



Quarterly Report

Comprehensive Performance Report

June 30, 2023



Description of SBI Investment Programs

The Minnesota State Board of Investment is responsible for the investment management of various retirement funds, trust funds and cash accounts.

Combined Funds

The Combined Funds represent the assets for both the active and retired public employees in the statewide retirement systems, the biggest of which are the Public Employees Retirement Association (PERA), the Teachers Retirement Association (TRA), and the Minnesota State Retirement System (MSRS). The SBI commingles the assets of these plans into the Combined Funds to capture investment efficiencies. All assets in the Combined Funds are managed externally by investment management firms retained by contract.

Fire Plans + Other Retirement Plans

Fire Plans and Other Retirement Plans include assets from volunteer fire relief plans and other public retirement plans with authority to invest with the SBI, if they so choose. Fire Plans that are not eligible to be consolidated with Public Employees Retirement Association (PERA) or elect not to be administered by PERA may invest their assets with the SBI using the same asset pools as the Combined Funds. The Statewide Volunteer Firefighter Retirement Plan is administered by PERA and has its own investment vehicle called the Volunteer Firefighter Account.

Participant Directed Investment Program

The Participant Directed Investment Program (PDIP) provides investment vehicles for a variety of retirement or other tax-advantaged savings plans. Investment goals among the PDIP's many participants are varied. In order to meet the variety of goals, participants may allocate their investments among one or more accounts that are appropriate for their needs within statutory requirements and rules established by the participating organizations.

Non-Retirement Funds

The Non-Retirement Funds are funds established by the State of Minnesota and other government entities for various purposes which include the benefit of public schools, the environment, other post-employment benefits, workers compensation insurance, and other purposes.

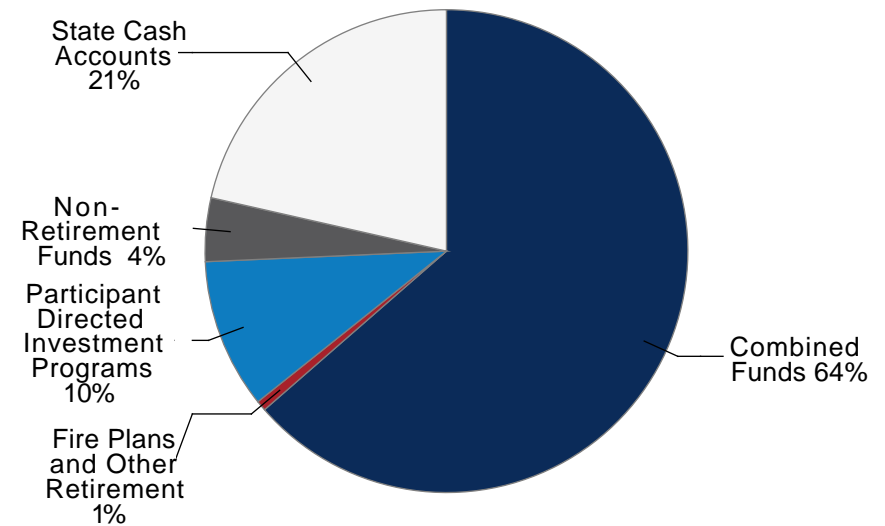
State Cash

The State Cash accounts are cash balances of state government funds including the State General Fund. 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. Because of special legal restrictions, a small number of cash accounts cannot be commingled.



Funds Under Management

	<u>\$ Millions</u>
COMBINED FUNDS	\$85,653
Fire Plans + Other Retirement Plans	924
Participant Directed Investment Program	13,507
State Deferred Compensation Plan	9,232
Health Care Savings Plan	1,797
Unclassified Employees Retirement Plan	359
Hennepin County Supplemental Retirement Plan	164
PERA Defined Contribution Plan	88
Minnesota College Savings Plan	1,830
Minnesota Achieving a Better Life Experience Plan	36
Non-Retirement Funds	5,730
Assigned Risk Plan	265
Permanent School Fund	1,890
Environmental Trust Fund	1,620
Closed Landfill Investment Fund	130
Miscellaneous Trust Funds	966
Other Postemployment Benefits Accounts	859
State Cash	28,886
Invested Treasurer's Cash	28,697
Other State Cash Accounts	190
TOTAL SBI AUM	134,701



Note: Differentials within column amounts may occur due to rounding



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Performance Reporting Legend

Manager Level Data

Aggregate Level Data

Sub-Asset Class Level Data

Asset Class Level Data

Note:

Throughout this report performance is calculated net of investment management fees, gross of administrative fees. Aggregates include terminated managers, and returns for all periods greater than one year are annualized. Inception Date and Since Inception Returns refer to the date of retention by the SBI. FYTD refers to the return generated by an account since July 1 of the most recent year. For historical benchmark details, please refer to the addendum of this report. Some aggregate inception to date return are based portfolio management decisions to re-group manager accounts in different or newly created aggregates.



Quarterly Report

Combined Funds

June 30, 2023



Combined Funds Summary

Combined Funds Change in Market Value (\$Millions)

	One Quarter
Combined Funds	
Beginning Market Value	\$83,246
Net Contributions	-680
Investment Return	3,087
Ending Market Value	85,653

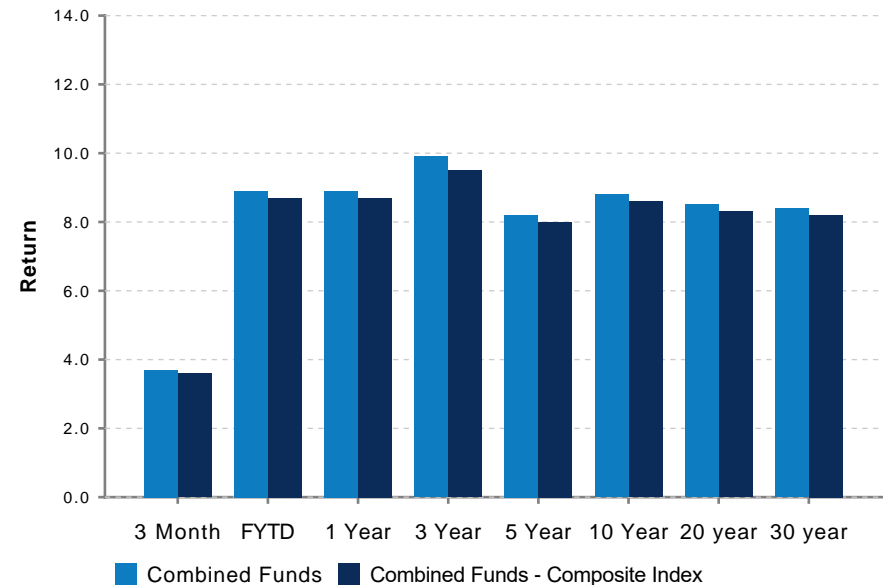
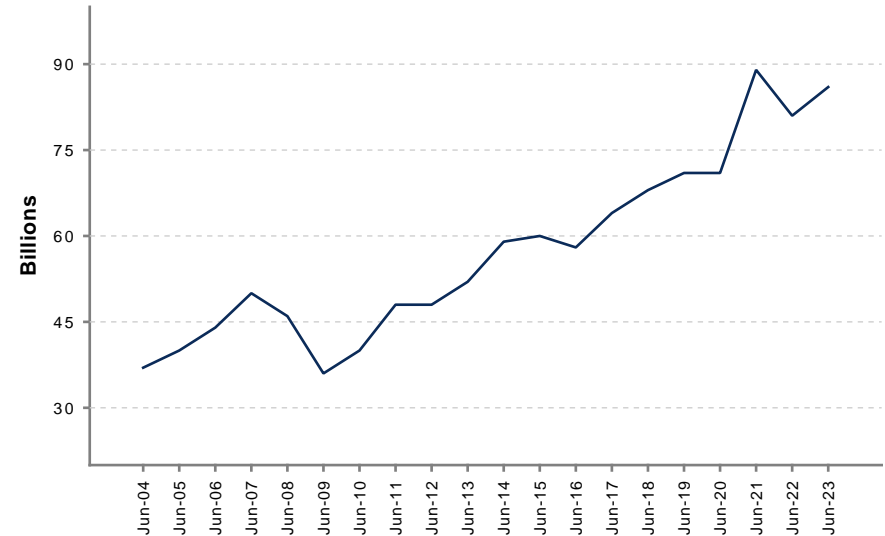
The change in market value of the Combined Funds since the end of last quarter is due to net contributions and investment returns.

Performance (Net of Fees)

The Combined Funds' performance is evaluated relative to a composite of public market index and private market investment returns. The Composite performance is calculated by multiplying the beginning of month Composite weights and the monthly returns of the asset class benchmarks.

	Qtr	FYTD	1 Yr	3 Yr	5 Yr	10 Yr	20 Yr	30 Yr
Combined Funds	3.7%	8.9%	8.9%	9.9%	8.2%	8.8%	8.5%	8.4%
Combined Funds - Composite Index	3.6%	8.7%	8.7%	9.5%	8.0%	8.6%	8.3%	8.2%
Excess	0.1%	0.3%	0.3%	0.5%	0.3%	0.2%	0.3%	0.2%

Asset Growth

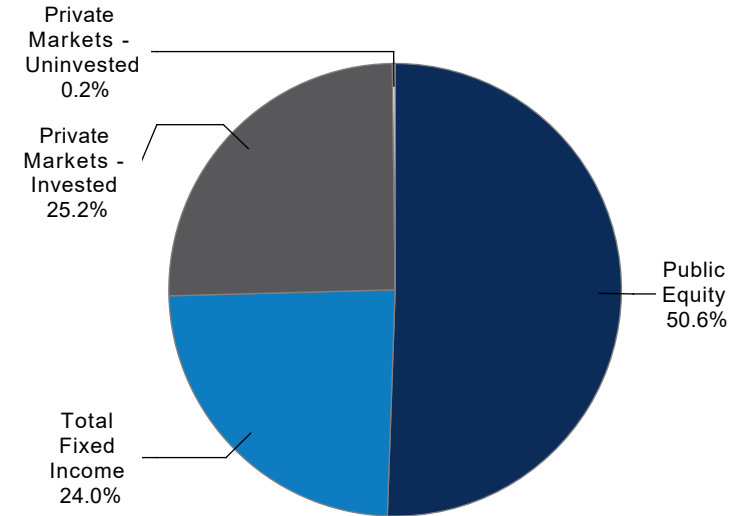


Combined Funds Summary

Asset Mix

The Combined Funds actual asset mix relative to the Strategic Asset Allocation Policy Target is shown below. Any uninvested portion of the Private Markets allocation is held in Public Equity.

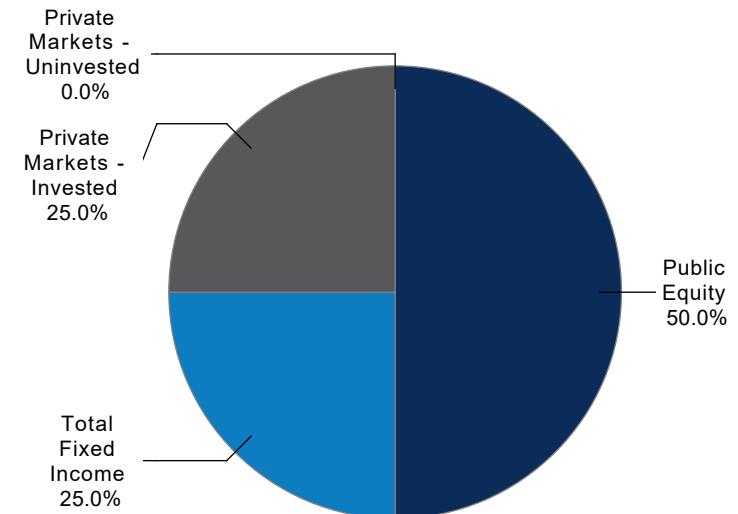
	<u>(Millions)</u>	<u>Actual Mix</u>	<u>Policy Target</u>
Public Equity	\$43,265	50.5%	50.0%
Total Fixed Income	20,597	24.0	25.0
Private Markets - Total	21,791	25.4	25.0
Private Markets - Invested	21,580	25.2	
Private Markets - Uninvested	211	0.2	
TOTAL	85,653	100.0	



Composite Index Comparison

The Combined Funds Composite is set as the Strategic Asset Allocation Policy Target. Asset class weights for Private Markets - Invested and Private Markets - Uninvested are reset at the start of each month. The Combined Funds Composite weighting shown below is as of the first day of the quarter.

	<u>Policy Weight</u>	<u>Market Index</u>
Public Equity	50.0%	Public Equity Benchmark
Total Fixed Income	25.0	Total Fixed Income Benchmark
Private Markets - Invested	25.0	Private Markets
Private Markets - Uninvested	0.0	





Combined Funds Asset Class Performance Summary

Public Equity

The Combined Funds Public Equity includes Domestic Equity, International Equity and Global Equity.

The Public Equity benchmark is 67% Russell 3000 and 33% MSCI ACWI ex US (net).

	<u>Market Value</u>	<u>Actual Weight</u>	<u>Policy Weight</u>	<u>Last Qtr</u>	<u>FYTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>20 Year</u>	<u>30 Year</u>
Public Equity	\$43.3	50.5%	50.0%	6.5%	17.4%	17.4%	12.2%	9.0%	10.2%	9.1%	8.8%
Public Equity Benchmark				6.4	17.0	17.0	11.8	8.8			
Excess				0.1	0.3	0.3	0.4	0.2			
Domestic Equity	28.7	33.5	33.5	8.3	19.1	19.1	14.1	11.3	12.3	10.0	9.6
Domestic Equity Benchmark				8.4	19.0	19.0	14.0	11.3	12.3	10.0	9.8
Excess				-0.1	0.1	0.1	0.1	-0.0	-0.0	-0.1	-0.1
International Equity	13.6	15.9	16.5	3.0	14.0	14.0	8.8	4.5	5.4	7.1	6.0
International Equity Benchmark				2.4	12.7	12.7	7.2	3.5	4.7	6.7	5.3
Excess				0.6	1.3	1.3	1.6	1.0	0.7	0.5	0.8
Global Equity	1.0	1.2	0.0	5.1	17.1	17.1					
MSCI AC World Index (net)				6.2	16.5	16.5					
Excess				-1.0	0.6	0.6					

Note:

Prior to 6/30/16 the returns of Domestic and International Equity were not reported as a Total Public Equity return. For additional information regarding historical asset class performance and benchmarks, please refer to the Combined Funds Performance Report.



Combined Funds Asset Class Performance Summary

Total Fixed Income

The Combined Funds Fixed Income program includes Core/Core Plus, Return Seeking Fixed Income, Treasuries and Laddered Bond + Cash.

The Total Fixed Income benchmark is 40% Bloomberg U.S. Aggregate Index/ 40% Bloomberg Treasury 5+ Years Index/ 20% ICE BofA US 3-Month Treasury Bill.

	<u>Market Value</u>	<u>Actual Weight</u>	<u>Policy Weight</u>	<u>Last Qtr</u>	<u>FYTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>20 Year</u>	<u>30 Year</u>
Total Fixed Income	\$20.6	24.0%	25.0%	-0.5%	0.1%	0.1%	-4.0%	1.7%	2.3%	3.6%	4.9%
Total Fixed Income Benchmark				-0.9%	-1.3%	-1.3%	-4.6%	1.3%	1.8%	3.2%	4.5%
Excess				0.3%	1.4%	1.4%	0.6%	0.4%	0.5%	0.4%	0.4%
Core/Core Plus	\$4.5	5.2%	5.0	-0.5%	0.3%	0.3%	-3.3%	1.3%	2.0%	3.5%	4.8%
Core Bonds Benchmark				-0.8%	-0.9%	-0.9%	-4.0%	0.8%	1.5%	3.0%	4.4%
Excess				0.4%	1.2%	1.2%	0.6%	0.6%	0.5%	0.5%	0.4%
Return Seeking Fixed Income	\$4.2	4.9%	5.0	0.8%	5.1%	5.1%					
Bloomberg U.S. Aggregate				-0.8%	-0.9%	-0.9%					
Excess				1.7%	6.0%	6.0%					
Treasury Protection	\$8.0	9.3%	10.0	-2.1%	-4.4%	-4.4%	-8.1%	-0.0%			
Bloomberg Treasury 5+ Year				-2.0%	-4.3%	-4.3%	-8.2%	-0.0%			
Excess				-0.1%	-0.1%	-0.1%	0.1%	-0.0%			
Laddered Bond + Cash	\$4.0	4.6%	5.0	1.3%	3.8%	3.8%	1.2%	1.5%	1.0%	1.6%	3.1%
ICE BofA US 3-Month Treasury Bill				1.2%	3.6%	3.6%	1.3%	1.6%	1.0%	1.4%	2.4%
Excess				0.1%	0.2%	0.2%	-0.1%	-0.1%	0.1%	0.2%	0.7%

Note:

Since 12/1/2020 the Total Fixed Income includes allocations to Core/Core Plus Bonds, Return Seeking Bonds, Treasuries and Laddered Bond + Cash. From 7/1/2020 to 11/30/2020 Total Fixed Income was Core Bonds, Treasuries and Cash. From 2/1/2018-6/30/20 Total Fixed Income was Core Bonds and Treasuries. Prior to 2/1/2018, Total Fixed Income was Core Bonds. For additional information regarding historical asset class performance and benchmarks, please refer to the Combined Funds Performance Report.



Combined Funds Asset Class Performance Summary

Private Markets

	<u>Last Qtr</u>	<u>FYTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>20 Year</u>	<u>25 Year</u>	<u>30 Year</u>
Private Markets - Invested	2.5%	1.8%	1.8%	20.5%	13.5%	12.7%	14.0%	12.4%	13.4%
Private Markets -Uninvested (1)	1.5%	5.6%	5.6%						
Private Equity	3.6%	1.5%	1.5%	22.8%	17.0%	16.3%	16.2%	13.6%	15.6%
Private Credit	3.2%	9.1%	9.1%	16.1%	11.7%	13.1%	12.9%	12.8%	
Resources	-1.4%	2.8%	2.8%	17.1%	3.9%	2.4%	13.0%	11.7%	12.8%
Real Estate	-2.5%	-3.3%	-3.3%	16.7%	12.4%	12.7%	9.7%	9.4%	9.6%

Private Markets

The time-weighted rates of return for the Private Markets portfolio are shown here. Private Markets included Private Equity, Private Credit, Resources, and Real Estate. Some of the existing investments are relatively immature and returns may not be indicative of future results.

Private Equity Investments - The objectives of the Private Equity portfolio, which may include leveraged buyouts, growth equity, venture capital and special situations, are to achieve attractive returns and to provide overall portfolio diversification to the total plan.

Private Credit Investments - The objectives of the Private Credit portfolio, which may include mezzanine debt, direct lending, and other forms of non-investment grade fixed income instruments, are to achieve a high total return over a full market cycle and to provide some degree of downside protection and typically provide current income in the form of a coupon. In certain situations, investments in the Private Credit portfolio also provide an equity component of return in the form of warrants or re-organized equity.

Resource Investments - The objectives of the Resources portfolio, which may include energy, infrastructure, and other hard assets, are to provide protection against the risks associated with inflation and to provide overall portfolio diversification to the total plan.

Real Estate Investments - The objectives of the Real Estate portfolio, which may include core and non-core real estate investments, are to achieve attractive returns, preserve capital, provide protection against risks associated with inflation, and provide overall portfolio diversification to the total plan.

The SBI also monitors Private Markets performance using money-weighted return metrics such as Internal Rate of Return and Multiple of Invested Capital. For money-weighted return metrics please refer to the Combined Funds Performance Report.

(1) The Uninvested portion of the Private Markets allocation is invested in a combination of a passively managed S&P 500 Index strategy and a cash overlay strategy invested in equity derivatives and cash.

Source: State Street Bank



Quarterly Report

Asset Class & Manager Performance

June 30, 2023

The assets of the Combined Funds are allocated to public equity, fixed income, private markets, and cash. Each asset class may be further differentiated by geography, management style, and/or strategy. Managers are hired to manage the assets accordingly. This diversification is intended to reduce wide fluctuations in investment returns on a year-to-year basis and enhances the Funds' ability to meet or exceed the actuarial return target over the long-term.

The Combined Funds consist of the assets of active employees and retired members of the statewide retirement plans. The SBI commingles the assets of these plans into the Combined Funds to capture investment efficiencies. This sharing is accomplished by grouping managers by asset class, geography, and management style, into several Investment Pools. The individual funds participate in the Investment Pools by purchasing units which function much like the shares of a mutual fund.

While the vast majority of the units of these pools are owned by the Combined Funds, the Supplemental Investment Fund also owns units of these pools. The Supplemental Investment Funds are mutual fund-like investment vehicles which are used by investors in the Participant Directed Investment Program. Please refer to the Participant Directed Investment Program report for more information.

The performance information presented on the following pages for Public Equity and Fixed Income includes both the Combined Funds and Supplemental Investment Fund. The Private Markets is Combined Funds only. All assets in the Combined Funds are managed externally by investment management firms retained by contract.

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Domestic Equity

June 30, 2023



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Total Domestic Equity										
ACTIVE DOMESTIC EQUITY AGGREGATE (1)	\$2,959,475,600	10.1%	6.1%	16.2%	16.2%	12.0%	7.7%	10.8%	8.1%	06/1996
Active Domestic Equity Benchmark			6.1	14.3	14.3	12.1	7.6	10.4	8.7	06/1996
Excess			0.0	1.9	1.9	-0.1	0.1	0.4	-0.6	
SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)	3,206,359,138	10.9	8.6	19.8	19.8	14.8	12.4	12.9	9.0	06/1996
Semi Passive Domestic Equity Benchmark			8.6	19.4	19.4	14.1	11.9	12.6	8.9	06/1996
Excess			-0.0	0.5	0.5	0.7	0.5	0.2	0.1	
PASSIVE DOMESTIC EQUITY AGGREGATE (3)	23,119,226,235	78.9	8.6	19.4	19.4	14.1	11.8	12.5	9.2	06/1996
Passive Domestic Equity Benchmark			8.6	19.3	19.3	14.1	11.8	12.5	9.2	06/1996
Excess			0.0	0.0	0.0	0.0	0.0	-0.0	-0.1	
TRANSITION AGGREGATE DOMESTIC EQUITY (4)	47									
TOTAL DOMESTIC EQUITY (5)	29,285,061,021	100.0	8.3	19.1	19.1	14.1	11.3	12.3	10.6	01/1984
Domestic Equity Benchmark			8.4	19.0	19.0	14.0	11.3	12.3	10.8	01/1984
Excess			-0.1	0.1	0.1	0.1	-0.0	-0.0	-0.2	

(1) The Active Domestic Equity Benchmark is a weighted composite each of the individual active domestic equity manager's benchmarks.

(2) The current Semi-Passive Domestic Equity Benchmark is the Russell 1000 index.

(3) The current Passive Domestic Equity Benchmark is a weighted average of the Russell 1000, Russell 2000 and Russell 3000.

(4) The Transition Domestic Equity Aggregate will periodically contain residual Domestic Equity securities from transitions.

(5) The current Domestic Equity Benchmark is the Russell 3000.

Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Total Domestic Equity					
ACTIVE DOMESTIC EQUITY AGGREGATE (1)	-21.3%	18.5%	27.3%	27.6%	-6.5%
Active Domestic Equity Benchmark	-19.4	20.3	19.8	28.2	-8.0
Excess	-1.9	-1.7	7.5	-0.6	1.4
SEMI PASSIVE DOMESTIC EQUITY AGGREGATE (2)	-18.7	28.8	21.0	30.9	-4.9
Semi Passive Domestic Equity Benchmark	-19.1	26.5	21.0	31.4	-4.8
Excess	0.4	2.3	0.0	-0.5	-0.1
PASSIVE DOMESTIC EQUITY AGGREGATE (3)	-19.2	26.5	20.8	31.3	-5.0
Passive Domestic Equity Benchmark	-19.1	26.4	20.8	31.3	-5.0
Excess	-0.0	0.1	0.0	0.0	-0.0
TOTAL DOMESTIC EQUITY (5)	-19.4	25.8	21.7	30.7	-5.3
Domestic Equity Benchmark	-19.2	25.7	20.8	30.8	-5.2
Excess	-0.2	0.1	0.9	-0.1	-0.0

(1) The Active Domestic Equity Benchmark is a weighted composite each of the individual active domestic equity manager's benchmarks.

(2) The current Semi-Passive Domestic Equity Benchmark is the Russell 1000 index.

(3) The current Passive Domestic Equity Benchmark is a weighted average of the Russell 1000, Russell 2000 and Russell 3000.

