



**Wyoming State Treasurer's Office
Investments Overview for 68th Legislature
January 14, 2025**

Agenda

1. Welcome – State Treasurer, Curtis Meier Jr.
2. Overview of the State Portfolio – Katie Smith, CFO
3. Investments, Then and Now – Patrick Fleming, CIO
4. Future of State Revenues – Patrick Fleming, CIO
5. Staying Fiscally Healthy – Patrick Fleming, CIO

Investment Pools and Funds (Participants)



Investment Pool X



Fund 1



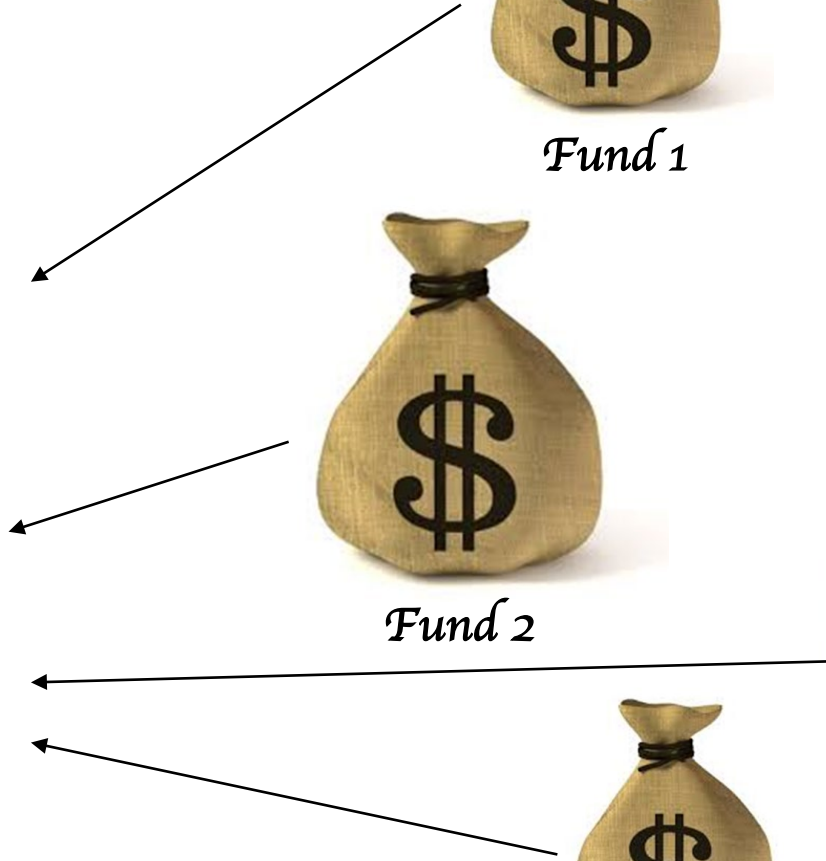
Fund 2



Fund 3



Fund 4



Fund Types

(investment perspective)

1. *Permanent*

- Intended to be inviolate
 - **Constitutional**
Example: Permanent Mineral Trust Fund
 - **Statutory**
Example: WY Outdoor Recreation and Tourism Trust Fund

2. *Non-Permanent*



State of Wyoming Portfolio Structure

Pools = 13

Funds = 494

American Rescue Plan Act (ARPA) Pool	Common School Permanent Land Fund (CSPLF) Pool	Wyoming Tomorrow Scholarship Pool	Wyoming Rec and Tourism Trust Pool	Permanent Land Funds (PLF) Pool	University Permanent Land Fund (UPLF) Pool
1 Fund	1 Fund	1 Fund	1 Fund	10 Funds	1 Fund
\$321M AUM	\$5.6B AUM	\$31M AUM	\$6M AUM	\$305M AUM	\$34M AUM
Hathaway Pool	Higher Ed Pool	Workers' Comp Pool	Permanent Mineral Trust Fund (PMTF) Pool	Legislative Stabilization Reserve Account (LSRA) Pool	Pool A
1 Fund	1 Fund	1 Fund	1 Fund	1 Fund	18 Funds
\$769M AUM	\$143M AUM	\$2.5B AUM	\$11.1B AUM	\$1.5B AUM	\$545M AUM

