



**STATE OF WYOMING'S
INVESTMENT PORTFOLIO:
AN OVERVIEW OF STRATEGIES**

**Wyoming State Treasurer's Office
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STATE OF WYOMING'S INVESTMENT PORTFOLIO

AN OVERVIEW OF STRATEGIES

The State of Wyoming's investment portfolio employs a variety of strategies to meet the State's investment goals of protection of funds, and predictable returns within acceptable risk. This overview covers the four basic investment areas: fixed income, equities, alternatives and cash. It also describes the current investment managers engaged by the State to implement these strategies.

FIXED INCOME

The State of Wyoming's fixed income mandates are designed with a goal of broad market replication, but with increased return potential via the use of active managers. Further, the diversification efforts within the fixed income portfolio are intended to provide the State consistent income with low volatility of overall returns, and to protect the portfolio in a potential environment of rising interest rates and inflation. The State uses a "core-satellite" structure with most of the portfolio in "core" strategies, complimented by selected "satellite" managers in specialist roles.

THE BROAD FIXED INCOME MARKET

The broad fixed income market, represented by the Barclays U.S. Aggregate Bond Index, is comprised of the following primary sectors:

- Treasurys - Debt obligations of the U.S. government secured by its full faith and credit and issued at various schedules and maturities, ranging from 3 months to 30 years. Treasurys are generally non-callable, meaning they cannot be redeemed by the issuer for redemption prior to maturity.
- Agencies - Securities issued by federal agencies, such as Federal National Mortgage Association (FNMA) and Federal Home Loan Bank (FHLB). Agencies can be callable, meaning they may have an embedded feature whereby it may be redeemed by the issuer prior to maturity under terms designated prior to issuance.
- Corporates - Debt issued by corporations, often referred to as Credits. Corporate bonds carry default risk that is directly tied to the credit-worthiness of the corporation. Rating agencies such as Standard and Poor's, Moody's, and Fitch rate individual securities, delineating the relative degree of credit risk. Investment grade bonds range from AAA to BBB.
- Mortgage-Backed Securities (MBS) - Debt securities that represent ownership interest in a group of mortgages, such as those issued by the FNMA and the Government National Mortgage Association (GNMA). As mortgage holders generally pay back principal and interest each month, and also pay off mortgage debt each time they relocate or refinance, mortgages carry a high degree of "pre-payment risk" and general uncertainty regarding the speed at which principal will be repaid.
- Asset-Backed Securities (ABS) - A type of debt security that is based on pools of assets, or collateralized by the cash flows from a specified pool of underlying assets. These asset pools can consist of any type of receivable, most commonly credit card payments, auto loans, and mortgages.

THE "PLUS" SECTORS

Types of fixed income securities not included in the Barclays U.S. Aggregate Bond Index, but often utilized opportunistically by active fixed income managers include:

- **Below Investment Grade (High Yield)** - Non-investment grade bonds, referred to as high yield, carry a rating of BB or lower and typically offer a higher yield to compensate for the higher embedded credit risk or risk of default.
- **Bank Loans** - Bank loans are floating-rate, short-term loans arranged by banks to non-investment grade companies typically used to finance mergers and acquisitions, capital expenditures, and leveraged buyouts. These loans earn an adjustable rate of interest, primarily made up of an adjusting base rate and a credit spread reflecting issuer risk. The interest rate on these loans tends to reset every 30 to 90 days, thus providing higher yields in a rising rate environment.
- **Foreign/Global Debt** - Bonds issued by foreign governments, agencies, and public or private companies.
- **Emerging Markets Debt** - A term used to represent bonds issued in less developed countries, which include countries in most or all of Africa, Eastern Europe, Latin America, Russia, the Middle East, and Asia - excluding Japan. Emerging Markets Debt is primarily issued by sovereign issuers and tends to have a lower credit rating than other sovereign debt because of the increased economic and political risks. Most issuance is rated below investment grade, though a few countries that have seen significant improvements have been upgraded to BBB or A ratings.

INTERNAL FIXED INCOME PORTFOLIO

Until the 1990s, most of Wyoming's money was managed in-house in fixed income and cash. The State continues to maintain an internal bond portfolio of approximately 4 percent of the total fixed income portfolio. The internal portfolio is comprised of primarily government securities, such as Treasuries and Agencies, which continue to provide some diversification and protection against deflation.