(4) The Transition Domestic Equity Aggregate will periodically contain residual Domestic Equity securities from transitions.

(5) The current Domestic Equity Benchmark is the Russell 3000.

Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Active Large Cap Growth										
SANDS	\$187,615,203	0.6%	13.9%	31.7%	31.7%	-0.8%	7.6%	12.5%	10.5%	01/2005
Russell 1000 Growth			12.8	27.1	27.1	13.7	15.1	15.7	11.3	01/2005
Excess			1.1	4.6	4.6	-14.5	-7.6	-3.3	-0.8	
WINSLOW	187,065,837	0.6	13.2	27.9	27.9	10.0	12.8	14.8	11.4	01/2005
Russell 1000 Growth			12.8	27.1	27.1	13.7	15.1	15.7	11.3	01/2005
Excess			0.4	0.7	0.7	-3.7	-2.3	-0.9	0.1	
RUSSELL 1000 GROWTH AGGREGATE (1)	374,681,040	1.3	13.6	29.8	29.8	6.0	13.1	15.8	11.0	11/2003
Russell 1000 Growth			12.8	27.1	27.1	13.7	15.1	15.7	11.2	11/2003
Excess			0.8	2.7	2.7	-7.7	-2.1	0.1	-0.2	

(1) Prior to 1/1/2021 the Russell 1000 Growth Aggregate included returns from Zevenbergen, which moved to the Russell 3000 Growth benchmark and is now reported separately.



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Active Large Cap Growth					
SANDS	-49.3%	5.2%	71.0%	33.5%	7.0%
Russell 1000 Growth	-29.1	27.6	38.5	36.4	-1.5
Excess	-20.2	-22.4	32.5	-2.8	8.6
WINSLOW	-31.0	24.8	37.6	34.2	4.2
Russell 1000 Growth	-29.1	27.6	38.5	36.4	-1.5
Excess	-1.8	-2.8	-0.9	-2.2	5.7
RUSSELL 1000 GROWTH AGGREGATE (1)	-41.3	12.8	81.3	37.3	4.7
Russell 1000 Growth	-29.1	27.6	38.5	36.4	-1.5
Excess	-12.1	-14.8	42.8	0.9	6.2

(1) Prior to 1/1/2021 the Russell 1000 Growth Aggregate included returns from Zevenbergen, which moved to the Russell 3000 Growth benchmark and is now reported separately.



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Semi-Passive Large Cap										
BLACKROCK	\$1,595,041,726	5.4%	8.1%	18.9%	18.9%	14.0%	11.9%	13.1%	10.3%	01/1995
Semi Passive Domestic Equity Benchmark			8.6	19.4	19.4	14.1	11.9	12.6	10.0	01/1995
Excess			-0.5	-0.4	-0.4	-0.1	-0.0	0.5	0.4	
J.P. MORGAN	1,611,317,413	5.5	9.0	20.7	20.7	15.5	12.9	13.2	10.4	01/1995
Semi Passive Domestic Equity Benchmark			8.6	19.4	19.4	14.1	11.9	12.6	10.0	01/1995
Excess			0.5	1.3	1.3	1.4	0.9	0.6	0.4	
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE	3,206,359,138	10.9	8.6	19.8	19.8	14.8	12.4	12.9	9.0	06/1996
Semi Passive Domestic Equity Benchmark			8.6	19.4	19.4	14.1	11.9	12.6	8.9	06/1996
Excess			-0.0	0.5	0.5	0.7	0.5	0.2	0.1	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Semi-Passive Large Cap					
BLACKROCK	-19.2%	28.3%	20.7%	30.4%	-4.1%
Semi Passive Domestic Equity Benchmark	-19.1	26.5	21.0	31.4	-4.8
Excess	-0.1	1.8	-0.3	-1.0	0.7
J.P. MORGAN					
J.P. MORGAN	-18.1	29.3	21.2	31.3	-5.4
Semi Passive Domestic Equity Benchmark	-19.1	26.5	21.0	31.4	-4.8
Excess	1.0	2.8	0.3	-0.1	-0.6
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE					
SEMI-PASSIVE DOMESTIC EQUITY AGGREGATE	-18.7	28.8	21.0	30.9	-4.9
Semi Passive Domestic Equity Benchmark	-19.1	26.5	21.0	31.4	-4.8
Excess	0.4	2.3	0.0	-0.5	-0.1



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Active Large Cap Value										
BARROW HANLEY	\$378,953,944	1.3%	5.7%	13.4%	13.4%	18.3%	10.2%	10.4%	8.6%	04/2004
Russell 1000 Value			4.1	11.5	11.5	14.3	8.1	9.2	7.8	04/2004
Excess			1.6	1.8	1.8	4.0	2.1	1.2	0.8	
LSV	357,059,105	1.2	3.1	10.6	10.6	16.5	7.1	9.8	8.7	04/2004
Russell 1000 Value			4.1	11.5	11.5	14.3	8.1	9.2	7.8	04/2004
Excess			-0.9	-1.0	-1.0	2.1	-1.0	0.5	0.8	
RUSSELL 1000 VALUE AGGREGATE	736,013,050	2.5	4.4	12.0	12.0	17.2	9.1	10.2	8.7	10/2003
Russell 1000 Value			4.1	11.5	11.5	14.3	8.1	9.2	8.5	10/2003
Excess			0.3	0.5	0.5	2.9	1.0	1.0	0.2	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Active Large Cap Value					
BARROW HANLEY	1.1%	27.7%	2.4%	26.9%	-5.9%
Russell 1000 Value	-7.5	25.2	2.8	26.5	-8.3
Excess	8.6	2.5	-0.4	0.4	2.4
LSV					
LSV	-6.3	29.7	-1.3	26.9	-11.8
Russell 1000 Value	-7.5	25.2	2.8	26.5	-8.3
Excess	1.3	4.5	-4.1	0.4	-3.6
RUSSELL 1000 VALUE AGGREGATE					
RUSSELL 1000 VALUE AGGREGATE	-2.6	28.8	1.6	27.4	-8.7
Russell 1000 Value	-7.5	25.2	2.8	26.5	-8.3
Excess	4.9	3.7	-1.2	0.9	-0.4



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Active Small Cap Growth										
ARROWMARK	\$183,643,976	0.6%	6.0%	20.0%	20.0%	8.7%	3.9%		10.1%	11/2016
Russell 2000 Growth			7.1	18.5	18.5	6.1	4.2		9.4	11/2016
Excess			-1.0	1.4	1.4	2.6	-0.3		0.7	
HOOD RIVER	208,728,361	0.7	8.3	19.6	19.6	15.8	11.9		15.0	11/2016
Russell 2000 Growth			7.1	18.5	18.5	6.1	4.2		9.4	11/2016
Excess			1.2	1.1	1.1	9.7	7.7		5.6	
RICE HALL JAMES	192,031,105	0.7	2.8	8.3	8.3	7.0	2.8		9.9	11/2016
Russell 2000 Growth			7.1	18.5	18.5	6.1	4.2		9.4	11/2016
Excess			-4.2	-10.2	-10.2	0.9	-1.5		0.5	
WELLINGTON	239,817,360	0.8	8.2	16.8	16.8	5.6	4.4		9.4	11/2016
Russell 2000 Growth			7.1	18.5	18.5	6.1	4.2		9.4	11/2016
Excess			1.1	-1.7	-1.7	-0.5	0.1		0.0	
RUSSELL 2000 GROWTH AGGREGATE	824,220,802	2.8	6.5	16.2	16.2	9.3	5.9	8.7%	7.6	11/2003
Russell 2000 Growth			7.1	18.5	18.5	6.1	4.2	8.8	8.4	11/2003
Excess			-0.5	-2.4	-2.4	3.2	1.6	-0.2	-0.8	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Active Small Cap Growth					
ARROWMARK	-23.3%	6.1%	21.9%	20.1%	0.9%
Russell 2000 Growth	-26.4	2.8	34.6	28.5	-9.3
Excess	3.1	3.2	-12.8	-8.4	10.3
HOOD RIVER	-27.7	24.2	61.7	24.3	-7.0
Russell 2000 Growth	-26.4	2.8	34.6	28.5	-9.3
Excess	-1.4	21.4	27.0	-4.2	2.3
RICE HALL JAMES	-24.4	15.6	23.8	18.0	-6.9
Russell 2000 Growth	-26.4	2.8	34.6	28.5	-9.3
Excess	2.0	12.8	-10.8	-10.5	2.4
WELLINGTON	-28.5	4.3	33.1	35.6	-11.6
Russell 2000 Growth	-26.4	2.8	34.6	28.5	-9.3
Excess	-2.1	1.4	-1.5	7.1	-2.3
RUSSELL 2000 GROWTH AGGREGATE	-26.3	12.4	35.4	24.6	-6.2
Russell 2000 Growth	-26.4	2.8	34.6	28.5	-9.3
Excess	0.0	9.5	0.8	-3.9	3.2



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Active Small Cap Value										
GOLDMAN SACHS	\$233,593,198	0.8%	1.3%	5.7%	5.7%	14.3%	3.4%	7.5%	8.3%	01/2004
Russell 2000 Value			3.2	6.0	6.0	15.4	3.5	7.3	7.3	01/2004
Excess			-1.9	-0.3	-0.3	-1.1	-0.1	0.2	1.0	
HOTCHKIS AND WILEY	183,626,713	0.6	3.6	20.7	20.7	28.1	7.8	9.6	8.7	01/2004
Russell 2000 Value			3.2	6.0	6.0	15.4	3.5	7.3	7.3	01/2004
Excess			0.4	14.7	14.7	12.7	4.2	2.3	1.4	
MARTINGALE	152,827,715	0.5	4.8	13.7	13.7	21.1	5.4	9.2	7.8	01/2004
Russell 2000 Value			3.2	6.0	6.0	15.4	3.5	7.3	7.3	01/2004
Excess			1.6	7.7	7.7	5.6	1.9	1.9	0.5	
PEREGRINE	241,363,452	0.8	1.4	4.7	4.7	16.9	3.4	7.3	9.2	07/2000
Russell 2000 Value			3.2	6.0	6.0	15.4	3.5	7.3	8.6	07/2000
Excess			-1.8	-1.3	-1.3	1.5	-0.1	0.1	0.6	
RUSSELL 2000 VALUE AGGREGATE	811,411,078	2.8	2.4	9.8	9.8	19.0	4.5	8.1	8.5	10/2003
Russell 2000 Value			3.2	6.0	6.0	15.4	3.5	7.3	8.0	10/2003
Excess			-0.8	3.8	3.8	3.5	1.0	0.8	0.5	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Active Small Cap Value					
GOLDMAN SACHS	-14.4%	27.0%	2.4%	23.2%	-13.3%
Russell 2000 Value	-14.5	28.3	4.6	22.4	-12.9
Excess	0.1	-1.3	-2.3	0.8	-0.5
HOTCHKIS AND WILEY	3.1	36.5	-0.2	19.7	-14.4
Russell 2000 Value	-14.5	28.3	4.6	22.4	-12.9
Excess	17.6	8.2	-4.8	-2.7	-1.5
MARTINGALE	-8.0	41.3	-4.6	21.1	-15.0
Russell 2000 Value	-14.5	28.3	4.6	22.4	-12.9
Excess	6.4	13.0	-9.2	-1.3	-2.1
PEREGRINE	-12.5	28.6	7.3	21.1	-16.1
Russell 2000 Value	-14.5	28.3	4.6	22.4	-12.9
Excess	2.0	0.3	2.7	-1.3	-3.3
RUSSELL 2000 VALUE AGGREGATE	-9.4	31.8	1.5	21.3	-14.7
Russell 2000 Value	-14.5	28.3	4.6	22.4	-12.9
Excess	5.1	3.5	-3.1	-1.1	-1.8



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Active All Cap										
ZEVENBERGEN (1)	\$213,149,630	0.7%	15.3%	43.4%	43.4%	-3.1%	10.1%	14.3%	11.0%	04/1994
Zevenbergen Custom Benchmark			12.5	26.6	26.6	14.9	15.8	16.1		04/1994
Excess			2.8	16.8	16.8	-18.0	-5.7	-1.8		
ACTIVE RUSSELL 3000 GROWTH (2)	213,149,630	0.7	15.3	43.4	43.4				-18.0	01/2021
Russell 3000 Growth TR			12.5	26.6	26.6				5.6	01/2021
Excess			2.8	16.8	16.8				-23.5	

(1) Effective 1/1/2021, the SBI changed the Zevenbergen Benchmark to the Russell 3000 Growth. Prior to this date it was the Russell 1000 Growth.

(2) Prior to 1/1/2021, Zevenbergen returns were reported as part of the Russell 1000 Growth Aggregate.



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Active All Cap					
ZEVENBERGEN (1)	-55.7%	-9.7%	126.2%	43.0%	2.3%
Zevenbergen Custom Benchmark	-29.0	32.3	38.5	36.4	-1.5
Excess	-26.8	-42.0	87.7	6.7	3.8
ACTIVE RUSSELL 3000 GROWTH (2)					
ACTIVE RUSSELL 3000 GROWTH (2)	-55.7	-9.7			
Russell 3000 Growth TR	-29.0	25.8			
Excess	-26.8	-35.6			

(1) Effective 1/1/2021, the SBI changed the Zevenbergen Benchmark to the Russell 3000 Growth. Prior to this date it was the Russell 1000 Growth.

(2) Prior to 1/1/2021, Zevenbergen returns were reported as part of the Russell 1000 Growth Aggregate.



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Total Passive Domestic Equity										
BLACKROCK RUSSELL 1000	\$22,286,292,500	76.1%	8.6%	19.4%	19.4%	14.1%	11.9%		13.5%	11/2016
RUSSELL 1000 (DAILY)			8.6	19.4	19.4	14.1	11.9		13.5	11/2016
Excess			0.0	0.0	0.0	-0.0	-0.0		-0.0	
BLACKROCK RUSSELL 2000	71,085,589	0.2	5.2	11.9	11.9	11.4			6.9	11/2018
RUSSELL 2000 (DAILY)			5.2	12.3	12.3	10.8			6.3	11/2018
Excess			-0.0	-0.4	-0.4	0.5			0.5	
BLACKROCK RUSSELL 3000 (1)	761,848,146	2.6	8.4	19.0	19.0	14.1	11.6	12.4%	9.7	07/1995
Passive Manager Benchmark			8.4	19.0	19.0	13.9	11.4	12.3	9.6	07/1995
Excess			0.0	0.1	0.1	0.2	0.2	0.1	0.1	
PASSIVE DOMESTIC EQUITY AGGREGATE (2)	23,119,226,235	78.9	8.6	19.4	19.4	14.1	11.8	12.5	9.2	06/1996
Passive Domestic Equity Benchmark			8.6	19.3	19.3	14.1	11.8	12.5	9.2	06/1996
Excess			0.0	0.0	0.0	0.0	0.0	-0.0	-0.1	

(1) The current Passive Manager Benchmark is the Russell 3000. For historical benchmark details please refer to the addendum of this report.

(2) The current Passive Domestic Equity Benchmark is a weighted average of the Russell 1000, Russell 2000 and Russell 3000.



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Total Passive Domestic Equity					
BLACKROCK RUSSELL 1000	-19.2%	26.5%	20.9%	31.4%	-4.8%
RUSSELL 1000 (DAILY)	-19.1	26.5	21.0	31.4	-4.8
Excess	-0.0	0.1	-0.0	0.0	-0.0
BLACKROCK RUSSELL 2000	-19.9	16.0	20.8	25.2	
RUSSELL 2000 (DAILY)	-20.4	14.8	20.0	25.5	
Excess	0.6	1.2	0.8	-0.3	
BLACKROCK RUSSELL 3000 (1)	-19.2	26.2	21.2	31.1	-5.2
Passive Manager Benchmark	-19.2	25.7	20.9	31.0	-5.2
Excess	0.0	0.5	0.3	0.0	-0.0
PASSIVE DOMESTIC EQUITY AGGREGATE (2)	-19.2	26.5	20.8	31.3	-5.0
Passive Domestic Equity Benchmark	-19.1	26.4	20.8	31.3	-5.0
Excess	-0.0	0.1	0.0	0.0	-0.0

(1) The current Passive Manager Benchmark is the Russell 3000. For historical benchmark details please refer to the addendum of this report.

(2) The current Passive Domestic Equity Benchmark is a weighted average of the Russell 1000, Russell 2000 and Russell 3000.

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International Equity

June 30, 2023



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Total International Equity										
DEVELOPED MARKETS (1)	\$9,973,747,662		3.7%	18.1%	18.1%	11.2%	5.8%	6.4%	5.2%	01/1997
BENCHMARK DM			3.0	17.4	17.4	9.3	9.3	5.4	4.5	01/1997
Excess			0.7	0.7	0.7	1.9	1.9	1.3	0.6	
EMERGING MARKETS (2)	3,262,596,777	23.7%	1.4	4.2	4.2	2.9%	1.3%	2.8%	5.1	11/1996
BENCHMARK EM			0.9	1.7	1.7	2.3	0.9	3.0	5.3	11/1996
Excess			0.5	2.5	2.5	0.5	0.4	-0.1	-0.2	
ACWI EX-US AGGREGATE	392,424,534	2.8	4.1	15.7	15.7				4.0	01/2021
MSCI AC WORLD ex US (NET) - DAILY			2.4	12.7	12.7				-0.3	01/2021
Excess			1.7	3.0	3.0				4.3	
CHINA ONLY AGGREGATE	143,245,861	1.0	-12.6	-16.5	-16.5				-14.2	01/2021
MSCI China A			-10.7	-20.3	-20.3				-12.6	01/2021
Excess			-2.0	3.8	3.8				-1.6	
TRANSITION AGGREGATE INTERNATIONAL EQUITY (3)	602,347	0.0								
TOTAL INTERNATIONAL EQUITY (4)	13,772,617,181	100.0	3.0	14.0	14.0	8.8	4.5	5.4	6.3	10/1992
International Equity Benchmark			2.4	12.7	12.7	7.2	3.5	4.7	5.7	10/1992
Excess			0.6	1.3	1.3	1.6	1.0	0.7	0.6	

(1) The current benchmark for Developed Markets, Benchmark DM, is the Standard (large + mid) MSCI World ex USA (net).

(2) The current benchmark for Emerging Markets, Benchmark EM, is the Standard (large + mid) MSCI Emerging Markets Free (net).

(3) The Transition Aggregate International Equity contains International Equity securities that are being transitioned to a different manager.

(4) The current International Equity Benchmark is the MSCI ACWI ex USA (net). Does not includes impact of currency overlay on the passive EAFE portfolio from 12/1/95-10/31/00. This impact is included in the return for the Combined Funds portion of the International Equity portfolio.

Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Total International Equity					
DEVELOPED MARKETS (1)	-10.7%	13.5%	8.9%	23.3%	-14.2%
BENCHMARK DM	-14.3%	12.6%	7.6%	22.5%	-14.1%
Excess	3.6%	0.9%	1.3%	0.8%	-0.1%
EMERGING MARKETS (2)					
EMERGING MARKETS (2)	-21.1	-1.5	17.9%	20.3%	-15.4%
BENCHMARK EM	-20.1	-2.5	18.3	18.4	-14.6
Excess	-1.0	1.1	-0.4	1.9	-0.8
ACWI EX-US AGGREGATE					
ACWI EX-US AGGREGATE	-12.6	12.8			
MSCI AC WORLD ex US (NET) - DAILY	-16.0	7.8			
Excess	3.4	4.9			
CHINA ONLY AGGREGATE					
CHINA ONLY AGGREGATE	-24.5	-2.9			
MSCI China A	-25.9	3.2			
Excess	1.4	-6.1			
TRANSITION AGGREGATE INTERNATIONAL EQUITY (3)					
TOTAL INTERNATIONAL EQUITY (4)	-13.7	8.9	11.4	22.4	-14.5
International Equity Benchmark	-16.0	7.8	10.5	21.5	-14.2
Excess	2.3	1.1	0.8	0.9	-0.3

(1) The current benchmark for Developed Markets, Benchmark DM, is the Standard (large + mid) MSCI World ex USA (net).

(2) The current benchmark for Emerging Markets, Benchmark EM, is the Standard (large + mid) MSCI Emerging Markets Free (net).

(3) The Transition Aggregate International Equity contains International Equity securities that are being transitioned to a different manager.

(4) The current International Equity Benchmark is the MSCI ACWI ex USA (net). Does not includes impact of currency overlay on the passive EAFE portfolio from 12/1/95-10/31/00. This impact is included in the return for the Combined Funds portion of the International Equity portfolio.

Note: All aggregates include the performance of terminated managers. For historical benchmark details please refer to the addendum of this report.



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Active Developed Markets										
ACADIAN	\$521,941,310	3.8%	1.6%	12.0%	12.0%	8.6%	3.7%	7.8%	6.2%	07/2005
BENCHMARK DM			3.0	17.4	17.4	9.3	4.6	5.4	5.0	07/2005
Excess			-1.4	-5.4	-5.4	-0.7	-0.8	2.5	1.3	
COLUMBIA	459,810,798	3.3	4.8	23.9	23.9	11.7	7.2	7.5	3.9	03/2000
BENCHMARK DM			3.0	17.4	17.4	9.3	4.6	5.4	3.7	03/2000
Excess			1.8	6.5	6.5	2.4	2.6	2.1	0.2	
FIDELITY	455,511,267	3.3	3.4	17.0	17.0	9.2	5.9	6.5	6.5	07/2005
BENCHMARK DM			3.0	17.4	17.4	9.3	4.6	5.4	5.0	07/2005
Excess			0.4	-0.4	-0.4	-0.1	1.3	1.1	1.5	
JP MORGAN	342,139,011	2.5	3.1	18.2	18.2	8.3	5.2	5.8	5.3	07/2005
BENCHMARK DM			3.0	17.4	17.4	9.3	4.6	5.4	5.0	07/2005
Excess			0.1	0.8	0.8	-1.0	0.6	0.4	0.3	
MARATHON	384,545,077	2.8	3.4	18.6	18.6	11.5	5.1	6.5	7.7	11/1993
BENCHMARK DM			3.0	17.4	17.4	9.3	4.6	5.4	5.1	11/1993
Excess			0.4	1.2	1.2	2.2	0.5	1.1	2.7	
AQR CAPITAL MANAGEMENT	265,411,038	1.9	5.2	18.4	18.4	9.3	3.4	4.9	5.0	07/2005
BENCHMARK DM			3.0	17.4	17.4	9.3	4.6	5.4	5.0	07/2005
Excess			2.2	1.0	1.0	0.0	-1.2	-0.5	-0.0	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Active Developed Markets					
ACADIAN	-12.5%	13.6%	11.7%	19.1%	-13.5%
BENCHMARK DM	-14.3	12.6	7.6	22.5	-14.1
Excess	1.8	0.9	4.2	-3.4	0.6
COLUMBIA	-15.0	14.2	15.0	28.9	-14.9
BENCHMARK DM	-14.3	12.6	7.6	22.5	-14.1
Excess	-0.7	1.6	7.4	6.4	-0.8
FIDELITY	-17.4	13.0	15.4	27.1	-14.6
BENCHMARK DM	-14.3	12.6	7.6	22.5	-14.1
Excess	-3.2	0.4	7.8	4.6	-0.5
JP MORGAN	-19.0	13.3	14.2	28.5	-17.3
BENCHMARK DM	-14.3	12.6	7.6	22.5	-14.1
Excess	-4.7	0.7	6.6	6.0	-3.3
MARATHON	-12.1	12.8	7.6	23.5	-13.4
BENCHMARK DM	-14.3	12.6	7.6	22.5	-14.1
Excess	2.2	0.2	0.1	1.0	0.7
AQR CAPITAL MANAGEMENT	-12.7	8.1	6.5	20.8	-18.2
BENCHMARK DM	-14.3	12.6	7.6	22.5	-14.1
Excess	1.6	-4.5	-1.1	-1.7	-4.1



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>1 Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Total Developed Markets										
Active Developed Markets Aggregate (1)	\$2,430,863,090	17.6%	3.4%	17.4%	17.4%	9.5%	5.0%	6.2%	5.5%	06/1996
BENCHMARK DM			3.0%	17.4%	17.4%	9.3%	4.6%	5.4%	2.4%	06/1996
Excess			0.4%	0.0%	0.0%	0.2%	0.4%	0.8%	3.1%	
SSgA DEVELOPED MARKETS PASSIVE	\$7,592,042,439	55.1%	3.2%	17.8%	17.8%	9.8%	5.0%	5.8%		
BENCHMARK DM			3.0%	17.4%	17.4%	9.3%	4.6%	5.4%		
Excess			0.2%	0.4%	0.4%	0.5%	0.4%	0.4%		
RECORD CURRENCY (2)	-\$49,157,867	-0.4%	.5%	0.4%	0.4%					10/2020
DEVELOPED MARKETS TOTAL (4)	\$9,973,747,662		3.7%	18.1%	18.1%	11.2%	5.8%	6.4%	5.2%	01/1997
BENCHMARK DM			3.0%	17.4%	17.4%	9.3	9.3	5.4	4.5	01/1997
Excess			0.7%	0.7%	0.7%	1.9	1.9	1.3	0.6	

(1) Includes the historical returns of AQR and terminated managers previously classified as "Semi-Passive Developed Markets."

