

CALSTRS

CALIFORNIA STATE TEACHERS'
RETIREMENT SYSTEM

COMMODITY PORTFOLIO POLICY

INVESTMENT BRANCH
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O. Commodity Portfolio Policy

INTRODUCTION

In accordance with the Investment Policy and Management Plan (Plan), the California State Teachers' Retirement System (CalSTRS) has established a Commodity Portfolio. The primary objective for the Commodity Portfolio (Portfolio) is to hedge sudden, unexpected increases in inflation.

The Portfolio is to be invested, managed and sold in a prudent manner for the sole benefit of CalSTRS' participants and beneficiaries, in accordance with the Teachers' Retirement Law and other applicable statutes. No investment vehicle or activity prohibited by the Investment Resolution adopted by the Board in 1984, as amended occasionally will be authorized for the Portfolio.

CalSTRS' Investment Committee has established the asset allocation and strategic objectives for the Portfolio. The Commodity Portfolio Policy (Policy) ensures that investors, managers, consultants, or other participants selected by CalSTRS take prudent and careful action while managing the Portfolio. The purchase, management, and sale of all Portfolio products are performed by external and/or internal professionals (managers) who are monitored and evaluated by internal investment officers, a Portfolio consultant, and/or independent fiduciaries. The internal investment officers and independent fiduciaries operate under the direction of the Chief Investment Officer (CIO). Review of the Portfolio will fall under the general Consultant (Consultant), who reports directly to the Investment Committee. If a specialty asset class specific consultant is retained, that consultant will report directly the Investment Committee.

Policies approved by the CalSTRS' Investment Committee cannot be altered without explicit direction from the Investment Committee.

POLICY

This document outlines the policy for the management of the CalSTRS Commodity Portfolio (Portfolio). These policies are designed to set the boundaries for oversight and management of the Portfolio, while allowing sufficient flexibility in the management process to manage risk and capture investment opportunities.

Policies for the management of the Portfolio are listed below:

1. The Portfolio's assets are to be invested in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with applicable portions of the California Teachers' Retirement Law.
2. As part of the Innovation Portfolio, the Commodity Portfolio Policy will adhere to the Innovation Portfolio Policy.
3. The purpose of the Portfolio is to provide the Board with the opportunity to obtain exposure to commodities utilizing commodity futures and other derivatives. The Portfolio will be required to demonstrate success before committing larger dollar amounts to the strategy. Within three years, CalSTRS will decide if the Portfolio should graduate and be incorporated into a new strategic class, be included within one of the traditional asset classes or be terminated.
4. The Portfolio's performance shall be benchmarked against the Dow Jones-UBS Commodities Index. Investment Managers are expected to deliver at least 25 basis points per year over the benchmark.
5. The Portfolio will not hold any securities prohibited by the most recent Investment Resolution.
6. To achieve the stated performance objective, the Portfolio will invest in a diversified portfolio of active futures/derivatives managers. Staff will select appropriate managers with structural aspects that provide for the maximum risk-adjusted return while mitigating costs.
7. CalSTRS may enter into discretionary separate account relationships with investment funds/managers, subject to pre-approved investment guidelines. The CIO must approve any deviations from the approved guidelines. For this reason, investments shall be structured to facilitate alignment of interests between management and CalSTRS, management accountability, investment monitoring, and liquidity.
8. The initial assets under management (AUM) in the Portfolio shall not exceed \$150 million.

9. All investment products considered for the Portfolio will be carefully evaluated to determine the expected benefits to the Portfolio. Such investment products will be approved by the CIO, investment staff and consultant (e.g., general or specialized independent consultant if required). The delegated limits for approval of commitment to a manager designated as follows:

Chief Investment Officer	\$100 million
Director of Innovation & Risk	\$75 million
Portfolio Manager	\$50 million
Investment Officer III	\$40 million

The approval and rejection decision for commodity investments may be delegated to staff. All investments are subject to appropriate due diligence as defined in the CalSTRS Innovation Portfolio Guidelines.

10. CalSTRS' investment personnel have authority to manage the Portfolio. If prudent, CalSTRS may elect to manage a strategy internally. Any internally managed strategy must first be approved by the Chief Investment Office and General Consultant.
11. Investments in the Portfolio should have clearly articulated and viable exit strategies through which assets can be disposed of or liquidated upon termination of the investment manager.
12. The CIO shall monitor the implementation of the Portfolio in compliance with investment policies. A report to the CalSTRS' Board shall be made annually or as otherwise requested.

Policy for Innovation Portfolio First Reading and Adoption, November 4, 2010

GLOSSARY

ACTIVE INVESTING – Portfolio management strategy where the manager makes investments with the goal of outperforming a benchmark index.

ALPHA – Portfolio's return relative to the return of the portfolio's benchmark.

ASSET ALLOCATION – Process of allocating investments optimally across a set of asset classes.

ASYMMETRIC RETURNS – Investment opportunities whereby the potential profit or probability of profit is higher than the potential loss or probability of loss. The risk/reward relationship is asymmetric with respect to the magnitude and frequency of positive versus negative returns.

BACKWARDATION – Futures contracts with a later maturity date trade at a discount to futures contracts with an earlier maturity date, generating a positive roll return when a futures contract is rolled.

BASIS POINTS – Measure to describe the percentage change in value or rate of a financial instrument (1/100th of 1%).

BENCHMARK – Standard against which the performance of a strategy or portfolio is measured.

BETA – The relative volatility of an investment compared to the market as a whole, often proxied by a broad index. The market itself has a beta of 1.0. A beta above 1.0 is more volatile than the overall market, while a beta below 1.0 is less volatile.

CARRY COSTS – Costs associated with holding a physical commodity, such as storage, insurance and transportation costs.