State Agency Pool
456 Funds
\$6.9B AUM

**\$30B
Total AUM**

Permanent Mineral Trust Fund (PMTF) Pool

Revenues

- Severance Taxes
- Earnings over Spending Policy Amount

Expenditures

- Loans to political subdivisions directed by Statute



Common School Permanent Land Fund (CSPLF) Pool



Revenues

- Severance Taxes
- Mineral Royalties
- Proceeds from the Sale of State Lands
- Earnings over Spending Policy Amount

Other “Permanent” Fund Pools

- Wyoming Tomorrow Scholarship Pool
- Wyoming Rec and Tourism Trust Fund Pool
- Permanent Land Funds (PLF) Pool
- University Permanent Land Fund (UPLF) Pool
- Hathaway Endowment Pool
- Higher Education Endowment Pool



Workers' Compensation Pool

Revenues

- Employer Payments
- Investment Earnings

Expenditures

- Claims
- Program Management
- Workplace Safety Programs



Legislative Stabilization Reserve Account (LSRA) Pool



Revenues and Expenditures

- Directed by Statute
Inter-fund Loans

Pool A

Creation

- Constitutional Amendment A in 2016 that provided the Legislature the ability to specify which non-permanent funds could be invested in equities, with the goal being to earn more than the fund would if it was invested in the State Agency Pool.

Funds

- W.S. 9-4-715(p)(i)-(xvi)



State Agency Pool

Revenues

- Fees/Dues
- Grants
- Mineral Royalties
- Investment Earnings

Expenditures



Investment Earnings

The profit on investments, such as interest, dividends and capital gains.

