Base plus amounts available for follow-on investments.
- c. After the Follow-On Commitment Period, 1.0% per annum of the Remaining Capital base; provided, however, that the annual Management Fee will equal 1.0% of the Remaining Capital Base for all periods (whether before or after the Commitment Period) during which management fees are payable to the Manager or any affiliate of the Manager by a successor fund with committed capital (including capital committed to any parallel investment vehicles) equal to or greater than the aggregate amount of capital committed to the Fund and the Parallel Funds.
- d. Management fees will be payable during any extension of the Fund's initial term, as provided below under "Investment Period and Term," in accordance with an annual budget.

Management fees will be reduced by 100% in the case of all limited partners of the Partnership's share of "Offset Fees", which are fees that THL charges portfolio companies (directors fees, investment banking fees, transaction fees, break-up fees, etc.), but, ultimately, reimburses Limited Partners.

VIII. Distributions

The Fund has two classes of Limited Partnership interests: Class A Limited Partnership interests ("Class A Interests") and Class B Limited Partnership interests ("Class B Interests"). Class A Interests and Class B Interests are subject to different terms with regards to the distribution of profits and the preferred rate of return.

Class A Interests are a modified American-style waterfall with distributions to be made in the following order and priority:

- First, 100% to the Limited Partner until the cumulative distributions received by the Limited Partner equals the sum of its capital contributions with respect to (i) each realized portfolio investment and the amount of net write-downs among all other Portfolio Investments; and (ii) expenses of the Fund, including the Management Fee, allocated to each Realized Portfolio Investment and such net write-downs;
- Second, 100% to the Limited Partner until the cumulative distributions received by the
 Limited Partner equal a preferred return of 8% per annum, compounded annually, on
 the sum of its capital contributions to the Fund with respect to (i) each Realized
 Portfolio Investment and the amount of net write-downs among all other Portfolio
 Investments, and (ii) expenses of the Fund, including the Management Fee, allocated
 to each Realized Portfolio Investment and such net write-downs;
- Third, 100% to the General Partner until the general partner has received its 20% carried interest; and
- Thereafter, 80% to the Limited Partner and 20% to the General Partner.

Class B Interests are a European-style waterfall with distributions to be made in the following order and priority:

- First, 100% to the Limited Partner until the cumulative distributions received by the Limited Partner equals the sum of its aggregate capital contributions to the Fund utilized to fund Portfolio Investments and expenses of the Fund, including the Management Fee;
- Second, 100% to the Limited Partner until the cumulative distributions received by the Limited Partner equal a preferred return of 5% per annum, compounded annually, on the amount of its aggregate capital contributions to the Fund utilized to fund Portfolio Investments and to pay the expenses of the Fund, including the Management Fee;
- Third, 100% to the General Partner until the cumulative distributions to the General Partner equal 20% of the total cumulative distributions; and
- Thereafter, 80% to the Limited Partner and 20% to the General Partner.

IX. Key-Person Termination

In the event that certain individuals associated with the Manager and the General Partner cease to be associated with the Manager or ceases to own certain interests in the General Partner or the Manager, as described in the Partnership Agreement, the General Partner shall provide prompt written notice to the Limited Partners that a "Key Person Event" has occurred. During the 180-day period following the giving of such notice, such Key Person

Event may be cured with the approval of the Advisory Committee, including, for example, by the appointment of one or more replacement persons.

Specifically, a key person event occurs when (a) fewer than seven of the Principals are devoting substantially all of their business time to the Partnership, (b) all Senior Principals cease to be devoting substantially all of their business time to the Partnership, or (c) a majority of the economic interests of the General Partner and the Manager ceases to be held or controlled directly or indirectly by Persons who at the time of the Final Closing are Active Partners and Persons who later become Active Partners.

X. Investment Period and Term

The term of the Fund will end on the tenth anniversary of the Final Closing. However, the term of the Fund may be extended by the General Partner with the consent of the Advisory Committee, for up to three additional one-year periods in order to facilitate the orderly disposition of Fund investments. The Fund is also subject to earlier termination pursuant to the terms of the Partnership Agreement.

^{*} 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.

PRIVATE EQUITY MANAGER SUMMARY PROFILE

I. Background Data

Name of Fund:	TPG Partners VII L.P.			
Type of Fund:	Private Equity Limited Partnership			
Total Fund Size:	\$8-10 billion			
Fund Manager:	TPG Capital Advisors, LLC			
Manager Contact:	Jennifer Morais			
	67 Mowat Avenue, Suite 431			
	Toronto, Ontario			
	M6K 3E3			
	Canada			
	(817) 869-8279			

II. Organization and Staff

TPG (the "Firm") is one of the largest global alternative investment firms in the world, with total assets under management of over \$75 billion as of March 31, 2015. David Bonderman and James Coulter started the Firm in 1993 with the formation of Air Partners, a \$64 million vehicle designed to invest in the restructuring of Continental Airlines. Since that time, TPG and its founders have invested \$62 billion in 379 private equity investments.

TPG Capital is the largest private equity platform within TPG. The Firm believes TPG Capital benefits from a differentiated investment strategy, specialized sector expertise, the value-add of TPG's dedicated operations team, and a disciplined investment approach. Since its founding, TPG Capital has raised \$55 billion through the formation of six prior TPG Partners funds and through the current raise of TPG VII. Together, these funds comprise the Firm's "TPG Capital" platform. The Firm operates a global alternative investment platform that encompasses private equity, private credit, real estate, and public equity. Private equity continues to be TPG's largest asset class, representing 79% of AUM as of March 31, 2015.

In addition to David Bonderman and James Coulter, the TPG Capital team includes Jonathan Coslet, the Chief Investment Officer, who has been with the firm since 1993, and 22 Partners who together comprise the TPG Capital leadership. In total, there are 81 dedicated professionals working together in the TPG Capital business. Across the Firm, TPG has a team of 388 investment professionals worldwide, who are supported by 384 middle-office professionals.

The Firm currently has 17 offices worldwide – San Francisco, Fort Worth, Austin, Beijing, Dallas, Hong Kong, Houston, London, Luxembourg, Melbourne, Moscow, Mumbai, New York, São Paulo, Shanghai, Singapore, and Tokyo.

III. Investment Strategy

TPG Partners VII L.P. (the "Fund") is being formed to seek attractive returns by making investments in operating companies through acquisitions and restructurings. TPG believes that it provides attractive portfolio construction to its limited partners by focusing on a differentiated investment strategy, its core sectors of strength, and geographies where they have experienced historical success. The strategy represents the continuation of the investment activities carried out through TPG VI and prior TPG Capital partnerships.

TPG Capital seeks to invest in businesses that they identify as having one of the following attributes:

- i. market leaders with a fundamentally strong business model in sectors in which TPG Capital has deep experience and strong conviction ("Traditional Buyouts"),
- ii. potential for transformative growth or improvement under TPG Capital's ownership ("Transformational" transactions), or
- iii. attractive risk / reward profile despite being unconventional ("Off the Beaten Path" transactions).

Traditional Buyouts

Traditional Buyouts have historically been comprised of well-managed companies that have strong business models within their industries. These companies typically enjoy leading brands and market share, strong underlying industry trends, and management teams with demonstrated track records. TPG Capital actively manages these investments, largely in the form of incremental efforts of the Firm's in-house operations group, TPG Operations Group ("TPG Ops"), and a focus on enhanced capital efficiency. TPG Capital often invests for growth in these businesses and works to accelerate management's existing strategy. As of December 31, 2014, TPG Capital has executed 38 Traditional Buyouts, investing \$17 billion.

Transformational Transactions

Transformational transactions often involve a substantial degree of direct involvement from TPG Capital, both from deal teams and TPG Ops. Transformational transactions can be "broken-to-good" investments in turnaround situations and can also be "good-to-great" transactions where active involvement is required to increase revenue and earnings growth through a change in strategy or operations. As of December 31, 2014, TPG Capital has executed 51 Transformational transactions, investing \$15 billion.

Off the Beaten Path Transactions

Off the Beaten Path transactions are those that are unconventional – either in the uncommon structure of the transaction or the sourcing efforts required to generate the investment opportunity. These are investments that TPG believes feature interesting risk / reward profiles that allow the Firm to unlock value that may be unavailable to other

investors. As of December 31, 2014, TPG Capital has executed 80 Off the Beaten Path Transactions, investing \$14 billion.

TPG has invested in every major industry group, and TPG Capital is focused on investing in five core sectors: (1) Energy, (2) Healthcare, (3) Industrials, (4) Retail and Consumer, and (5) Technology. The core sectors of focus are key to generating top-down investment themes which TPG believes allow deal teams to proactively source differentiated investments, make thoughtful investment decisions based on industry knowledge, and remain efficient by quickly passing on unattractive opportunities. Since 2009, TPG Capital has invested 81% of its capital into the five core sectors.

IV. Investment Performance

Previous fund performance as of June 30, 2015 for investments in Funds I through VI is shown below:

Fund	Inception Date	Total Invested Capital	SBI Commitment	Net IRR from Inception *	Net MOIC from Inception**	Fund Status
TPG I	1994	\$696 million	N/A	36%	3.7x	Realized
TPG II	1997	\$2.5 billion	N/A	10%	1.8x	Realized
TPG III	1999	\$3.7 billion	N/A	26%	2.8x	Liquidating
TPG IV	2003	\$6.2 billion	N/A	16%	2.1x	Liquidating
TPG V	2006	\$15.6 billion	N/A	5%	1.4x	Liquidating
TPG VI	2008	\$18.4 billion	N/A	13%	1.6x	Liquidating

^{*} 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) are provided by TPG.

V. General Partner's Investment

TPG GenPar VII, L.P. (the "General Partner") will make aggregate capital commitments equal to 5% of the Fund, up to \$400 million. The General Partner may increase its capital commitment on a quarterly basis. The General Partner may not increase its capital commitment to an amount that exceeds 6.5% of the Fund.

VI. Takedown Schedule

The General Partner will draw down capital commitments from time to time as needed to fund investments and operations (including partnership expenses, organizational expenses and management fees). The General Partner will give at least 10 days' written notice prior to any drawdown of unfunded capital commitments.

^{**} Adjusted for returned principal that is eligible for recycling.

VII. Fees

Management fees will be payable semi-annually in advance. The Fund will offer two management fee schedules from which the limited partners may choose:

- i. Conventional Fee Rates: The conventional fee rates will equal, on an annual basis:
 - a. <u>Commitment Period Fees</u>: During the commitment period, 1.50% of capital commitments.
 - b. <u>Post-Commitment Period Fees</u>: Once the commitment period ends or management fees begin to accrue on a successor fund, 0.75% of actively invested capital contributions.
- ii. J-Curve Mitigating Rates: The J-Curve Mitigating Rates will equal, on an annual basis:
 - a. <u>Commitment Period Fees</u>: During the commitment period, management fees will be charged on a limited partner's capital commitment in the following amounts:
 - 0.625% of an amount equal to capital commitments minus actively invested capital contributions; plus
 - 1.50% of actively invested capital contributions.
 - b. <u>Post-Commitment Period Fees</u>: Once the commitment period ends or management fees begin to accrue on a successor fund, 1.50% of actively invested capital contributions.