CORE

Wyoming employs *core fixed income* managers, who manage a portfolio made up of primarily core sectors of the market - government securities, agencies, mortgage-backed securities, and investment grade corporate bonds. About 70 percent of the fixed income is in core strategies with six investment managers. Each core manager's performance is evaluated relative to the Barclays U.S. Aggregate Bond Index.

- **C.S. McKee** - Wyoming uses C.S. McKee's Aggregate Fixed Income strategy, which is focused on "bottom-up" security selection and sector management. The portfolio is typically higher than the benchmark in credit quality and liquidity.
- **JP Morgan** - Wyoming uses JP Morgan's Columbus Core Bond strategy, which employs a bottom-up, value-oriented, risk-managed methodology emphasizing security selection. Overall portfolio duration and yield curve decisions are important, but de-emphasized in JP Morgan's process.

- **MacKay Shields** - Wyoming uses MacKay Shields' Core Investment Grade strategy, which combines a fundamental and rigorous bottom-up approach with a top-down macroeconomic overlay, plus a risk assessment that appreciates the significance of monetary policy and its impact on capital markets.
- **Neuberger Berman, LLC** - Wyoming uses Neuberger Berman's Core Bond Management strategy, which is a core strategy that uses a disciplined investment process and is highly dependent on internally generated fundamental research and extensive use of quantitative tools.
- **Pacific Investment Management Company (PIMCO)** - Wyoming uses PIMCO's Total Return strategy, an approach revolving around the principle of diversification. PIMCO employs top-down strategies such as yield curve positioning and sector rotation, complemented by a bottom-up approach to security selection.
- **Wells Capital Management** - Wyoming uses Wells Capital's Montgomery U.S. Core strategy, which focuses on a bottom-up investment process in liquid securities and relative value trading. The process is tempered by a proprietary risk management system.

TIPS

TIPS (Treasury Inflation Protected Securities) are US Treasury issued securities that are explicitly linked to changes in the Consumer Price Index, thus providing a measure of inflation protection without sacrificing capital preservation. The State currently employs one TIPS manager.

- **State Street Global Advisors** - Wyoming uses State Street's TIPS Index Strategy, a passively managed TIPS strategy. The State believes that active management in this space would likely return no value-add, net of fees. The State Street portfolio is designed to track the returns of the Barclays U.S. TIPS Index.

CREDIT

"Credit" is a unique combined strategy for Wyoming consisting of investment grade credit, high yield and floating rate bank loans. Managers have the flexibility to rotate among these sectors, but the underlying neutral weighting is 20 percent investment grade credit, 20 percent high yield and 60 percent floating rate bank loans. The overweight to bank loans recognizes their ability to provide protection against rising interest rates as the underlying securities' interest rate is tied to a floating reference rate. The State currently employs two credit managers. Their performance is measured against a custom index comprised of 20 percent Barclays U.S. Credit Index, 20 percent BofA Merrill Lynch U.S. High Yield Master II Constrained Index and 60 percent S&P/LSTA Leveraged Loan Index.

- **Neuberger Berman, LLC** - Wyoming uses a blended account at Neuberger which includes the firm's Investment Grade Credit, High Income and Floating Rate Income funds. Portfolio managers for each bond category will cooperate in allocation weightings among the three types.
- **Seix Investment Advisors** - Wyoming uses a separate account blended fund across investment grade credit, high yield and bank loans. Seix's investment process is top down for allocation among the three bond categories, with bottom-up research to choose securities within each.

OPPORTUNISTIC CREDIT

"Opportunistic Credit" is part of Wyoming's fixed income portfolio. The strategy can invest across the fixed income universe using a diverse set of instruments that take advantage of dislocations in credit markets. Each investment is unique.

- **Grosvenor Capital Management, L.P.** - Wyoming uses Grosvenor to implement a strategy that takes advantage of a credit "opportunity" that presents itself primarily in Europe, where European banks are shedding assets to improve their capital ratios. The Grosvenor Silvery Lupine Fund will invest with a limited number of underlying funds to achieve an 80 percent European focus overall; the balance will be invested primarily in the United States, with perhaps 5 percent elsewhere globally.

EMERGING MARKETS DEBT - LOCAL CURRENCY

Emerging markets debt capitalizes on global growth and will provide diversification to different interest rate environments around the world. Many emerging countries specifically offer the attractive combination of higher yields and cleaner balance sheets than their developed counterparts. This strategy also serves as a good diversifier in a largely U.S. dollar denominated portfolio. The State currently employs two emerging markets debt managers. Their performance is measured against the JP Morgan GBI-EM Global Diversified Un-hedged Index.