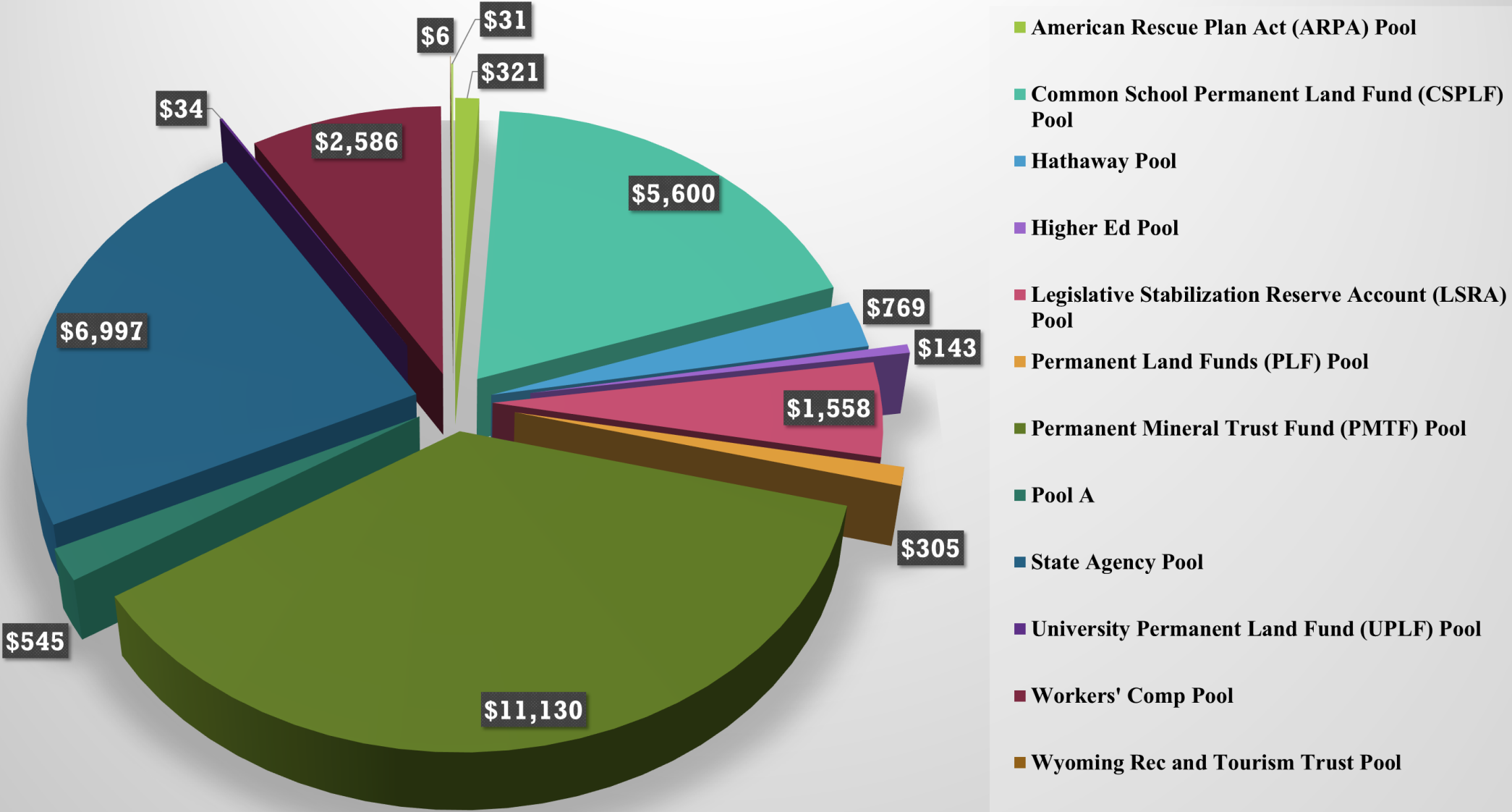


- *When?*
 - Monthly
- *How?*
 - Two distributions
 - Income – interest and dividends
 - Realized Gains and Losses
- *Who?*
 - Directed by Statute
 - Example – PMTF goes to GF