A limited partner will be entitled to a percentage discount on its commitment period fees, determined based on the size of its capital commitment as set forth below:

- At least \$100 million and up to \$250 million: 5%
- At least \$250 million and up to \$400 million: 10%
- At least \$400 million: 15%

VIII. Distributions

Distributions will be made in the following order of priority:

100% to the Limited Partners, until the Limited Partners receive an amount equal to
the sum of their capital contributions to fully realized investments; plus any writedowns on remaining investments; plus organizational expenses, management fees
allocable to realized investments and write-down amounts; plus all other Partnership
expenses; and plus 8% per annum interest compounded annually on the amounts above
(the "Preferred Return").

- 2. Then, 20% to the Limited Partners and 80% to the General Partner, until the General Partner receives 20% of the sum of the Preferred Return and the distributions made under this part 2.
- 3. From then on, 80% to the Limited Partners and 20% to the General Partner.

IX. Key-Person Termination

A key person event will occur if, during the commitment period,

- fewer than two of David Bonderman, James Coulter and Jonathan Coslet devote a substantial majority of their business time and attention to the activities of TPG; or
- fewer than six of David Bonderman, James Coulter, Jonathan Coslet, Kevin Burns, Michael MacDougall, Todd Sisitsky, Bryan Taylor, Jack Weingart and Carrie Wheeler devote a substantial majority of their business time and attention to the activities of TPG.

X. Investment Period and Term

The commitment period for the Fund is six years from the initial closing date. The fund term is ten years, which may be extended for up to two additional one-year periods with the consent of a majority interest of the limited partners.

^{*} 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.

TAB E

INVESTMENT ADVISORY COUNCIL REPORT

DATE:

September 2, 2015

TO:

Members, State Board of Investment

FROM:

Members, Investment Advisory Council and SBI Staff

SUBJECT:

Public Markets, Non-Retirement, and Defined Contribution Report

This section of the report provides a brief overview of economic and capital market performance as it pertains to the SBI portfolio. Also, included in this section is a summary of investment manager activity and performance summaries of the equity and fixed income managers in the SBI portfolio.

Also, we have included commentary and performance for the non-retirement managers, deferred compensation plan mutual funds, and performance for options within the Minnesota College Savings Plan.

The report includes the following sections:

	-	Page
•	Public Markets Economic and Market Overview	3
•	Public Markets Manager Activity	5
•	Non-Retirement Manager Update	8
•	Deferred Compensation Manager Update	9
•	Manager Performance Summaries	A-1

Public Markets Economic and Market Overview Second Quarter 2015

Overview

Once again, after-effects of The Great Recession impacted global investors as Greece found itself on the edge of financial collapse. Talks of a potential "Grexit" had been discussed for months, but again gained steam on June 30th when Greece missed a €1.55 billion (\$1.73 billion) International Monetary Fund loan payment, making it the first advanced economy to default on an IMF loan. Many economists point to the poorly designed terms of the €110 billion bailout package Greece received from the IMF in 2010 as a reason for the default. Whatever the reason, the country's inclusion in the euro hangs in the balance. Recently, Greece had agreed with eurozone leaders on a tentative €86 billion (\$96 billion) bailout deal, but was working with the European Commission, the European Central Bank, and the International Monetary Fund on finalizing the deal.

Domestically, in the second quarter, the Nasdaq Composite Index closed at a record high of 5056 on April 23rd, eclipsing the previous high of 5048 set on March 10, 2000. The Index still marks a proxy for Technology stocks, but the composition of the Index has changed in the course of fifteen years. As of the April 23rd record close, the Technology sector accounted for 42% of the Index versus 65% in March 2000, Consumer Services had increased to 21% from 8%, and Healthcare comprised 17%, up from 7%.

In a welcomed change for oil investors, the price of a barrel of crude oil had a relatively stable three months. The closely-watched commodity traded in a \$12 band (the low was \$49/bbl on April 2nd and the high was \$61/bbl on June 10th) and the average price for the quarter was \$58/bbl, which was \$9 above the average price in the first quarter. The \$9 advance ends three quarters of declines, including two quarters of \$24 average price decreases.

In financial markets, listed equity markets increased slightly for the quarter. The Healthcare and Telecommunication sectors carried the *Russell 3000 Index* to a quarterly gain of 0.1%, compensating for the underperforming Utilities and Industrials sectors. Globally, international markets, as represented by the *MSCI World ex-US Index*, increased 0.5% and the *MSCI Emerging Markets Free (net) Index* added 0.7%. International markets continued to be driven by macro themes as investors remained heavily influenced by slowing economic growth, interest rate expectations, changes in oil prices, and foreign exchange trends.

In Fixed Income markets, the *Barclays Aggregate Index* fell (1.7%) for the quarter, with bonds on the long end of the curve causing the most drag. Twenty year Treasuries fell (9.1%), long Utility corporate bonds fell (8.5%), and long Industrials fell (7.8%). Investors will be monitoring the upcoming Federal Open, Market Committee ("FOMC") policy meetings to see if FOMC members elect to increase the Fed Funds rate. According to the FOMC Dot Plot, which charts each member's expectations for the year-end Fed Funds rate over time, members predicted a rate increase to occur by year-end. The most recent plot, based on FOMC economic predictions published in June, had a median Fed Funds rate of 0.625% for year-end 2015 and a median prediction of 1.625% for year-end 2016.

SBI Portfolio

Quarterly performance for the SBI's portfolio outpaced the overall markets. Domestic equities returned 0.1%, which was in line with the *Russell 3000 Index*, and international and emerging market stocks advanced by 1.3%, which outperformed its aggregate benchmark by 80 bps. The fixed income allocation decreased (1.5%), but outperformed the *Barclays Aggregate Index* by 20 bps.

Domestic Equity

Domestically, large cap growth managers exceeded the *Russell 1000 Growth Index* as stock selection across several sectors, particularly the Consumer Discretionary sector, boosted performance. Similarly, large cap value managers beat the *Russell 1000 Value Index* for the quarter. Strong stock selection, particularly in the Financial Services and Healthcare sectors, added to returns. Within small cap equity, active small cap growth managers continued to outpace the *Russell 2000 Growth Index*. Stock selection in the Information Technology sector led the way, while solid stock picking in the Consumer Discretionary sector also boosted returns. Active small cap value managers also used stock selection, particularly in the Financials and Consumer Discretionary sectors, to outpace the *Russell 2000 Value Index* for the quarter. The semi-passive, domestic equity portfolio trailed the Russell 1000 Index during the second quarter due to stock selection in the Industrials and Consumer Discretionary sectors. Losses were partially offset through stock picking in the Healthcare and Materials sectors.

International Equity

Active international equity managers outperformed the MSCI World ex-USA Index (net) for the quarter, as stock selection and country allocation added alpha. Stock selection was positive in the Financials, Industrials, and Consumer Discretionary sectors. Moreover, Australia, Japan, and the UK produced alpha from a country perspective.

Emerging Markets Equity

Within Emerging Markets, the portfolio outperformed the MSCI Emerging Markets Free (net) Index. Active managers benefited from an overweight position in China, underweight positions in Korea and Malaysia, and stock selection in South Africa. The passive Emerging Markets portfolio produced positive tracking error primarily due to an underweight position in restricted stocks (Iran and Sudan) in the benchmark, coupled with the subsequent overweight positions in non-restricted names.

Fixed Income

For the SBI's Fixed Income allocation, both the active and semi-passive manager aggregates outperformed the *Barclays Aggregate Index* for the quarter. Sector exposure to RMBS (agency and non-agency) positions and security selection in Corporate bonds and Non-Agency CMBS positions contributed to the outperformance. The underweight duration position in the aggregate portfolio was additive to performance as rates increased during the quarter.

Public Markets Manager Activity Second Quarter 2015

Manager Summary

For the quarter, the vast majority of investment managers performed in line with expectations and no commentary was necessary. There were some noteworthy manager developments for the quarter involving Columbia, Goldman Sachs, McKinley, Morgan Stanley, PIMCO, and SSgA.

Columbia (Fixed Income - Active)

Zach Pandl, who was hired by Columbia in 2013 as Senior Interest Rates Strategist to assist in duration and yield curve positions, left the firm in the second quarter of this year. Columbia plans on filling the vacancy created by Mr. Pandl, but, at the time of publication, had not found a replacement. Staff will continue to monitor the situation.

Goldman Sachs (Domestic Equity - Small Cap Value)

On July 13, 2015, Goldman Sachs announced that Dolores Bamford, an Energy Research Analyst and Portfolio Manager, is retiring effective September 1, 2015. Ms. Bamford served as the co-lead portfolio manager for the Mid Cap Value strategy, as well as contributed stock ideas to the SMID and Small Cap Value strategies. (The SBI is invested in the Small Cap Value portfolio.) Adam Agress rejoined the U.S. Value Equity Team on July 6, 2015 and will assume Ms. Bamford's Energy research responsibilities for the Mid Cap Value, as well as the Small Cap Value/SMID strategies. Mr. Agress has 9 years of industry experience and served as a research analyst and sector portfolio manager on the U.S. Value Equity Team from 2007 to 2011, where he worked closely with Ms. Bamford. Given the depth of the U.S. Value Team, staff is not concerned with the change, but will monitor the transition.

McKinley (Domestic Equity – Small Cap Growth and International Equity Developed Markets) On July 8, 2015, the SBI was informed that Jose Menchero, Ph.D. had joined McKinley as a Quantitative Research Consultant on the firm's Scientific Advisory Board. Dr. Menchero is the founder of Menchero Portfolio Analytics Consulting, a firm that focuses on portfolio construction, factor modeling, and risk analysis. Prior to that, he was a managing director and Global Head of Research at MSCI, where he was responsible for portfolio analytics, portfolio construction research, and the development of the Barra equity risk model. Prior to MSCI, he was the Director of Research at Thomson Financial. While Dr. Menchero is not directly managing assets for McKinley, staff believes this is a positive addition to the firm.

McKinley also announced that it entered into an agreement with Noah Holdings Limited, a Hong Kong based wealth and asset management firm. This development was spurred by McKinley's efforts to enhance its capabilities in customizing portfolios to meet client-specific investment goals. Staff has no concerns with this announcement, but will monitor this relationship.

Morgan Stanley (International Equity – Emerging Markets)

In April, Morgan Stanley announced that Arthur Lev will assume the new position of Chairman of Investment Management. Mr. Lev will work with Gregory J. Fleming, President of

Investment Management, on several strategic initiatives. Michael Levy, most recently Head of Merchant Banking & Real Estate Investing's Capital Markets Group, will replace Mr. Lev as Head of Traditional Asset Management. Staff has no concerns with the change, but will monitor the situation.

PIMCO (Fixed Income - Active)

In May, as part of a restructuring plan, PIMCO announced they were closing two equity strategies. As a result, Virginie Maisonneuve, CIO of Global Equities, resigned from her position. Mark Seidner, the SBI's Portfolio Manager for its Fixed Income strategies, will assume reporting responsibilities for the remaining equity staff, which is an insignificant time commitment. SBI staff has no concerns with this announcement, but will continue to monitor the situation.

SSgA (Domestic Equity and International Equity)

In June 2015, Greg Ehret was appointed President of SSgA, a title that CEO Ron O'Hanley held since joining the firm. Mr. O'Hanley succeeded Scott Powers as CEO in April 2015 after Mr. Powers announced his retirement. Staff has no concerns with the change, but will monitor the situation.

Sources: Barclays, Bloomberg, Bureau of Economic Analysis, FactSet, J.P. Morgan, Wall Street Journal

2015 Manager Meetings

Staff continued with the SBI Stock and Bond Manager Annual Reviews. The third quarter manager reviews are noted below.