- **Investec Asset Management** - Wyoming uses Investec's Emerging Markets Local Currency Debt (Aggregate) fund. The fund's investment process focuses on bottom-up decisions to add value in relative country and currency positions. The process downplays the importance of top-down market timing.
- **Stone Harbor Investment** - Wyoming uses a sub-fund of Stone Harbor [Investment/Global] Funds PLC, an open ended fixed income mutual fund. The investment team focuses on country risk, evaluating sovereign credit risk to identify overweight opportunities in countries that otherwise are perceived as too risky, and at the same time avoiding or underweighting truly risky country positions.

CONVERTIBLES

A convertible bond is a bond which, at the option of the holder and in accordance with the terms of issue, is convertible into equity shares of a corporation, combining the characteristics of both stocks and bonds. Stock characteristics capitalize on the growth of the equity market, while bond characteristics provide current income and a downside price "floor." Convertibles allow for participation in the upside of equity markets without a direct investment in equities. The State currently employs one manager in this space:

- **Allianz Global Investors (AGI) Capital** - The State is invested in the Allianz NACM Convertible Fund. AGI Capital was formed from the combination of three affiliates, NFJ Investment Group ("NFJ"), Nicholas-Applegate Capital Management ("NACM") and Oppenheimer Capital ("OpCap"). AGI Capital's strategy seeks to offer upside participation in rising markets and downside protection in falling markets. The Allianz NACM Convertible Fund is evaluated versus the BofA ML All Quality Convertibles Index.

EQUITIES

The State of Wyoming's equity mandates are designed with a goal of broad market exposure, while reserving the additional cost of active management for only the highest conviction strategies. The diversification efforts within the equity portfolio are intended to provide emphasis on total return, capital appreciation, protection against inflation risk and consistent returns.. The State uses a "core-satellite" structure for the US equity portfolio with most of the portfolio in "core" capitalization-weighted, low volatility, and fundamental passive strategies, complemented by selected "satellite" managers in specialist roles.

ALL CAP US EQUITY

All cap equity strategies invest in stocks issued by companies with market capitalizations across the broad market spectrum in the United States, generally between approximately \$170 million and \$550 billion. The State employs three investment managers in this space:

- **Epoch Investment Partners, Inc.** - The Epoch portfolio targets stocks with value characteristics across the entire domestic market capitalization universe. Epoch employs a bottom-up investment process, searching for companies that generate free cash flow and use it to the greatest benefit of shareholders. Epoch is judged on how well they perform relative to the Russell 3000 Index.
- **Lazard Asset Management LLC** - The Lazard portfolio targets a concentrated portfolio of stocks designed to leverage the best ideas of the U.S. Equity team. Lazard focuses on companies that are both attractively valued and financially productive. Lazard is judged on how well they perform relative to the Russell 3000 Index.
- **State Street Global Advisors** - The State Street portfolio is a passive portfolio, designed to track a custom index consisting of 69 percent Russell 3000 Index, 24 percent FTSE RAFI US 1000 Index, and 7 percent MSCI USA Minimum Volatility Index. Passive portfolios are not designed to beat the target index, but rather to match its performance. A manager of an index portfolio is judged on how well they track the target index.

SMALL CAP US EQUITY

Small cap equity strategies invest in stocks issued by companies with a market capitalization between approximately \$170 million and \$4 billion in the United States. The State currently employs one investment manager in this space:

- **RBC Global Asset Management** - The RBC portfolio targets the small cap universe. RBC employs a fundamental, bottom-up stock selection process, focusing on companies neglected by the majority of market participants with low interest, expectations, and valuation. RBC is judged on how well they perform relative to the Russell 2000 Index.

GLOBAL EQUITY

Global equity strategies invest in stocks from companies based within and outside of the United States. The strategy provides exposure to both domestic and international stocks with the flexibility to over-/underweight the State's portfolio based on relative valuations. The State employs one investment manager in this space:

- **Arrowstreet Capital** - The Arrowstreet Global portfolio is an active global mandate, focused on the investable global universe. Arrowstreet uses a quantitative model to implement a strategy using multiple types of investment insights including value, momentum, and indirect effects. Arrowstreet is judged on how well they perform relative to the MSCI All Country World Index.