Assets Under Management by Investment Pool

as of June 30, 2024

Values in Millions

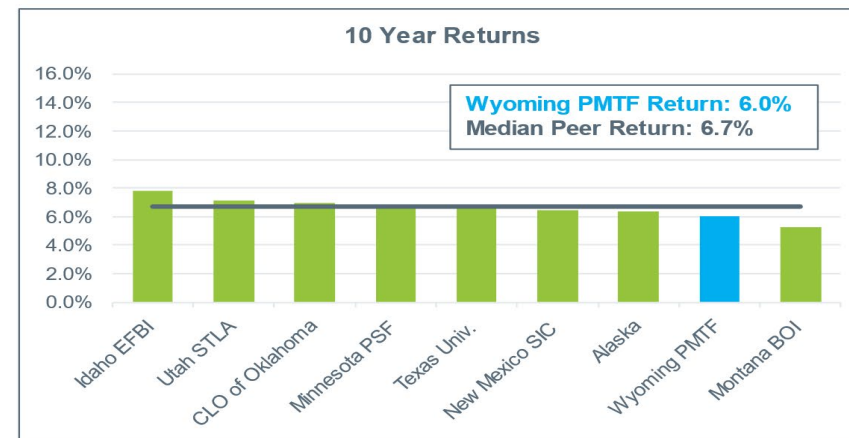
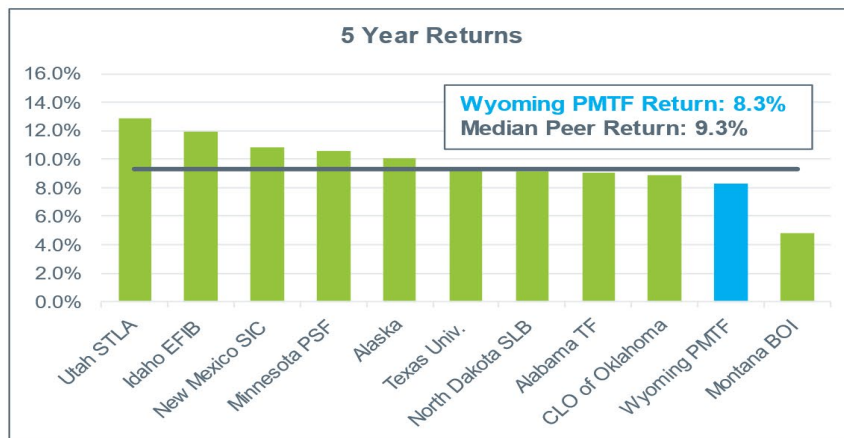
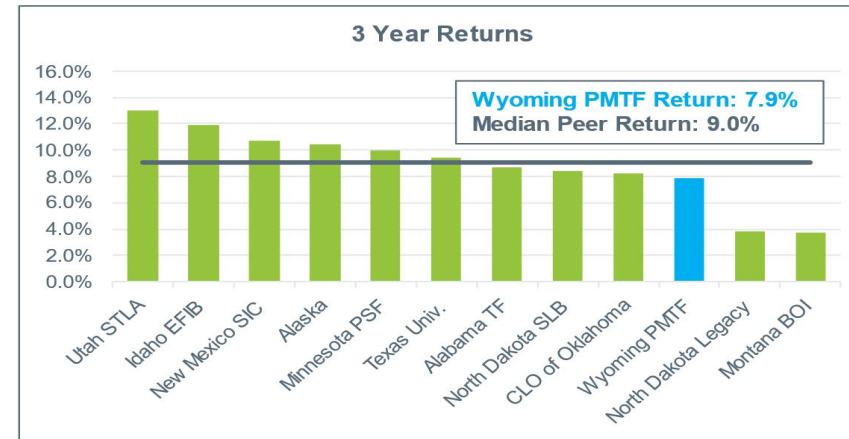
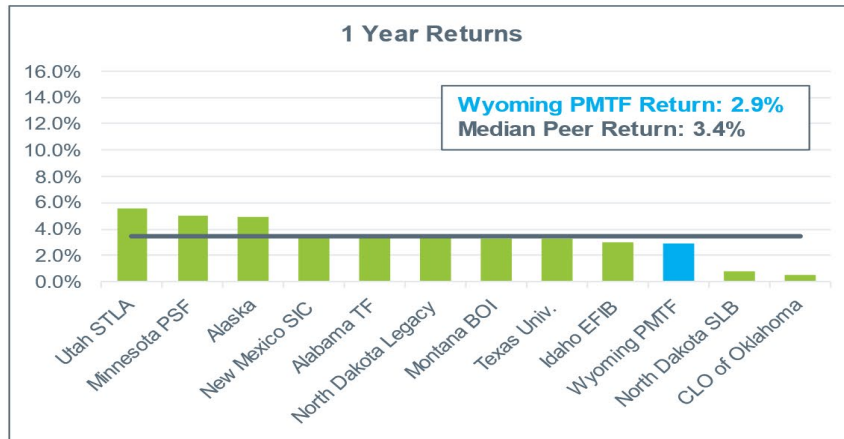


Total AUM = \$30 Billion

How have we performed vs other comparable funds?