I	nvestment Manager	Asset Class	
•	J.P. Morgan Investment Management Inc.	International Equity	
•	Dodge & Cox	Fixed Income	
•	Columbia Management Investment Advisers, LLC	Fixed Income	
•	BlackRock Financial Management, Inc.	Domestic Equity	
•	Hotchkis & Wiley Capital Management, LLC	Domestic Equity	
•	Neuberger Berman Fixed Income LLC	Fixed Income	
•	Martingale Asset Management, L.P.	Domestic Equity	
•	Systematic Financial Management, L.P.	Domestic Equity	
•	Winslow Capital Management, LLC	Domestic Equity	
•	Morgan Stanley Investment Management Inc.	International Equity	

Non-Retirement Manager Update Second Quarter 2015

Domestic Equities

GE Asset Management

The domestic equity portfolio outperformed its benchmark, the S&P 500, for the quarter and lagged for the year. For the quarter, stock selection in financials, consumer staples, and industrials benefited returns. Several of the portfolios holdings that are leveraged to rising interest rates rose on the outlook for better net interest margins and higher fee income growth. For the year, stock selection in information technology and energy detracted from returns.

Internal Stock Pool

The performance in the domestic equity portfolio tracked the index, the S&P 500 for the quarter and the year.

Fixed Income

RBC Global Asset Management

The fixed income portfolio outperformed the benchmark, the Barclays Intermediate Government for the quarter and tracked the index for the year. For the quarter, the portfolios slight short duration stance relative to the benchmark contributed positively to performance. In addition, excess yield from out-of-benchmark sector allocation to municipal bonds and securitized agencies benefited performance.

Internal Bond Pool

The bond portfolio outperformed its benchmark for the quarter and for the year. During the quarter, interest rates rose, due to corporate bond supply pressures, Fed action and geopolitics. Intermediate to long bonds experienced price depreciation across the curve. The portfolios short duration positioning relative to the benchmark benefited performance. For the year, an overweight allocation to asset backed securities (ABS) and security selection contributed to outperformance.

Deferred Compensation Managers Second Quarter 2015

Domestic Equities

Janus Twenty

The domestic equity portfolio outperformed its benchmark, the S&P 500, for the quarter and for the year. Strong stock selection in financials and health care contributed to positive relative performance for the quarter. The portfolio one year return benefited from strong stock selection and an overweight allocation to healthcare holdings in addition to an underweight in energy and industrial holdings.

Vanguard Institutional Index Plus

The domestic equity portfolio tracked the return of the S&P 500 Index for the quarter and the year.

Vanguard Mid-Cap Index

The mid-cap equity portfolio tracked the benchmark, CRSP US Mid Cap Index, for the quarter and the year.

T. Rowe Price

The small cap equity portfolio underperformed the benchmark, the Russell 2000, for the quarter and the year primarily due to stock selection. For the quarter, holdings in the consumer discretionary, industrials, and information technology sectors lagged. For the year, holdings in the information technology and materials sectors detracted from returns in addition to an overweight in the industrial sector.

International Equities

Fidelity Diversified International

The portfolio outperformed the benchmark, the MSCI EAFE Free, for the quarter and the year. The portfolio benefited from both strong stock selection and positive sector allocation. Holdings in the financials, health care, and consumer staples sectors benefited relative performance for the year along with an underweight in energy and an overweight in information technology.

Vanguard Total International Stock Index

The portfolio outperformed its benchmark, the FTSE Global All Cap ex US Index, for the quarter and underperformed for the year. The slight tracking error for this portfolio is due to fair value pricing and the price adjustment to the NAV should even out over time.

Fixed Income

Dodge & Cox Income Fund

The portfolio outperformed the benchmark, the Barclays Aggregate, for the quarter and underperformed for the year. Performance for the quarter was helped by shorter overall duration and lower exposure to long-term bonds relative to the benchmark. For the year, an overweight in corporate bonds detracted from relative returns.

Vanguard Total Bond Market Index

The portfolio tracked the benchmark, the Barclays Aggregate Index, for the quarter and the year.

Balanced and Conservative Options

Vanguard Balanced

The portfolio tracked its benchmark, a combined return of 60% CRSP US total Market and 40% Barclays Aggregate, for the quarter and the year.

Galliard Capital Management

The stable value portfolio outperformed its benchmark, the 3 Year Constant Maturity Treasury plus 0.45%, for the quarter and the year. For the quarter, the portfolio benefited from holdings in U.S. TIPS and high quality asset backed securities (ABS). The portfolios overweight allocation to spread products (excluding ABS) relative to the benchmark, which detracted from performance, was offset by the portfolios allocation to higher quality (AA+) securities relative to the benchmark. For the year, an overweight to non-Treasury sectors and bond positioning along the intermediate part of the curve continued to benefit returns



STATE BOARD OF INVESTMENT

Domestic Equity Manager Performance Summaries

Second Quarter 2015

MINNESOTA STATE BOARD OF INVESTMENT

Domestic Equity

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COMBINED RETIREMENT FUNDS ACTIVE DOMESTIC EQUITY MANAGERS

Periods Ended June 30, 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Puggall 1000 Crouds A	Lieve	0.5	10.2	
Russell 1000 Growth Aggregate	1.1	9.5	19.3	19.3
Russell 1000 Growth Index	0.1	10.6	18.0	18.6
Russell 1000 Value Aggregate	0.6	6.5	19.2	17.2
Russell 1000 Value Index	0.1	4.1	17.3	16.5
Russell 2000 Growth Aggregate	2.5	13.2	18.3	17.7
Russell 2000 Growth Index	2.0	12.3	20.1	19.3
Russell 2000 Value Aggregate	-0.1	4.4	19.6	18.1
Russell 2000 Value Index	-1.2	0.8	15.5	14.8
Active Manager Aggregate	0.9	8.0	19.1	17.9
Benchmark	0.1	6.8	17.6	17.4
Semi-Passive Aggregate	-0.4	7.9	18.1	18.1
Benchmark	0.1	7.4	17.7	17.6
Passive Manager (BlackRock)	0.1	7.3	17.7	17.5
Russell 3000 Index	0.1	7.3	17.7	17.5
Total Aggregate	0.1	7.7	18.2	17.8
Russell 3000 Index	0.1	7.3	17.7	17.5

Calendar Years

	2014	2013	2012	2011	2010
Russell 1000 Growth Aggregate	9.6	42.0	15.5	-0.4	19.3
Russell 1000 Growth Index	13.0	33.5	15.3	2.6	16.7
Russell 1000 Value Aggregate	13.1	36.5	16.9	-2.1	15.0
Russell 1000 Value Index	13.5	32.5	17.5	0.4	15.5
Russell 2000 Growth Aggregate	-3.4	47.2	12.0	-5.6	29.1
Russell 2000 Growth Index	5.6	43.3	14.6	-2.9	29.1
Russell 2000 Value Aggregate	7.5	40.8	19.6	-4.5	30.5
Russell 2000 Value Index	4.2	34.5	18.1	-5.5	24.5
Active Manager Aggregate	9.3	40.2	15.4	-2.7	19.7
Active Manager Benchmark	11.0	34.7	16.3	0.0	18.7
Semi-Passive Aggregate	14.2	33.2	17.7	2.2	15.2
Benchmark	13.2	33.1	16.4	1.5	16.1
Passive Manager (BlackRock)	12.6	33.5	16.4	0.8	17.2
Russell 3000 Index	12.6	33.6	16.4	1.0	16.9
Total Aggregate	12.3	35.1	16.6	0.4	17.1
Russell 3000 Index	12.6	33.6	16.4	1.0	16.9

COMBINED RETIREMENT FUNDS ACTIVE DOMESTIC EQUITY MANAGERS

Periods Ended June 2015

Performance versus Russell Style Benchmarks for All Periods

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception(1)
Russell 1000 Growth Index	0.1	10.6	18.0	18.6	
INTECH	-1.6	11.4	17.7	18.4	7.7
Benchmark	0.1	10.6	18.0	18.6	8.5
Jacobs Levy	-0.4	10.6	18.3	19.5	7.4
Benchmark	0.1	10.6	18.0	18.6	8.5
Sands Capital	0.1	7.8	18.8	21.9	10.3
Benchmark	0.1	10.6	18.0	18.6	8.5
Winslow-Large Cap	1.1	12.2	18.6	18.7	9.7
Benchmark	0.1	10.6	18.0	18.6	8.5
Zevenbergen Capital	6.8	7.4	23.4	18.7	10.5
Benchmark	0.1	10.6	18.0	18.6	9.1
Aggregate	1.1	9.5	19.3	19.3	
Russell 1000 Value Index	0.1	4.1	17.3	16.5	
Barrow, Hanley	0.6	6.4	18.4	17.4	 8.1
Benchmark	0.1	4.1	17.3	16.5	7.6
Earnest Partners	0.1	9.4	16.2	15.2	6.4
Benchmark	0.1	4.1	17.3	16.5	6.9
LSV Asset Mgmt.	0.8	7.2	22.5	18.7	9.1
Benchmark	0.1	4.1	17.3	16.5	7.6
Systematic Financial Mgmt.	0.6	3.9	18.1	16.1	7.6
Benchmark	0.1	4.1	17.3	16.5	7.6
Aggregate	0.6	6.5	19.2	17.2	

⁽¹⁾ Since inception by the SBI. Inception dates as follows:

Note: All aggregates include the performance of terminated managers

^{4/1/94:} Zevenbergen Capital

^{7/1/00:} Earnest Partners

^{4/1/04:} Barrow Hanley, LSV Asset Mgmt., Systematic Financial Mgmt.

^{1/1/05:} INTECH, Jacobs Levy, Sands Capital, Winslow-Large Cap

COMBINED RETIREMENT FUNDS ACTIVE DOMESTIC EQUITY MANAGERS

Periods Ended June 2015

Performance versus Russell Style Benchmarks for All Periods

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception (1)
Small Cap					
Russell 2000 Growth Index	2.0	12.3	20.1	19.3	<u>~</u>
McKinley Capital	1.1	10.7	24.4	21.1	7.9
Benchmark	2.0	12.3	20.1	19.3	9.4
Next Century Growth	3.9	15.8	14.5	15.8	3.6
Benchmark	2.0	12.3	20.1	19.3	4.8
Aggregate	2.5	13.2	18.3	17.7	
Russell 2000 Value Index	-1.2	0.8	15.5	14.8	-
Goldman Sachs	-0.3	4.0	18.8	18.2	10.1
Benchmark	-1.2	0.8	15.5	14.8	7.9
Hotchkis & Wiley	0.0	5.7	22.9	20.2	9.5
Benchmark	-1.2	0.8	15.5	14.8	7.9
Martingale Asset Mgmt.	-1.9	4.7	20.6	18.4	7.9
Benchmark	-1.2	0.8	15.5	14.8	7.9
Peregrine Capital	1.0	3.6	17.3	16.5	10.9
Benchmark	-1.2	0.8	15.5	14.8	9.9
Aggregate	-0.1	4.4	19.6	18.1	
Active Mgr. Aggregate (2)	0.9	8.0	19.1	17.9	

7/1/00: Next Century, Peregrine Capital

1/1/04: Goldman Sachs, Hotchkis & Wiley, Martingale Asset Mgmt., McKinley Capital

(2) 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

⁽¹⁾ Since inception by the SBI. Inception dates as follows:

COMBINED RETIREMENT FUNDS DOMESTIC EQUITY MANAGERS

Periods Ended June 2015 Versus Manager Benchmarks

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception(1)
Semi-Passive Managers (2)				9111-111	
BlackRock Institutional	-0.2	8.5	18.4	18.4	9.6
Benchmark	0.1	7.4	17.7	17.6	9.3
INTECH	-0.7	6.4	17.1	17.3	13.8
Benchmark	0.1	7.4	17.7	17.6	14.0
JP Morgan	0.0	8.3	18.6	18.2	9.6
Benchmark	0.1	7.4	17.7	17.6	9.3
Mellon Capital	-0.8	8.3	18.1	18.5	9.0
Benchmark	0.1	7.4	17.7	17.6	9.3
Semi-Passive Aggregate (R1000)	-0.4	7.9	18.1	18.1	
Passive Manager (R3000)					
BlackRock Institutional	0.1	7.3	17.7	17.5	0.0
Benchmark	0.1	7.3	17.7	17.5	9.0 8.9
Total Aggregate (3)	0.1	7.7	18.2	17.8	10.4
Benchmark (3,4)	0.1	7.3	17.7	17.5	10.6
Russell 3000 Index (3)	0.1	7.3	17.7	17.5	10.9
Russell 1000 Index (3)	0.1	7.4	17.7	17.6	11.1
Russell 2000 Index (3)	0.4	6.5	17.8	17.1	9.7

(1) Since retention by the SBI. Inception dates as follows:

1/1/95: BlackRock Institutional (semi-passive), J.P. Morgan, Mellon Capital

7/1/95: BlackRock Institutional (passive)

4/1/00: INTECH

(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) Total Aggregate and Benchmarks Inception as of 1/1/84

Note: All aggregates include the performance of terminated managers.

