



INV1-006

Investment Risk Management Policy

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Document Links:	Purpose , Policy , Procedure , Definitions , Related Documents , Policy History				

Purpose

- I. This document sets forth SERS' Investment Risk Management Policy ("Policy"), designed to ensure that an effective Investment Risk Management Program ("Program") is in place to monitor and manage risks affecting SERS' investment portfolios.

Investment Risk Management does not mean risk avoidance; rather, it looks toward capital preservation and optimal risk-adjusted return generation. SERS Investment Beliefs, as set forth in the SERS Investment Policy, state "Risk is the likelihood of loss or less than expected outcomes and is not fully captured by a single metric such as volatility. Risk has many dimensions, subjective and objective, which must be comprehensively assessed and managed in the investment process." Therefore, the preservation and growth of fund assets requires prudent, active and holistic risk management practices.

Total risk assumed by SERS' fund is largely determined by the strategic asset allocation policy approved by the Board relative to the long term expected return and actuarial rate. The asset allocation policy decision considers the actuarial funded status and potential downside risk. This Policy is primarily concerned with measuring and monitoring the level of total risk and active risk introduced by the implementation of the asset allocation policy.

Policy

II. OBJECTIVES

The Program shall be managed to:

- A. Identify, measure, monitor and then communicate investment the level of risks across the Total Fund;
- B. Ensure that risks are well understood and intended;
- C. Evaluate investment returns and risks to determine if SERS is adequately compensated for the level of risks in the portfolio.

III. KEY INVESTMENT RISKS

Macroeconomic and market risks are external, dynamic, and often inter-related. These

risks are embedded in investments, and they are important drivers of investment performance. The Program is intended to report, monitor, and manage key investment risks at the Total Fund level as well as at multiple subsidiary levels.

A. Macroeconomic Risks

Macroeconomic risks include [geo-political risk](#), [inflation/deflation risk](#), [regulatory risk](#), and [demographic risk](#). Macroeconomic risks are external, uncontrollable factors; they may impact investment performance. These risks are not all quantitatively measurable.

B. Market Risks

Market risks are risks that affect the overall performance of financial markets. These risks include [credit risk](#), [currency risk](#), [interest rate risk](#), [leverage risk](#), [liquidity risk](#), and [systemic risk](#). These risks are generally measurable.

C. Portfolio Risks

The performance of SERS investment portfolios, including the Total Fund and each asset class/strategy, largely depends over time on the exposures to particular markets, strategies, securities, and investment vehicles. Portfolio risks include but are not limited to [volatility of investment returns](#), [deviation from strategic exposures](#), [concentration risk](#), [manager selection risk](#), leverage risk, currency risk, interest rate risk, liquidity risk, credit risk, and other equity and bond factor risks. These risks are measurable.

D. Operational Risks

Operational risks refer to risks that occur in the investment implementation process. These risks include but are not limited to [trade execution risk](#), [business disruption/system failure risk](#), [valuation risk](#), [counterparty risk](#), and [model risk](#). These risks are not all measurable and are managed through appropriate controls.

IV. RISK BUDGET

The Total Fund's active risk will be measured by the risk system and will be managed relative to a specific range in standard deviation. Such a range shall be defined in the Statement of Investment Policy.

V. IMPLEMENTATION

A. Responsibilities

SERS Investment Staff ("Staff") will:

1. Select and utilize risk analytics tools to provide forward-looking investment risk analytics to the Board and to inform investment decisions;
2. Communicate and interpret risks of the Policy Portfolio as well as additional risks of investment implementation to the Board;
3. Monitor risks relative to the Investment Policy and Asset Class Implementation Guidelines;
4. Work to incorporate relevant information generated by the Program into the investment decision-making process.

The General Investment Consultant is responsible for advising the Board on risk management matters and for advising the Investment Staff on risk management efforts as appropriate.

B. Reporting

Staff will provide risk reports to the Board on a quarterly basis, and more frequently as appropriate. Based on the risk system, risk measures for the Total Fund, each asset class and each investment manager will be reported as forecasted annual total risk and tracking error in standard deviation and forecasted factor exposures and the associated risks. The factors include equity factors such as style, size, and industry; and fixed income factors such as interest rate, spread, credit, and currency. The risk report also includes stress testing of historical and hypothetical scenarios and the potential portfolio impacts. Other risks (leverage, counterparty, and liquidity) are not measurable by the risk system and will be monitored separately.

Procedure None

Definitions

Business Disruption/System Failure Risk: The risk that systems supporting investment activities and processes will fail.

Concentration Risk: Lack of diversification in exposure to markets or managers. Concentration of securities or markets can be measured by overlapped holding index.

Counterparty Risk: The risk that a party in an investment, credit, or trading transaction does not fulfill its contractual obligation. Both sides of a contract are exposed to this risk.

Credit Risk: Also known as default risk, the risk that a borrower will not repay a debt obligation as promised.

Currency Risk: The potential loss on the price of an asset due to fluctuating foreign currency exchange rates. Currencies can fluctuate due to monetary policy, devaluation by foreign markets or domestic intervention.

Deflation Risk: A general decline in prices, often caused by a reduction in the supply of money or credit.

Demographic Risk: Changes in socioeconomic characteristics that influence labor force and consumption patterns.

Deviation from Strategic Exposures Risk: Also known as active risk, the differences between actual capital allocation and strategic asset allocation or benchmark. This risk can be measured by tracking error which is standard deviation of excess returns of a portfolio over a benchmark or strategic policy portfolio return.

Geo-political Risk: Instability in a country's political parties or policies that adversely impacts investment returns. The more protracted an investment's time horizon, the more sensitive it becomes to political risk.

Governance Risk: Generally relates to the adequacy of policies, procedures, delegations and oversight mechanisms in place to enable the Board to exercise its fiduciary responsibility in the best interest of plan members and beneficiaries. In the context of investment risk management it

relates to the existence of a Board approved Risk Management Policy and a process for monitoring risks in accordance with the policy.

Inflation Risk: The risk that general prices of goods and services are rising, eroding purchasing power of the money and adversely impact a country's currency value relative to others.

Interest Rate Risk: The risk that an investment will decline in value as a result of a change (increase) in interest rates. This risk of a portfolio or an investment can be measured by its duration.

Leverage Risk: Borrowing can magnify losses. Debt ratios can be used to estimate this risk.

Liquidity Risk: Risk that an asset cannot be sold without loss of value at a certain time. It also refers to the possibility that a business fails to honor its payment obligation on time due to lack of cash.

Manager Selection Risk: Risk that a chosen manager does not perform and business does not continue as expected.

Model Risk: Risk that the models/formulas are erroneous. It also refers to risk that inputs/assumptions used are not accurate.

Regulatory Risk: The risk that a change in laws and regulations of a regulatory body will have material impacts on a business, industry, or market, and on how an investor can invest.

Systemic Risk: Risk of malfunction of the financial system which can be a result of the collapse of a large bank, a significant member of the financial system or the underlying market infrastructure.

Trade Execution Risk: Risk that trading processes could fail or become adversely impacted. Failed trades or non-delivery of securities are trade execution risks.

Valuation Risk: Risk that an investment/ financial asset is not fairly valued at a certain point in time.

Volatility of Return Risk: Fluctuations of investment returns as well as deviation of the actual returns from expected returns. This risk can be measured by actual or expected standard deviation of returns.

Related Documents and Information

Statutes: R.C. 3309.15

Rules: N/A

Document Links: [Purpose](#), [Policy](#), [Procedure](#), [Definitions](#), [Related Documents](#), [Policy History](#)

Forms: ---

Policy History

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