2015 Ranking

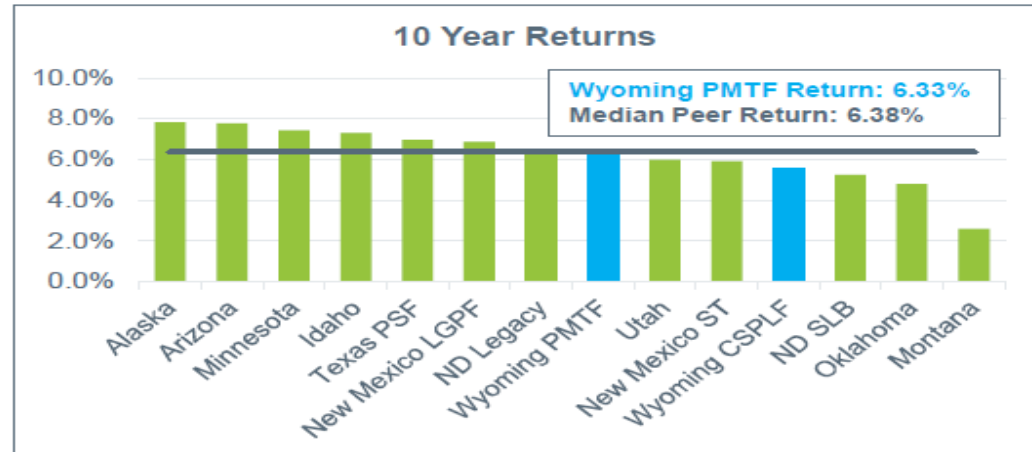
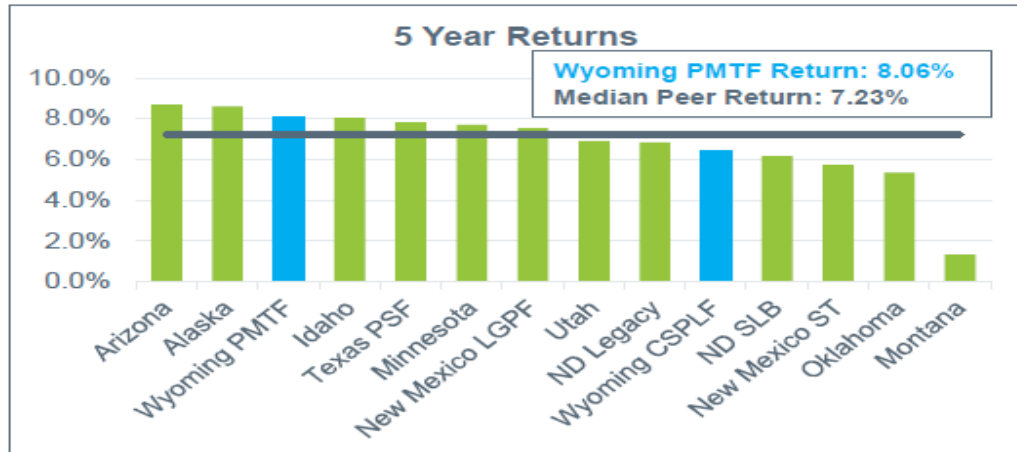
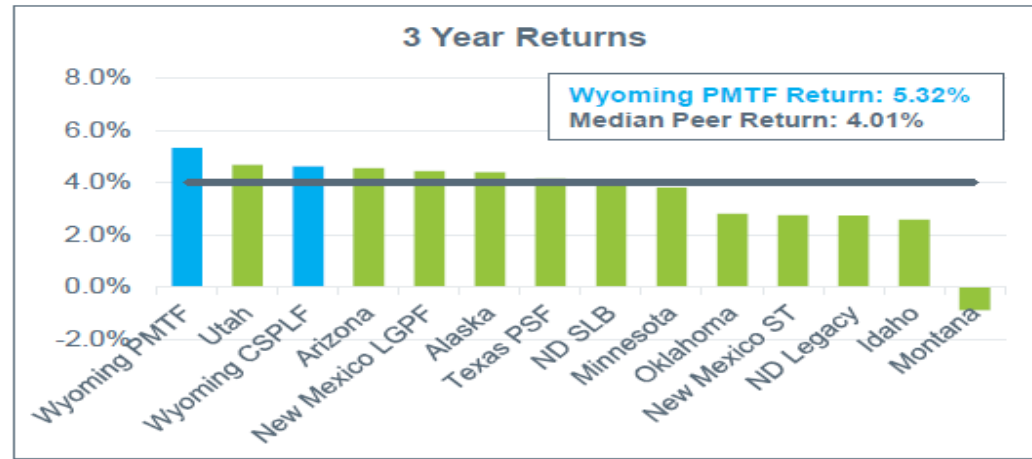
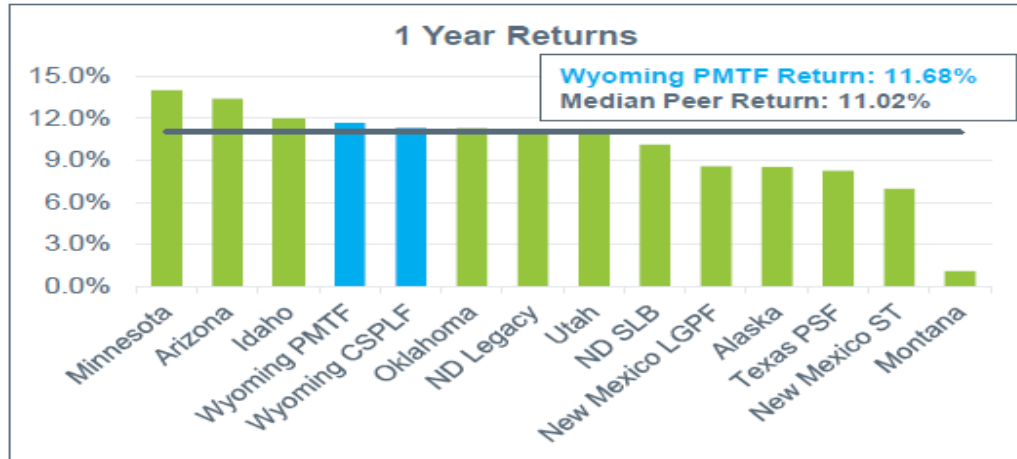
Performance Comparison – US Sovereign Wealth Funds