⁽⁴⁾ 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 DOMESTIC EQUITY MANAGERS

	June 30, 2015		March 31, 2015	
Process Section Control of the Contr	Market Value	Percent	Market Value	Percent
Russell 1000 Growth Aggregate	\$3,005,506,197	10.2%	\$2.071.5(2.4(9	10.00/
INTECH	\$609,351,593	2.1%	\$2,971,562,468	10.0%
Jacobs Levy	\$709,155,870	2.1%	\$619,544,923	2.1%
Sands Capital	\$700,332,209	2.4%	\$711,647,175	2.4%
Winslow-Large Cap			\$699,793,568	2.4%
Zevenbergen Capital	\$320,517,099	1.1%	\$316,899,187	1.1%
Zevenbergen Capital	\$666,149,426	2.3%	\$623,677,615	2.1%
Russell 1000 Value Aggregate	\$3,056,719,154	10.4%	\$3,039,990,343	10.3%
Barrow Hanley	\$844,468,741	2.9%	\$839,452,455	2.8%
Earnest Partners	\$575,456,540	2.0%	\$575,157,031	1.9%
LSV Asset Mgmt.	\$857,510,926	2.9%	\$850,708,432	2.9%
Systematic Financial Mgmt.	\$779,282,947	2.7%	\$774,672,424	2.6%
Russell 2000 Growth Aggregate	\$851,688,198	2.9%	\$831,264,455	2.8%
McKinley Capital	\$430,609,675	1.5%	\$426,038,197	1.4%
Next Century Growth	\$421,078,523	1.4%	\$405,226,258	1.4%
Russell 2000 Value Aggregate	\$1,140,020,611	3.9%	\$1,141,657,104	3.9%
Goldman Sachs	\$281,557,557	1.0%	\$282,508,633	1.0%
Hotchkis & Wiley	\$266,241,924	0.9%	\$266,267,538	0.9%
Martingale Asset Mgmt.	\$224,133,241	0.8%	\$228,590,747	0.8%
Peregrine Capital	\$368,087,890	1.3%	\$364,290,185	1.2%
Semi-Passive Manager Aggregate	\$11,251,979,690	38.3%	\$11,590,320,730	39.1%
BlackRock Institutional	\$2,544,057,665	8.7%	\$2,548,181,271	8.6%
NTECH	\$2,608,571,205	8.9%	\$2,773,098,556	9.4%
P Morgan	\$3,290,358,068	11.2%	\$3,291,043,568	11.1%
Mellon Capital	\$2,808,992,752	9.6%	\$2,977,997,335	10.1%
Passive Manager	\$10,055,973,783	34.2%	\$10,042,233,399	33.9%
BlackRock Institutional	\$10,055,973,783	34.2%	\$10,042,233,399	33.9%
Total Portfolio	\$29,361,887,634	100.0%	\$29,617,028,499	100.0%

COMBINED RETIREMENT FUNDS ACTIVE DOMESTIC EQUITY MANAGERS

Calendar Year Returns

Russell Style Manager Benchmarks

INTECH 12.8 34.1 17.8 0.1 19.5 Jacobs Levy 12.9 37.0 13.0 6.6 19.5 Sands Capital 9.1 42.4 24.2 2.7 26.8 Winslow - Large Cap 11.0 37.4 13.7 0.1 16.8 Zevenbergen Capital 3.4 60.6 8.0 -9.8 22.9 Aggregate 9.6 42.0 15.5 -0.4 19.3 Russell 1000 Value Index 13.5 32.5 17.5 0.4 15.5 Barrow, Hanley 13.0 35.5 15.5 1.7 10.4 Earnest Partners 14.0 32.0 10.7 -4.7 18.5 LSV Asset Mgmt. 14.0 41.2 20.4 -0.8 14.0 Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP Russell 2000 Growth Index 5.6 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 fotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 dartingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 deregrine Capital 4.1 37.3 18.8 -4.1 27.3 aggregate 7.5 40.8 19.6 -4.5 30.5 active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7		2014	2013	2012	2011	2010
NTECH 12.8 34.1 17.8 0.1 19.5 Jacobs Levy 12.9 37.0 13.0 6.6 19.5 Sands Capital 9.1 42.4 24.2 2.7 26.8 Winslow - Large Cap 11.0 37.4 13.7 0.1 16.8 Zevenbergen Capital 3.4 60.6 8.0 -9.8 22.9 Aggregate 9.6 42.0 15.5 -0.4 19.3 Russell 1000 Value Index 13.5 32.5 17.5 0.4 15.5 Barrow, Hanley 13.0 35.5 15.5 1.7 10.4 Earnest Partners 14.0 32.0 10.7 -4.7 18.5 LSV Asset Mgmt. 14.0 41.2 20.4 -0.8 14.0 Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP Russell 2000 Growth Index 5.6 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Auggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 fotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 dartingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 teregrine Capital 4.1 37.3 18.8 4.1 27.3 auggregate 7.5 40.8 19.6 -4.5 30.5 active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7						
Jacobs Levy 12.9 37.0 13.0 6.6 19.5 Sands Capital 9.1 42.4 24.2 2.7 26.8 Winslow - Large Cap 11.0 37.4 13.7 0.1 16.8 22.9 Aggregate 9.6 42.0 15.5 -0.4 19.3 22.9 Aggregate 9.6 42.0 15.5 1.7 10.4 24.7 13.7 10.1 24.7 13.0 35.5 15.5 1.7 10.4 25.5 15.5 15.5 1.7 10.4 25.5 15.5 15.5 1.7 10.4 25.5 15.5 15.5 1.7 10.4 25.5 15.5 15.5 1.7 10.4 25.5 15.5 15.5 1.7 10.4 25.5 15.5 15.5 1.7 10.4 25.5 15.5 15.5 1.7 10.4 25.5 15.5 15.5 1.7 10.4 25.5 15.5 15.5 15.5 1.7 10.4 25.5 15.5 15.5 15.5 15.5 15.5 15.5 15.5	Russell 1000 Growth Index	13.0	33.5	15.3	2.6	16.7
Sands Capital 9.1 42.4 24.2 2.7 26.8 Winslow - Large Cap 11.0 37.4 13.7 0.1 16.8 Zevenbergen Capital 3.4 60.6 8.0 -9.8 22.9 Aggregate 9.6 42.0 15.5 -0.4 19.3 Russell 1000 Value Index 13.5 32.5 17.5 0.4 15.5 Barrow, Hanley 13.0 35.5 15.5 1.7 10.4 Earnest Partners 14.0 32.0 10.7 -4.7 18.5 LSV Asset Mgmt. 14.0 41.2 20.4 -0.8 14.0 Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP Russell 2000 Growth Index 5.6 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate <	INTECH	12.8	34.1	17.8	0.1	
Sands Capital 9.1 42.4 24.2 2.7 26.8 Winslow - Large Cap 11.0 37.4 13.7 0.1 16.8 Zevenbergen Capital 3.4 60.6 8.0 -9.8 22.9 Aggregate 9.6 42.0 15.5 -0.4 19.3 Russell 1000 Value Index 13.5 32.5 17.5 0.4 15.5 Barrow, Hanley 13.0 35.5 15.5 1.7 10.4 Earnest Partners 14.0 32.0 10.7 -4.7 18.5 LSV Asset Mgmt. 14.0 41.2 20.4 -0.8 14.0 Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP 20 4.2 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4	Jacobs Levy	12.9	37.0	13.0	6.6	19.5
Winslow - Large Cap 11.0 37.4 13.7 0.1 16.8 Zevenbergen Capital 3.4 60.6 8.0 -9.8 22.9 Aggregate 9.6 42.0 15.5 -0.4 19.3 Russell 1000 Value Index 13.5 32.5 17.5 0.4 15.5 Barrow, Hanley 13.0 35.5 15.5 1.7 10.4 Earnest Partners 14.0 32.0 10.7 -4.7 18.5 SSV Asset Mgmt. 14.0 41.2 20.4 -0.8 14.0 Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP 20.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 <td>Sands Capital</td> <td>9.1</td> <td>42.4</td> <td>24.2</td> <td>2.7</td> <td></td>	Sands Capital	9.1	42.4	24.2	2.7	
Zevenbergen Capital 3.4 60.6 8.0 -9.8 22.9 Aggregate 9.6 42.0 15.5 -0.4 19.3 Russell 1000 Value Index 13.5 32.5 17.5 0.4 15.5 Barrow, Hanley 13.0 35.5 15.5 1.7 10.4 Earnest Partners 14.0 32.0 10.7 -4.7 18.5 LSV Asset Mgmt. 14.0 41.2 20.4 -0.8 14.0 Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP 8 4.2 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Foldchkis & Wiley 13.0	Winslow - Large Cap	11.0	37.4	13.7	0.1	
Russell 1000 Value Index	Zevenbergen Capital	3.4	60.6	8.0	-9.8	
Barrow, Hanley 13.0 35.5 15.5 1.7 10.4 Earnest Partners 14.0 32.0 10.7 -4.7 18.5 LSV Asset Mgmt. 14.0 41.2 20.4 -0.8 14.0 Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP Russell 2000 Growth Index 5.6 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Regregate 7.5 40.8 19.6 -4.5 30.5	Aggregate	9.6	42.0	15.5	-0.4	19.3
Barrow, Hanley 13.0 35.5 15.5 1.7 10.4 Earnest Partners 14.0 32.0 10.7 -4.7 18.5 LSV Asset Mgmt. 14.0 41.2 20.4 -0.8 14.0 Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP Russell 2000 Growth Index 5.6 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Regregate 7.5 40.8 19.6 -4.5 30.5	Russell 1000 Value Index	13.5	32.5	17.5	0.4	15.5
Earnest Partners 14.0 32.0 10.7 -4.7 18.5 LSV Asset Mgmt. 14.0 41.2 20.4 -0.8 14.0 Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP Russell 2000 Growth Index 5.6 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Motchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 eregrine Capital 4.1 37.3 18.8 -4.1 27.3 Ruggregate 7.5 40.8 19.6 -4.5 30.5 ettive Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7						
LSV Asset Mgmt. 14.0 41.2 20.4 -0.8 14.0 Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP Russell 2000 Growth Index 5.6 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Gotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Gregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Regregate 9.3 40.2 15.4 -2.7 19.7	Earnest Partners					
Systematic Financial Mgmt. 11.6 35.0 18.2 -7.4 18.1 Aggregate 13.1 36.5 16.9 -2.1 15.0 SMALL CAP Russell 2000 Growth Index 5.6 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Letergrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Lettive Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7						
SMALL CAP Russell 2000 Growth Index 5.6 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Gotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Agringale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Aggregate 9.3 40.2 15.4 -2.7 19.7	Systematic Financial Mgmt.					
Russell 2000 Growth Index 5.6 43.3 14.6 -2.9 29.1 McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Rective Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7	Aggregate	13.1	36.5	16.9	-2.1	15.0
McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7	SMALL CAP					
McKinley Capital 2.0 51.6 23.2 -7.9 28.5 Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7	Russell 2000 Growth Index	5.6	43.3	14.6	-2.9	29.1
Next Century Growth -6.5 50.3 1.9 -4.5 29.6 Aggregate -3.4 47.2 12.0 -5.6 29.1 Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Agringale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7	McKinley Capital	2.0	51.6	23.2		
Russell 2000 Value Index 4.2 34.5 18.1 -5.5 24.5 Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 aggregate 7.5 40.8 19.6 -4.5 30.5 Active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7	Next Century Growth	-6.5	50.3	1.9	-4.5	
Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7	Aggregate	-3.4	47.2	12.0	-5.6	29.1
Goldman Sachs 7.4 39.3 16.6 1.3 27.0 Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7	Russell 2000 Value Index	4.2	34.5	18.1	-5.5	24.5
Hotchkis & Wiley 13.0 46.0 24.1 -10.8 43.4 Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7	Goldman Sachs	7.4				
Martingale Asset Mgmt. 7.3 43.1 20.1 -5.2 27.4 Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7	Iotchkis & Wiley	13.0				
Peregrine Capital 4.1 37.3 18.8 -4.1 27.3 Aggregate 7.5 40.8 19.6 -4.5 30.5 Active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7		7.3				
Active Mgr. Aggregate 9.3 40.2 15.4 -2.7 19.7	eregrine Capital	4.1				
200	aggregate	7.5	40.8	19.6	-4.5	30.5
ctive Mgr. Aggregate Benchmark (1) 11.0 34.7 16.3 0.0 18.7	active Mgr. Aggregate	9.3	40.2	15.4	-2.7	19.7
	ctive Mgr. Aggregate Benchmark (1)	11.0	34.7	16.3	0.0	18.7