INTERNATIONAL EQUITY

International equity strategies invest in stocks issued by companies domiciled outside the United States. Wyoming is invested in both developed and emerging markets. The MSCI ACWI Ex-U.S. Index used for performance measurement stands for Morgan Stanley Capital International All Country World Index excluding the United States. The State currently employs four investment managers in this space:

- **The Boston Company Asset Management, LLC** - Wyoming is invested in The Boston Company's MSCI ACWI Ex-U.S. Value strategy, which is value-oriented, research-driven and risk-aware. Value investors focus on stocks that are priced cheaply relative to their inherent value and potential.
- **Fisher Investments** - Wyoming is invested in Fisher's All Foreign Equity strategy, a core equity portfolio. Fisher employs a top-down investment process, searching for countries and sectors coming into favor, and then buying stocks that complement those themes.
- **Manning & Napier Advisors, Inc.** - Wyoming is invested in Manning & Napier's Core Non-U.S. Equity strategy. Manning & Napier's in-house equity analysts rely upon three broad equity selection strategies. The portfolios are managed by an investment team that implements decisions according to a well-defined, time-tested process.
- **Northern Trust Global Investments** - Wyoming is invested in Northern Trust's ACWI Ex-U.S. passive index strategy. Passive portfolios are not designed to outperform but rather to match the target index. Northern Trust's performance is judged on how closely they track the risk and return characteristics of the index.

ALTERNATIVES

Alternative investments are non-traditional investments that exhibit low correlation with most traditional asset classes, and are utilized as a way to reduce the Plan's overall volatility of returns and/or enhance overall performance.

ABSOLUTE RETURN

Absolute Return strategies refer to hedge fund investment approaches such as long/short equities, arbitrage, and event driven strategies that seek to deliver positive returns, regardless of market direction. Exposure to absolute return strategies is commonly gained via a hedge fund of funds portfolio. A hedge

fund of funds structure is one in which a manager invests in a group of single manager hedge funds or managed accounts, which may utilize a variety of investing strategies, creating a diversified investment vehicle for its investors. Absolute return strategies strive to deliver consistent positive returns as opposed to equity or fixed income investments that seek to outperform relative to a market benchmark. The State currently employs three investment managers in this space:

- **Aurora Investment Management, LLC.** - Wyoming is invested in the Aurora Limited Partnerships I & II, off-the-shelf hedge fund of funds that are well diversified both by strategy and by underlying managers. Aurora employs both a top-down and bottom-up approach, looking prospectively at overall strategy allocations and seeking to invest with the most talented managers in their respective strategy.
- **Pacific Alternative Asset Management Company (PAAMCO)** - Wyoming is invested in Newport Jackalope, a tailored fund of funds investment created specifically for the State of Wyoming, utilizing PAAMCO's Moderate Multi-Strategy approach. PAAMCO's investment philosophy is to invest in a diversified portfolio of hedge funds and strategies with the goal of preserving capital and adding appreciable value (alpha) with low betas (sensitivity) to overall market indices.
- **Grosvenor Capital Management, L.P.** - Wyoming is invested in Grosvenor Global Recovery Fund, Ltd., an opportunistic fund of funds that seeks to profit from investment opportunities that Grosvenor believes emerged as a result of dislocations and illiquidity in the global credit markets during 2008 - 2009. The Fund is invested with managers with whom Grosvenor has been invested for many years and established strong relationships. The funds held in the Global Recovery Fund possess flexible mandates that allow them to allocate capital opportunistically. The Global Recovery Fund is designed as a limited-life, self-liquidating fund. Grosvenor has distributed all capital from the Fund, with the exception of two audit reserves that are expected to be distributed in mid-2015.

REAL ESTATE

Core Real Estate refers to investments in well-leased, high quality, income producing institutional properties in high barrier to entry markets. Core real estate investments seek to deliver consistent returns driven primarily by rental income, with an opportunity for long-term price appreciation. Common property types associated with core real estate investing are apartments, office buildings, retail centers, and industrial parks. The State currently employs two investment managers in this space:

- **Clarion Partners** - Wyoming is invested in the Clarion Lion Properties Fund, an open-ended commingled fund that is diversified geographically across the United States. The fund seeks to exploit sectors of relative value by investing in those markets and property types that the firm believes will outperform over a five year timeframe.
- **UBS Realty Investors** - Wyoming is invested in the UBS Trumbull Property Fund, an actively managed open-ended fund with a core portfolio of U.S. equity real estate diversified by property type and geographic region. Its focus is to acquire existing, well-leased properties, or properties with expansion and/or rehabilitation potential and, to a very limited extent, make forward commitments on to-be-built properties.