(2) Return for Record Currency is the difference between the DM Equity with Currency Management and without.



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Total Developed Markets					
Active Developed Markets Aggregate (1)	-15.2%	12.5%	12.2%	24.4%	-15.1%
BENCHMARK DM	-14.3%	12.6%	7.6%	22.5%	-14.1%
Excess	-0.9%	-0.1%	4.6%	1.9%	-1.0%
SSgA DEVELOPED MARKETS PASSIVE	-13.8%	13.0%	8.2%	23.0%	-13.9%
BENCHMARK DM	-14.3%	12.6%	7.6%	22.5%	-14.1%
Excess	0.5%	0.4%	0.6%	0.5%	0.2%
DEVELOPED MARKETS TOTAL	-10.7%	13.5%	8.9%	23.3%	-14.2%
BENCHMARK DM	-14.3%	12.6%	7.6%	22.5%	-14.1%
Excess	3.6%	0.9%	1.3%	0.8%	-0.1%

(1) Includes the historical returns of AQR and terminated managers previously classified as "Semi-Passive Developed Markets"



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Active Emerging Markets										
MARTIN CURRIE	\$377,916,204	2.7%	1.4%	4.3%	4.3%	1.5%	1.5%		4.8%	04/2017
BENCHMARK EM			0.9	1.7	1.7	2.3	0.9		3.0	04/2017
Excess			0.5	2.6	2.6	-0.8	0.5		1.8	
MACQUARIE	355,431,575	2.6	0.7	2.5	2.5	1.0	1.9		4.0	04/2017
BENCHMARK EM			0.9	1.7	1.7	2.3	0.9		3.0	04/2017
Excess			-0.2	0.8	0.8	-1.4	1.0		0.9	
MORGAN STANLEY	454,059,224	3.3	3.1	9.0	9.0	3.0	1.3	2.8%	7.8	01/2001
BENCHMARK EM			0.9	1.7	1.7	2.3	0.9	3.0	7.5	01/2001
Excess			2.2	7.2	7.2	0.7	0.4	-0.1	0.2	
NEUBERGER BERMAN	325,865,611	2.4	0.1	1.6	1.6	-1.2	-1.5		1.4	04/2017
BENCHMARK EM			0.9	1.7	1.7	2.3	0.9		3.0	04/2017
Excess			-0.8	-0.2	-0.2	-3.5	-2.4		-1.6	
PZENA	381,418,061	2.8	4.4	15.2	15.2	14.9	5.7		5.8	04/2017
BENCHMARK EM			0.9	1.7	1.7	2.3	0.9		3.0	04/2017
Excess			3.5	13.4	13.4	12.6	4.7		2.8	
ROCK CREEK	354,099,394	2.6	-0.0	0.3	0.3	1.2	0.7		2.2	04/2017
BENCHMARK EM			0.9	1.7	1.7	2.3	0.9		3.0	04/2017
Excess			-0.9	-1.5	-1.5	-1.1	-0.2		-0.8	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Active Emerging Markets					
MARTIN CURRIE	-25.7%	-3.5%	26.5%	27.3%	-16.6%
BENCHMARK EM	-20.1	-2.5	18.3	18.4	-14.6
Excess	-5.6	-1.0	8.2	8.8	-2.0
MACQUARIE	-26.5	-2.2	24.2	23.2	-13.3
BENCHMARK EM	-20.1	-2.5	18.3	18.4	-14.6
Excess	-6.4	0.3	5.9	4.7	1.3
MORGAN STANLEY	-23.8	3.5	15.7	20.4	-16.7
BENCHMARK EM	-20.1	-2.5	18.3	18.4	-14.6
Excess	-3.7	6.0	-2.6	1.9	-2.2
NEUBERGER BERMAN	-22.1	-5.6	14.2	19.7	-17.1
BENCHMARK EM	-20.1	-2.5	18.3	18.4	-14.6
Excess	-2.0	-3.1	-4.1	1.3	-2.6
PZENA	-7.4	9.3	7.7	13.4	-10.8
BENCHMARK EM	-20.1	-2.5	18.3	18.4	-14.6
Excess	12.7	11.8	-10.6	-5.1	3.8
ROCK CREEK	-19.4	-5.2	22.0	22.3	-17.6
BENCHMARK EM	-20.1	-2.5	18.3	18.4	-14.6
Excess	0.7	-2.7	3.7	3.9	-3.1



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Total Emerging Markets										
ACTIVE EMERGING MARKETS AGGREGATE	\$2,248,790,068	16.3%	1.7%	5.5%	5.5%	3.3%	1.5%	2.7%	3.1%	01/2012
BENCHMARK EM			0.9	1.7	1.7	2.3	0.9	3.0	3.2	01/2012
Excess			0.8	3.8	3.8	0.9	0.6	-0.3	-0.0	
SSGA EMERGING MARKETS PASSIVE	1,013,806,709	7.4	0.8	1.4	1.4	1.9	0.7	2.9	3.1	01/2012
BENCHMARK EM			0.9	1.7	1.7	2.3	0.9	3.0	3.2	01/2012
Excess			-0.1	-0.3	-0.3	-0.4	-0.2	-0.0	-0.0	
EMERGING MARKETS TOTAL	3,262,596,777	23.7	1.4	4.2	4.2	2.9	1.3	2.8	5.1	11/1996
BENCHMARK EM			0.9	1.7	1.7	2.3	0.9	3.0	5.3	11/1996
Excess			0.5	2.5	2.5	0.5	0.4	-0.1	-0.2	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Total Emerging Markets					
ACTIVE EMERGING MARKETS AGGREGATE	-21.4%	-0.9%	17.6%	21.4%	-15.6%
BENCHMARK EM	-20.1	-2.5	18.3	18.4	-14.6
Excess	-1.3	1.6	-0.7	3.0	-1.0
SSGA EMERGING MARKETS PASSIVE	-20.4	-2.9	18.3	18.1	-14.7
BENCHMARK EM	-20.1	-2.5	18.3	18.4	-14.6
Excess	-0.3	-0.3	0.0	-0.3	-0.1
EMERGING MARKETS TOTAL	-21.1	-1.5	17.9	20.3	-15.4
BENCHMARK EM	-20.1	-2.5	18.3	18.4	-14.6
Excess	-1.0	1.1	-0.4	1.9	-0.8



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Active ACWI ex-US										
EARNEST PARTNERS ACWI EX US	\$392,424,534	2.8%	4.1%	15.7%	15.7%				4.0%	01/2021
MSCI AC WORLD ex US (NET) - DAILY			2.4%	12.7%	12.7%				-0.3%	01/2021
Excess			1.7%	3.0%	3.0%				4.3%	
TOTAL ACWI EX-US AGGREGATE										
TOTAL ACWI EX-US AGGREGATE	\$392,424,534	2.8%	4.1%	15.7%	15.7%				4.0%	01/2021
MSCI AC WORLD ex US (NET) - DAILY			2.4%	12.7%	12.7%				-0.3%	01/2021
Excess			1.7%	3.0%	3.0%				4.3%	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Active ACWI ex-US					
EARNEST PARTNERS ACWI EX US	-12.6%	12.8%			
MSCI AC WORLD ex US (NET) - DAILY	-16.0	7.8			
Excess	3.4	4.9			
TOTAL ACWI EX-US AGGREGATE					
MSCI AC WORLD ex US (NET) - DAILY	-16.0	7.8			
Excess	3.4	4.9			



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
China Only Managers										
EARNEST PARTNERS CHINA	\$143,245,861	1.0%	-12.6%	-16.5%	-16.5%				-14.2%	01/2021
MSCI China A			-10.7	-20.3	-20.3				-12.6	01/2021
Excess			-2.0	3.8	3.8				-1.6	
CHINA ONLY AGGREGATE	143,245,861	1.0	-12.6	-16.5	-16.5				-14.2	01/2021
MSCI China A			-10.7	-20.3	-20.3				-12.6	01/2021
Excess			-2.0	3.8	3.8				-1.6	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
China Only Managers					
EARNEST PARTNERS CHINA	-24.5%	-2.9%			
MSCI China A	-25.9	3.2			
Excess	1.4	-6.1			
CHINA ONLY AGGREGATE					
CHINA ONLY AGGREGATE	-24.5	-2.9			
MSCI China A	-25.9	3.2			
Excess	1.4	-6.1			

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Global Equity

June 30, 2023



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Global Equity Managers										
ARIEL INVESTMENTS	\$398,672,982	40.3%	3.7%	8.5%	8.5%				6.0%	01/2021
MSCI AC WORLD NET USD DAILY			6.2	16.5	16.5				4.0	01/2021
Excess			-2.4	-8.0	-8.0				2.1	
BAILLIE GIFFORD	223,247,521	22.6	7.7	24.3	24.3				-13.0	01/2021
MSCI AC WORLD NET USD DAILY			6.2	16.5	16.5				4.0	01/2021
Excess			1.5	7.7	7.7				-17.0	
MARTIN CURRIE INVESTMENTS - GLOBAL EQ	366,839,831	37.1	5.1	23.4	23.4				-2.7	01/2021
MSCI AC WORLD NET USD DAILY			6.2	16.5	16.5				4.0	01/2021
Excess			-1.0	6.9	6.9				-6.7	
GLOBAL EQUITY	988,760,334	100.0	5.1	17.1	17.1				-2.5	01/2021
MSCI AC WORLD NET USD DAILY			6.2	16.5	16.5				4.0	01/2021
Excess			-1.0	0.6	0.6				-6.5	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Global Equity Managers					
ARIEL INVESTMENTS	-5.6%	12.1%			
MSCI AC WORLD NET USD DAILY	-18.4	18.5			
Excess	12.8	-6.5			
BAILLIE GIFFORD	-46.9	3.1			
MSCI AC WORLD NET USD DAILY	-18.4	18.5			
Excess	-28.5	-15.5			
MARTIN CURRIE INVESTMENTS - GLOBAL EQ	-32.9	12.8			
MSCI AC WORLD NET USD DAILY	-18.4	18.5			
Excess	-14.5	-5.8			
GLOBAL EQUITY	-27.7	9.6			
MSCI AC WORLD NET USD DAILY	-18.4	18.5			
Excess	-9.4	-8.9			

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Core/Core Plus Bonds

June 30, 2023



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Bonds										
CORE (1)	\$1,918,526,886	41.2%	-0.3%	0.8%	0.8%				-3.4%	11/2020
Bloomberg U.S. Aggregate			-0.8	-0.9	-0.9				-4.5	11/2020
Excess			0.5	1.7	1.7				1.1	
CORE PLUS (1)	2,741,017,433	58.8	-0.6	-0.1	-0.1				-4.5	11/2020
Bloomberg U.S. Aggregate			-0.8	-0.9	-0.9				-4.5	11/2020
Excess			0.3	0.8	0.8				-0.0	
TRANSITION AGGREGATE CORE BONDS (2)	19,614	0.0								
TOTAL CORE/CORE PLUS BONDS (3)	4,659,563,933	100.0	-0.5	0.3	0.3	-3.3%	1.3%	2.0%	6.7	07/1984
Bloomberg U.S. Aggregate			-0.8	-0.9	-0.9	-4.0	0.8	1.5	6.3	07/1984
Excess			0.4	1.2	1.2	0.6	0.6	0.5	0.3	

(1) Prior to 12/1/2020 the Core and Core Plus managers were categorized as Active or Semi-Passive. For historical performance of each manager, see the following pages in this report. For information on the historical performance of the previous groupings refer to the 9/30/2020 Comprehensive Performance Report.

(2) The Transition Aggregate Core Bonds includes core bonds securities that are being transition to a different manager.

(3) The current Core Bonds Benchmark is the Bloomberg U.S. Aggregate calculated daily. For historical benchmark details please refer to the addendum of this report.

Note: All aggregates include the performance of terminated managers. Inception refers to the date of retention by the SBI.



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Bonds					
CORE (1)	-12.3%	-1.0%			
Bloomberg U.S. Aggregate	-13.0	-1.5			
Excess	0.7	0.5			
CORE PLUS (1)	-15.2	-1.1			
Bloomberg U.S. Aggregate	-13.0	-1.5			
Excess	-2.2	0.4			
TRANSITION AGGREGATE CORE BONDS (2)					
TOTAL CORE/CORE PLUS BONDS (3)	-14.1	-1.1	9.7%	9.7%	-0.0%
Bloomberg U.S. Aggregate	-13.0	-1.5	7.5	8.7	0.0
Excess	-1.1	0.5	2.2	1.0	-0.1

(1) Prior to 12/1/2020 the Core and Core Plus managers were categorized as Active or Semi-Passive. For historical performance of each manager, see the following pages in this report. For information on the historical performance of the previous groupings refer to the 9/30/2020 Comprehensive Performance Report.

(2) The Transition Aggregate Core Bonds includes core bonds securities that are being transition to a different manager.

(3) The current Core Bonds Benchmark is the Bloomberg U.S. Aggregate calculated daily. For historical benchmark details please refer to the addendum of this report.

Note: All aggregates include the performance of terminated managers. Inception refers to the date of retention by the SBI.



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Active Core										
DODGE & COX	\$1,025,990,581	22.0%	0.0%	1.7%	1.7%	-1.9%	1.9%	2.6%	5.1%	02/2000
Bloomberg U.S. Aggregate			-0.8	-0.9	-0.9	-4.0	0.8	1.5	4.0	02/2000
Excess			0.9	2.7	2.7	2.0	1.2	1.1	1.1	
BLACKROCK	892,536,305	19.2	-0.7	-0.3	-0.3	-3.7	1.1	1.7	4.4	04/1996
Bloomberg U.S. Aggregate			-0.8	-0.9	-0.9	-4.0	0.8	1.5	4.3	04/1996
Excess			0.2	0.7	0.7	0.3	0.3	0.2	0.1	
CORE	1,918,526,886	41.2	-0.3	0.8	0.8				-3.4	11/2020
Bloomberg U.S. Aggregate			-0.8	-0.9	-0.9				-4.5	11/2020
Excess			0.5	1.7	1.7				1.1	

(1) Prior to 12/1/2020 the Core managers were categorized as Active or Semi-Passive. For information on the historical performance of the previous groupings refer to the 9/30/2020 Comprehensive Performance Report.



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Active Core					
DODGE & COX	-11.3%	-0.7%	9.4%	9.6%	-0.0%
Bloomberg U.S. Aggregate	-13.0	-1.5	7.5	8.7	0.0
Excess	1.7	0.8	1.8	0.9	-0.1
BLACKROCK					
BLACKROCK	-13.4	-1.3	8.3	9.3	-0.1
Bloomberg U.S. Aggregate	-13.0	-1.5	7.5	8.7	0.0
Excess	-0.4	0.2	0.8	0.6	-0.2
CORE					
CORE	-12.3	-1.0			
Bloomberg U.S. Aggregate	-13.0	-1.5			
Excess	0.7	0.5			



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Core Plus Bonds										
GOLDMAN SACHS	\$896,206,185	19.2%	-0.5%	-0.3%	-0.3%	-3.7%	1.1%	1.8%	4.7%	07/1993
Bloomberg U.S. Aggregate			-0.8	-0.9	-0.9	-4.0	0.8	1.5	4.4	07/1993
Excess			0.3	0.7	0.7	0.3	0.3	0.3	0.3	
NEUBERGER	876,857,015	18.8	-0.5	0.0	0.0	-3.3	1.4	1.9	5.6	07/1988
Bloomberg U.S. Aggregate			-0.8	-0.9	-0.9	-4.0	0.8	1.5	5.4	07/1988
Excess			0.3	1.0	1.0	0.7	0.6	0.4	0.3	
WESTERN	967,954,233	20.8	-0.6	-0.1	-0.1	-4.2	1.0	2.2	7.4	07/1984
Bloomberg U.S. Aggregate			-0.8	-0.9	-0.9	-4.0	0.8	1.5	6.3	07/1984
Excess			0.2	0.9	0.9	-0.2	0.2	0.7	1.0	
CORE PLUS	2,741,017,433	58.8	-0.6	-0.1	-0.1				-4.5	11/2020
Bloomberg U.S. Aggregate			-0.8	-0.9	-0.9				-4.5	11/2020
Excess			0.3	0.8	0.8				-0.0	

(1) Prior to 12/1/2020 the Core managers were categorized as Active or Semi-Passive. For information on the historical performance of the previous groupings refer to the 9/30/2020 Comprehensive Performance Report.



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Core Plus Bonds					
GOLDMAN SACHS	-13.9%	-1.5%	9.0%	9.6%	-0.0%
Bloomberg U.S. Aggregate	-13.0	-1.5	7.5	8.7	0.0
Excess	-0.9	0.0	1.5	0.9	-0.0
NEUBERGER	-13.8	-0.6	9.9	9.0	-0.1
Bloomberg U.S. Aggregate	-13.0	-1.5	7.5	8.7	0.0
Excess	-0.8	1.0	2.4	0.3	-0.1
WESTERN	-17.6	-1.3	10.9	11.1	-0.2
Bloomberg U.S. Aggregate	-13.0	-1.5	7.5	8.7	0.0
Excess	-4.6	0.3	3.4	2.4	-0.3
CORE PLUS	-15.2	-1.1			
Bloomberg U.S. Aggregate	-13.0	-1.5			
Excess	-2.2	0.4			

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Return Seeking Bonds

June 30, 2023



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Return Seeking Bonds Managers										
COLUMBIA CREDIT PLUS	\$871,323,678	20.9%	-0.2%	2.6%	2.6%				-4.0%	12/2020
Credit Plus Benchmark			0.2	2.6	2.6				-4.3	12/2020
Excess			-0.3	-0.0	-0.0				0.3	
PIMCO CREDIT PLUS	824,575,078	19.8	0.1	2.8	2.8				-3.7	12/2020
Credit Plus Benchmark			0.2	2.6	2.6				-4.3	12/2020
Excess			-0.0	0.2	0.2				0.6	
CREDIT PLUS	1,695,898,756	40.7	-0.0	2.7	2.7				-3.8	12/2020
Credit Plus Benchmark			0.2	2.6	2.6				-4.3	12/2020
Excess			-0.2	0.1	0.1				0.5	
BLACKROCK OPPORTUNISTIC	539,280,869	12.9	0.7	3.7	3.7				-0.9	12/2020
ICE BofA US 3-Month Treasury Bill			1.2	3.6	3.6				1.5	12/2020
Excess			-0.4	0.1	0.1				-2.3	
ASHMORE EMERGING MARKET	291,432,925	7.0	1.2	7.2	7.2				-9.5	01/2021
JPM JEMB Sovereign-only 50-50			2.3	9.4	9.4				-6.1	01/2021
Excess			-1.1	-2.2	-2.2				-3.4	
TCW SECURITIZED CREDIT	399,034,399	9.6	1.4	1.6	1.6				-0.3	07/2021
ICE BofA US 3-Month Treasury Bill			1.2	3.6	3.6				1.9	07/2021
Excess			0.2	-2.0	-2.0				-2.2	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Return Seeking Bonds Managers					
COLUMBIA CREDIT PLUS	-15.3%	1.1%			
Credit Plus Benchmark	-13.7	0.0			
Excess	-1.6	1.1			
PIMCO CREDIT PLUS	-13.6	0.8			
Credit Plus Benchmark	-13.7	0.0			
Excess	0.1	0.7			
CREDIT PLUS	-14.5	0.9			
Credit Plus Benchmark	-13.7	0.0			
Excess	-0.7	0.9			
BLACKROCK OPPORTUNISTIC	-5.4	0.3			
ICE BofA US 3-Month Treasury Bill	1.5	0.0			
Excess	-6.8	0.2			
ASHMORE EMERGING MARKET	-17.2	-10.1			
JPM JEMB Sovereign-only 50-50	-14.8	-5.3			
Excess	-2.4	-4.8			
TCW SECURITIZED CREDIT	-4.6				
ICE BofA US 3-Month Treasury Bill	1.5				
Excess	-6.1				



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Return Seeking Bonds Managers										
PAYDEN RYGEL	\$291,809,204	7.0%	2.2%	9.0%	9.0%				-1.2%	01/2021
Multi-Asset Credit Benchmark			2.2	8.7	8.7				-1.2	01/2021
Excess			0.0	0.2	0.2				-0.0	
PGIM	337,180,551	8.1	2.1	9.0	9.0				-1.7	01/2021
Multi-Asset Credit Benchmark			2.2	8.7	8.7				-1.2	01/2021
Excess			-0.1	0.2	0.2				-0.6	
MULTI-ASSET CREDIT	628,989,755	15.1	2.1	9.0	9.0				-1.5	01/2021
Multi-Asset Credit Benchmark			2.2	8.7	8.7				-1.2	01/2021
Excess			-0.0	0.2	0.2				-0.3	
KKR	308,945,688	7.4	2.1	10.0	10.0				-0.4	01/2021
ICE BofA US Cash Pay HY Constrained			1.6	8.9	8.9				-0.6	01/2021
Excess			0.5	1.2	1.2				0.1	
OAKTREE	305,180,046	7.3	1.5	8.9	8.9				-0.4	01/2021
ICE BofA US Cash Pay HY Constrained			1.6	8.9	8.9				-0.6	01/2021
Excess			-0.1	0.1	0.1				0.1	
HIGH YIELD	614,125,735	14.7	1.8	9.5	9.5				-0.4	01/2021
ICE BofA US Cash Pay HY Constrained			1.6	8.9	8.9				-0.6	01/2021
Excess			0.2	0.6	0.6				0.1	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Return Seeking Bonds Managers					
PAYDEN RYSEL	-9.6%	2.6%			
Multi-Asset Credit Benchmark	-10.0	2.7			
Excess	0.4	-0.1			
PGIM	-11.5	3.2			
Multi-Asset Credit Benchmark	-10.0	2.7			
Excess	-1.5	0.5			
MULTI-ASSET CREDIT	-10.6	2.9			
Multi-Asset Credit Benchmark	-10.0	2.7			
Excess	-0.6	0.2			
KKR	-11.0	4.7			
ICE BofA US Cash Pay HY Constrained	-11.1	5.3			
Excess	0.1	-0.6			
OAKTREE	-9.5	4.5			
ICE BofA US Cash Pay HY Constrained	-11.1	5.3			
Excess	1.6	-0.8			
HIGH YIELD	-10.3	4.6			
ICE BofA US Cash Pay HY Constrained	-11.1	5.3			
Excess	0.8	-0.7			



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Return Seeking Bonds										
CREDIT PLUS	\$1,695,898,756	40.7%	-0.0%	2.7%	2.7%				-3.8%	12/2020
Credit Plus Benchmark			0.2	2.6	2.6				-4.3	12/2020
Excess			-0.2	0.1	0.1				0.5	
OPPORTUNISTIC FI	539,280,869	12.9	0.7	3.7	3.7				-0.9	12/2020
ICE BofA US 3-Month Treasury Bill			1.2	3.6	3.6				1.5	12/2020
Excess			-0.4	0.1	0.1				-2.3	
EMERGING MARKET DEBT	291,432,925	7.0	1.2	7.2	7.2				-9.5	01/2021
JPM JEMB Sovereign-only 50-50			2.3	9.4	9.4				-6.1	01/2021
Excess			-1.1	-2.2	-2.2				-3.4	
SECURITIZED CREDIT	399,034,399	9.6	1.4	1.6	1.6				-0.3	06/2021
ICE BofA US 3-Month Treasury Bill			1.2	3.6	3.6				1.8	06/2021
Excess			0.2	-2.0	-2.0				-2.1	
MULTI-ASSET CREDIT	628,989,755	15.1	2.1	9.0	9.0				-1.5	01/2021
Multi-Asset Credit Benchmark			2.2	8.7	8.7				-1.2	01/2021
Excess			-0.0	0.2	0.2				-0.3	
HIGH YIELD	614,125,735	14.7	1.8	9.5	9.5				-0.4	01/2021
ICE BofA US Cash Pay HY Constrained			1.6	8.9	8.9				-0.6	01/2021
Excess			0.2	0.6	0.6				0.1	
RETURN SEEKING BONDS (1)	4,170,679,184	100.0	0.9	5.1	5.1				-2.4	12/2020
Return Seeking Fixed Income Benchmark			1.1	5.1	5.1				-2.0	12/2020
Excess			-0.1	-0.0	-0.0				-0.4	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Return Seeking Bonds					
CREDIT PLUS	-14.5%	0.9%			
Credit Plus Benchmark	-13.7	0.0			
Excess	-0.7	0.9			
OPPORTUNISTIC FI					
ICE BofA US 3-Month Treasury Bill	1.5	0.0			
Excess	-6.8	0.2			
EMERGING MARKET DEBT					
JPM JEMB Sovereign-only 50-50	-14.8	-5.3			
Excess	-2.4	-4.8			
SECURITIZED CREDIT					
ICE BofA US 3-Month Treasury Bill	1.5				
Excess	-6.1				
MULTI-ASSET CREDIT					
Multi-Asset Credit Benchmark	-10.0	2.7			
Excess	-0.6	0.2			
HIGH YIELD					
ICE BofA US Cash Pay HY Constrained	-11.1	5.3			
Excess	0.8	-0.7			
RETURN SEEKING BONDS (1)					
Return Seeking Fixed Income Benchmark	-9.8	0.8			
Excess	-1.6	0.1			