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.

⁽¹⁾ 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

Calendar Year Returns Versus Manager Benchmarks

	2014	2013	2012	2011	2010
Semi-Passive Managers					_
Russell 1000 Index	13.2	33.1	16.4	1.5	16.1
BlackRock Institutional	14.2	33.3	19.0	1.6	14.0
INTECH	11.6	33.0	16.6	2.9)
JP Morgan	15.0	33.7	17.6	1.1	16.8
Mellon Capital	15.9	32.6	17.3	4.6	13.7
Semi-Passive Aggregate (R1000)	14.2	33.2	17.7	2.2	15.2
Passive Managers					
Russell 3000 Index	12.6	33.6	16.4	1.0	16.9
BlackRock Institutional	12.6	33.5	16.4	0.8	17.2
Total Aggregate	12.3	35.1	16.6	0.4	17.1
Russell 3000 Index	12.6	33.6	16.4	1.0	16.9
Russell 1000 Index	13.2	33.1	16.4	1.5	16.1
Russell 2000 Index	4.9	38.8	16.3	-4.2	26.9

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.



STATE BOARD OF INVESTMENT

International Manager Performance Summaries

Second Quarter 2015

MINNESOTA STATE BOARD OF INVESTMENT

International Managers

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(quarter, 1, 3, 5 year periods)	
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(by calendar year)	

COMBINED RETIREMENT FUNDS INTERNATIONAL MANAGERS Periods Ended June 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception (1)
Active Developed Markets (2)					
Acadian	1.3	-5.5	13.9	10.7	5.4
Benchmark	0.5	-5.3	11.1	9.0	5.2
Columbia	3.6	3.5	13.2	11.8	2.5
Benchmark	0.5	-5.3	II.I	9.0	3.2
J.P. Morgan	1.4	-3.8	10.9	9.5	5.3
Benchmark	0.5	-5.3	11.1	9.0	5.2
Marathon Asset Management	3.1	-0.1	14.9	12.0	8.7
Benchmark	0.5	-5.3	11.1	9.0	5.2
McKinley	4.1	0.1	13.9	10.8	5.2
Benchmark	0.5	-5.3	11.1	9.0	5.2
Pyramis (Fidelity)	1.1	-2.0	13.4	11.0	6.9
Benchmark	0.5	-5.3	11.1	9.0	5.2
Aggregate	2.5	-1.2	13.6	10.9	
Benchmark	0.5	-5.3	11.1	9.0	
Active Emerging Markets (3)					
Capital International	0.2	-7.6	3.0	0.7	9.4
Benchmark	0.7	-5.1	3.7	3.7	10.3
Morgan Stanley	1.7	-3.5	5.4	5.3	11.1
Benchmark	0.7	-5.1	3.7	3.7	10.3
Aggregate	1.0	-5.5	4.3	2.9	
Benchmark	0.7	-5.1	3.7	3.7	
Semi-Passive Developed Markets (2)					
AQR	0.5	-4.3	13.6	10.4	5.8
Benchmark	0.5	-5.3	11.1	9.0	5.2
Pyramis (Fidelity)	2.2	-2.0	13.0	10.6	6.4
Benchmark	0.5	-5.3	11.1	9.0	5.2
State Street	1.1	-4.5	13.4	9.1	4.8
Benchmark	0.5	-5.3	11.1	9.0	5.2
Aggregate	1.4	-3.3	13.3	10.1	
Benchmark	0.5	-5.3	II.I	9.0	

⁽¹⁾ Since inception by the SBI. Inception dates as follows:

^{10/1/92:} State Street (semi-passive developed markets)

^{10/1/93:} Marathon Asset Management (active developed markets)

^{1/1/00:} Columbia (active developed markets)

^{1/1/01:} Capital International, Morgan Stanley (active emerging markets)

^{7/1/05:} Acadian, J.P. Morgan, McKinley (active developed markets) AQR, Pyramis (semi-passive developed markets)

⁽²⁾ Since 6/1/08 the developed markets manager's benchmark is the Standard (large + mid) MSCI World ex USA (net). From 10/1/07 through 5/31/08 the benchmark was the Provisional Standard MSCI World ex USA (net). From 10/1/03 to 9/30/07 the benchmark was MSCI World ex USA (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). Prior to that date, it was MSCI Emerging Markets Free (gross). From 10/1/01 to 5/31/02 the benchmarkwas the Provisional MSCI Emerging Markets Free (net).

COMBINED RETIREMENT FUNDS INTERNATIONAL MANAGERS

Periods Ended June 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception (1)
Passive Developed Markets (2)					
State Street	0.6	-4.9	11.5	9.4	6.5
Benchmark	0.5	-5.3	11.1	9.0	6.2
Passive Emerging Markets (3)					
State Street	0.9	-4.7	3.9		4.4
Benchmark	0.7	-5.1	3.7	**	4.3
Equity Only (4)	1.3	-3.8	10.7	8.4	6.8
Benchmark (5)	0.5	-5.3	9.4	7.8	6.3
Total Program (5,9)	1.3	-3.8	10.7	8.4	7.0
Benchmark (6,9)	0.5	-5.3	9.4	7.8	6.3
SBI Int'l Equity Target (6,9)	0.5	-5.3	9.4	7.8	6.3
MSCI ACWI Free ex USA (7,9)	0.5	-5.3	9.4	7.8	6.5
MSCI World ex USA (net) (9)	0.5	-5.3	11.1	9.0	6.3
MSCI EAFE Free (net) (9)	0.6	-4.2	12.0	9.5	6.1
MSCI Emerging Markets Free (8,9)	0.7	-5.1	3.7	3.7	7.8

(1) Since retention by the SBI. Inception dates as follows:

10/1/92: State Street (passive developed markets) 1/1/12: State Street (passive emerging markets)

- (2) Since 6/1/08 the developed markets managers' 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.
- (9) Total Program and Benchmarks Inception as of 10/1/92

COMBINED RETIREMENT FUNDS INTERNATIONAL STOCK MANAGERS Periods Ended June 2015

	June 30, 2015		March 31, 2015	
	Market Value	Percent	Market Value	Percent
Active Developed Markets	\$2,527,080,262	27.6%	\$2,464,566,267	27.3%
Acadian	\$378,654,108	4.1%	\$373,770,189	4.1%
Columbia	\$372,050,727	4.1%	\$359,111,476	4.0%
J.P. Morgan	\$304,967,954	3.3%	\$300,732,818	3.3%
Marathon	\$790,626,332	8.6%	\$766,639,960	8.5%
McKinley	\$317,550,101	3.5%	\$304,996,757	3.4%
Pyramis (Fidelity)	\$363,231,039	4.0%	\$359,315,067	4.0%
Active Emerging Markets	\$1,527,798,398	16.7%	\$1,512,584,171	16.7%
Capital International	\$710,522,023	7.8%	\$709,042,540	7.8%
Morgan Stanley	\$817,276,376	8.9%	\$803,541,632	8.9%
Semi-Passive Developed Markets	\$1,204,504,268	13.2%	\$1,187,620,262	13.1%
AQR	\$350,462,058	3.8%	\$348,563,174	3.9%
Pyramis (Fidelity)	\$534,704,554	5.8%	\$523,088,657	5.8%
State Street	\$319,337,656	3.5%	\$315,968,431	3.5%
Passive Developed Markets	\$3,595,128,986	39.3%	\$3,572,038,192	39.5%
State Street	\$3,595,128,986	39.3%	\$3,572,038,192	39.5%
Passive Emerging Markets	\$302,205,418	3.3%	\$299,583,312	3.3%
State Street	\$302,205,418	3.3%	\$299,583,312	3.3%
Total Portfolio	\$9,156,717,331	100.0%	\$9,036,392,203	100.0%