CASH YIELD – A component of the futures return equivalent to the interest earned on the cash not required as collateral for the futures contract.

CBOE – Chicago Board Options Exchange.

CME – Chicago Mercantile Exchange.

COMMODITY TRADING ADVISOR (CTA) – An individual or firm that advises clients on or manages a managed future account, which contains options and futures. CTAs must register with the Commodity Futures Trading Commission and the National Futures Association.

CONTANGO – Futures contracts with a later maturity date trade at a premium to futures contracts with an earlier maturity date, generating a negative return when the futures contract is rolled.

CONTRACT or DELIVERY MONTH – The specified month within which a futures contract matures and can be settled by delivery of the underlying commodity.

CORRELATION – Measure of the strength or direction of a relationship between two assets, portfolios or securities.

COUNTERPARTY – The opposite party in a bilateral contract or transaction such as a swap. There are two counterparties to each trade.

DIVERSIFICATION – A risk management technique to reduce risk by investing among a variety of assets within a portfolio.

DOW JONES-UBS COMMODITY INDEX – An index composed of commodity futures traded on U.S. exchanges.

DOWNSIDE DEVIATION – The volatility of returns that are negative.

DOWNWARD SLOPING – A situation in which nearby futures contract prices are higher than futures contract prices with later maturities.

ENHANCED INDEXING – A strategy that follows rules similar to an index but slightly diverts from the index to maintain a high beta to the benchmark while reducing volatility and enhancing return.

EQUAL-WEIGHTED – Each sector in an index is given the same weight in that index.

EQUAL RISK-WEIGHTED – Each sector in an index is given a weight such that the volatility that each sector contributes to the index is equal.

EXCESS RETURN – Return in excess of a market rate or target rate of return.

FINANCIAL ASSET – An asset, such as stocks and bonds that derives its value from a contractual claim.

FRONT-MONTH CONTRACT – Futures contract with the earliest maturity date. Also called the “nearby contract.”

FULLY FUNDED – The investor must invest cash equivalent to the full value of the investment. Also called an “unlevered” investment.

FUTURES CONTRACT or FUTURE – A publicly traded, standardized agreement to buy or sell a specified quantity of a given commodity at a future date at an agreed-upon price.

ICE – Intercontinental Exchange, which operates OTC (over-the-counter) electronic exchanges.

INFLATION-LINKED BONDS – Bonds that pay yields that are tied to the inflation rate. Examples include U.S. TIPS (Treasury Inflation-Protected Securities) and U.K. Linkers.

KURTOSIS – A statistic used to measure the "peakedness" of a probability distribution and occurrence of fat tail events. The standard normal distribution has excess kurtosis of zero. Positive kurtosis indicates a "peaked" distribution with fatter tails and negative kurtosis indicates a "flat" distribution with thinner tails.

LONG – One who has bought a futures contract to establish a market position or one who owns an inventory of commodities.

MASTER LIMITED PARTNERSHIP (MLP) – Limited partnerships that are publically traded on a U.S. securities exchange. MLPs pay no income tax, and instead pay out their income to their shareholders.

MATURITY DATE – The date on which a futures contract expires and the holder of the future must accept the underlying commodity for delivery in exchange for a pre-specified price.

MEAN-VARIANCE OPTIMIZATION – A quantitative asset allocation tool used to identify the maximum return portfolio for a selected level of risk.

MERC – The Chicago Merc is the Chicago Mercantile Exchange (CME). The New York Merc is the New York Mercantile Exchange (NYMEX).

NEARBY FUTURES CONTRACT – Futures contract with the earliest maturity date. Also called the "front-month" contract.

NOMINAL RETURN – The real return plus the inflation rate.

NYMEX – New York Mercantile Exchange.

OPEN INTEREST – The total number of futures contracts that are not closed or delivered on a particular day, or the total number of contracts held by market participants at the end of the day.

OVER-THE-COUNTER (OTC) MARKET – The trading of commodities, contracts or other instruments directly between two parties off of a regulated exchange.

PASSIVE INVESTING – Portfolio management strategy where the manager makes as few portfolio decisions as possible in order to minimize transaction costs and mimic the performance of the benchmark index.

PRICE DISCOVERY – The process of determining the price level for a commodity based on supply and demand conditions.

REAL ASSET – Physical, identifiable assets, such as gold, oil and land.

REAL RETURN – The nominal return less the inflation rate.

RISK-ADJUSTED RETURN – Measure of how much risk is involved to produce the investment return.

ROLLING A FUTURES CONTRACT – Selling (buying) a nearby contract and buying (selling) a contract with a later maturity date to avoid taking delivery of (delivering) the underlying commodity.

ROLL RETURN – Return generated from the difference in price between a nearby contract and a contract further out on the curve.

SEPARATE ACCOUNT – An account whereby the individual securities held in the account are segregated, owned by the account holder and managed by a professional money manager.

SHARPE RATIO – Measure of the excess return (alpha or return over a cash yield) per unit of risk in an investment.

SHORT – The selling side of a futures contract.

SKEW – A statistic used to measure the symmetry of a distribution around its mean value. Normal distributions are perfectly symmetrical and have zero skew. Negative skew indicates a distribution with a downside bias. Positive skew indicates a distribution with an upward bias.

SPOT MARKET – Market of an immediate delivery of and payment for the commodity.

SPOT PRICE – The current market price of the commodity.

SWAP – An agreement between two counterparties to exchange a stream of payments over time according to specified terms. For example, in a commodity swap, Counterparty A may pay Counterparty B a payout based on the price of a commodity, while Counterparty B pays Counterparty A a payout based on the level of a commodity index.

UPWARD SLOPING – A situation in which nearby futures contract prices are lower than futures contract prices with later maturities.

VOLATILITY – Measure of the dispersion of returns for a security or market index.