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Treasuries

June 30, 2023



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Treasuries Managers										
BLACKROCK	\$2,788,862,089	34.8%	-2.0%	-4.3%	-4.3%	-8.3%	-0.1%		-0.1%	02/2018
Bloomberg Treasury 5+ Year			-2.0	-4.3	-4.3	-8.2	-0.0		0.0	02/2018
Excess			-0.0	-0.0	-0.0	-0.0	-0.1		-0.1	
GOLDMAN SACHS	2,551,072,643	31.9	-2.0	-4.2	-4.2	-8.1	-0.0		0.0	02/2018
Bloomberg Treasury 5+ Year			-2.0	-4.3	-4.3	-8.2	-0.0		0.0	02/2018
Excess			0.0	0.1	0.1	0.2	-0.0		0.0	
NEUBERGER	2,663,490,988	33.3	-2.2	-4.7	-4.7	-8.0	0.0		0.1	02/2018
Bloomberg Treasury 5+ Year			-2.0	-4.3	-4.3	-8.2	-0.0		0.0	02/2018
Excess			-0.3	-0.4	-0.4	0.3	0.0		0.0	
TOTAL TREASURIES	8,003,425,721	100.0	-2.1	-4.4	-4.4	-8.1	-0.0		0.0	02/2018
Bloomberg Treasury 5+ Year			-2.0	-4.3	-4.3	-8.2	-0.0		0.0	02/2018
Excess			-0.1	-0.1	-0.1	0.1	-0.0		-0.0	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Treasuries Managers					
BLACKROCK	-20.6%	-4.0%	12.5%	10.4%	
Bloomberg Treasury 5+ Year	-20.3	-3.8	12.8	10.4	
Excess	-0.3	-0.2	-0.3	-0.1	
GOLDMAN SACHS	-20.6	-3.9	12.7	10.6	
Bloomberg Treasury 5+ Year	-20.3	-3.8	12.8	10.4	
Excess	-0.3	-0.1	-0.1	0.1	
NEUBERGER	-20.5	-3.4	12.8	10.4	
Bloomberg Treasury 5+ Year	-20.3	-3.8	12.8	10.4	
Excess	-0.2	0.4	-0.1	-0.0	
TOTAL TREASURIES	-20.6	-3.7	12.7	10.4	
Bloomberg Treasury 5+ Year	-20.3	-3.8	12.8	10.4	
Excess	-0.3	0.0	-0.2	0.0	

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Laddered Bonds + Cash

June 30, 2023



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Laddered Bond and Cash Managers									
Neuberger Berman Ladder Bond	\$779,414,951	19.7%	1.2%	3.6%				1.2%	11/2020
ICE BofA US 3-Month Treasury Bill			1.2	3.6				1.4	11/2020
Excess			0.0	0.0				-0.2	
Goldman Sachs Ladder Bond	780,852,293	19.7	1.3	3.7				1.3	11/2020
ICE BofA US 3-Month Treasury Bill			1.2	3.6				1.4	11/2020
Excess			0.1	0.1				-0.1	
Treasury Ladder Aggregate	1,560,267,244	39.3	1.2	3.6				1.3	11/2020
ICE BofA US 3-Month Treasury Bill			1.2	3.6				1.4	11/2020
Excess			0.1	0.1				-0.2	
Combined Funds STIF	2,342,690,489	59.1	1.3	4.0	1.4%	1.6%	1.1%	1.5	01/2004
iMoneyNet Money Fund Average-All Taxable			1.2	3.5	1.2	1.3	0.8	1.2	01/2004
Excess			0.1	0.5	0.3	0.3	0.3	0.4	
TEACHERS RETIREMENT CD REPO	63,082,815	1.6	1.2	3.7	1.4	1.7	1.2	1.1	02/2012
ICE BofA US 3-Month Treasury Bill			1.2	3.6	1.3	1.6	1.0	0.9	02/2012
Excess			0.1	0.1	0.1	0.1	0.2	0.2	
Laddered Bond + Cash	3,966,297,972	100.0	1.3	3.8	1.2	1.5	1.0	4.2	12/1977
ICE BofA US 3-Month Treasury Bill			1.2	3.6	1.3	1.6	1.0	4.4	12/1977
Excess			0.1	0.2	-0.1	-0.1	0.1	-0.2	



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Laddered Bond and Cash Managers					
Neuberger Berman Ladder Bond	0.8%	0.0%			
ICE BofA US 3-Month Treasury Bill	1.5	0.0			
Excess	-0.6	-0.0			
Goldman Sachs Ladder Bond	0.9	0.1			
ICE BofA US 3-Month Treasury Bill	1.5	0.0			
Excess	-0.5	0.0			
Treasury Ladder Aggregate	0.9	0.0			
ICE BofA US 3-Month Treasury Bill	1.5	0.0			
Excess	-0.6	-0.0			
Combined Funds STIF	1.7	0.1	0.5%	2.3%	2.0%
iMoneyNet Money Fund Average-All Taxable	1.4	0.0	0.3	1.9	1.5
Excess	0.4	0.1	0.2	0.5	0.5
TEACHERS RETIREMENT CD REPO	1.5	0.1	1.0	2.5	1.8
ICE BofA US 3-Month Treasury Bill	1.5	0.0	0.7	2.3	1.9
Excess	0.1	0.0	0.4	0.2	-0.0
Laddered Bond + Cash	1.1	0.0	0.6	2.3	1.9
ICE BofA US 3-Month Treasury Bill	1.5	0.0	0.7	2.3	1.9
Excess	-0.4	-0.0	-0.1	0.1	0.0

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Uninvested Private Markets

June 30, 2023



	<u>Ending Market Value</u>	<u>Portfolio Weight</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
Uninvested Private Markets										
UNINVESTED PRIVATE MARKETS (1)	211,047,257	100.0	1.5	5.6	5.6				3.6	01/2021
Uninvested Private Markets BM			1.2	5.4	5.4				3.6	01/2021
Excess			0.3	0.2	0.2				0.0	

(1) The Uninvested Private Markets is currently cash. Prior to 11/02/2022. The Uninvested portion of the Private Markets allocation was invested in a combination of a passively managed S&P 500 Index strategy and a cash overlay strategy invested in equity derivatives and cash. The benchmark is ICE BofA US 3-Month Treasury Bill, prior to 11/02/2022 it was S&P 500.



	<u>2022 Calendar Return</u>	<u>2021 Calendar Return</u>	<u>2020 Calendar Return</u>	<u>2019 Calendar Return</u>	<u>2018 Calendar Return</u>
Uninvested Private Markets					
UNINVESTED PRIVATE MARKETS (1)	-17.6	28.6			
Uninvested Private Markets BM	-17.5	28.7			
Excess	-0.1	-0.1			

(1) The Uninvested Private Markets is currently cash. Prior to 11/02/2022, The Uninvested portion of the Private Markets allocation was invested in a combination of a passively managed S&P 500 Index strategy and a cash overlay strategy invested in equity derivatives and cash. The benchmark is ICE BofA US 3-Month Treasury Bill, prior to 11/02/2022 it was S&P 500.

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Private Markets

June 30, 2023



Combined Funds Asset Class Performance Summary

Private Markets

	<u>Last Qtr</u>	<u>FYTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>20 Year</u>	<u>25 Year</u>	<u>30 Year</u>
Private Markets - Invested	2.5%	1.8%	1.8%	20.5%	13.5%	12.7%	14.0%	12.4%	13.4%
Private Markets -Uninvested (1)	1.5%	5.6%	5.6%						
Private Equity	3.6%	1.5%	1.5%	22.8%	17.0%	16.3%	16.2%	13.6%	15.6%
Private Credit	3.2%	9.1%	9.1%	16.1%	11.7%	13.1%	12.9%	12.8%	
Resources	-1.4%	2.8%	2.8%	17.1%	3.9%	2.4%	13.0%	11.7%	12.8%
Real Estate	-2.5%	-3.3%	-3.3%	16.7%	12.4%	12.7%	9.7%	9.4%	9.6%

Private Markets

The time-weighted rates of return for the Private Markets portfolio are shown here. Private Markets included Private Equity, Private Credit, Resources, and Real Estate. Some of the existing investments are relatively immature and returns may not be indicative of future results.

Private Equity Investments - The objectives of the Private Equity portfolio, which may include leveraged buyouts, growth equity, venture capital and special situations, are to achieve attractive returns and to provide overall portfolio diversification to the total plan.

Private Credit Investments - The objectives of the Private Credit portfolio, which may include mezzanine debt, direct lending, and other forms of non-investment grade fixed income instruments, are to achieve a high total return over a full market cycle and to provide some degree of downside protection and typically provide current income in the form of a coupon. In certain situations, investments in the Private Credit portfolio also provide an equity component of return in the form of warrants or re-organized equity.

Resource Investments - The objectives of the Resources portfolio, which may include energy, infrastructure, and other hard assets, are to provide protection against the risks associated with inflation and to provide overall portfolio diversification to the total plan.

Real Estate Investments - The objectives of the Real Estate portfolio, which may include core and non-core real estate investments, are to achieve attractive returns, preserve capital, provide protection against risks associated with inflation, and provide overall portfolio diversification to the total plan.

The SBI also monitors Private Markets performance using money-weighted return metrics such as Internal Rate of Return and Multiple of Invested Capital. For money-weighted return metrics please refer to the Combined Funds Performance Report.

(1) The Uninvested portion of the Private Markets allocation is invested in a combination of a passively managed S&P 500 Index strategy and a cash overlay strategy invested in equity derivatives and cash.

Source: State Street Bank

Minnesota State Board of Investment
Quarter Ending June 30, 2023
Private Markets Investments



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Private Equity	25,300,314,217	19,326,073,314	14,984,509,521	8,008,449,034	15,585,994,773	1.58	12.0	
Adams Street Partners, LLC	398,191,000	215,375,384	120,113,440	183,624,975	189,470,312	1.44	35.6	
Adams Street Global Secondary Fund 5 LP	100,000,000	77,114,692	77,395,843	22,885,308	26,941,830	1.35	6.3	2012
Adams Street Global Secondary Fund 6	100,000,000	80,400,008	42,717,597	19,599,992	83,844,149	1.57	23.1	2017
Adams Street Global Secondary Fund 7	198,191,000	57,860,684	0	141,139,675	78,684,333	1.36	77.3	2021
Advent International Group	505,000,000	381,891,302	333,962,703	126,192,652	325,279,553	1.73	10.6	
Advent International GPE VI-A, L.P.	50,000,000	52,993,313	103,400,194	0	5,126,420	2.05	16.5	2008
Advent International GPE VII, L.P.	90,000,000	86,490,641	140,322,935	3,600,000	17,132,078	1.82	13.5	2012
Advent International GPE VIII-B	100,000,000	100,000,000	78,744,166	0	122,799,547	2.02	17.9	2016
Advent International GPE IX	115,000,000	107,532,348	11,495,408	7,467,652	147,403,122	1.48	21.6	2019
Advent International GPE X	150,000,000	34,875,000	0	115,125,000	32,818,386	0.94	-16.4	2022
Affinity Ventures	9,000,000	9,000,000	3,590,011	0	818,406	0.49	-21.8	
Affinity Ventures IV, L.P.	4,000,000	4,000,000	1,541,970	0	3,279	0.39	-35.4	2004
Affinity Ventures V, L.P.	5,000,000	5,000,000	2,048,042	0	815,127	0.57	-8.1	2008
Apax Partners	600,000,000	523,062,755	554,813,088	161,066,025	318,744,416	1.67	13.1	
APAX VIII - USD	200,000,000	240,451,261	364,650,169	7,966,190	33,039,893	1.65	13.8	2013
Apax IX USD L.P.	150,000,000	162,024,715	180,896,534	14,420,230	145,962,086	2.02	22.5	2016
Apax X USD L.P.	150,000,000	120,586,779	9,266,385	38,679,605	139,742,437	1.24	16.3	2019
Apax XI	100,000,000	0	0	100,000,000	0			2022
Arsenal Capital Partners	175,000,000	102,279,759	13,903,312	81,440,684	103,482,483	1.15	3.4	
Arsenal Capital Partners VI LP	100,000,000	29,425,977	287,031	70,841,991	29,028,183	1.00	-0.5	2021
Arsenal Capital Partners V, L.P.	75,000,000	72,853,782	13,616,281	10,598,693	74,454,300	1.21	7.4	2019
Asia Alternatives	649,000,000	160,690,397	18,009,584	501,727,116	165,768,102	1.14	0.5	
Asia Alternatives Capital Partners V	99,000,000	100,073,898	16,878,241	12,343,615	112,351,313	1.29	10.5	2017
MN Asia Investors	550,000,000	60,616,499	1,131,343	489,383,501	53,416,789	0.90	-9.5	2020
Banc Fund	178,551,387	187,460,477	50,694,952	0	179,397,736	1.23	3.6	
Banc Fund IX, L.P.	107,205,932	107,205,932	43,369,555	0	100,877,893	1.35	5.0	2014
Banc Fund X, L.P.	71,345,455	80,254,545	7,325,397	0	78,519,843	1.07	2.1	2018
BlackRock	951,774,870	956,392,392	4,527,649	0	1,586,226,231	1.66	17.3	
BlackRock Long Term Capital, SCSP	950,000,000	954,617,522	2,660,745	0	1,586,162,750	1.66	30.1	2019
BlackRock Tempus Fund	1,774,870	1,774,870	1,866,904	0	63,481	1.09	4.5	2015

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Blackstone Group L.P.	1,535,000,000	879,614,137	720,258,885	756,712,863	539,645,070	1.43	5.3	
Blackstone Capital Partners IV, L.P.	70,000,000	84,459,884	201,361,236	1,832,302	251,377	2.39	37.0	2002
Blackstone Capital Partners V L.P.	140,000,000	152,408,625	245,685,920	7,027,560	1,214,275	1.62	8.0	2006
Blackstone Capital Partners VI, L.P.	100,000,000	106,834,851	157,913,327	10,975,597	34,587,690	1.80	12.4	2008
Blackstone Capital Partners VII	130,000,000	139,510,319	89,353,422	9,306,402	125,434,966	1.54	13.0	2015
Blackstone Capital Partners VIII LP	150,000,000	99,188,279	6,202,841	62,130,457	106,674,327	1.14	10.6	2019
Blackstone Capital Partners Asia II	270,000,000	29,246,803	0	240,753,197	21,965,314	0.75	-29.2	2021
Blackstone Capital Partners IX	150,000,000	0	0	150,000,000	0			2022
Blackstone Growth	250,000,000	204,707,785	19,742,139	62,787,347	185,649,824	1.00	0.2	2020
Blackstone Growth Equity II	150,000,000	0	0	150,000,000	0			2022
Blackstone Supplemental Account - M	125,000,000	63,257,591	0	61,900,000	63,867,296	1.01	0.7	2021
Blackstone Strategic Partners	915,500,000	698,078,955	846,963,050	303,580,567	248,040,832	1.57	15.0	
Strategic Partners III VC, L.P.	25,000,000	25,075,239	34,045,314	99,607	93,376	1.36	6.0	2004
Strategic Partners III-B, L.P.	100,000,000	79,629,077	118,509,586	12,304,709	214,476	1.49	6.3	2004
Strategic Partners IV VC, L.P.	40,500,000	42,175,414	62,659,747	2,247,328	2,032,353	1.53	9.2	2008
Strategic Partners IV-B	100,000,000	99,445,314	153,252,273	11,580,657	2,937,936	1.57	12.2	2008
Strategic Partners V, LP	100,000,000	87,190,444	135,892,900	12,012,592	7,216,190	1.64	18.5	2011
Strategic Partners VI, L.P.	150,000,000	104,075,534	130,882,448	52,606,791	27,049,176	1.52	14.2	2014
Strategic Partners VII, L.P.	150,000,000	121,382,805	126,292,370	45,708,481	77,995,386	1.68	18.3	2016
Strategic Partners VIII	150,000,000	116,665,772	82,401,365	88,721,490	107,853,609	1.63	34.0	2018
Strategic Partners IX	100,000,000	22,439,356	3,027,047	78,298,913	22,648,330	1.14	16.4	2022
Bridgepoint	270,289,324	159,330,724	14,957,084	115,791,151	223,178,903	1.49	10.4	
Bridgepoint Europe VI L.P.	163,650,051	159,330,724	14,957,084	9,151,877	223,178,903	1.49	20.9	2018
Bridgepoint Europe VII	106,639,274	0	0	106,639,274	0			2022
Brookfield Asset Management Inc.	500,000,000	384,069,284	201,329,386	159,862,205	440,605,614	1.67	28.8	
Brookfield Capital Partners Fund IV	100,000,000	109,806,883	172,956,949	10,864,417	96,282,305	2.45	43.8	2015
Brookfield Capital Partners V L.P.	250,000,000	245,678,311	28,311,500	27,581,880	308,799,115	1.37	16.3	2018
Brookfield Capital Partners Fund VI	150,000,000	28,584,091	60,937	121,415,909	35,524,194	1.24	26.4	2022
Canyon Partners	125,000,000	128,095,847	21,475,843	18,379,996	127,503,778	1.16	9.2	
Canyon Distressed Opportunity Fund III	125,000,000	128,095,847	21,475,843	18,379,996	127,503,778	1.16	9.2	2020
Cardinal Partners	10,000,000	10,000,000	39,196,082	0	30,226	3.92	10.6	
DSV Partners IV	10,000,000	10,000,000	39,196,082	0	30,226	3.92	10.6	1985
Carlyle Group	400,000,000	315,774,884	69,472,567	149,824,832	291,864,007	1.14	1.9	
Carlyle Strategic Partners IV, L.P.	100,000,000	119,848,374	53,429,269	32,306,465	83,488,532	1.14	7.2	2016
Carlyle Partners VII, L.P.	150,000,000	154,627,392	15,998,919	8,816,709	169,100,132	1.20	7.4	2017
Carlyle Partners VIII	150,000,000	41,299,118	44,379	108,701,658	39,275,343	0.95	-9.0	2021
CarVal Investors	600,000,000	512,272,032	410,233,542	92,592,247	265,806,708	1.32	7.2	
CVI Credit Value Fund A II	150,000,000	142,500,000	199,242,174	7,500,000	4,188,427	1.43	8.3	2012
CVI Credit Value Fund A III	150,000,000	142,500,000	162,113,881	7,500,000	31,555,279	1.36	8.4	2015
CVI Credit Value Fund IV	150,000,000	129,772,032	48,722,922	25,092,247	126,206,003	1.35	7.6	2017
CVI Credit Value Fund V	150,000,000	97,500,000	154,566	52,500,000	103,857,000	1.07	4.5	2020

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Chicago Growth Partners	60,000,000	58,347,626	123,930,240	1,652,374	10,706	2.12	19.5	
Chicago Growth Partners II, L.P.	60,000,000	58,347,626	123,930,240	1,652,374	10,706	2.12	19.5	2008
Clearlake Capital	100,000,000	51,373,445	2,434	48,626,555	53,225,355	1.04	4.1	
Clearlake Capital Partners VII	100,000,000	51,373,445	2,434	48,626,555	53,225,355	1.04	4.1	2022
Court Square	489,419,132	482,022,506	619,932,310	63,498,854	262,613,845	1.83	16.8	
Court Square Capital Partners II, L.P.	164,419,132	170,029,204	295,744,454	6,176,873	3,187,331	1.76	12.3	2006
Court Square Capital Partners III, L.P.	175,000,000	189,497,317	283,583,858	6,692,921	134,662,199	2.21	20.3	2012
Court Square Capital Partners IV, L.P.	150,000,000	122,495,985	40,603,998	50,629,060	124,764,315	1.35	17.7	2018
CVC Capital Partners	454,575,110	438,451,735	658,197,845	122,860,030	215,395,804	1.99	16.8	
CVC Capital Partners VI	245,475,076	284,567,637	362,639,619	21,301,821	212,682,651	2.02	16.9	2013
CVC Capital Partners IX	100,000,000	0	0	100,000,000	0			2023
CVC European Equity Partners V, L.P.	109,100,034	153,884,098	295,558,227	1,558,209	2,713,153	1.94	16.7	2008
Goldman, Sachs & Co.	449,800,000	379,183,244	341,861,187	163,683,992	236,524,485	1.53	13.7	
GS Capital Partners VI, L.P.	100,000,000	110,285,035	143,299,966	2,551,356	1,618,843	1.31	7.1	2007
GS China-US Cooperation Fund	99,800,000	39,430,412	523,330	60,544,033	52,858,552	1.35	13.2	2018
GS Vintage VII	100,000,000	87,228,595	72,641,061	61,810,828	66,767,869	1.60	15.2	2016
West Street Capital Partners VII, L.P.	150,000,000	142,239,202	125,396,830	38,777,775	115,279,221	1.69	19.5	2016
Goldner Hawn Johnson & Morrison	144,941,388	55,773,532	71,964,283	89,339,823	59,316,508	2.35	18.2	
GHJM TrailHead Fund	20,000,000	16,652,130	51,364,283	3,354,486	6,518,138	3.48	20.2	2012
Goldner Hawn Fund VII, L.P.	57,755,138	39,121,401	20,600,000	18,799,087	52,798,370	1.88	34.5	2018
Goldner Hawn VIII	67,186,250	0	0	67,186,250	0			2023
Green Equity Investors	325,000,000	336,771,391	238,381,912	25,916,600	339,554,719	1.72	10.7	
Green Equity Investors VI, L.P.	200,000,000	224,914,839	237,369,166	11,760,406	213,165,082	2.00	13.9	2012
Green Equity Investors VIII	125,000,000	111,856,552	1,012,746	14,156,194	126,389,637	1.14	7.6	2020
GTCR	210,000,000	214,082,258	454,867,110	16,665,460	122,510,750	2.70	27.5	
GTCR Fund X	100,000,000	105,821,208	215,422,690	6,751,396	0	2.04	21.4	2010
GTCR XI	110,000,000	108,261,050	239,444,420	9,914,064	122,510,750	3.34	33.6	2013
HarbourVest	21,372,808	20,940,767	26,666,665	793,901	4,807,920	1.50	9.7	
Dover Street VII Cayman Fund L.P.	2,198,112	2,074,235	1,845,767	132,416	17,043	0.90	-4.5	2014
HarbourVest Intl PE Partners V-Cayman US	3,386,759	3,346,199	4,508,944	174,560	25,307	1.36	13.6	2014
Harbourvest Intl PE Partners VI-Cayman	4,090,328	4,039,473	5,645,630	190,925	2,176,784	1.94	15.0	2014
HarbourVest Partners VIII Cayman Buyout	4,506,711	4,390,673	5,849,345	156,000	410,861	1.43	13.3	2014
HarbourVest Partners VIII-Cayman Venture	7,190,898	7,090,187	8,816,978	140,000	2,177,925	1.55	11.0	2014
Hellman & Friedman	575,000,000	409,760,506	165,633,592	177,960,641	424,848,527	1.44	10.0	
Hellman & Friedman Capital Partners VII, L.P.	50,000,000	49,914,704	154,063,260	2,183,886	10,193,452	3.29	24.9	2009
Hellman & Friedman Capital Partners X	250,000,000	186,382,141	7,412,203	71,030,062	182,565,086	1.02	1.6	2021
Hellman & Friedman Capital Partners XI	100,000,000	0	0	100,000,000	0			2023
Hellman & Friedman Investors IX, L.P.	175,000,000	173,463,661	4,158,129	4,746,693	232,089,989	1.36	13.5	2018