COMBINED RETIREMENT FUNDS INTERNATIONAL STOCK MANAGERS Calendar Year Returns

	2014	2013	2012	2011	2010
Active Developed Markets (1)					
Acadian	-1.7	26.1	17.6	-12.9	13.9
Benchmark	-4.3	21.0	16.4	-12.2	8.9
Columbia	-5.6	23.9	19.0	-12.1	15.2
Benchmark	-4.3	21.0	16.4	-12.2	8.9
.P. Morgan	-5.1	19.5	18.4	-10.2	7.6
Benchmark	-4.3	21.0	16.4	-12.2	8.9
Marathon	-4.0	28.5	17.9	-9.2	14.4
Benchmark	-4.3	21.0	16.4	-12.2	8.9
AcKinley	-2.7	28.0	16.9	-15.5	11.8
Benchmark	-4.3	21.0	16.4	-12.2	8.9
Pyramis (Fidelity)	-5.6	26.7	20.3	-11.9	11.7
Benchmark	-4.3	21.0	16.4	-12.2	8.9
Aggregate	-4.1	25.4	17.9	-11.7	11.9
Benchmark	-4.3	21.0	16.4	-12.2	8.9
Active Emerging Markets (2)					
Capital International	-5.9	0.7	13.8	-22.8	16.1
enchmark	-2.2	-2.6	18.2	-18.4	18.9
Morgan Stanley	-2.4	0.5	21.1	-17.8	18.4
Benchmark	-2.2	-2.6	18.2	-18.4	18.9
ggregate	-4.1	0.6	17.5	-20.6	17.1
Penchmark	-2.2	-2.6	18.2	-18.4	18.9
emi-Passive Developed Markets (1)				
QR	-4.4	24.1	20.8	-13.9	11.4
Penchmark	-4.3	21.0	16.4	-12.2	8.9
yramis (Fidelity)	-4.0	23.2	19.4	-12.6	11.5
Penchmark	-4.3	21.0	16.4	-12.2	8.9
tate Street	-5.1	25.3	17.3	-15.6	8.7
enchmark	-4.3	21.0	16.4	-12.2	8.9
ggregate	-4.4	24.0	19.2	-13.8	10.6
Benchmark	-4.3	21.0	16.4	-12.2	8.9

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

COMBINED RETIREMENT FUNDS INTERNATIONAL STOCK MANAGERS Calendar Year Returns

	2014	2013	2012	2011	2010
Passive Developed Markets (1)					
State Street	-3.9	21.4	16.7	-11.9	9.9
Benchmark	-4.3	21.0	16.4	-12.2	8.9
Passive Emerging Markets (2)					
State Street	-2.1	-2.5	18.5	22	
Benchmark	-2.2	-2.6	18.2		. ==
Equity Only (3) (4)	-4.0	17.8	17.6	-14.2	12.3
Benchmark	-3.9	15.3	16.8	-13.7	11.2
Total Program (4)	-4.0	17.8	17.6	-14.2	12.3
Benchmark	-3.9	15.3	16.8	-13.7	11.2
BI Int'l Equity Target (5)	-3.9	15.3	16.8	-13.7	11.2
ASCI ACWI Free ex USA (net)	-3.9	15.3	16.8	-13.7	11.2
ASCI World ex USA (net)	-4.3	21.0	16.4	-12.2	8.9
ASCI EAFE Free (net)	-4.9	22.8	17.3	-12.1	7.7
MSCI Emerging Markets Free (net)	-2.2	-2.6	18.2	-18.4	18.9

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



STATE BOARD OF INVESTMENT

Bond Manager Performance Summaries

Second Quarter 2015

MINNESOTA STATE BOARD OF INVESTMENT

Bond Managers

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COMBINED RETIREMENT FUNDS **BOND MANAGERS**

Periods Ended June 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception (1)
Active Managers					
Barclays Aggregate Index	-1.7	1.9	1.8	3.3	
Aberdeen	-1.7	2.4	2.9	4.7	5.6
Benchmark	-1.7	1.9	1.8	3.3	5.6
Columbia (RiverSource)	-1.1	2.2	2.8	4.5	5.7
Benchmark	-1.7	1.9	1.8	3.3	5.6
Dodge & Cox	-1.2	1.5	3.6	4.7	6.6
Benchmark	-1.7	1.9	1.8	3.3	5.6
PIMCO	-1.I	3.0	3.1	4.5	6.8
Benchmark	-1.7	1.9	1.8	3.3	4.8
Western	-1.8	2.0	3.1	4.8	8.9
Benchmark	-1.7	1.9	1.8	3.3	7.7
Active Mgr. Aggregate	-1.4	2.2	3.1	4.6	
Semi-Passive Managers					
BlackRock	-1.6	2.1	2.1	3.6	5.7
Benchmark	-1.7	1.9	1.8	3.3	5.6
Goldman	-1.5	2.0	2.2	3.9	5.9
Benchmark	-1.7	1.9	1.8	3.3	5.6
Neuberger	-1.8	2.0	2.1	3.8	6.9
Benchmark	-1.7	1.9	1.8	3.3	6.7
Semi-Passive Mgr. Aggregate	-1.6	2.0	2.2	3.8	
Benchmark	-1.7	1.9	1.8	3.3	
Historical Aggregate (2,3)	-1.5	2.1	2.6	4.2	7.9
Benchmark (3,4)	-1.7	1.9	1.8	3.3	7.8
Barclays Aggregate Index (3,4)	-1.7	1.9	1.8	3.3	7.8

⁽¹⁾ Since inception by the SBI. Inception dates as follows:

^{7/1/84;} Western

^{7/1/88:} Neuberger

^{7/1/93:} Columbia, Goldman

^{4/1/96:} BlackRock

^{1/1/00:} Aberdeen, Dodge & Cox

^{10/1/08:} PIMCO

⁽²⁾ Includes performance of terminated managers.

⁽³⁾ Historical Aggregate and benchmarks inception date: 7/1/84(4) Prior to July 1994, this index reflects the Solomon BIG.

COMBINED RETIREMENT FUNDS BOND MANAGERS Periods Ending June 2015

	June 30, 2015		March 31, 2015	
**************************************	Market Value	Percent	Market Value	Percent
Semi-Passive	\$7,249,659,531	50.2%	\$7,369,598,888	50.3%
BlackRock	\$1,950,380,120	13.5%	\$1,981,234,260	13.5%
Goldman	\$2,722,243,347	18.9%	\$2,764,439,384	18.9%
Neuberger	\$2,577,036,064	17.9%	\$2,623,925,245	17.9%
Active Managers	\$7,181,582,466	49.8%	\$7,281,769,910	49.7%
Aberdeen	\$1,116,184,129	7.7%	\$1,135,120,809	7.7%
Columbia (RiverSource)	\$1,220,077,919	8.5%	\$1,233,576,958	8.4%
Dodge & Cox	\$1,530,809,941	10.6%	\$1,549,603,158	10.6%
PIMCO	\$1,629,281,003	11.3%	\$1,647,750,431	11.2%
Western	\$1,685,229,473	11.7%	\$1,715,718,554	11.7%
Total Portfolio	\$14,431,241,997	100.0%	\$14,651,368,799	100.0%

COMBINED RETIREMENT FUNDS BOND MANAGERS Calendar Year Returns

	2014	2013	2012	2011	2010
Active Managers					
Aberdeen	6.7	-1.5	7.7	8.0	10.7
Benchmark	6.0	-2.0	4.2	7.8	6.5
Columbia (RiverSource)	5.8	-1.0	6.9	8.1	8.1
Benchmark	6.0	-2.0	4.2	7.8	6.5
Dodge & Cox	6.0	0.9	8.5	5.0	7.8
Benchmark	6.0	-2.0	4.2	7.8	6.5
PIMCO	5.5	-1.3	9.3	4.5	12.1
Benchmark	6.0	-2.0	4.2	7.8	6.5
Western	7.0	-1.4	7.8	7.1	10.9
Benchmark	6.0	-2.0	4.2	7.8	6.5
Active Mgr. Aggregate	6.2	-0.8	8.1	6.4	10.0
Benchmark	6.0	-2.0	4.2	7.8	6.5
Semi-Passive Managers					
BlackRock	6.0	-1.8	5.0	8.0	6.5
Benchmark	6.0	-2.0	4.2	7.8	6.5
Goldman	6.1	-1.7	5.4	8.3	8.0
Benchmark	6.0	-2.0	4.2	7.8	6.5
Neuberger	6.1	-2.0	5.4	7.6	9.1
Benchmark	6.0	-2.0	4.2	7.8	6.5
Semi-Passive Mgr. Aggregate	6.1	-1.8	5.3	8.0	7.9
Benchmark	6.0	-2.0	4.2	7.8	6.5
Historical Aggregate	6.1	-1.3	6.7	7.2	9.0
Benchmark	6.0	-2.0	4.2	7.8	6.5
Barclays Aggregate Index	6.0	-2.0	4.2	7.8	6.5

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



STATE BOARD OF INVESTMENT

Non-Retirement Manager Performance Summaries

Second Quarter 2015

MINNESOTA STATE BOARD OF INVESTMENT

Non-Retirement Managers

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NON-RETIREMENT MANAGERS Periods Ended June 2015

	Last Quarter	Last Year	I	ast 3 Years	Last 5 Years	Since Inception (1)
GE Asset Management	0.5	6.7		18.1	16.5	10.1
S&P 500 Index	0.3	7.4		17.3	17.3	9.7
RBC Global Asset Management (2)	-0.4	1.7		0.9	2.5	5.4
Barclays Intermediate Government	-0.4	1.8		0.9	2.1	5.5
Internal Stock Pool	0.3	7.5		17.3	17.3	9.4
S&P 500 Index	0.3	7.4		17.3	17.3	9.3
Internal Bond Pool - Trust	-1.3	2.5		3.0	3.9	6.5
Barclays Aggregate	-1.7	1.9		1.8	3.3	5.9

⁽¹⁾ Since retention by the SBI. Inception dates as follows:

^{7/1/91:} RBC Global Asset Management

^{7/1/93:} Internal Stock Pool

^{7/1/94:} Internal Bond Pool - Trust

^{1/1/95:} GE Asset Management

⁽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 Year Treasury/Ag, 15% ML 3-5 Year Treasury/Ag, and 10% ML 91-day T-Bill was utilized.

NON-RETIREMENT MANAGERS Periods Ended June 2015

	June 30, 2015		March 31, 2015	
with a second se	Market Value	Percent	Market Value	Percent
GE Asset Management	\$63,208,051	2.1%	\$62,882,075	2.1%
RBC Global Asset Management	\$244,029,590	8.1%	\$239,904,006	8.0%
Internal Stock Pool	\$1,760,081,830	58.4%	\$1,751,018,858	58.2%
Internal Bond Pool - Trust	\$946,567,244	31.4%	\$954,266,690	31.7%
Total Portfolio	\$3,013,886,715	100.0%	\$3,008,071,630	100.0%

NON-RETIREMENT MANAGERS Calendar Year Returns

	2014	2013	2012	2011	2010
GE Asset Management	13.2	34.5	16.8	-2.2	10.7
S&P 500 Index	13.7	32.4	16.0	2.1	15.1
RBC Global Asset Management (1)	2.5	-1.3	1.8	7.1	8.4
Barclays Intermediate Gov	2.5	-1.2	1.7	6.2	5.0
nternal Stock Pool	13.7	32.2	16.0	2.2	15.1
5&P 500 Index	13.7	32.4	16.0	2.1	15.1
Internal Bond Pool - Trust	6.0	0.0	5.8	5.6	6.3
Barclays Aggregate	6.0	-2.0	4.2	7.8	6.5

