

Comprehensive Performance Report

September 30, 2024





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

Combined Funds	\$ Millions \$97,619	
Fire Plans + Other Retirement Plans	\$1,025	
Participant Directed Investment Program	\$15,730	
State Deferred Compensation Plan	\$10,696	
Health Care Savings Plan	\$2,181	State Cash
Unclassified Employees Retirement Plan	\$424	Accounts 19%
Hennepin County Supplemental Retirement Plan	\$186	
PERA Defined Contribution Plan	\$106	
Minnesota College Savings Plan	\$2,085	Non- Retirement
Minnesota Achieving a Better Life Experience Plan	\$51	Funds 4%
Non-Retirement Funds	\$6,728	Participant Directed Investment Programs
Assigned Risk Plan	\$277	10% Combined Funds 65%
Permanent School Fund	\$2,240	Fire Plans
Environmental Trust Fund	\$1,973	and Other / Retirement
Closed Landfill Investment Fund	\$157	1 %
Miscellaneous Trust Funds	\$1,035	
Other Postemployment Benefits Accounts	\$1,046	
State Cash	\$28,813	
Invested Treasurer's Cash	\$27,633	
Other State Cash Accounts	\$1,180	
Total SBI AUM	\$149,915	

Note: Differentials within column amounts may occur due to rounding. Totals are unaudited and may differ from the final fiscal year-end report.





Quarterly Report

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Assigned Risk Plan		Note:
Permanent School Fund		Throughout this report performance is calculated net of investment management
Environmental Trust Fund		fees, gross of administrative fees. Aggregates include terminated managers, and returns for all periods greater than one year are annualized. Inception Date and
Closed Landfill Investment Fund		Since Inception Returns refer to the date of retention by the SBI. FYTD refers to
Non-Retirement Managers		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-
State Cash Accounts	115	group manager accounts in different or newly created aggregates.
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Combined Funds

September 30, 2024





Combined Funds Summary

Combined Funds Change in Market Value (\$Millions)

•	One Quarter
COMBINED FUNDS	
Beginning Market Value	\$93,679
Net Contributions	-674
Investment Return	4,614
Ending Market Value	97,619

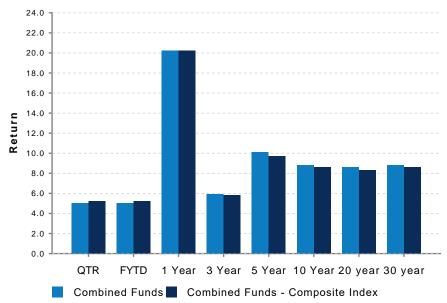
The change in market value of the Combined Funds since the end of last quarter is due to net contributions and investment returns.

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	<u>1 Yr</u>	<u>3 Yr</u>	<u>5 Yr</u>	<u>10 Yr</u>	<u>20 Yr</u>	<u>30 Yr</u>
Combined Funds	5.0%	5.0%	20.2%	5.9%	10.1%	8.8%	8.6%	8.8%
Combined Funds- Composite Index	5.2%	5.2%	20.2%	5.8%	9.7%	8.6%	8.3%	8.6%
Excess	-0.2%	-0.2%	-0.0%	0.1%	0.4%	0.2%	0.2%	0.2%







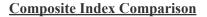


Combined Funds Summary

Asset Mix

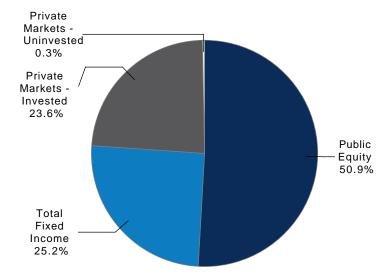
The Combined Funds actual asset mix relative to the Strategic Asset Allocation Policy Target is shown below. Any uninvested portion of the Private Markets allocation is held in cash.

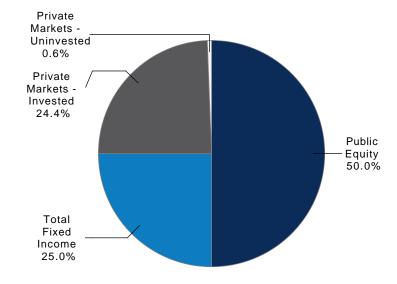
	(Millions)	Actual Mix	Policy Target
Public Equity	\$49,649	50.9%	50.0%
Total Fixed Income	24,630	25.2	25.0
Private Markets - Total	23,340	23.9	25.0
Private Markets - Invested	23,067	23.6	
Private Markets - Uninvested	273	0.3	
TOTAL	97,619	100.0	



The Combined Funds Composite is set as the Strategic Asset Allocation Policy Target. The Combined Funds Composite weighting shown below is as of the first day of the quarter.