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IK Limited	581,224,421	472,935,898	502,315,911	159,135,449	285,440,729	1.67	9.0	
IK Fund VII	163,650,051	179,393,652	319,311,212	8,274,443	20,910,568	1.90	14.4	2013
IK Fund VIII	163,650,051	177,056,244	183,004,699	8,375,586	143,196,157	1.84	19.0	2016
IK Fund IX	147,285,046	116,486,003	0	35,846,146	121,334,005	1.04	2.6	2019
IK Fund X	106,639,274	0	0	106,639,274	0			2022
Kohlberg, Kravis, Roberts & Co.	1,797,000,000	1,126,419,814	962,399,113	744,369,771	749,624,507	1.52	6.8	
KKR 2006 Fund L.P.	200,000,000	218,137,965	392,492,978	3,300,979	147,966	1.80	9.1	2006
KKR Americas Fund XII L.P.	150,000,000	146,879,040	68,761,699	17,931,609	159,572,755	1.55	15.6	2016
KKR Ascendant Strategy	150,000,000	0	0	150,000,000	0			2023
KKR Asian Fund III	100,000,000	95,239,707	51,539,308	16,019,039	109,435,599	1.69	20.7	2017
KKR Asian Fund IV	150,000,000	69,241,077	1,640,757	85,921,125	72,976,854	1.08	6.7	2020
KKR Core Investments Partnership	97,000,000	100,504,008	5,416,200	2,662,724	113,529,736	1.18	12.0	2021
KKR Core Investments Fund II	100,000,000	0	0	100,000,000	0			2022
KKR Europe V	100,000,000	88,425,065	16,882,045	16,523,617	90,453,343	1.21	9.9	2018
KKR European Fund VI (USD) SCSp	100,000,000	16,320,027	0	83,679,973	14,484,203	0.89	-11.2	2022
KKR Millennium Fund	200,000,000	205,167,570	424,946,028	0	162,060	2.07	16.4	2002
KKR MN Partnership L.P.	150,000,000	80,488,217	720,098	69,511,783	85,635,841	1.07	6.2	2021
KKR North America Fund XIII	300,000,000	106,017,138	0	198,818,922	103,226,150	0.97	-3.1	2021
Lexington Partners	1,345,000,000	1,092,847,474	758,872,552	319,653,935	879,493,962	1.50	19.2	
Lexington Capital Partners VI-B, L.P.	100,000,000	98,374,022	145,958,371	1,634,703	523,842	1.49	7.9	2005
Lexington Capital Partners VII, L.P.	200,000,000	173,199,401	266,823,840	30,768,965	22,893,500	1.67	14.5	2009
Lexington Capital Partners VIII, L.P.	150,000,000	136,614,631	138,342,403	32,435,593	89,640,768	1.67	16.3	2014
Lexington Capital Partners IX, L.P.	150,000,000	119,793,422	34,752,512	43,035,124	143,116,602	1.48	27.3	2018
Lexington Capital Partners X	100,000,000	7,500,000	0	92,500,000	10,681,193	1.42	42.4	2021
Lexington Co-Investment Partners IV	200,000,000	215,808,686	132,540,232	4,966,398	229,124,906	1.68	16.5	2017
Lexington Co-Investment Partners V	300,000,000	226,573,417	10,031,374	83,457,957	255,974,374	1.17	16.0	2020
Lexington Co-Investment Partners V Overage	45,000,000	31,086,000	839,090	14,753,090	34,304,170	1.13	10.2	2021
Lexington Middle Market Investors IV	100,000,000	83,897,895	29,584,730	16,102,105	93,234,607	1.46	21.4	2016
Madison Dearborn Capital Partners LLC	200,000,000	176,176,809	68,213,581	48,398,262	179,134,911	1.40	8.2	
Madison Dearborn Capital Partners VII, L.P.	100,000,000	99,647,695	60,112,099	16,966,707	108,011,412	1.69	13.5	2015
Madison Dearborn Capital Partners VIII-A, L.P.	100,000,000	76,529,114	8,101,482	31,431,555	71,123,499	1.04	2.9	2019
Marathon	200,000,000	161,906,171	6,185,200	44,000,000	177,937,188	1.14	8.2	
Marathon Distressed Credit Fund	200,000,000	161,906,171	6,185,200	44,000,000	177,937,188	1.14	8.2	2020
Merced Capital	178,737,500	184,266,287	150,140,076	0	64,807,334	1.17	3.7	
Merced Partners IV	125,000,000	124,968,390	120,597,539	0	17,777,882	1.11	2.1	2013
Merced Partners V	53,737,500	59,297,897	29,542,537	0	47,029,452	1.29	5.3	2017
MHR Institutional Partners	75,000,000	83,022,509	24,307,372	11,735,519	98,668,144	1.48	11.0	
MHR Institutional Partners IV LP	75,000,000	83,022,509	24,307,372	11,735,519	98,668,144	1.48	11.0	2014

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Neuberger Berman LLC	625,000,000	447,321,716	350,805,313	440,842,523	428,758,461	1.74	30.5	
Dyal Capital Partners III	175,000,000	212,783,584	213,288,776	108,355,278	168,447,163	1.79	26.8	2015
Dyal Capital Partners IV	250,000,000	178,538,132	125,879,198	178,327,969	200,702,210	1.83	44.9	2018
Dyal Capital Partners V	200,000,000	56,000,000	11,637,339	154,159,276	59,609,088	1.27	19.7	2020
Nordic Capital	581,224,421	521,941,309	334,068,552	155,014,509	444,153,094	1.49	13.6	
Nordic Capital Fund VIII	163,650,051	225,322,480	295,912,941	14,170,797	60,260,060	1.58	12.9	2013
Nordic Capital IX Beta, L.P.	163,650,051	177,781,572	38,155,612	6,457,844	239,309,604	1.56	18.6	2017
Nordic Capital Fund X	147,285,046	118,837,256	0	27,746,595	144,583,430	1.22	23.1	2020
Nordic Capital Fund XI	106,639,274	0	0	106,639,274	0			2022
Oak Hill Capital Management, Inc.	250,000,000	246,282,642	219,518,109	11,268,440	185,719,671	1.65	23.4	
Oak Hill Capital Partners IV Onshore LP	150,000,000	153,245,546	219,478,696	4,305,536	68,444,366	1.88	32.7	2016
Oak Hill Capital Partners V	100,000,000	93,037,096	39,414	6,962,904	117,275,306	1.26	14.1	2018
Oaktree Capital Management, LLC	387,000,000	203,352,882	62,914,692	237,320,535	206,634,799	1.33	16.1	
Oaktree Special Situations Fund, L.P.	100,000,000	103,873,391	20,335,451	7,741,294	94,796,329	1.11	2.4	2014
Oaktree Special Situations Fund II, L.P.	100,000,000	99,479,491	42,579,241	42,579,241	111,838,470	1.55	45.9	2018
Oaktree Special Situations Fund III	187,000,000	0	0	187,000,000	0			2022
Paine & Partners, LLC	325,000,000	222,272,128	79,724,950	126,393,601	222,497,341	1.36	7.2	
Paine Schwartz Food Chain Fund IV	75,000,000	69,747,990	35,397,971	14,110,631	60,185,286	1.37	7.5	2014
Paine Schwartz Food Chain Fund V, L.P.	150,000,000	128,316,549	44,184,222	36,110,348	140,253,898	1.44	24.0	2018
Paine Schwartz Food Chain VI	100,000,000	24,207,589	142,757	76,172,622	22,058,157	0.92	-9.8	2023
Permal PE	5,337,098	4,401,655	4,672,751	1,090,000	372,412	1.15	4.6	
Glouston Private Equity Opportunities IV	5,337,098	4,401,655	4,672,751	1,090,000	372,412	1.15	4.6	2014
Permira	605,505,188	485,522,430	466,909,794	187,184,601	445,390,454	1.88	8.6	
Permira V, L.P.	163,650,051	184,423,912	380,461,905	4,592,876	115,259,247	2.69	21.0	2013
Permira VI, L.P.	130,920,041	128,354,778	75,222,218	28,037,579	165,862,544	1.88	17.3	2016
Permira VII L.P.1	147,285,046	147,198,277	11,225,671	16,829,368	140,063,869	1.03	1.4	2019
Permira VIII	163,650,051	25,545,463	0	137,724,778	24,204,794	0.95	-5.2	2022
Public Pension Capital Management	285,000,000	162,322,320	102,191,267	142,256,138	203,144,265	1.88	23.2	
Public Pension Capital, LLC	285,000,000	162,322,320	102,191,267	142,256,138	203,144,265	1.88	23.2	2014
Silver Lake Partners	335,000,000	345,266,133	368,178,778	30,892,072	337,877,204	2.04	18.0	
Silver Lake Partners III, L.P.	100,000,000	93,866,167	192,376,979	9,528,468	25,008,127	2.32	18.3	2007
Silver Lake Partners IV	100,000,000	115,939,897	126,010,284	2,881,307	158,908,523	2.46	21.7	2012
Silver Lake Partners V, L.P.	135,000,000	135,460,069	49,791,515	18,482,297	153,960,554	1.50	13.8	2017
Siris Capital Group	67,875,000	0	0	67,875,000	0		0.0	
Siris V	67,875,000	0	0	67,875,000	0			2022
Split Rock	110,000,000	107,055,906	125,392,564	2,944,094	25,119,022	1.41	5.0	
Split Rock Partners LP	50,000,000	47,890,906	58,794,192	2,109,094	2,302,648	1.28	3.0	2005
Split Rock Partners II, LP	60,000,000	59,165,000	66,598,372	835,000	22,816,374	1.51	7.0	2008

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Summit Partners	600,000,000	447,825,237	411,555,543	366,502,454	415,298,147	1.85	20.7	
Summit Partners Growth Equity Fund VIII	100,000,000	116,727,192	237,084,364	23,129,320	48,728,283	2.45	26.3	2011
Summit Partners Growth Equity Fund IX	100,000,000	132,784,916	141,424,991	108,640,075	151,081,688	2.20	31.5	2015
Summit Partners Growth Equity Fund X-A	150,000,000	137,296,520	33,046,188	45,749,668	152,158,183	1.35	18.2	2019
Summit Partners Growth Equity Fund XI	250,000,000	61,016,609	0	188,983,391	63,329,993	1.04	6.7	2021
TA Associates	80,000,000	0	0	80,000,000	0		0.0	
TA XV	80,000,000	0	0	80,000,000	0			2023
Thoma Bravo LLC	525,000,000	532,458,175	284,137,643	65,267,015	519,362,216	1.51	13.2	
Thoma Bravo Fund XII, L.P.	75,000,000	81,949,004	84,992,456	18,452,144	78,591,206	2.00	16.1	2016
Thoma Bravo Fund XIII, L.P.	150,000,000	184,783,234	92,067,654	12,475,387	225,660,160	1.72	27.5	2018
Thoma Bravo Fund XIV	150,000,000	147,759,334	37	2,240,666	147,112,296	1.00	-0.2	2020
Thoma Bravo Fund XV LP	100,000,000	67,966,603	19,556	32,098,818	67,593,318	0.99	-0.8	2021
Thoma Cressey Fund VII, L.P.	50,000,000	50,000,000	107,057,940	0	405,237	2.15	23.6	2000
Thomas H. Lee Partners	400,000,000	311,822,415	262,678,078	117,709,866	243,433,331	1.62	15.8	
Thomas H. Lee Equity Fund VII, LP.	100,000,000	99,643,507	137,891,993	10,518,650	47,113,559	1.86	21.3	2015
Thomas H. Lee Equity Fund VIII, L.P.	150,000,000	147,208,530	124,786,085	22,161,594	135,076,029	1.77	35.7	2018
Thomas H. Lee Equity Fund IX	150,000,000	64,970,378	0	85,029,622	61,243,742	0.94	-9.6	2021
TPG Capital	650,000,000	402,633,473	196,922,580	291,622,989	390,197,040	1.46	13.1	
TPG Growth V	150,000,000	104,342,948	8,437,171	53,658,205	122,659,194	1.26	18.2	2021
TPG Partners VII, L.P.	100,000,000	101,004,041	156,773,574	16,884,812	41,128,594	1.96	19.8	2015
TPG Partners VIII	150,000,000	147,426,581	31,421,240	20,939,875	177,075,370	1.41	27.8	2018
TPG Partners IX, L.P.	100,000,000	0	0	100,000,000	0			2022
TPG Tech Adjacencies II, L.P.	150,000,000	49,859,903	290,595	100,140,097	49,333,881	1.00	-0.5	2021
Varde Fund	631,286,710	608,861,188	723,333,846	22,425,522	199,804,111	1.52	8.2	
Varde Fund IX, L.P.	100,000,000	100,000,000	216,671,921	0	0	2.17	15.0	2008
Varde Fund X, LP	150,000,000	150,000,000	253,807,303	0	5,098,221	1.73	10.0	2010
Varde Fund XI, LP	200,000,000	200,000,000	227,185,961	0	34,089,875	1.31	4.4	2013
Varde Fund XIII, L.P.	150,000,000	144,000,000	25,668,661	6,000,000	145,303,299	1.19	7.6	2018
Varde Fund XIV	31,286,710	14,861,188	0	16,425,522	15,312,715	1.03	4.0	2022
Vestar Capital Partners	325,000,000	310,640,217	287,092,671	24,974,147	183,644,749	1.52	12.1	
Vestar Capital Partners V, L.P.	75,000,000	76,797,458	100,961,586	0	147,707	1.32	3.9	2005
Vestar Capital Partners VI, LP	100,000,000	108,816,906	152,887,343	0	66,608,922	2.02	23.5	2011
Vestar Capital Partners VII, L.P.	150,000,000	125,025,853	33,243,742	24,974,147	116,888,120	1.20	8.9	2017
Vista Equity Partners	200,000,000	147,738,030	77,223	53,474,873	166,298,546	1.13	4.8	
Vista Equity Partners Perennial	200,000,000	147,738,030	77,223	53,474,873	166,298,546	1.13	4.8	2020

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Warburg Pincus	1,416,000,000	1,128,515,379	1,063,252,893	293,198,500	778,845,102	1.63	10.2	
Warburg Pincus China, L.P.	45,000,000	46,935,000	17,602,200	0	46,742,452	1.37	8.2	2016
Warburg Pincus China-Southeast Asia II	50,000,000	26,000,000	4,097,500	24,000,000	22,854,271	1.04	2.3	2019
Warburg, Pincus Equity Partners, L.P.	100,000,000	100,000,000	163,542,253	0	400,857	1.64	10.0	1998
Warburg Pincus Financial Sector	90,000,000	90,562,652	34,617,600	3,555,000	129,362,847	1.81	20.3	2017
Warburg Pincus Global Growth, L.P.	250,000,000	225,866,992	5,789,114	23,875,000	305,969,705	1.38	13.8	2018
Warburg Pincus Global Growth 14, L.P.	300,000,000	59,576,783	0	240,000,000	58,771,140	0.99	-1.5	2022
Warburg Pincus Private Equity IX, L.P.	100,000,000	100,000,000	172,072,950	0	38,831	1.72	9.6	2005
Warburg Pincus Private Equity X, LP	150,000,000	150,000,000	266,806,541	0	2,757,041	1.80	9.5	2007
Warburg Pincus Private Equity XI, LP	200,000,000	200,342,452	262,255,748	0	85,348,886	1.74	11.9	2012
Warburg Pincus Private Equity XII, LP	131,000,000	129,231,500	136,468,988	1,768,500	126,599,072	2.04	17.6	2015
Wayzata Investment Partners	150,000,000	68,415,000	51,516,408	15,000,000	19,776,761	1.04	0.9	
Wayzata Opportunities Fund III	150,000,000	68,415,000	51,516,408	15,000,000	19,776,761	1.04	0.9	2012
Wellspring Capital Partners	125,000,000	152,361,431	57,804,878	12,973,229	168,005,231	1.48	19.2	
Wellspring Capital Partners VI, L.P.	125,000,000	152,361,431	57,804,878	12,973,229	168,005,231	1.48	19.2	2016
Welsh, Carson, Anderson & Stowe	650,000,000	484,046,168	474,651,929	165,953,832	368,832,405	1.74	7.5	
Welsh, Carson, Anderson & Stowe XI, L.P.	100,000,000	100,000,000	161,464,441	0	6,926,327	1.68	11.7	2008
Welsh, Carson, Anderson & Stowe XII, L.P.	150,000,000	150,000,000	223,398,784	0	135,017,233	2.39	25.8	2014
Welsh, Carson, Anderson & Stowe XIII, L.P.	250,000,000	213,945,620	89,788,704	36,054,380	211,508,407	1.41	23.3	2018
Welsh, Carson, Anderson & Stowe XIV	150,000,000	20,100,548	0	129,899,452	15,380,437	0.77	-30.9	2022
Whitehorse Capital	300,000,000	254,605,880	165,212,572	109,335,177	155,343,421	1.26	18.1	
Whitehorse Liquidity Partners III	100,000,000	104,256,456	87,372,605	13,688,231	55,924,578	1.37	19.4	2019
Whitehorse Liquidity Partners IV	100,000,000	95,855,329	54,465,430	28,591,101	63,139,766	1.23	18.8	2020
Whitehorse Liquidity Partners V	100,000,000	54,494,095	23,374,537	67,055,845	36,279,077	1.09	16.2	2021
Wind Point Partners	200,000,000	130,434,841	3,109,544	72,679,306	169,012,779	1.32	16.6	
Wind Point Partners IX	100,000,000	93,964,209	3,109,544	9,149,938	129,870,527	1.42	21.1	2019
Wind Point Partners X	100,000,000	36,470,632	0	63,529,368	39,142,252	1.07	12.2	2022
Windjammer Capital Investors	441,708,861	232,306,454	291,414,378	225,164,132	148,696,442	1.89	11.3	
Windjammer Capital Fund VI	175,000,000	0	0	175,000,000	0			2023
Windjammer Senior Equity Fund IV, L.P.	100,000,000	94,740,728	166,415,656	21,167,914	71,635,844	2.51	17.8	2012
Windjammer Senior Equity Fund V, L.P.	100,000,000	82,350,042	39,549,152	18,856,855	76,891,947	1.41	18.4	2017
Windjammer Mezzanine & Equity Fund II	66,708,861	55,215,684	85,449,570	10,139,363	168,651	1.55	9.0	2000

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Private Credit	4,080,253,754	3,233,031,688	2,408,877,849	1,332,406,734	1,884,674,414	1.33	9.3	
Audax Group	350,000,000	228,179,634	215,424,996	144,327,429	73,508,734	1.27	13.9	
Audax Mezzanine Fund III, L.P.	100,000,000	105,207,316	133,977,984	0	5,457,799	1.33	9.8	2010
Audax Mezzanine Fund IV-A, L.P.	100,000,000	88,946,795	78,137,566	27,531,278	33,655,730	1.26	12.0	2015
Audax Mezzanine Fund V	150,000,000	34,025,524	3,309,446	116,796,151	34,395,204	1.11	20.1	2020
Avenue Capital Partners	200,000,000	200,977,328	178,946,043	0	159,214,186	1.68	10.7	
Avenue Energy Opportunities Fund, L.P.	100,000,000	100,977,328	80,568,142	0	71,899,947	1.51	6.7	2014
Avenue Energy Opportunities Fund II	100,000,000	100,000,000	98,377,901	0	87,314,240	1.86	14.7	2017
BlackRock	97,500,000	93,275,368	17,419,531	4,224,632	99,963,119	1.26	7.8	
BlackRock Middle Market Senior Fund	97,500,000	93,275,368	17,419,531	4,224,632	99,963,119	1.26	7.8	2018
Brookfield Asset Management Inc.	200,000,000	72,071,352	21,878,738	144,389,725	59,230,525	1.13	17.9	
Brookfield Real Estate Finance Fund VI	200,000,000	72,071,352	21,878,738	144,389,725	59,230,525	1.13	17.9	2021
Castlelake L.P.	100,000,000	0	0	100,000,000	0		0.0	
Castlelake Aviation V Stable Yield	100,000,000	0	0	100,000,000	0			2023
Energy Capital Partners	28,087,500	34,513,848	11,074,135	4,647,787	25,236,255	1.05	4.0	
Energy Capital Credit Solutions II-A	28,087,500	34,513,848	11,074,135	4,647,787	25,236,255	1.05	4.0	2018
Gold Hill	65,852,584	65,852,584	113,654,899	0	2,886,179	1.77	12.6	
Gold Hill 2008	25,852,584	25,852,584	48,393,297	0	2,582,274	1.97	14.4	2008
Gold Hill Venture Lending	40,000,000	40,000,000	65,261,602	0	303,906	1.64	10.7	2004
HPS Investment Partners	200,000,000	123,410,483	35,193,080	102,373,626	110,462,783	1.18	7.2	
HPS Mezzanine Partners 2019, L.P.	100,000,000	95,382,125	30,801,952	26,010,856	86,030,137	1.22	10.3	2019
HPS Strategic Investment Partners V	100,000,000	28,028,358	4,391,128	76,362,770	24,432,646	1.03	4.0	2022
Kohlberg, Kravis, Roberts & Co.	274,000,000	371,969,233	331,200,572	89,442,728	105,267,602	1.17	7.6	
KKR Lending Partner II L.P.	75,000,000	87,050,313	84,852,023	8,802,924	4,863,101	1.03	1.5	2015
KKR Lending Partners III L.P.	199,000,000	284,918,920	246,348,549	80,639,804	100,404,501	1.22	13.6	2017
LBC Credit Partners	200,000,000	209,243,000	163,074,779	61,614,942	84,674,904	1.18	11.7	
LBC Credit Partners IV, L.P.	100,000,000	120,079,392	120,475,586	27,043,046	21,265,192	1.18	8.5	2016
LBC Credit Partners V, L.P.	100,000,000	89,163,607	42,599,193	34,571,896	63,409,712	1.19	15.0	2019
Marathon	200,000,000	124,234,784	5,929,184	81,787,224	148,358,165	1.24	6.9	
Marathon Secured Private Strategies Fund II	100,000,000	96,022,008	5,858,534	10,000,000	119,976,930	1.31	10.7	2019
Marathon Secured Private Strategies Fund III	100,000,000	28,212,776	70,649	71,787,224	28,381,235	1.01	3.1	2022
Merit Capital Partners	350,000,000	252,931,972	349,468,068	97,001,229	78,683,124	1.69	5.0	
Merit Mezzanine Fund IV, L.P.	75,000,000	70,178,571	139,120,463	4,821,429	1,112,906	2.00	11.6	2004
Merit Mezzanine Fund V, LP	75,000,000	72,306,122	108,565,889	2,693,878	11,901,338	1.67	10.0	2009
Merit Mezzanine Fund VI	100,000,000	92,629,096	101,781,716	7,304,104	50,021,363	1.64	16.8	2016
Merit Mezzanine Fund VII	100,000,000	17,818,182	0	82,181,818	15,647,517	0.88	-18.4	2020
Oaktree Capital Management, LLC	650,000,000	475,840,920	60,716,754	180,700,000	523,111,177	1.23	11.5	
Oaktree Opportunities Fund X, L.P.	50,000,000	46,500,021	38,544,660	8,500,000	30,516,736	1.49	9.4	2015
Oaktree Opportunities Fund Xb, L.P.	100,000,000	75,000,000	0	25,000,000	110,834,325	1.48	13.9	2015
Oaktree Real Estate Debt III	200,000,000	99,340,899	19,975,318	102,200,000	93,673,905	1.14	10.7	2020
Oaktree Opportunities Fund XI	300,000,000	255,000,000	2,196,776	45,000,000	288,086,211	1.14	12.0	2020