All data is as of June 30, 2015 and is gross of fees. Universe includes all sovereign wealth funds, endowments and foundations. Performance is reported in US Dollars and is reflective of permanent fund assets only.

2024 Ranking

Performance Historical Fund Performance



All data is as of June 30, 2024 and is gross of fees.

Utah SITFO performance is estimated using net-of-fees performance and an annual investment management fee of 0.56% (prior to 2021).



What Changed?

- A great working relationship between WSTO, legislature and the SLIB.
- Moved from an income focus to the best risk adjusted return.
- Amendment A was approved, and a volatility based risk management system was implemented.
- Started an Investment Funds Committee (IFC), which resulted in a better asset allocation.
- One person was managing \$19 billion in 2015. Now we have 11 people managing \$30 billion!
- Growth of internally invested portion of the portfolio, which contributed to tremendous cost savings.
- Hired additional accounting professionals that allowed WSTO to invest in more complex and higher returning investments

Continuing this structure is EXTREMELY important. Why?

- Produces a better return and higher alpha
 - additional alpha dollars are a major benefit to the State and the people of Wyoming
- Ten years ago the alpha was .3%. This equated to **\$54 million.**
- FY24 we produced 1.4% in alpha or..... $\$30B \times 1.4\% = \underline{\underline{\$420 million.}}$

Wyoming State Treasurer's Office
 Total Fund
 Performance

As of June 30, 2024

Comparative Performance										
	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years
Total Fund	0.7	1.1	4.1	9.0	9.0	3.4	5.5	4.7	5.8	5.3
Wyoming State Total Fund Index	0.7	0.9	3.4	7.6	7.6	2.4	4.8	4.4	5.3	4.8
Difference	0.0	0.2	0.7	1.4	1.4	1.0	0.7	0.3	0.5	0.5

FYTD Asset Class Returns

What happens when the structure changes?