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



STATE BOARD OF INVESTMENT

Deferred Compensation Plan Minnesota College Savings Plan Performance Summaries

Second Quarter 2015

MINNESOTA STATE BOARD OF INVESTMENT

Deferred Compensation Plan and Minnesota College Savings Plan

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MN STATE 457 DEFERRED COMPENSATION PLAN FUND OPTIONS

Periods Ended June 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception(2)
Large Cap Equity					
Janus Twenty	0.8	7.8	16.4	14.8	4.2
S&P 500	0.3	7.4	17.3	17.3	4.5
Vanguard Institutional Index Plus	0.3	7.4	17.3	17.3	4.6
S&P 500	0.3	7.4	17.3	17.3	4.5
Mid Cap Equity					
Vanguard Mid-Cap Index	-1.2	8.7	19.7	18.3	10.3
CRSP US Mid Cap (3)	-1.2	8.7	19.8	18.3	10.3
Small Cap Equity					
T. Rowe Price Small-Cap Stock	-0.8	5.7	17.4	18.8	10.4
Russell 2000	0.4	6.5	17.8	17.1	7.9
Balanced					
Vanguard Balanced Index Inst. Fund	-0.7	5.1	11.1	11.9	7.3
60% CRSP US Tot Mkt, 40% Barclays Agg (4)	-0.6	5.1	11.2	11.9	7.2
Fixed Income					
Dodge & Cox Income Fund	-1.2	1.0	3.2	4.3	5.9
Barclays Aggregate	-1.7	1.9	1.8	3.3	5.4
Vanguard Total Bond Market Index Inst.	-1.8	1.7	1.7	3.3	4.5
Barclays Aggregate	-1.7	1.9	1.8	3.3	4.5
SIF Money Market (1)	0.0	0.1	0.2	0.2	2.2
3 Month T-Bills	0.0	0.0	0.1	0.1	1.9
SIF Fixed Interest (1)					
Galliard Capital Management	0.5	1.9	2.1	2.6	4.8
3-Year Constant Maturity Treasury +45bp	0.3	1.4	1.1	1.1	3.7
International					
Fidelity Diversified International	2.2	2.1	14.1	11.4	7.1
MSCI EAFE Free	0.6	-4.2	12.0	9.5	4.0
Vanguard Total International Stock Index	1.3	-4.5	9.9	-	3.2
FTSE Global All Cap ex US (5)	1.2	-4.2	10.3	22	3.4

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

- (2) Since retention by the SBI. Time periods varies for each manager.
- (3) Benchmark is the CRSP US Mid-Cap Index beginning February 2013. Prior to that date it was the MSCI US Mid-Cap 450 Index.
- (4) Benchmark is 60% CRSP US Total Market Index and 40% Barclays Aggregate Bond Index beginning January 2013. Prior to that date it was 60% MSCI US Broad Market Index and 40% Barclays Aggregate Bond Index.
- (5) Benchmark is the FTSE Global All Cap ex US Index beginning June 2013; MSCI ACWI ex USA 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.

⁽¹⁾ SIF Money Market Account and SIF Fixed Interest Accounts are Supplemental Investment Fund options (SIF), which are also offered under the Deferred Compensation Plan.

MN STATE 457 DEFERRED COMPENSATION PLAN FUND OPTIONS Periods Ended June 2015

MN Target Retirement Funds	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception (1)
SSgA		200000			
Income Fund	-0.5	-0.1	4.7		4.9
Income Fund Benchmark	-0.5	0.0	4.9	••	5.1
2020 Fund	-0.5	0.1	6.9		7.6
2020 Fund Benchmark	-0.5	0.2	7.0		7.7
2025 Fund	-0.6	0.8	8.9	-	8.7
2025 Fund Benchmark	-0.6	0.9	9.0	-	8.8
2030 Fund	-0.6	1.4	10.2	35 (424)	9.4
	-0.6	1.5	10.3	-	9.5
2030 Fund Benchmark	-0.0	1.3	10.5	, o 	7.3
2035 Fund	-0.6	1.6	11.1		9.7
2035 Fund Benchmark	-0.6	1.7	11.2		9.8
2040 Fund	-0.5	1.7	11.8		9.7
2040 Fund Benchmark	-0.5	1.7	11.9	-	9.8
2045 Fund	-0.4	1.7	12.5	-	9.8
2045 Fund Benchmark	-0.4	1.7	12.6	-	9.8
2050 Fund	-0.3	1.7	12.6	-	9.8
2050 Fund Benchmark	-0.3	1.7	12.7	-	9.9
2055 Fund	-0.3	1.7	12.6		9.8
2055 Fund Benchmark	-0.3	1.7	12.7		9.9
2033 Fulla Delicililark	-0.3	1.7	12.7		7.2
2060 Fund	-0.3	1.7	12.6		9.8
2060 Fund Benchmark	-0.3	1.7	12.7		9.9

Note: Each SSgA 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.

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

MN STATE 457 DEFERRED COMPENSATION PLAN FUND OPTIONS Periods Ended June 2015

SSgA Index Funds	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception (1)
S&P 500 Index Fund	0.3	7.4	17.3		14.2
S&P 500	0.3	7.4	17.3	 -	14.2
DJ-UBS Roll Select Commodity Index Fund	3.4	-22.6	-7.9		-7.9
DJ-UBS Roll Select Commodity Index	3.4	-22.6	-7.7	**	-7.7
Russell Small/Mid Cap Index Fund	-0.5	6.2	19.2		19.2
Russell Small Cap Completeness Index	-0.4	6.1	19.2		19.2
Global All-Cap Equity ex-US Index Fund	1.1	-4.8	9.9	2	3.4
MSCI ACWI ex USA IMI	1.0	-5.0	9.8	** 2	3.1
Global Real Estate Securities Index Fund	-6.8	0.1	8.8		7.4
FTSE EPRA/NAREIT Dev Liquid	-7.0	-0.6	8.2		6.6
Long Government Bond Index Fund	-8.1	6.2	1.2		8.0
Barclays Long Government	-8.1	6.2	1.2		8.1
Bond Index Fund	-1.7	1.9	1.8		3.2
Barclays Aggregate	-1.7	1.9	1.8		3.2
Inflation Protected Bond Index Fund	-1.1	-1.7	-0.8		2.2
Barclays U.S. TIPS	-1.1	-1.7	-0.8		2.2
High Yield Bond Index Fund	-0.3	-1.3	6.3	222 2-5	6.6
Barclays U.S. High Yield Very Liquid	-0.4	-1.1	6.3	77	6.7
U.S. Short-Term Gov/Credit Index Fund	0.1	0.9	0.9		1.6
Barclays 1-3 Yr Govt/Credit	0.1	0.9	0.9	1	1.0

Benchmarks for the SSgA Funds are noted in italics below the Fund names.

⁽¹⁾ Minnesota Target Retirement Funds inception date is July 2011.

MN STATE 457 DEFERRED COMPENSATION PLAN FUND OPTIONS

Calendar Year Returns

	2014	2013	2012	2011	2010
Large Cap Equity					
Janus Twenty	8.9	33.1	22.3	-8.2	7.0
S&P 500	13.7	32.4	16.0	2.1	15.1
Vanguard Institutional Index Plus	13.7	32.4	16.0	2.1	15.1
S&P 500	13.7	32.4	16.0	2.1	15.1
Mid Cap Equity					
Vanguard Mid-Cap Index	13.8	35.2	16.0	-2.0	25.7
CRSP US Mid Cap (2)	13.8	35.4	16.0	-1.9	25.7
Small Cap Equity					
T. Rowe Price Small-Cap Stock	6.9	37.6	18.0	-0.1	32.5
Russell 2000	4.9	38.8	16.3	-4.2	26.9
Balanced					
Vanguard Balanced Index Inst. Fund	10.0	18.1	11.5	4.3	13.3
60% CRSP US Tot Mkt, 40% Barclays Agg (3)	10.0	18.2	11.6	4.1	13.5
Fixed Income					
Dodge & Cox Income Fund	5.5	0.6	7.9	4.8	7.2
Barclays Aggregate	6.0	-2.0	4.2	7.8	6.5
Vanguard Total Bond Market Index Inst.	5.9	-2.1	4.2	7.7	6.6
Barclays Aggregate	6.0	-2.0	4.2	7.8	6.5
SIF Money Market (1)	0.1	0.2	0.3	0.2	0.2
3 Month T-Bills	0.0	0.1	0.1	0.1	0.1
SIF Fixed Interest (1)					
Galliard Capital Management	1.8	2.2	2.8	3.4	4.1
3-Year Constant Maturity Treasury +45bp	1.3	1.0	0.8	1.2	1.5
International					
Fidelity Diversified International	-3.2	25.2	19.4	-13.8	9.7
MSCI EAFE Free	-4.9	22.8	17.3	-12.1	7.7
Vanguard Total International Stock Index	-4.1	15.2	18.3	-14.6	11.1
FTSE Global All Cap ex US (4)	-3.1	15.9	17.0	-14.3	10.7

Numbers in blue include returns prior to retention by SBI.

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

- (1) SIF Money Market Account and SIF Fixed Interest Accounts are Supplemental Investment Fund options (SIF), which are also offered under the Deferred Compensation Plan accounts.
- (2) Benchmark is the CRSP US Mid-Cap Index beginning February 2013. Prior to that date it was the MSCI US Mid-Cap 450 Index.
- (3) Benchmark is 60% CRSP US Total Market Index and 40% Barclays Aggregate Bond Index beginning January 2013. Prior to that date it was 60% MSCI US Broad Market Index and 40% Barclays Aggregate Bond Index.
- (4) Benchmark is the FTSE Global All Cap ex US Index beginning June 2013; MSCI ACWI ex USA 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

MN Target Retirement Funds	2014	2013	2012	2011	2010
SSgA					
Income Fund	3.6	5.1	9.7	4.6	9.6
Income Fund Benchmark	3.8	5.3	9.8	4.8	10.1
2020 Fund	5.3	8.8	12.5	7.3	13.6
2020 Fund Benchmark	5.5	9.1	12.5	7.4	13.9
2025 Fund	5.9	13.2	13.7	5.9	14.6
2025 Fund Benchmark	6.2	13.5	13.7	6.0	14.7
2030 Fund	6.3	16.0	14.3	4.9	15.1
2030 Fund Benchmark	6.6	16.3	14.1	5.0	15.3
2035 Fund	6.4	18.1	14.9	3.5	15.7
2035 Fund Benchmark	6.7	18.5	14.7	3.6	15.8
2040 Fund	6.4	19.7	15.5	1.5	15.9
2040 Fund Benchmark	6.6	20.0	15.3	1.6	16.1
045 Fund	6.2	21.3	16.0	0.0	16.2
2045 Fund Benchmark	6.5	21.6	15.8	0.1	16.2
050 Fund	6.2	21.4	15.9	0.1	16.1
2050 Fund Benchmark	6.5	21.7	15.8	0.1	16.2
2055 Fund	6.2	21.4	15.9	0.1	16.1
2055 Fund Benchmark	6.5	21.7	15.8	0.1	16.2
2060 Fund	6.2	21.4	16.0	_	
2060 Fund Benchmark	6.5	21.7	15.8		

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

Numbers in blue include returns prior to retention by SBI.

MN STATE 457 DEFERRED COMPENSATION PLAN FUND OPTIONS Calendar Year Returns

SSgA Index Funds	2014	2013	2012	2011	2010
S&P 500 Index Fund	13.7	32.4	16.0	2.1	15.1
C&P 500 mdex Fund	13.7	32.4	16.0	2.1	15.1
DJ-UBS Roll Select Commodity Index Fund	-15.3	-9.3			
J-UBS Roll Select Commodity Index	-15.2	-9.1			
Russell Small/Mid Cap Index Fund	7.5	38.4		,	
Russell Small Cap Completeness Index	7.4	38.5			
Global All-Cap Equity ex-US Index Fund	-4.2	15.4	18.2		
ASCI ACWI ex USA IMI	-3.9	15.8	17.0		2-
Global Real Estate Securities Index Fund	15.5	2.7	28.9	-5.4	19.1
TTSE EPRA/NAREIT Dev Liquid	15.0	2.5	27.5	-5.8	18.4
ong Government Bond Index Fund	24.6	-12.5	3.8	29.2	9.5
Barclays Long Government	24.7	-12.5	3.8	29.1	9.4
Bond Index Fund	6.0	-2.1	4.2	7.8	6.6
Barclays Aggregate	6.0	-2.0	4.2	7.8	6.5
nflation Protected Bond Index Fund	3.6	-8.6	6.9	13.5	6.2
Barclays U.S. TIPS	3.6	-8.6	7.0	13.6	6.3
ligh Yield Bond Index Fund	2.1	6.6	14.8	5.7	12.5
Barclays U.S. High Yield Very Liquid	2.1	6.6	15.4	6.1	15.1
J.S. Short-Term Gov/Credit Index Fund	0.7	0.6	3.9	1.5	2.4
Barclays 1-3 Yr Govt/Credit	0.8	0.6	1.3	1.6	2.8

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

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

Numbers in blue include returns prior to retention by SBI.