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PIMCO BRAVO	5,243,670	4,745,149	5,714,432	5,350,003	255,959	1.26	4.8	
PIMCO Bravo Fund OnShore Feeder II	5,243,670	4,745,149	5,714,432	5,350,003	255,959	1.26	4.8	2014
Prudential Global Investment Mgmt	600,000,000	530,422,039	563,891,070	123,726,938	174,686,519	1.39	12.3	
Prudential Capital Partners II, L.P.	100,000,000	97,930,132	145,671,152	11,049,052	488,725	1.49	9.0	2005
Prudential Capital Partners III, L.P.	100,000,000	102,871,088	174,839,469	13,586,923	2,849,084	1.73	14.1	2009
Prudential Capital Partners IV	100,000,000	113,143,330	133,421,700	1,948,707	19,458,486	1.35	8.6	2012
Prudential Capital Partners V, L.P.	150,000,000	152,783,202	102,178,772	8,439,070	85,846,049	1.23	7.4	2016
PGIM Capital Partners VI, L.P.	150,000,000	63,694,287	7,779,977	88,703,186	66,044,175	1.16	22.4	2020
Summit Partners	95,000,000	100,002,497	137,062,090	22,177,023	2,097,439	1.39	9.2	
Summit Subordinated Debt Fund III, L.P.	45,000,000	44,088,494	62,804,226	2,250,000	537,254	1.44	8.6	2004
Summit Subordinated Debt Fund IV, L.P.	50,000,000	55,914,003	74,257,864	19,927,023	1,560,186	1.36	9.8	2008
TCW	189,570,000	174,519,135	154,180,226	59,157,056	69,930,532	1.28	9.3	
TCW Direct Lending LLC	89,570,000	83,599,652	88,959,322	14,899,409	19,330,558	1.30	8.3	2014
TCW Direct Lending VII	100,000,000	90,919,484	65,220,904	44,257,647	50,599,973	1.27	10.2	2018
TSSP	275,000,000	170,842,362	44,049,254	111,486,392	167,107,212	1.24	6.9	
Sixth Street Opportunities Partners V	75,000,000	21,628,194	712,372	53,606,350	19,682,670	0.94	-6.6	2021
Sixth Street TAO Partners (B), L.P.	50,000,000	47,754,708	20,556,001	22,817,104	42,097,400	1.31	10.4	2018
Sixth Street TAO Partners (D), L.P.	100,000,000	61,073,149	15,951,628	26,425,007	60,480,239	1.25	13.2	2018
TSSP Opportunities Partners IV (A), L.P.	50,000,000	40,386,311	6,829,253	8,637,931	44,846,904	1.28	10.5	2018

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Real Assets	4,197,571,518	3,924,883,304	2,808,514,500	581,616,327	2,105,772,625	1.25	6.3	
BlackRock	198,500,000	162,397,309	71,583,086	46,914,650	120,800,312	1.18	8.1	
BlackRock Global Renewable Power Fund II	98,500,000	104,674,253	68,717,826	2,843,682	59,416,751	1.22	6.3	2017
BlackRock Global Renewable Power Infrastructure III	100,000,000	57,723,056	2,865,259	44,070,968	61,383,561	1.11	10.0	2019
EIG Global Energy Partners	450,000,000	470,613,496	385,532,797	77,704,481	136,881,092	1.11	0.8	
EIG Energy Fund XIV	100,000,000	113,459,470	95,309,310	2,761,129	3,585,109	0.87	-5.0	2007
EIG Energy Fund XV	150,000,000	161,497,867	156,372,490	22,871,323	18,473,639	1.08	1.9	2010
EIG Energy Fund XVI	200,000,000	195,656,159	133,850,997	52,072,029	114,822,343	1.27	5.6	2013
Encap Energy	300,000,000	322,304,990	322,894,964	8,326,109	145,865,069	1.45	8.9	
EnCap Energy Capital Fund VIII, L.P.	100,000,000	103,352,598	67,325,767	0	40,782,541	1.05	0.8	2010
Encap Energy Fund IX	100,000,000	113,725,245	132,573,789	3,890,055	33,980,909	1.46	10.5	2012
EnCap Energy Capital Fund X, L.P.	100,000,000	105,227,147	122,995,408	4,436,053	71,101,618	1.84	15.3	2015
Energy & Minerals Group	680,000,000	692,602,709	421,349,474	44,221,087	534,173,071	1.38	9.7	
NGP Midstream & Resources, L.P.	100,000,000	103,565,615	179,560,149	17,857	4,525,782	1.78	13.2	2007
The Energy & Minerals Group Fund II, L.P.	100,000,000	108,534,480	108,598,045	170,365	105,971,883	1.98	12.1	2011
The Energy & Minerals Group Fund III, L.P.	200,000,000	207,635,331	37,373,504	1,219,725	110,433,882	0.71	-4.8	2014
The Energy & Minerals Group Fund IV, LP	150,000,000	163,358,656	90,955,893	14,023,899	147,363,583	1.46	8.6	2015
The Energy & Minerals Group Fund V	112,500,000	92,332,817	3,658,916	23,199,538	139,979,769	1.56	14.2	2019
The Energy & Minerals Group Fund V Accordion, LP	17,500,000	17,175,810	1,202,967	5,589,703	25,898,171	1.58	14.9	2019
Energy Capital Partners	500,000,000	421,489,500	343,310,881	159,684,838	248,363,043	1.40	8.6	
Energy Capital Partners III, L.P.	200,000,000	235,844,231	302,156,801	30,959,867	47,429,617	1.48	10.9	2013
Energy Capital Partners IV-A, LP	150,000,000	126,963,783	41,154,080	36,494,241	143,164,156	1.45	16.5	2017
Energy Capital Partners V	150,000,000	58,681,486	0	92,230,730	57,769,270	0.98	-1.6	2023
Enervest Management Partners	100,000,000	99,324,433	101,510,847	8,769,265	54,941,381	1.58	10.1	
EnerVest Energy Institutional Fund XIV-A, L.P.	100,000,000	99,324,433	101,510,847	8,769,265	54,941,381	1.58	10.1	2015
First Reserve	500,000,000	554,272,050	310,314,749	10,330,243	95,881,827	0.73	-9.7	
First Reserve Fund XI, L.P.	150,000,000	150,292,121	100,059,903	0	67,614	0.67	-8.8	2006
First Reserve Fund XII, L.P.	150,000,000	165,617,044	85,669,271	0	182,952	0.52	-17.9	2008
First Reserve Fund XIII, L.P.	200,000,000	238,362,885	124,585,575	10,330,243	95,631,261	0.92	-2.4	2013

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Private Markets Investments



Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Kohlberg, Kravis, Roberts & Co.	249,850,000	192,495,060	39,665,685	71,866,523	186,473,377	1.17	5.2	
KKR Global Infrastructure Investors III	149,850,000	135,517,819	37,946,283	25,591,907	131,106,935	1.25	10.1	2018
KKR Global Infrastructure Investors IV	100,000,000	56,977,241	1,719,402	46,274,616	55,366,443	1.00	0.3	2021
Merit Energy Partners	519,721,518	384,644,480	204,431,097	94,599,899	312,361,532	1.34	8.2	
Merit Energy Partners F-II, L.P.	100,000,000	59,522,861	34,132,129	0	6,067,920	0.68	-5.5	2006
Merit Energy Partners H	100,000,000	100,000,000	29,668,582	0	47,306,974	0.77	-3.6	2011
Merit Energy Partners I, L.P.	169,721,518	169,721,518	112,039,060	0	166,200,476	1.64	9.5	2014
Merit Energy Partners K, L.P.	150,000,000	55,400,101	28,591,326	94,599,899	92,786,162	2.19	32.4	2019
NGP	599,500,000	590,386,271	574,770,920	45,679,233	242,322,922	1.38	9.1	
Natural Gas Partners IX, LP	150,000,000	174,005,353	249,411,654	605,481	358,049	1.44	12.1	2007
NGP Natural Resources X, L.P.	150,000,000	149,357,872	132,217,257	642,128	15,607,343	0.99	-0.3	2011
NGP Natural Resources XI, L.P.	150,000,000	154,850,028	133,858,376	6,290,493	112,784,534	1.59	10.8	2014
NGP Natural Resources XII, L.P.	149,500,000	112,173,018	59,283,633	38,141,131	113,572,996	1.54	13.7	2017
Sheridan	100,000,000	34,353,005	33,150,000	13,520,000	27,708,999	1.77	13.3	
Sheridan Production Partners III-B, L.P.	100,000,000	34,353,005	33,150,000	13,520,000	27,708,999	1.77	13.3	2014

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Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Real Estate	4,423,147,868	3,013,187,974	2,091,932,132	1,727,068,945	2,011,060,663	1.36	5.8	
Angelo, Gordon & Co.	650,000,000	467,562,691	277,532,407	235,655,000	354,421,320	1.35	10.0	
AG Asia Realty Fund III, L.P.	50,000,000	47,587,261	47,125,000	6,196,250	16,132,122	1.33	10.1	2016
AG Asia Realty Fund IV, L.P.	100,000,000	79,350,334	33,500,000	36,797,500	73,441,747	1.35	14.4	2018
AG Asia Realty Fund V	100,000,000	0	0	100,000,000	0			2023
AG Europe Realty Fund II, L.P.	75,000,000	68,635,121	33,769,976	12,768,750	68,504,804	1.49	11.2	2018
AG Europe Realty Fund III	75,000,000	45,713,586	3,000,000	29,437,500	50,854,357	1.18	10.1	2020
AG Realty Fund IX	100,000,000	92,141,126	87,000,000	11,650,000	36,238,982	1.34	6.9	2014
AG Realty Fund X, L.P.	150,000,000	134,135,263	73,137,431	38,805,000	109,249,309	1.36	17.1	2018
Blackstone	1,124,500,000	906,880,264	904,240,574	387,382,886	576,449,772	1.63	3.4	
Blackstone Real Estate Partners Asia II	74,500,000	69,529,328	15,431,181	15,016,187	68,578,113	1.21	7.5	2017
Blackstone Real Estate Partners Asia III	100,000,000	14,930,124	2,368	86,266,767	12,888,941	0.86	-17.2	2021
Blackstone Real Estate Partners V	100,000,000	104,217,981	209,143,624	4,174,052	117,456	2.01	10.8	2006
Blackstone Real Estate Partners VI, L.P.	100,000,000	109,528,873	218,606,081	4,907,906	1,426,967	2.01	13.1	2007
Blackstone Real Estate Partners VII, LP	100,000,000	112,390,951	181,590,498	10,855,329	18,783,571	1.78	14.9	2011
Blackstone Real Estate VIII.TE.1 L.P.	150,000,000	174,197,714	178,468,578	21,143,177	113,957,717	1.68	15.7	2015
Blackstone Real Estate Partners IX, L.P.	300,000,000	313,554,841	100,998,244	52,483,254	353,956,678	1.45	23.9	2018
Blackstone Real Estate Partners X	200,000,000	8,530,453	0	192,536,214	6,740,329	0.79	-41.4	2022
Blackstone Strategic Partners	75,000,000	77,489,811	66,234,275	916,710	858,620	0.87	-3.2	
Strategic Partners III RE, L.P.	25,000,000	25,981,820	15,252,523	9,006	95,929	0.59	-6.4	2005
Strategic Partners IV RE, L.P.	50,000,000	51,507,991	50,981,752	907,704	762,691	1.00	0.1	2008
Brookfield Asset Management Inc.	300,000,000	154,495,186	7,380,906	152,818,913	159,458,689	1.08	15.3	
Brookfield Strategic Real Estate Partners IV	300,000,000	154,495,186	7,380,906	152,818,913	159,458,689	1.08	15.3	2021
Carlyle Group	450,000,000	154,446,202	106,572,205	366,882,668	102,221,650	1.35	-5.0	
Carlyle Realty Partners IX	300,000,000	29,317,268	0	270,682,732	22,334,247	0.76	-36.6	2021
Carlyle Realty Partners VIII, L.P.	150,000,000	125,128,934	106,572,205	96,199,936	79,887,403	1.49	26.6	2017
Kohlberg, Kravis, Roberts & Co.	125,000,000	74,887,791	6,247,764	52,949,756	66,195,441	0.97	-2.7	
KKR Real Estate Partners Americas III	125,000,000	74,887,791	6,247,764	52,949,756	66,195,441	0.97	-2.7	2021
Landmark Partners	249,500,000	104,789,284	63,819,374	167,424,115	79,772,301	1.37	8.1	
Landmark Real Estate Partners VIII, L.P.	149,500,000	104,789,284	63,819,374	67,424,115	79,772,301	1.37	16.3	2016
Landmark Real Estate Partners IX	100,000,000	0	0	100,000,000	0			2021
Lubert Adler	174,147,868	132,670,244	86,217,291	42,414,787	86,952,038	1.31	11.6	
Lubert-Adler Real Estate Fund VII-B, L.P.	74,147,868	67,585,213	82,515,205	7,414,787	20,629,218	1.53	15.5	2017
Lubert-Adler Recovery and Enhancement Capital Fund	100,000,000	65,085,030	3,702,087	35,000,000	66,322,820	1.08	7.7	2021
Oaktree Capital Management, LLC	200,000,000	150,475,519	36,760,052	84,000,000	122,005,853	1.06	10.8	
Oaktree Real Estate Opportunities Fund VIII	200,000,000	150,475,519	36,760,052	84,000,000	122,005,853	1.06	10.8	2020
Rockpoint	200,000,000	179,256,674	69,882,159	41,172,282	144,368,259	1.20	8.2	
Rockpoint Real Estate Fund V, L.P.	100,000,000	99,919,326	58,755,434	17,327,032	59,402,863	1.18	4.5	2014
Rockpoint Real Estate Fund VI, L.P.	100,000,000	79,337,348	11,126,725	23,845,250	84,965,396	1.21	11.8	2019

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Investments	Commitments	Contributions	Distributions	Remaining Commitment	Market Value	Investment Multiple	IRR	Vintage Year
Rockwood	200,000,000	166,224,934	61,784,022	37,955,769	130,839,942	1.16	6.0	
Rockwood Capital RE Partners X, L.P.	100,000,000	95,391,047	57,507,174	6,293,482	54,972,654	1.18	4.7	2015
Rockwood Capital RE Partners XI	100,000,000	70,833,887	4,276,848	31,662,288	75,867,288	1.13	7.2	2019
Silverpeak Real Estate Partners	225,000,000	144,009,375	109,295,624	7,496,058	3,734,216	0.78	-3.9	
Silverpeak Legacy Pension Partners II, L.P.	75,000,000	73,069,012	92,033,940	7,496,058	420,285	1.27	4.2	2005
Silverpeak Legacy Pension Partners III, L.P.	150,000,000	70,940,363	17,261,685	0	3,313,931	0.29	-11.9	2008
TA Associates Realty	450,000,000	300,000,000	295,965,478	150,000,000	183,782,561	1.60	11.2	
Realty Associates Fund X	100,000,000	100,000,000	161,146,171	0	109,451	1.61	12.6	2012
Realty Associates Fund XI	100,000,000	100,000,000	116,669,552	0	47,285,369	1.64	11.4	2015
Realty Associates Fund XII	100,000,000	100,000,000	18,149,755	0	136,387,741	1.55	20.9	2018
Realty Associates Fund XIII	150,000,000	0	0	150,000,000	0			2023
Total	38,001,287,357	29,497,176,279	22,293,834,002	11,649,541,040	21,587,502,476	1.49	10.3	
<i>Difference**</i>					(7,059,894)			
Private Markets Total with Difference					21,580,442,582			

<i>Private Markets Portfolio Status</i>	Managers	Funds
Private Equity	59	192
Private Credit	18	41
Real Assets	11	32
Real Estate	13	36
Total	101	301

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 and may slightly differ from final fiscal year end report. Ultimately, the actual performance and value of any investment is not known until final liquidation. Because there is no industry-standardized method for valuation or reporting comparisons of performance and valuation data among different investments is difficult.

Data presented in this report is made public pursuant to Minn. Stat. Chs. 13 and 13D, and Minn. Stat. § 11A.24, subd. 6(c). Additional information on private markets investments may be classified as non-public and not subject to disclosure.

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

** Difference is from an in-kind stock distribution liquidating account, cash transactions posted to next day and distributions received in foreign currency during the month.

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Quarterly Report

Participant Directed Investment Program

June 30, 2023



Quarterly Report

Participant Directed Investment Program

The Participant Directed Investment Program (PDIP) provides investment vehicles for a variety of retirement or other tax-advantaged savings plans. The objective of the Plan is to be competitive in the marketplace by providing quality investment options with low fees to its participants. Investment goals among the PDIP's many participants are varied.

- The Supplemental Investment Fund (SIF) is an investment platform that provides participants with the option to invest in many of the same pools as the Combined Funds in addition to a Stable Value Fund and a Money Market Fund. The Volunteer Firefighter Account is an option in the SIF for local firefighter entities that join the Statewide Voluntary Firefighter Plan administered by PERA. The investment vehicles are structured much like a family of mutual funds where participating entities buy or sell units in each fund. Participants may allocate their investments among one or more funds that are appropriate for their needs and are within statutory requirements and rules established by the participating organizations.
- The Mutual Fund Line-up is an investment platform that offers participants three sets of investment options. The first is a set of actively and passively managed mutual funds, a Stable Value Fund and a Money Market Fund. The second is a set of target date funds called Minnesota Target Retirement Funds. The third is a self-directed brokerage account window which offers thousands of mutual funds. The SBI has no direct management responsibilities for funds within the self-directed brokerage account window. 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.
- The SBI is responsible for the investment options provided in the two State Sponsored Savings Plans established under provisions of the Internal Revenue Code 529, the Minnesota College Savings Plan and Minnesota Achieving a Better Life Experience Plan (ABLE). The Minnesota College Savings Plan is an educational savings plan designed to help families save for qualified nationwide 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 have contracted jointly with TIAA-CREF Tuition Financing, Inc. to provide administrative, marketing, communication, recordkeeping and investment management services. The ABLE Plan is a savings plan designed to help individuals save for qualified disability expenses without losing eligibility for certain assistance programs. The plan is administered by the Department of Human Services (DHS). The SBI and DHS have jointly contracted with Ascensus to provide recordkeeping, administrative, and investment management services for the plan.

The investment returns shown in this report are calculated using a time-weighted rate of return formula. These returns are net of investment management fees and transaction costs. They do not, however, reflect administrative expenses that may be deducted by the retirement systems or other agencies to defray administrative costs.



Supplemental Investment Fund Summary

The Minnesota Supplemental Investment Fund (SIF) is a multi-purpose investment platform that offers a range of investment options to state and local public employees. This investment platform provides some or all of the investment options to the Public Employees Retirement Association (PERA) Defined Contribution Plan, local pension plans and the 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. All returns are net of investment management fees.

Investment Option Descriptions

- Balanced Fund - a balanced portfolio utilizing both common stocks and bonds
- U.S. Equity Actively Managed Fund - an actively managed, U.S. common stock portfolio.
- U.S. Equity Index Fund - a passively managed, common stock portfolio designed to broadly track the performance of the U.S. stock market.
- Broad International Equity Fund - a portfolio of non-U.S. stocks that incorporates both active and passive management.
- Bond Fund - an actively managed, bond portfolio.
- Money Market Fund - a portfolio utilizing short-term, liquid debt securities.
- Stable Value Fund - a portfolio of stable value instruments, including security backed contracts and insurance company and bank investment contracts.
- Volunteer Firefighter Account - a balanced portfolio only used by the Statewide Volunteer Firefighter Plan.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Option Since</u>
BALANCED FUND	\$113,546,025	5.0%	11.6%	7.4%	7.8%	8.4%	01/1980
U.S. EQUITY ACTIVELY MANAGED FUND	83,715,159	8.3	19.7	13.2	11.4	12.6	07/1986
U.S. EQUITY INDEX FUND	414,971,997	8.4	19.0	14.1	11.6	12.4	07/1986
BROAD INTERNATIONAL EQUITY FUND	135,374,766	3.0	14.0	8.8	4.5	5.4	09/1994
BOND FUND	100,682,881	-0.5	0.3	-3.3	1.3	2.0	07/1986
MONEY MARKET FUND	699,382,002	1.3	4.2	1.5	1.8	1.2	07/1986
STABLE VALUE FUND	1,699,071,788	0.7	2.5	2.2	2.4	2.2	11/1994
VOLUNTEER FIREFIGHTER ACCOUNT	151,720,613	3.3	8.7	4.7	5.7	6.3	01/2010

Note:

The Market Values for the Money Market Fund, the Stable Value Fund, and the Total Supplemental Investment Fund also include assets held through other plans.



Supplemental Investment Fund Performance

Balanced Fund

The primary investment objective of the Balanced Fund is to gain exposure to publicly traded U.S. equities, bond and cash in a diversified investment portfolio. The Fund seeks to maximize long-term real rates of return, while limiting short-run portfolio return volatility. The Balanced 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. The benchmark is a blend of 60% Russell 3000/35% Bloomberg U.S. Aggregate/5% 3 Month T-Bills.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
BALANCED FUND	\$113,546,025	5.0%	11.6%	7.4%	7.8%	8.4%
SIF BALANCED FUND BENCHMARK		4.8%	11.2%	7.0%	7.5%	8.1%
Excess		0.2%	0.4%	0.4%	0.3%	0.3%

U.S. Equity Actively Managed Fund

The U.S. Equity Actively Managed Fund's investment objective is to generate above-average returns from capital appreciation on common stocks. The U.S. Stock Actively Managed Fund is invested primarily in the common stocks of U.S. companies. The managers in the account also hold varying levels of cash.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
U.S. EQUITY ACTIVELY MANAGED FUND	83,715,159	8.3	19.7	13.2	11.4	12.6
Russell 3000		8.4	19.0	13.9	11.4	12.3
Excess		-0.1	0.8	-0.7	-0.0	0.3



Supplemental Investment Fund Performance

U.S. Equity Index Fund

The investment objective of the U.S. Equity Index Fund is to generate returns that track those of the U.S. stock market as a whole. The Fund is designed to track the performance of the Russell 3000 Index, a broad-based equity market indicator. The Fund is invested 100% in common stock.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
U.S. EQUITY INDEX FUND	\$414,971,997	8.4%	19.0%	14.1%	11.6%	12.4%
Russell 3000		8.4%	19.0%	13.9%	11.4%	12.3%
Excess		0.0%	0.0%	0.2%	0.2%	0.1%

Broad International Equity Fund

The investment objective of the Broad International Equity Fund is to earn a high rate of return by investing in the stock of companies outside the U.S. Portions of the Fund are passively managed and semi-passively managed. These portions of the Fund are designed to track and modestly outperform, respectively, the return of developed markets included in the MSCI World ex USA Index. A portion of the Fund is "actively managed" by several international managers and emerging markets specialists who buy and sell stocks in an attempt to maximize market value. The International Equity Benchmark is currently the MSCI ACWI ex USA (net).