	Policy Weight	Market Index
Public Equity	50.0%	Public Equity Benchmark
Total Fixed Income	25.0	Total Fixed Income Benchmark
Private Markets - Invested	24.4	Private Markets
Private Markets - Uninvested	0.6	ICE BofA US 3-Month Treasury Bill









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).

	Market Value	Actual Weight	Policy Weight	Last Qtr	FYTD	1 Year	3 Year	5 Year	10 Year	20 Year	30 Year
Public Equity	\$49.6	50.9%	50.0%	6.2%	6.2%	31.5%	8.4%	13.0%	10.6%	9.4%	9.5
Public Equity Benchmark				6.8	6.8	31.9	8.3	12.7	10.5	9.3	9.2
Excess				-0.6	-0.6	-0.4	0.1	0.3	0.1	0.1	0.3
Domestic Equity	32.8	33.6	33.5	6.2	6.2	35.5	10.2	15.4	12.8	10.5	10.4
Domestic Equity Benchmark				6.2	6.2	35.2	10.3	15.2	12.8	10.6	10.5
Excess				-0.0	-0.0	0.3	-0.1	0.2	-0.0	-0.1	-0.1
International Equity	15.8	16.2	16.5	6.4	6.4	23.8	5.1	8.5	5.9	6.6	6.1
International Equity Benchmark				8.1	8.1	25.4	4.1	7.5	5.2	6.1	5.4
Excess				-1.7	-1.7	-1.6	1.0	0.9	0.7	0.5	0.7
Global Equity	1.1	1.1	0.0	5.6	5.6	28.0	1.5				
MSCI AC World Index (net)				6.6	6.6	31.8	8.1				
Excess				-1.0	-1.0	-3.7	-6.6				

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.

	Market Value	Actual Weight	Policy Weight	Last Qtr	FYTD	1 Year	3 Year	5 Year	10 Year	<u>20 Year</u>	30 Year
Total Fixed Income	\$24.6	25.2%	25.0%	5.1%	5.1%	11.9%	-1.2%	0.8%	2.5%	3.7%	5.1%
Total Fixed Income Benchmark				5.0%	5.0%	10.9%	-1.7%	0.2%	2.0%	3.3%	4.7%
Excess				0.1%	0.1%	1.0%	0.5%	0.6%	0.5%	0.4%	0.4%
Core/Core Plus	\$5.4	5.6%	5.0	5.3%	5.3%	12.8%	-1.2%	1.0%	2.4%	3.7%	5.1%
Core Bonds Benchmark				5.2%	5.2%	11.6%	-1.4%	0.3%	1.8%	3.2%	4.7%
Excess				0.1%	0.1%	1.3%	0.2%	0.7%	0.6%	0.5%	0.4%
Return Seeking Fixed Income	\$4.8	5.0%	5.0	5.0%	5.0%	14.0%	1.2%				
Bloomberg U.S. Aggregate				5.2%	5.2%	11.6%	-1.4%				
Excess				-0.2%	-0.2%	2.5%	2.6%				
Treasury Protection	\$9.4	9.7%	10.0	6.6%	6.6%	13.0%	-4.7%	-1.9%			
Bloomberg Treasury 5+ Year				6.5%	6.5%	12.8%	-4.7%	-1.9%			
Excess				0.0%	0.0%	0.2%	0.0%	0.0%			
Laddered Bond + Cash	\$4.9	5.0%	5.0	1.6%	1.6%	5.7%	3.5%	2.3%	1.7%	1.8%	3.1%
ICE BofA US 3-Month Treasury l	Bill			1.4%	1.4%	5.5%	3.5%	2.3%	1.6%	1.6%	2.5%
Excess				0.2%	0.2%	0.3%	0.0%	-0.0%	0.1%	0.2%	0.6%

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									
	Last Qtr	FYTD	1 Year	3 Year	5 Year	10 Year	20 Year	25 Year	30 Year
Private Markets - Invested	2.2%	2.2%	7.8%	8.5%	13.0%	11.2%	13.5%	12.6%	13.6%
Private Markets -Uninvested (1)	1.1%	1.1%	5.3%	0.3%					
Private Equity	2.5%	2.5%	9.2%	8.1%	15.8%	15.1%	15.5%	13.8%	15.6%
Private Credit	1.5%	1.5%	8.4%	11.7%	11.6%	12.2%	12.5%	12.2%	
Resources	2.0%	2.0%	8.0%	11.1%	5.7%	0.3%	12.5%	13.0%	12.9%
Real Estate	0.9%	0.9%	-4.6%	5.9%	8.5%	9.7%	8.7%	8.9%	9.4%

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 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.

Source: State Street Bank



Quarterly Report



Asset Class & Manager Performance September 30, 2024

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.