MN STATE 457 DEFERRED COMPENSATION PLAN FUND OPTIONS

	June 30, 2015			
	Market Value	Percent	Market Value	Percent
Fixed Income	\$458,037,364	7.9%	\$457,025,343	7.9%
Dodge & Cox Income Fund	\$206,403,600	3.6%	\$209,588,575	3.6%
Vanguard Total Bond Market Index Inst.	\$190,307,274	3.3%	\$191,335,955	3.3%
Money Market	\$61,326,490	1.1%	\$56,100,813	1.0%
Stable Value	\$1,299,405,228	22.5%	\$1,306,026,420	22.6%
Galliard Stable Value Composite	\$1,299,405,228	22.5%	\$1,306,026,420	22.6%
Large Cap Equity	\$1,518,022,151	26.3%	\$1,528,503,642	26.5%
Janus Twenty	\$530,961,970	9.2%	\$535,876,974	9.3%
Vanguard Institutional Index Plus	\$987,060,181	17.1%	\$992,626,668	17.2%
Mid Cap Equity	\$436,748,735	7.6%	\$441,260,377	7.6%
Vanguard Mid-Cap Index	\$436,748,735	7.6%	\$441,260,377	7.6%
Small Cap Equity	\$602,159,488	10.4%	\$614,281,356	10.6%
T. Rowe Price Small-Cap Stock	\$602,159,488	10.4%	\$614,281,356	10.6%
Balanced	\$683,486,940	11.9%	\$690,936,059	12.0%
Vanguard Balanced Index Inst. Fund	\$683,486,940	11.9%	\$690,936,059	12.0%
International	\$460,392,059	8.0%	\$443,159,705	7.7%
Fidelity Diversified International	\$292,816,945	5.1%	\$284,063,983	4.9%
Vanguard Total International Stock Index	\$167,575,114	2.9%	\$159,095,722	2.8%
Target Retirement Funds	\$307,154,562	5.3%	\$290,116,977	5.0%
Income Fund	\$71,479,699	1.2%	\$69,144,923	1.2%
2020 Fund	\$73,664,160	1.3%	\$69,484,910	1.2%
2025 Fund	\$55,542,406	1.0%	\$51,740,192	0.9%
2030 Fund	\$34,944,988	0.6%	\$33,654,589	0.6%
2035 Fund	\$26,833,527	0.5%	\$25,511,669	0.4%
2040 Fund	\$16,452,725	0.3%	\$15,334,358	0.3%
2045 Fund	\$11,687,687	0.2%	\$10,246,534	0.2%
2050 Fund	\$8,109,117	0.1%	\$7,342,078	0.1%
2055 Fund	\$3,754,917	0.1%	\$3,317,374	0.1%
2060 Fund	\$4,685,336	0.1%	\$4,340,348	0.1%

MINNESOTA COLLEGE SAVINGS PLAN STATIC OPTIONS (1) Periods Ended June 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception(1)
Equity					
MNCSP US Intl Equity Allocation	-0.7	3.4	14.3	14.6	6.5
MNCSP US Intl Equity Allocation Benchmark	-0.6	3.5	14.8	14.9	7.6
MNCSP Equity Interest Allocation	0.2			. 	3.8
MNCSP Equity Interest Benchmark	0.1				3.4
MNCSP Intl Eq Index Allocation	1.0	-4.3			5.4
MNCSP Intl Eq Index Allocation Benchmark	0.7	-4.3		-	5.8
MNCSP US LC Equity Allocation	0.3	£4.			8.5
MNCSP US LC Equity Allocation Benchmark	0.3			(10)	8.7
Fixed Income					
MNCSP Fixed Income Allocation	-1.5	0.8	0.7	2.8	4.0
MNCSP Fixed Income Allocation Benchmark	-1.4	1.1	1.2	3.4	4.8
MNCSP Principal Interest Allocation	0.3	1.2	1.3	1.7	2.8
MNCSP Principal Interest Allocation Benchmark	0.0	0.0	0.0	0.1	1.4
MNCSP Money Market Allocation	0.0	0.0	0.0	-0.1	0.3
MNCSP Money Market Allocation Benchmark	0.0	0.0	0.0	0.0	0.4

⁽¹⁾ Since retention by the SBI. Time periods varies for each option

MINNESOTA COLLEGE SAVINGS PLAN ALLOCATION OPTIONS

Periods Ended June 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Since Inception(1)
Allocation Options					
MNCSP Aggressive Allocation	-0.9				4.5
MNCSP Aggressive Allocation Benchmark	-0.8		-		4.5
MNCSP Moderate Allocation	-1.0	2.4	8.9	9.9	4.8
MNCSP Moderate Allocation Benchmark	-0.9	2.6	9.3	10.4	5.5
MNCSP Conservative Allocation	-0.8	-	1000	-	1.4
MNCSP Conservative Allocation Benchmark	-0.8	See	DC 1898	-	1.3
Managed Allocation Options					
MNCSP Managed 0-4 Yrs	-0.9				4.5
*MNCSP Managed 0-4 Yrs - Bench	-0.8		-	-	4.5
MNCSP Managed 5-8 Yrs	-1.0				4.0
*MNCSP Managed 5-8 Yrs - Bench	-0.8				4.1
MNCSP Managed 9-10 Yrs	-1.1				3.5
*MNCSP Managed 9-10 Yrs - Bench	-0.9	<u> 222</u>			3.7
MNCSP Managed 11-12 Yrs	-1.1				3.0
*MNCSP Managed 11-12 Yrs - Bench	-0.9				3.2
*MNCSP Managed 11-12 YFS - Bench	-0.9	(12)			3.2
MNCSP Managed 13-14 Yrs	-1.0			-7	2.6
*MNCSP Managed 13-14 Yrs - Bench	-0.9	100		7.77	2.7
MNCSP Managed 15 Yrs	-0.9				2.1
*MNCSP Managed 15 Yrs - Bench	-0.8				2.1
MNCSP Managed 16 Yrs	-0.8			-	1.9
*MNCSP Managed 16 Yrs - Bench	-0.7				1.8
MNCSP Managed 17 Yrs	-0.6		-		1.7
*MNCSP Managed 17 Yrs - Bench	-0.6				1.4
MNCSP Managed 18+ Yrs	-0.5	-	No.		1.5
*MNCSP Managed 18+ Yrs - Bench	-0.5	1880	-		1.1

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

MINNESOTA COLLEGE SAVINGS PLAN ALLOCATION OPTIONS UNDERLYING FUNDS Periods Ended June 2015

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
TIAA-CREF:Bond Indx;Inst	-1.7	1.8	1.6	3.2	
Barclays Agg (SBI Toolbox Returns)	-1.7	1.9	1.8	3.3	4.4
TIAA-CREF:EM Eq Idx;Inst	0.7	-5.1	3.1	-	-
MSCI:Emer Markets	0.8	-4.8	4.1	4.0	8.5
TIAA-CREF:Eq Idx;Inst	0.1	7.3	17.7	17.5	8.1
Russell 3000 Index	0.1	7.3	17.7	17.5	8.2
TIAA-CREF:Hi-Yld;Inst	-0.1	0.0	6.3	8.4	-
ML:1-3 BB US HY CP	0.9	2.3	5.6	6.4	6.9
TIAA-CREF:Infl Bond;Inst	-1.4	-2.1	-1.0	3.0	3.8
Barclays U.S. TIPS Index	-1.1	-1.7	-0.8	3.3	4.1
TIAA-CREF:Itl Eq Ix;Inst	1.0	-4.0	12.0	9.9	5.3
MSCI EAFE USD Index	0.6	-4.2	12.0	9.5	5.1
TIAA-CREF:Money Mkt;Inst	0.0	0.0	0.0	0.0	1.5
MFR Avg All-Taxble	0.0	0.1	0.1	0.1	1.3
TIAA-CREF:Real Est;Inst	-9.2	6.0	8.6	14.4	6.0
NAREIT All Equity Index	-9.1	4.1	9.1	14.4	7.0
TIAA-CREF:S&P500 Idx;Ins	0.3	7.3	17.2	17.2	7.8
S&P 500 Index	0.3	7.4	17.3	17.3	7.9

MINNESOTA COLLEGE SAVINGS PLAN FUND OPTIONS

	June 30, 2015	March 31, 2015		
	Market Value	Percent	Market Value	Percent
Fixed Income	\$125,994,178	10.5%	\$122,332,768	10.3%
MNCSP Fixed Income Allocation	\$10,453,248	0.9%	\$10,484,783	0.9%
MNCSP Principal Interest Allocation	\$106,983,220	8.9%	\$103,296,356	8.7%
MNCSP Money Market Allocation	\$8,557,710	0.7%	\$8,551,629	0.7%
Equity	\$287,846,836	24.0%	\$289,860,329	24.3%
MNCSP US Intl Equity Allocation	\$279,667,014	23.4%	\$282,929,726	23.7%
MNCSP Equity Interest Allocation	\$364,210	0.0%	\$312,932	0.0%
MNCSP Intl Eq Index Allocation	\$2,862,491	0.2%	\$2,296,306	0.2%
MNCSP US LC Equity Allocation	\$4,953,121	0.4%	\$4,321,365	0.4%
Allocation Options	\$57,897,334	4.8%	\$55,862,724	4.7%
MNCSP Aggressive Allocation	\$4,596,792	0.4%	\$3,927,147	0.3%
MNCSP Moderate Allocation	\$50,504,977	4.2%	\$49,555,075	4.2%
MNCSP Conservative Allocation	\$2,795,565	0.2%	\$2,380,502	0.2%
Managed Allocation Options	\$725,279,821	60.6%	\$723,827,515	60.7%
MNCSP Managed 0-4 Yrs	\$25,352,739	2.1%	\$26,747,222	2.2%
MNCSP Managed 5-8 Yrs	\$82,362,877	6.9%	\$86,936,746	7.3%
MNCSP Managed 9-10 Yrs	\$80,573,033	6.7%	\$82,745,572	6.9%
MNCSP Managed 11-12 Yrs	\$110,196,015	9.2%	\$114,535,332	9.6%
MNCSP Managed 13-14 Yrs	\$118,799,977	9.9%	\$121,154,813	10.2%
ANCSP Managed 15 Yrs	\$57,396,980	4.8%	\$56,283,592	4.7%
MNCSP Managed 16 Yrs	\$61,426,258	5.1%	\$57,089,445	4.8%
MNCSP Managed 17 Yrs	\$51,457,626	4.3%	\$51,762,600	4.3%
MNCSP Managed 18+ Yrs	\$137,714,316	11.5%	\$126,572,193	10.6%