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
BROAD INTERNATIONAL EQUITY FUND	135,374,766	3.0	14.0	8.8	4.5	5.4
International Equity Benchmark		2.4	12.7	7.2	3.5	4.7
Excess		0.6	1.3	1.6	1.0	0.7



Supplemental Investment Fund Performance

Bond Fund

The investment objective of the Bond Fund is to exceed the return of the broad domestic bond market by investing in fixed income securities. The Bond Fund invests primarily in high-quality, government and corporate bonds that have intermediate to long-term maturities, usually 3 to 20 years. The Bond Fund benchmark is the Bloomberg U.S. Aggregate.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
BOND FUND	\$100,682,881	-0.5%	0.3%	-3.3%	1.3%	2.0%
Bloomberg U.S. Aggregate		-0.8%	-0.9%	-4.0%	0.8%	1.5%
Excess		0.4%	1.2%	0.6%	0.6%	0.5%

Money Market Fund

The investment objective of the Money Market Fund is to protect principal by investing in short-term, liquid U.S. Government securities. The Fund 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. Please note that the Market Value for the Money Market Fund reflects assets held through the Deferred Compensation Plan as well.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
MONEY MARKET FUND	699,382,002	1.3	4.2	1.5	1.8	1.2
ICE BofA US 3-Month Treasury Bill		1.2	3.6	1.3	1.6	1.0
Excess		0.1	0.6	0.3	0.2	0.2



Supplemental Investment Fund Performance

Stable Value Fund

The investment objectives of the Stable Value Fund 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 fund. The Fund is invested in a well-diversified portfolio of high-quality fixed income securities with strong credit ratings. The Fund also invests in contracts issued by highly rated insurance companies and banks which are structured to provide principal protection for the Fund's diversified bond portfolios, regardless of daily market changes. The Stable Value Fund Benchmark is the 3-year Constant Maturity Treasury Bill +45 basis points. Please note that the Market Value for the Stable Value Fund reflects assets held through the Deferred Compensation Plan as well.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
STABLE VALUE FUND	\$1,699,071,788	0.7%	2.5%	2.2%	2.4%	2.2%
Fixed Interest Blended Benchmark		1.1%	4.4%	2.3%	2.3%	2.0%
Excess		-0.4%	-1.9%	-0.1%	0.1%	0.2%

Volunteer Firefighter Account

The Volunteer Firefighter Account is different than other SIF program options. It is available only to the local entities that participate in the Statewide Volunteer Firefighter Plan (administered by PERA) and have all of their assets invested in the Volunteer Firefighter Account. There are other volunteer firefighter plans that are not eligible to be consolidated that may invest their assets through other SIF program options. The investment objective of the Volunteer Firefighter Account is to maximize long-term returns while limiting short-term portfolio return volatility. The account is invested in a balanced portfolio of domestic equity, international equity, fixed income and cash. The benchmark for this account is 35% Russell 3000, 15% MSCI ACWI ex USA (net), 45% Bloomberg U.S. Aggregate, 5% 3 Month T-Bills.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
VOLUNTEER FIREFIGHTER ACCOUNT	151,720,613	3.3	8.7	4.7	5.7	6.3
SIF Volunteer Firefighter Account BM		3.0	8.3	4.3	5.3	6.0
Excess		0.3	0.4	0.4	0.4	0.4



Mutual Funds

The mutual fund investment line-up provides investment options to the Minnesota Deferred Compensation Plan (MNDCP), Unclassified Retirement Plan, Health Care Savings Plan, and the Hennepin County Retirement Plan. The MNDCP is a tax-sheltered retirement savings plan that is supplemental to public employees primary retirement plan. (In most cases, the primary plan is a defined benefit plan administered by TRA, PERA, or MSRS.) Participants can choose from active and passively managed stock and bond funds, a Stable Value Fund, a Money Market Fund, a set of 10 target date retirement fund options, and a brokerage window where participants can choose from hundreds of mutual funds.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Option Since</u>
VANGUARD TOTAL STOCK MARKET INSTITUTIONAL INDEX PLUS	\$732,338,865	8.4%	18.9%	13.8%			07/2019
VANGUARD INSTITUTIONAL INDEX PLUS	1,785,476,763	8.7	19.6	14.6	12.3%	12.9%	07/1999
VANGUARD DIVIDEND GROWTH	983,811,264	3.5	10.7	13.8	12.2		10/2016
VANGUARD MID CAP INDEX	726,378,200	4.8	13.7	12.0	8.6	10.5	01/2004
T. ROWE PRICE SMALL-CAP STOCK	859,711,020	5.2	11.0	9.6	7.8	10.5	04/2000
FIDELITY DIVERSIFIED INTERNATIONAL	334,559,367	4.6	19.2	6.3	5.9	6.7	07/1999
VANGUARD TOTAL INTERNATIONAL STOCK INDEX	353,779,214	2.6	12.3	7.5	3.7	5.1	07/2011
VANGUARD BALANCED INDEX	1,339,480,629	4.6	10.7	6.5	7.3	8.1	12/2003
DODGE & COX INCOME	297,141,157	0.1	1.8	-1.8	2.0	2.5	07/1999
VANGUARD TOTAL BOND MARKET INDEX	317,676,352	-0.9	-0.9	-4.0	0.8	1.5	12/2003
2025 FUND	214,242,288	1.4	4.8	4.5	4.7	5.7	07/2011
2030 FUND	212,832,803	2.3	7.2	5.3	5.6	6.7	07/2011
2035 FUND	173,485,277	3.4	10.0	6.0	6.2	7.3	07/2011
2040 FUND	143,032,658	3.9	11.3	6.7	6.5	7.7	07/2011
2045 FUND	137,636,283	4.3	12.2	7.5	6.8	8.0	07/2011
2050 FUND	120,212,466	4.6	13.0	8.2	7.0	8.2	07/2011
2055 FUND	80,451,086	4.9	13.8	8.6	7.2	8.3	07/2011
2060 FUND	60,843,313	4.9	13.8	8.6	7.2	8.3	07/2011
2065 FUND	10,006,630	4.9	13.8	8.6			04/2020
INCOME FUND	205,519,630	1.1	4.0	3.3	4.0	4.1	07/2011
TD Ameritrade SDB	83,609,730						08/2017
TD Ameritrade SDB Roth	3,372,746						08/2017



Mutual Funds

LARGE CAP EQUITY

Vanguard Total Stock Market Institutional Index Plus (passive)

A passive domestic stock portfolio of large and small companies that tracks the CRSP US Total Market Index.

Vanguard Index Institutional Plus (passive)

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

Vanguard Dividend Growth (active) (1)

A fund of large cap stocks which is expected to outperform the S&P U.S. Dividend Growers Index, over time.

MID CAP EQUITY

Vanguard Mid Cap Index (passive) (2)

A fund that passively invests in companies with medium market capitalizations that tracks the CRSP US Mid-Cap Index.

SMALL CAP EQUITY

T Rowe Price Small Cap (active)

A fund that invests primarily in companies with small market capitalizations and is expected to outperform the Russell 2000 Index.

INTERNATIONAL EQUITY

Fidelity Diversified International (active)

A fund that invests primarily in stocks of companies located outside of the United States and is expected to outperform the MSCI index of Europe, Australasia and the Far East (EAFE), over time.

Vanguard Total International Stock Index (passive) (3)

A fund that seeks to track the investment performance of the FTSE Global All Cap ex US Index, an index designed to measure equity market performance in developed and emerging markets, excluding the United States.

	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	Option Since
Large Cap US Equity						
VANGUARD TOTAL STOCK MARKET INSTITUTIONAL INDEX PLUS	\$732,338,865	8.4%	18.9%	13.8%		07/2019
CRSP US Total Market Index		8.4	18.9	13.8		07/2019
Excess		0.0	0.0	0.1		
VANGUARD INSTITUTIONAL INDEX PLUS	1,785,476,763	8.7	19.6	14.6	12.3%	07/1999
S&P 500		8.7	19.6	14.6	12.3	07/1999
Excess		-0.0	-0.0	-0.0	-0.0	
VANGUARD DIVIDEND GROWTH	983,811,264	3.5	10.7	13.8	12.2	10/2016
VANGUARD DIVIDEND GROWTH INDEX		6.0	15.7	13.7	12.0	10/2016
Excess		-2.5	-5.0	0.1	0.1	
Mid Cap US Equity						
VANGUARD MID CAP INDEX	726,378,200	4.8	13.7	12.0	8.6	01/2004
CRSP US Mid Cap Index		4.8	13.7	12.0	8.6	01/2004
Excess		0.0	0.0	0.0	0.0	
Small Cap US Equity						
T. ROWE PRICE SMALL-CAP STOCK	859,711,020	5.2	11.0	9.6	7.8	04/2000
Russell 2000		5.2	12.3	10.8	4.2	04/2000
Excess		0.0	-1.4	-1.2	3.6	
International Equity						
FIDELITY DIVERSIFIED INTERNATIONAL	334,559,367	4.6	19.2	6.3	5.9	07/1999
MSCI EAFE FREE (NET)		3.0	18.8	8.9	4.4	07/1999
Excess		1.6	0.4	-2.6	1.5	
VANGUARD TOTAL INTERNATIONAL STOCK INDEX	353,779,214	2.6	12.3	7.5	3.7	07/2011
FTSE Global All Cap ex US Index Net		2.4	12.3	7.4	3.5	07/2011
Excess		0.2	0.0	0.1	0.2	



Mutual Funds

BALANCED

Vanguard Balanced Index (passive) (4)

A fund that passively invests in a mix of domestic stocks and bonds. The fund is expected to track a weighted benchmark of 60% CRSP US Total Market Index/40% Bloomberg U.S. Aggregate.

FIXED INCOME

Dodge & Cox Income Fund (active)

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

Vanguard Total Bond Market Index (passive)

A fund that passively invests in a broad, market weighted bond index that is expected to track the Bloomberg U.S. Aggregate.

Money Market Fund (5)

A fund that invests in short-term debt instruments which is expected to outperform the return on 3 Month T-Bills.

STABLE VALUE

Stable Value Fund (5)

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

Ending Market Value Last Qtr 1 Year 3 Year 5 Year Option Since

Balanced Funds

VANGUARD BALANCED INDEX	\$1,339,480,629	4.6%	10.7%	6.5%	7.3%	12/2003
Vanguard Balanced Fund Benchmark		4.7	10.9	6.6	7.4	12/2003
Excess		-0.0	-0.2	-0.1	-0.1	

Fixed Income

DODGE & COX INCOME	297,141,157	0.1	1.8	-1.8	2.0	07/1999
Bloomberg U.S. Aggregate		-0.8	-0.9	-4.0	0.8	07/1999
Excess		0.9	2.8	2.2	1.2	

VANGUARD TOTAL BOND MARKET INDEX	317,676,352	-0.9	-0.9	-4.0	0.8	12/2003
Bloomberg U.S. Aggregate		-0.8	-0.9	-4.0	0.8	12/2003
Excess		-0.1	0.0	-0.0	0.0	

MONEY MARKET FUND	699,382,002	1.3	4.2	1.5	1.8	07/1986
ICE BofA US 3-Month Treasury Bill		1.2	3.6	1.3	1.6	07/1986
Excess		0.1	0.6	0.3	0.2	

Stable Value

STABLE VALUE FUND	1,699,071,788	0.7	2.5	2.2	2.4	11/1994
Fixed Interest Blended Benchmark		1.1	4.4	2.3	2.3	11/1994
Excess		-0.4	-1.9	-0.1	0.1	

(1) Prior to 09/20/2021 the benchmark was the NASDAQ US Dividend Achievers Select Index.

(2) Prior to 02/01/2013 the benchmark was the MSCI US Mid-Cap 450 Index.

(3) Prior to 06/01/2013 the benchmark was MSCI ACWI ex USA IMI.

(4) Prior to 01/01/2013 the benchmark was 60% MSCI US Broad Market Index and 40% Bloomberg U.S. Aggregate.

(5) Money Market and Stable Value are Supplemental Investment Fund options which are also offered to eligible plans that invest through other plans.



Mutual Funds

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. A participant only needs to make one investment decision by investing their assets in the fund that is closest to their anticipated retirement date.

Target Date Retirement Funds

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>Option Since</u>		<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>Option Since</u>	
SSgA														
2025 FUND	\$214,242,288	1.4%	4.8%	4.5%	4.7%	07/2011		2050 FUND	\$120,212,466	4.6%	13.0%	8.2%	7.0%	07/2011
2025 FUND BENCHMARK		1.4%	4.7%	4.5%	4.7%	07/2011		2050 FUND BENCHMARK		4.5%	12.9%	8.2%	7.0%	07/2011
Excess		0.0%	0.0%	-0.0%	0.0%			Excess		0.0%	0.1%	-0.0%	0.0%	
2030 FUND	\$212,832,803	2.3%	7.2%	5.3%	5.6%	07/2011		2055 FUND	\$80,451,086	4.9%	13.8%	8.6%	7.2%	07/2011
2030 FUND BENCHMARK		2.3%	7.2%	5.3%	5.6%	07/2011		2055 FUND BENCHMARK		4.8%	13.7%	8.6%	7.2%	07/2011
Excess		0.0%	0.0%	-0.0%	0.0%			Excess		0.0%	0.1%	0.0%	0.0%	
2035 FUND	\$173,485,277	3.4%	10.0%	6.0%	6.2%	07/2011		2060 FUND	\$60,843,313	4.9%	13.8%	8.6%	7.2%	07/2011
2035 FUND BENCHMARK		3.4%	10.0%	6.0%	6.2%	07/2011		2060 FUND BENCHMARK		4.8%	13.7%	8.6%	7.2%	07/2011
Excess		0.0%	0.1%	-0.0%	0.0%			Excess		0.0%	0.1%	0.0%	0.0%	
2040 FUND	\$143,032,658	3.9%	11.3%	6.7%	6.5%	07/2011		2065 FUND	\$10,006,630	4.9%	13.8%	8.6%		04/2020
2040 FUND BENCHMARK		3.9%	11.2%	6.7%	6.5%	07/2011		2065 FUND BENCHMARK		4.8%	13.7%	8.6%		04/2020
Excess		0.0%	0.1%	-0.0%	0.0%			Excess		0.0%	0.1%	0.0%		
2045 FUND	\$137,636,283	4.3%	12.2%	7.5%	6.8%	07/2011		INCOME FUND	\$205,519,630	1.1%	4.0%	3.3%	4.0%	07/2011
2045 FUND BENCHMARK		4.2%	12.1%	7.5%	6.8%	07/2011		INCOME FUND BENCHMARK		1.1%	4.1%	3.4%	4.0%	07/2011
Excess		0.0%	0.1%	-0.0%	0.0%			Excess		0.0%	-0.0%	-0.0%	0.0%	

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



MN College Savings Plan Options

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 to provide administrative, marketing, communication, recordkeeping and investment management services. Please see the next page for the performance as reported by TIAA.

ENROLLMENT-BASED MANAGED ALLOCATIONS - The Enrollment Year Investment Option is a set of single fund options representing the date your future student needs their college savings. The asset allocation adjusts automatically to a more conservative investment objective and level of risk as the enrollment year approaches. The managed allocation changed from Age-Based to Enrollment-Based on October 28, 2019.

RISK BASED ALLOCATIONS - The Risk Based Allocation Option offers three separate allocation investment options - Aggressive, Moderate and Conservative, each of which has a fixed risk level that does not change as the Beneficiary ages.

ASSET CLASS BASED ALLOCATIONS

U.S. LARGE CAP EQUITY INDEX - A passive domestic stock portfolio that tracks the S&P 500.

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% MSCI Emerging Markets Free Index.

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.

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.

EQUITY AND INTEREST ACCUMULATION - A fund that passively invests half of the portfolio in U.S. equities across all capitalization ranges and the other half in the same Funding Agreement issued by TIAA-CREF Life as described above. The fund is expected to track a weighted benchmark of 50% Russell 3000 and 50% 3-month T-Bill.

100% FIXED INCOME - A fund that passively invests in fixed income holdings that tracks the Bloomberg U.S. 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% Bloomberg U.S. Aggregate, 20% inflation-linked bond, and 10% high yield.

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.

SOCIAL CHOICE EQUITY ALLOCATION - An actively managed fund that seeks to provide a favorable long-term total return that reflects the investment performance of the overall U.S. equity market while giving special consideration to companies whose activities are consistent with certain environmental, social and governance criteria.



MINNESOTA COLLEGE SAVINGS PLAN

Performance Statistics for the Period Ending: June 30, 2023

Total = \$1,830 Million

Fund Name	Ending Market	3 Months	1 Year	Annualized				Inception Date
				3 Years	5 Years	10 Years	Since Inception	
2040/2041 Enrollment Option	\$1,130,264						4.20%	5/12/2023
2040-2041 Custom Benchmark							4.71%	
2038/2039 Enrollment Option	\$26,158,234	4.50%	12.06%				-1.18%	6/11/2021
2038-2039 Custom Benchmark		4.63%	12.53%				-1.16%	
2036/2037 Enrollment Option	\$73,684,498	4.21%	11.44%	8.35%			7.07%	10/28/2019
2036-2037 Custom Benchmark		4.37%	11.95%	8.71%			6.96%	
2034/2035 Enrollment Option	\$59,991,687	3.93%	10.83%	7.87%			6.68%	10/28/2019
2034-2035 Custom Benchmark		4.10%	11.32%	8.23%			6.59%	
2032/2033 Enrollment Option	\$66,434,044	3.47%	9.83%	7.22%			6.27%	10/28/2019
2032-2033 Custom Benchmark		3.63%	10.29%	7.60%			6.18%	
2030/2031 Enrollment Option	\$76,051,394	2.78%	8.24%	6.32%			5.57%	10/28/2019
2030-2031 Custom Benchmark		2.99%	8.80%	6.72%			5.51%	
2028/2029 Enrollment Option	\$93,792,369	2.16%	6.76%	5.19%			4.72%	10/28/2019
2028-2029 Custom Benchmark		2.42%	7.41%	5.57%			4.63%	
2026/2027 Enrollment Option	\$125,586,963	1.67%	5.38%	4.06%			3.99%	10/28/2019
2026-2027 Custom Benchmark		1.93%	6.17%	4.43%			3.92%	
2024/2025 Enrollment Option	\$167,302,954	1.16%	3.85%	3.23%			3.42%	10/28/2019
2024-2025 Custom Benchmark		1.57%	5.08%	3.62%			3.38%	
In School Option	\$366,211,592	1.02%	3.31%	1.87%			2.44%	10/28/2019
In School Custom Benchmark		1.44%	4.17%	1.83%			2.04%	

MINNESOTA COLLEGE SAVINGS PLAN

Performance Statistics for the Period Ending: June 30, 2023

Fund Name	Ending Market	3 Months	1 Year	Annualized				Inception Date
				3 Years	5 Years	10 Years	Since Inception	
U.S. and International Equity Option	\$287,922,567	5.99%	15.33%	11.32%	8.56%	9.59%	7.39%	10/ 1/2001
BB: U.S. and International Equity Option		6.09%	15.93%	11.75%	8.47%	9.62%	8.06%	
Moderate Allocation Option	\$96,056,505	3.29%	9.07%	5.96%	5.95%	6.60%	5.44%	8/ 2/2007
BB: Moderate Allocation Option		3.42%	9.68%	6.29%	5.99%	6.70%	5.92%	
100% Fixed-Income Option	\$18,066,815	-0.71%	0.13%	-2.21%	1.33%	1.63%	2.72%	8/16/2007
BB: 100% Fixed-Income Option		-0.56%	0.33%	-2.01%	1.57%	1.93%	3.25%	
International Equity Index Option	\$10,344,434	2.76%	14.92%	7.87%	3.98%	4.98%	4.56%	6/18/2013
BB: International Equity Index Option		2.56%	15.33%	7.70%	3.78%	5.00%	4.59%	
Money Market Option	\$18,039,937	1.18%	3.62%	1.26%	1.40%	0.84%	0.70%	11/ 1/2007
BB: Money Market Option		1.15%	3.43%	1.17%	1.28%	0.76%	0.63%	
Principal Plus Interest Option	\$114,659,028	0.43%	1.60%	1.45%	1.67%	1.53%	2.33%	10/10/2001
Citigroup 3-Month U.S. Treasury Bill		1.25%	3.75%	1.33%	1.57%	0.98%	1.34%	
Aggressive Allocation Option	\$87,082,047	4.66%	12.22%	8.63%	7.26%		7.26%	8/12/2014
BB: Aggressive Allocation Option		4.75%	12.81%	9.03%	7.28%		7.23%	
Conservative Allocation Option	\$17,256,170	1.55%	5.05%	2.82%	3.77%		3.64%	8/18/2014
BB: Conservative Allocation Option		1.88%	5.98%	3.07%	3.92%		3.73%	
Equity and Interest Accumulation Option	\$8,462,348	4.35%	10.08%	7.74%	6.65%		6.35%	8/18/2014
BB: Equity and Interest Accumulation Option		4.81%	11.65%	7.88%	6.87%		6.40%	
U.S. Large Cap Equity Option	\$113,692,636	8.73%	19.44%	14.43%	12.14%		11.73%	8/12/2014
BB: U.S. Large Cap Equity Option		8.74%	19.59%	14.60%	12.31%		11.85%	
Social Choice Equity Option	\$1,306,801	6.37%	17.80%				0.92%	6/11/2021
BB: Social Choice Equity Option		8.39%	18.95%				1.75%	
Matching Grant	\$1,248,380	0.43%	1.60%	1.45%	1.67%	1.53%	2.33%	3/22/2002
Citigroup 3-Month U.S. Treasury Bill		1.25%	3.75%	1.33%	1.57%	0.98%	1.34%	

MINNESOTABLE^{plan}

A member of The National ABLE Alliance

Performance as of
06/30/23

Total Market Value: **\$36,254,473**

<u>Fund Name</u>	<u>Market Value</u>	<u>% of Plan</u>	<u>1 Month</u>	<u>3 Months</u>	<u>YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Inception</u>	<u>Inception Date</u>
Aggressive Option	\$2,703,553	7.46%	5.54	4.53	10.74	11.88	8.93	6.52		7.84	12/15/16
ABLE Aggressive Custom Benchmark			5.55	4.58	10.72	12.36	9.21	6.78		8.23	
Variance			(0.01)	(0.05)	0.02	(0.48)	(0.28)	(0.26)		(0.39)	
Moderately Aggressive Option	\$3,105,969	8.57%	4.60	3.69	9.18	9.88	7.26	5.84		6.89	12/15/16
ABLE Moderately Aggressive Custom Benchmark			4.59	3.72	9.24	10.32	7.57	6.09		7.25	
Variance			0.01	(0.03)	(0.06)	(0.44)	(0.31)	(0.25)		(0.36)	
Growth Option	\$4,580,138	12.63%	3.57	2.83	7.72	7.88	5.63	5.07		5.87	12/15/16
ABLE Growth Custom Benchmark			3.56	2.83	7.72	8.22	5.88	5.31		6.21	
Variance			0.01	0.00	0.00	(0.34)	(0.25)	(0.24)		(0.34)	
Moderate Option	\$4,090,609	11.28%	2.56	1.87	6.17	5.75	3.92	4.24		4.81	12/15/16
ABLE Moderate Custom Benchmark			2.58	1.95	6.22	6.12	4.17	4.48		5.12	
Variance			(0.02)	(0.08)	(0.05)	(0.37)	(0.25)	(0.24)		(0.31)	
Moderately Conservative Option	\$3,778,385	10.42%	1.77	1.44	4.71	4.62	2.89	3.36		3.70	12/15/16
ABLE Moderately Conservative Custom Benchmark			1.81	1.59	4.92	5.14	3.10	3.60		3.97	
Variance			(0.04)	(0.15)	(0.21)	(0.52)	(0.21)	(0.24)		(0.27)	
Conservative Option	\$6,512,305	17.96%	0.70	0.88	2.78	2.96	1.37	2.06		2.10	12/15/16
ABLE Conservative Custom Benchmark			0.79	1.10	3.16	3.70	1.60	2.28		2.34	
Variance			(0.09)	(0.22)	(0.38)	(0.74)	(0.23)	(0.22)		(0.24)	
Checking Account Option	\$11,483,513	31.67%									03/30/17

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Quarterly Report

Non-Retirement

June 30, 2023



Quarterly Report

Non-Retirement Funds

The SBI manages funds for trusts and programs created by the Minnesota State Constitution and Legislature.

- The Minnesota Workers Compensation Assigned Risk Plan provides worker compensation insurance for companies unable to obtain coverage through private carriers.
- The Permanent School Fund is a trust established for the benefit of Minnesota public schools.
- The Environmental Trust Fund is a trust established for the protection and enhancement of Minnesota's environment. It is funded with a portion of the proceeds from the state's lottery.
- The Closed Landfill Investment Fund is a trust created by the Legislature to invest money to pay for the long-term costs of maintaining the integrity of landfills in Minnesota once they are closed.
- Other Post-Employment Benefits Accounts (OPEB) are the assets set aside by local units of government for the payment of retiree benefits trusted by the Public Employees Retirement Association.
- Miscellaneous Trust Accounts are other small funds managed by the SBI for a variety of purposes.

All equity, fixed income, and cash assets for these accounts are managed externally by investment management firms retained by the SBI.



Non-Retirement

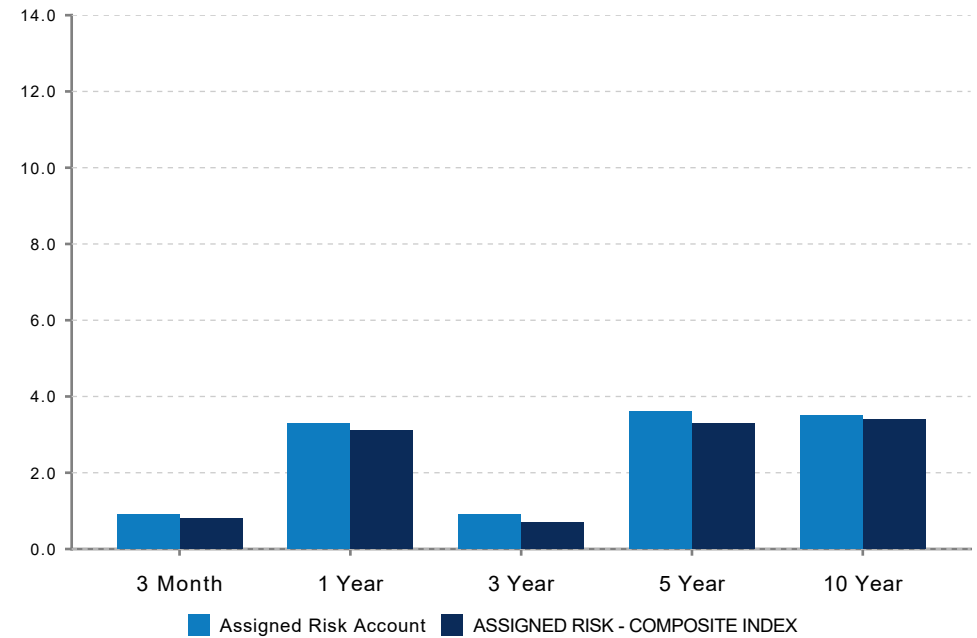
Assigned Risk Plan

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.