Non-Core Real Estate refers to investments in real estate properties in need of rehabilitation, redevelopment, or repositioning for alternative use or upgrade, which result in a higher risk-adjusted return potential. Additionally, non-core real estate strategies include investment in and opportunistic origination of debt instruments collateralized by real estate properties. The State employs four investment managers in this space:

- **Heitman** - Wyoming is invested in Heitman Value Partners II, LP, a value-added closed-end commingled fund with a 7 to 10 year lifecycle. The fund invests in real estate primarily through joint ventures with proven public and private real estate operating companies within the United States. The fund's strategy is to acquire assets in need of repositioning in major U.S. markets and to create value by executing asset-level business plans and selling the asset to core real estate buyers.
- **TA Realty** - Wyoming is invested in The Realty Associates Fund VIII, a closed-end commingled fund with a 7 to 10 year lifecycle. The fund seeks to create a diversified, value-added portfolio of in well-located office, industrial, retail, and multi-family properties in primary markets across the United States.
- **WestRiver Capital Management** - Wyoming is invested in WestRiver Real Estate Finance Fund LP, a closed-end commingled fund with an 7 to 10 year lifecycle. The fund seeks to originate and to acquire a diversified portfolio of high yield commercial real estate debt investments, secured by all major property types in primary markets throughout the United States.
- **Cornerstone Real Estate Advisors** - Wyoming is invested in the Cornerstone Core Mortgage Fund I LP, a closed-end, commingled fund which invests in mortgages secured by institutional-quality, commercial properties with quality ownership and sustainable cash flows. The loans are collateralized by multi-tenant office, warehouse/distribution, multi-family, hospitality and retail assets. The Fund focuses primarily on single asset transactions and selected portfolios in primary and secondary United States markets (with a small allocation to Canada) requiring \$20 million to \$50 million in first mortgage financing with terms of three to ten years.
- **Northwood Investors, LLC** - Wyoming is invested in Northwood Real Estate Partners L.P., a commingled fund that seeks investments in the U.S. and Europe in retail, hospitality and multifamily properties. The fund build value by acquiring assets (i) where a significant portion of the value is generated by growing the cash flow of the underlying property, (ii) that can be acquired as a discount, and (iii) where the opportunity exists to add value through redevelopment or additional development rights.
- **M&G Investment Management LTD** - Wyoming is invested in M&G Real Estate Debt Fund III, a closed-end, commingled fund. The fund invests in a diversified portfolio of real estate debt positions collateralized by commercial real estate assets primarily in Western Europe with a primary focus on the United Kingdom and secondary focus in Germany. The investments are in stretched senior debt that is senior in the capital stack, but junior to a low-leverage first mortgage.

PRIVATE EQUITY

The underlying investments made by investors in *Private Equity* include limited partnership interests and direct equity/debt investments in private and/or public portfolio companies. Investments in Private Equity are generally illiquid and often take 10 to 12 years to realize full value. Private equity sectors include:

- **Venture Capital** - Equity investments in companies that are still in the process of developing products and revenue.
- **Buyout Investing** - Purchase of significant portion of companies to effect change (management, strategic or operational).
- **Mezzanine Financing** - Investments in the subordinated debt of companies often with equity participation through rights, warrants, and options.

- Distressed Debt - Purchase of troubled companies' debt (high yield, bank loans, trade claims) at a fraction of face value. Differing strategies with respect to levels of control.

The State of Wyoming employs four investment managers in the private equity space:

- Hamilton Lane Advisors LLC - A private equity advisor which manages across the broad private equity universe. Wyoming is invested the Wyoming Nowood Fund LP, a closed-end fund of one, with a broad multi-strategy mandate.
- Neuberger Berman Alternatives Advisers LLC - A private equity advisor which manages across the broad private equity universe. Wyoming is invested the NB Sauger Fund LP, a closed-end fund of one, with a broad multi-strategy mandate.
- Access Venture Partners - A private equity advisor specializing in venture capital.
- Cheyenne Capital Fund - A private equity advisor with an emphasis in buy-outs who is creating a diversified investment vehicle via fund investment commitments and portfolio company investments.

CASH AND CASH EQUIVALENTS

Cash Equivalents are investments in highly liquid instruments, primarily U.S. Treasuries, targeted to provide safety of principal. Two-thirds of the cash portfolio is invested in securities that have a maximum maturity of one year. The other third is in an extended cash portfolio that has an average duration of less than 3 years. The State's cash and extended cash portfolios are managed by JP Morgan.