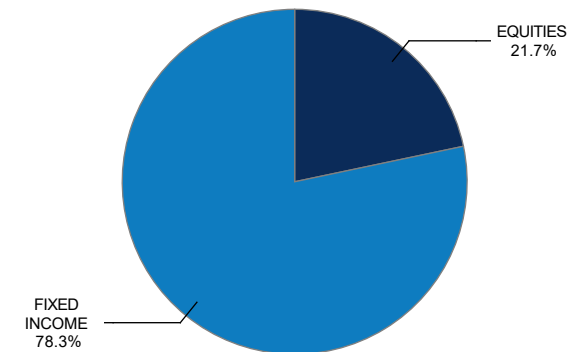
The Assigned Risk Plan is invested in a portfolio of common stocks and bonds

The equity segment is passively managed to track the performance of the S&P 500.

The fixed income benchmark is the Bloomberg U.S. Government Intermediate Index. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets of 80% fixed income and 20% equities. The actual asset mix will fluctuate and is shown in the graph below.



	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
ASSIGNED RISK PLAN	\$264,902,781	0.9%	3.3%	0.9%	3.6%	3.5%
EQUITIES	\$57,467,349	8.7%	19.7%	14.6%	12.3%	12.4%
FIXED INCOME	\$207,435,432	-1.1%	-0.9%	-2.7%	0.9%	1.0%
ASSIGNED RISK - COMPOSITE INDEX		0.8%	3.1%	0.7%	3.3%	3.4%
Excess		0.1%	0.2%	0.3%	0.3%	0.1%
S&P 500		8.7%	19.6%	14.6%	12.3%	12.9%
Bloomberg U.S. Government: Intermediate		-1.1%	-1.0%	-2.8%	0.8%	0.9%



Note: Since 12/1/2017 the Assigned Risk equity segment has been managed by Mellon. From 1/17/2017-11/30/2017 it was managed internally by SBI staff. Prior to 1/17/2017 the equity segment was managed by SSgA (formerly GE Investment Mgmt.). RBC manages the fixed income segment of the Fund.



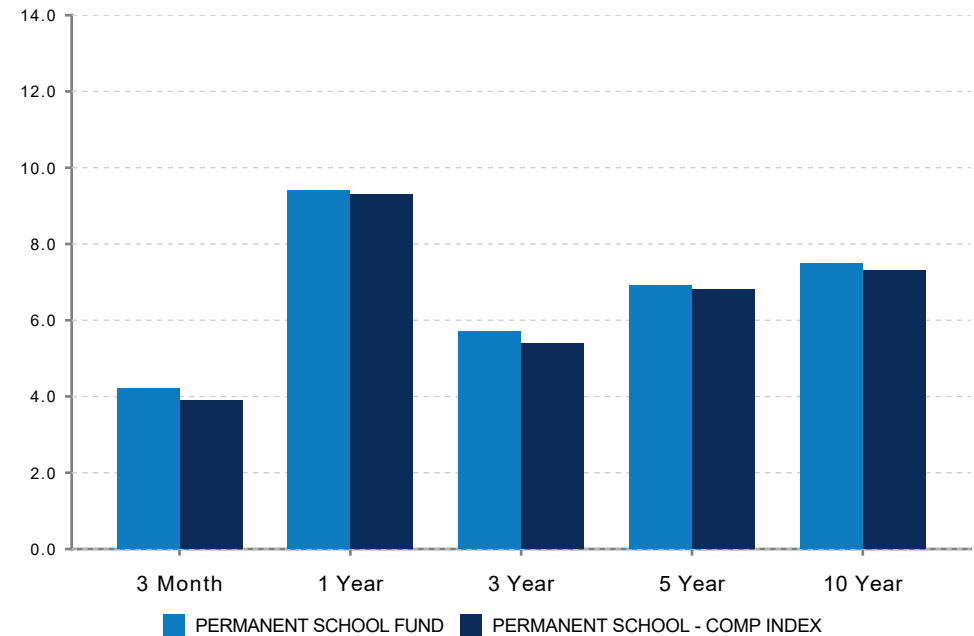
Non-Retirement

Permanent School Fund

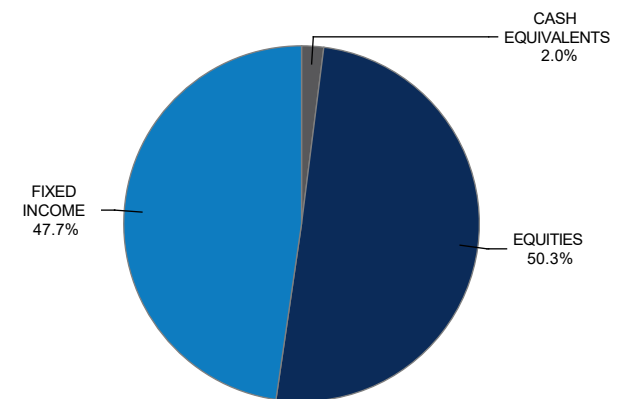
The investment objective of the Permanent School Fund is to produce a growing level of spendable income, within the constraints of maintaining adequate portfolio quality and liquidity. The income from the portfolio is transferred to the school endowment fund and distributed to Minnesota's public schools.

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.

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. The fixed income benchmark is the Bloomberg U.S. Aggregate. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets of 2% cash, 50% equity, and 48% fixed income. The actual asset mix will fluctuate and is shown in the graph below.



	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
PERMANENT SCHOOL FUND	\$1,889,599,161	4.2%	9.4%	5.7%	6.9%	7.5%
CASH EQUIVALENTS	37,725,361	1.3	4.0	1.4	1.6	1.1
EQUITIES	949,806,989	8.7	19.7	14.6	12.3	12.9
FIXED INCOME	902,066,812	-0.7	-0.6	-3.6	1.0	1.8
PERMANENT SCHOOL - COMP INDEX		3.9	9.3	5.4	6.8	7.3
Excess		0.2	0.1	0.3	0.1	0.2
S&P 500		8.7	19.6	14.6	12.3	12.9
Bloomberg U.S. Aggregate		-0.8	-0.9	-4.0	0.8	1.5



Note: Since 12/1/2017 the equity segment has been managed by Mellon and the fixed income segment by Prudential. Prior to 12/1/2017 both segments were managed internally by SBI staff. Prior to 7/1/97 the Fund allocation was 100% fixed income.



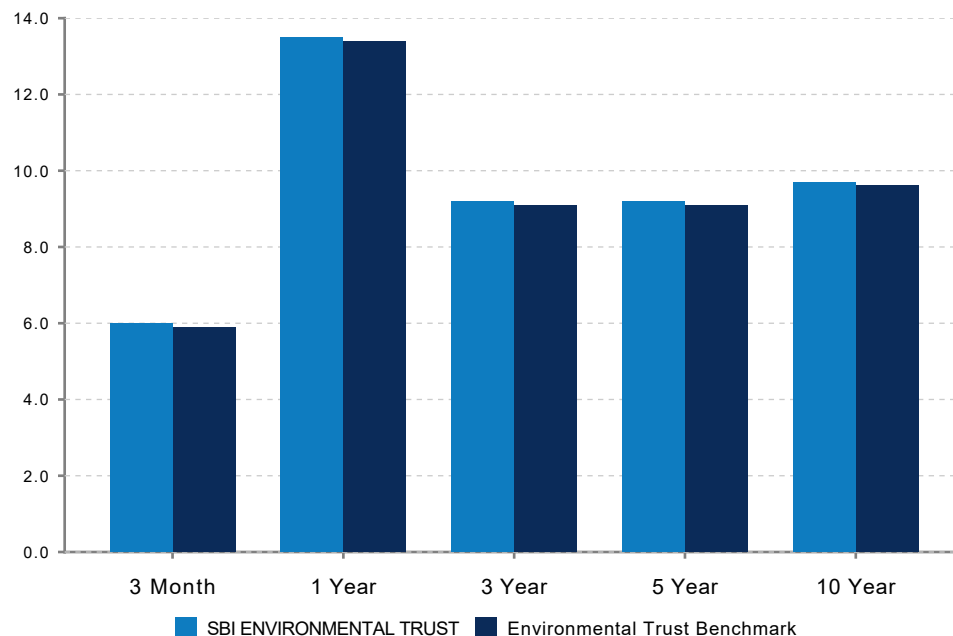
Non-Retirement

Environmental Trust Fund

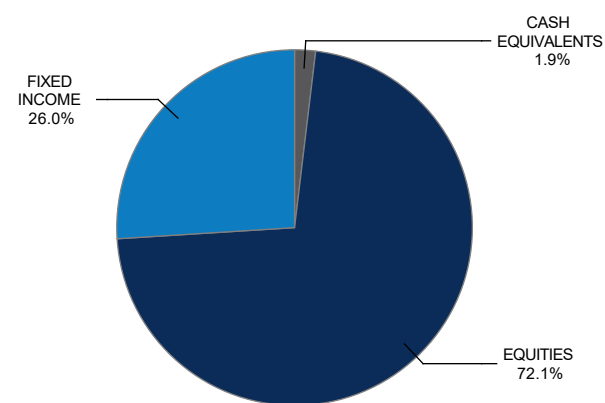
The objective of the Environmental Trust Fund is to increase the market value of the Fund over time in order to increase the annual amount made available for spending within the constraints of maintaining adequate portfolio quality and liquidity.

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.

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. The fixed income benchmark is the Bloomberg U.S. Aggregate. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets of 2% cash, 70% equities, and 28% fixed income. The actual asset mix will fluctuate and is shown in the graph below.



	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
SBI ENVIRONMENTAL TRUST	\$1,619,749,370	6.0%	13.5%	9.2%	9.2%	9.7%
CASH EQUIVALENTS	30,723,193	1.3	4.0	1.4	1.6	1.1
EQUITIES	1,167,141,528	8.7	19.7	14.6	12.3	12.9
FIXED INCOME	421,884,649	-0.7	-0.6	-3.6	1.0	1.8
Environmental Trust Benchmark		5.9	13.4	9.1	9.1	9.6
Excess		0.1	0.0	0.1	0.1	0.1
S&P 500		8.7	19.6	14.6	12.3	12.9
Bloomberg U.S. Aggregate		-0.8	-0.9	-4.0	0.8	1.5



Note: Since 12/1/2017 the equity segment has been managed by Mellon and the fixed income segment by Prudential. Prior to 12/1/2017 both segments were managed internally by SBI staff. From 7/1/94 to 7/1/99, the Fund's target allocation and benchmark was 50% fixed income and 50% stock. Prior to 7/1/94 the Fund was invested entirely in short-term instruments as part of the Invested Treasurer's Cash pool.

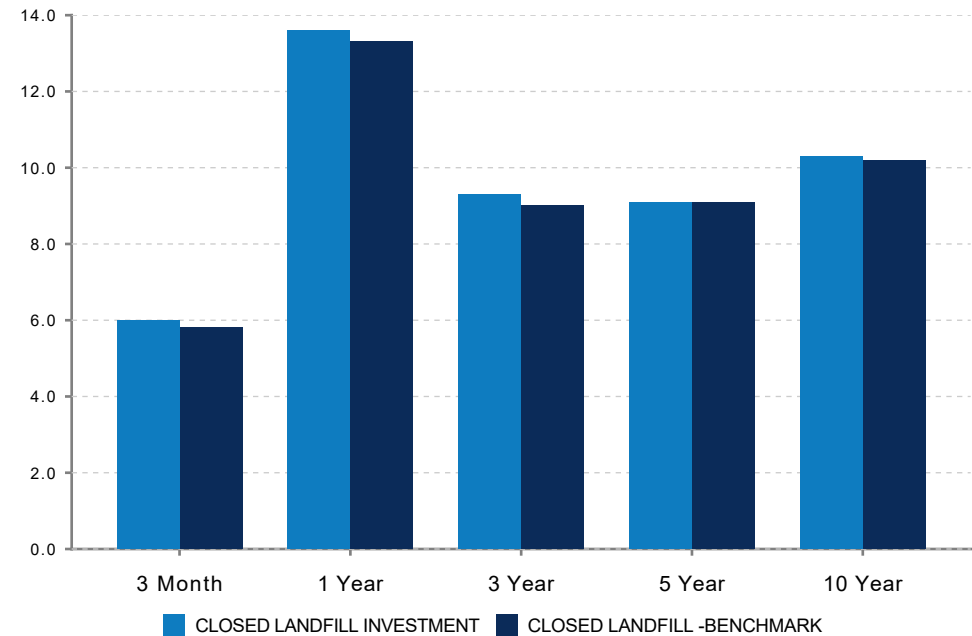


Non-Retirement

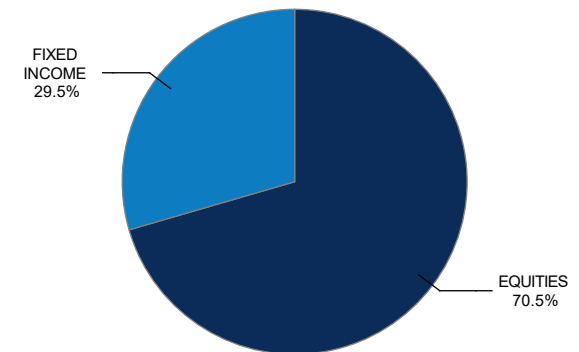
Closed Landfill Investment Fund

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 were 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. 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 principal and earnings back into the fund and in FY 2014 a repayment was made in the amount of \$64.2 million. In 2015, legislation was passed which repealed any further repayments.

The bond segment is actively managed to add incremental value through sector, security and yield curve decisions. The stock segment is managed to passively track the performance of the S&P 500. The fixed income benchmark is the Bloomberg U.S. Aggregate. The total fund benchmark is a combination of the fixed income and equity benchmarks, weighted according to the total fund asset allocation targets of 70% equities and 30% fixed income. The actual asset mix will fluctuate and is shown in the graph below.



	Ending Market Value	Last Qtr	1 Year	3 Year	5 Year	10 Year
CLOSED LANDFILL INVESTMENT	\$129,730,724	6.0%	13.6%	9.3%	9.1%	10.3%
EQUITIES	91,502,947	8.7	19.7	14.6	12.3	12.9
FIXED INCOME	38,227,777	-0.7	-0.6	-3.6	1.0	
CLOSED LANDFILL -BENCHMARK		5.8	13.3	9.0	9.1	10.2
Excess		0.2	0.2	0.3	0.0	0.1
S&P 500		8.7	19.6	14.6	12.3	12.9
Bloomberg U.S. Aggregate		-0.8	-0.9	-4.0	0.8	1.5



Note: Since 12/1/2017 the equity segment has been managed by Mellon and the fixed income segment by Prudential. Prior to 12/1/2017 both segments were managed internally by SBI staff. Prior to 9/10/14 the Fund's target allocation and benchmark was 100% domestic equity.

Minnesota State Board of Investment
Quarter Ending June 30, 2023
Non-Retirement Managers



	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>Fiscal YTD</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>Since Inception</u>	<u>Inception Date</u>
NON RETIREMENT EQUITY INDEX - MELLON	3,138,570,745	8.7	19.6	19.6	14.6	12.3	12.9	10.1	07/1993
S&P 500 INDEX (DAILY)		8.7	19.6	19.6	14.6	12.3	12.9	10.0	07/1993
Excess		-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.1	
NON RETIREMENT FIXED INCOME - PRUDENTIAL	1,554,644,961	-0.7	-0.6	-0.6	-3.6	1.0	1.8	5.0	07/1994
Bloomberg U.S. Aggregate		-0.8	-0.9	-0.9	-4.0	0.8	1.5	4.6	07/1994
Excess		0.1	0.4	0.4	0.3	0.2	0.3	0.4	
RBC	207,435,394	-1.1	-0.9	-0.9	-2.7	0.9	1.0	4.2	07/1991
RBC Custom Benchmark		-1.1	-1.0	-1.0	-2.8	0.8	0.9	4.3	07/1991
Excess		0.1	0.1	0.1	0.2	0.1	0.1	-0.1	
MET COUNCIL OPEB BOND POOL	99,598,171	-0.8	-0.5	-0.5	-1.7	0.7			02/2009
NON RETIREMENT CASH ACCOUNT	722,953,638	1.3	3.9	3.9	1.4	1.6		1.6	12/2017
ICE BofA US 3-Month Treasury Bill		1.2	3.6	3.6	1.3	1.6		1.6	12/2017
Excess		0.1	0.3	0.3	0.2	0.1		0.1	

Note:

RBC is the manager for the fixed income portion of the Assigned Risk Account. RBC changed its name from Voyageur Asset Management on 1/1/2010. The current benchmark is the Bloomberg U.S. Government Intermediate Index. Prior to 7/1/11 the Voyageur Custom Index was 10% 90 day T-Bill, 25% Merrill 1-3 Government, 15% Merrill 3-5 Government, 25% Merrill 5-10 Government, 25% Merrill Mortgage Master.

Prior to 12/1/17 the Non Retirement Equity Index and Non Retirement Fixed Income accounts were managed internally by SBI staff.

In addition to the Non-Retirement Funds listed on the previous pages, the Non Retirement Equity Index and the Non Retirement Fixed Income accounts also include the assets of various smaller Miscellaneous Trust Accounts and Other Post Employment Benefits.

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Quarterly Report

State Cash

June 30, 2023



State Cash Accounts

Invested Treasurer's Cash

The Invested Treasurer's Cash Pool (ITC) represents the balances in more than 400 separate accounts that flow through the Minnesota State Treasury. These accounts vary greatly in size. The ITC contains the cash balances of certain State agencies and non-dedicated cash in the State Treasury.

The investment objectives of the ITC, in order of priority, are as follows:

- 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.

The SBI seeks to provide safety of principal 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.

Beginning in January 2003, the Treasurer's Cash Pool is measured against the iMoneyNet, All Taxable Money Fund Report Average.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
Treasurer's Cash	28,696,820,507	1.2	3.6	0.9	1.5	0.9
iMoneyNet Money Fund Average-All Taxable		1.2	3.5	1.2	1.3	0.8

Other State Cash Accounts

Due to differing investment objectives, strategies, and time horizons, some State agencies' accounts are invested separately. These agencies direct the investments or provide the SBI with investment guidelines and the SBI executes on their behalf. Consequently, returns are shown for informational purposes only and there are no benchmarks for these accounts.

	<u>Ending Market Value</u>	<u>Last Qtr</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
Debt Service	115,724,656	2.9	5.9	1.0	2.7	1.5
Housing Finance	73,870,546	0.7				



Addendum

Benchmark Definitions

Active Domestic Equity Benchmark:

A weighted composite each of the individual active domestic equity managers' benchmarks. Effective 3/1/2017 the calculation uses the average weight of the manager relative to the total group of active managers during the month. Prior to 3/1/2017 the beginning of the month weight relative to the total group was used.

Benchmark DM:

Since 6/1/08 the developed markets managers' benchmark, "Benchmark DM," 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). Prior to that date, it was the MSCI EAFE Free (net), including from 10/1/01 to 5/31/02 when it was the Provisional MSCI EAFE Free (net).

Benchmark EM:

Since 6/1/08 the emerging markets managers' benchmark, "Benchmark EM," 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 the MSCI Emerging Markets Free (net), including from 10/1/01 to 5/31/02 when it was the Provisional MSCI Emerging Markets Free (net). Prior to 1/1/01, it was the MSCI Emerging Markets Free (gross).

Combined Funds Composite Index:

The Composite Index performance is calculated by multiplying the beginning of month Composite weights by the monthly returns of the asset class benchmarks. Asset class weights for Private Markets - Invested and Private Markets - Uninvested are reset at the start of each month. From 1/1/2018-2/28/2019 the Transitional Policy Target was used to reflect the addition of Treasuries to the Fixed Income portfolio. From 7/1/2016-12/31/2016 the composite weights were set to match actual allocation as the portfolio was brought into line with the new Strategic Asset Allocation Policy Target. 7/1/2016 to 12/1/2020 the uninvested portion of Private Markets allocated to Public Equity. Prior to 7/1/2016 the uninvested portion of the Private Markets was invested in Fixed Income and the Composite Index was adjusted accordingly. When the Strategic Asset Allocation Policy Target changes, so does the Composite Index.

Core Bonds Benchmark:

The Core Bonds Benchmark is the Bloomberg U.S. Aggregate. Prior to 2016 this index was called the Barclays Agg. Prior to 9/18/2008 this index was called the Lehman Brothers Aggregate Bond Index. From 7/1/84-6/30/94 the asset class benchmark was the Salomon Brothers Broad Investment Grade Index. The SBI name for this benchmark changed from Fixed Income to Core Bonds on March 31, 2020.

Credit Plus Benchmark:

40% Bloomberg US Corporate Bond Index, 30% Bloomberg US Mortgage Backed Index, 20% BofA ML US High Yield BB-B Cash Pay Constrained Index, and 10% JPM EMBI Global Diversified Index.



Addendum

Domestic Equity Benchmark:

Since 12/1/2020 the benchmark is the Russell 3000. From 1/1/2019-11/30/2020 the benchmark was 90% Russell 1000 and 10% Russell 2000. From 10/1/2003 to 12/31/2018 it was the Russell 3000. From 7/1/1999 to 9/30/2003, it was the Wilshire 5000 Investable Index. From 11/1/1993 to 6/30/1999, the target was the Wilshire 5000 as reported with no adjustments. Prior to 11/1/1993, the Wilshire 5000 was adjusted to reflect SBI mandated restrictions, which included liquor and tobacco, American Home Products and South Africa.

Fixed Interest Blended Benchmark: Since 6/1/2002, equals 3 Year Constant Maturity Treasury Yield + 45 bps. Prior to this change it was the 3 Year Constant Maturity Treasury Yield + 30 bps.

International Equity Benchmark:

Since 12/1/2020 equals the MSCI ACWI ex-US(Net). From 1/1/2018 to 1/1/2019 it was 75% MSCI World ex USA Index (net) and 25% MSCI Emerging Markets Index (net). From 6/1/08 to 12/31/2018 the International Equity asset class target was 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. Prior to 5/1/96 it was 100% the EAFE Free (net).

Multi-Asset Credit Benchmark:

33.33% ICE BofA High Yield, 33.33% S&P LSTA Leveraged Loan, and 33.33% JPM EMBI Global Diversified Index.

Passive Domestic Equity Benchmark:

A weighted average of the Russell 1000, Russell 2000 and Russell 3000 effective 11/1/2018. From 10/1/2016 to 11/1/2018 it was a weighted average of the Russell 1000 and Russell 3000. From 10/1/2003 to 10/1/2016 it was equal to the Russell 3000. From 7/1/2000 to 9/30/2003, it was the Wilshire 5000 Investable Index. From 11/1/1993 to 6/30/2000, the target was the Wilshire 5000 as reported with no adjustments. Prior to 11/1/1993, the Wilshire 5000 was adjusted to reflect SBI mandated restrictions, which included liquor and tobacco, American Home Products and South Africa.

Passive Manager Benchmark:

Russell 3000 effective 10/1/2003. From 7/1/2000 to 9/30/2003, it was the Wilshire 5000 Investable Index. From 11/1/1993 to 6/30/2000, the target was the Wilshire 5000 as reported with no adjustments. Prior to 11/1/1993, the Wilshire 5000 was adjusted to reflect SBI mandated restrictions, which included liquor and tobacco, American Home Products and South Africa.



Addendum

Public Equity Benchmark:

Since 12/1/2020 it is 67% Russell 3000 and 33% MSCI ACWI ex-US(net). From 1/1/2019 to 12/1/2020 it was 60.3% Russell 1000, 6.7% Russell 2000, 24.75% MSCI World Ex US (net), and 8.25% MSCI EM (net). From 7/1/2017 thru 12/31/2018 it was 67% Russell 3000 and 33% MSCI ACWI ex USA. Prior to 6/30/16 the returns of Domestic and International Equity were not reported as a total Public Equity return. From 6/30/16-6/30/17 the Public Equity benchmark adjusted by 2% each quarter from 75% Russell 3000 and 25% MSCI ACWI ex USA until it reached 67% and 33%.

Return Seeking BM:

A weighted composite of each individual return seeking fixed income managers' benchmarks. The calculation uses the average weight of the manager relative to the total group of active managers during the month.

Semi-Passive Domestic Equity Benchmark: Russell 1000 index effective 1/1/2004. Prior to 1/1/2004 it was the Completeness Fund benchmark.

Total Fixed Income Benchmark:

Since 7/1/2020 the Total Fixed Income benchmark is 40% Bloomberg U.S. Aggregate Index/ 40% Bloomberg Treasury 5+ Years Index/ 20% ICE BofA US 3-Month Treasury Bill. From 4/1/2019-6/30/2020 it was 50% Bloomberg Aggregate and 50% Bloomberg Treasury 5+ Years Index. From 2/1/2018-3/31/19 the weighting of this benchmark reflected the relative weights of the Core Bonds and Treasuries allocations in the Combined Funds Composite.

Zevenbergen Benchmark: Russell 3000 Growth index effective 1/1/2021. Prior to 1/1/2021 it was the Russell 1000 Growth Index.