Ask Alaska:

Ten year return ranking = **NUMBER 1!**

Five year ranking = # 2

Three year ranking = # 6

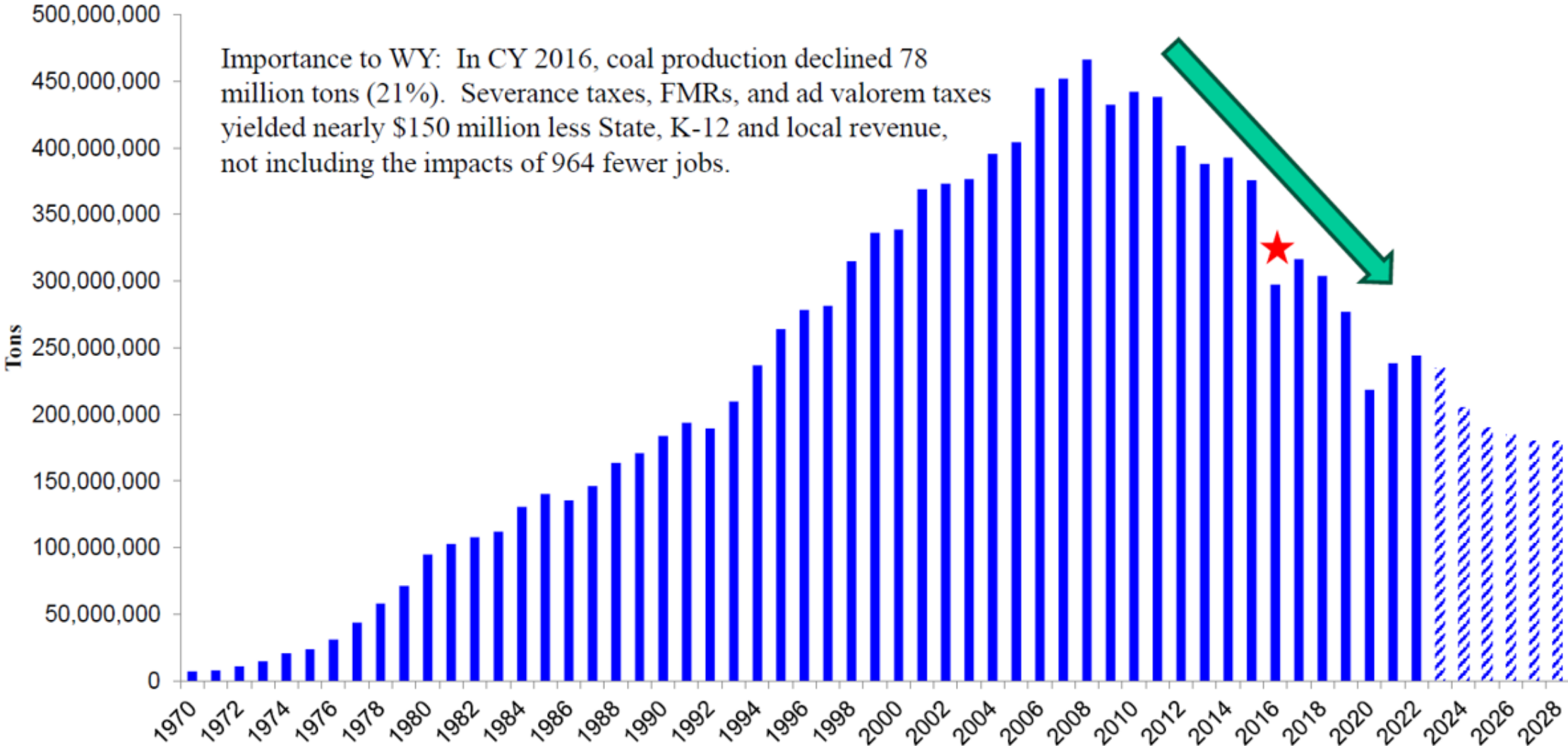
One year ranking = # 11



What are some of the future problems the State and people of Wyoming face?



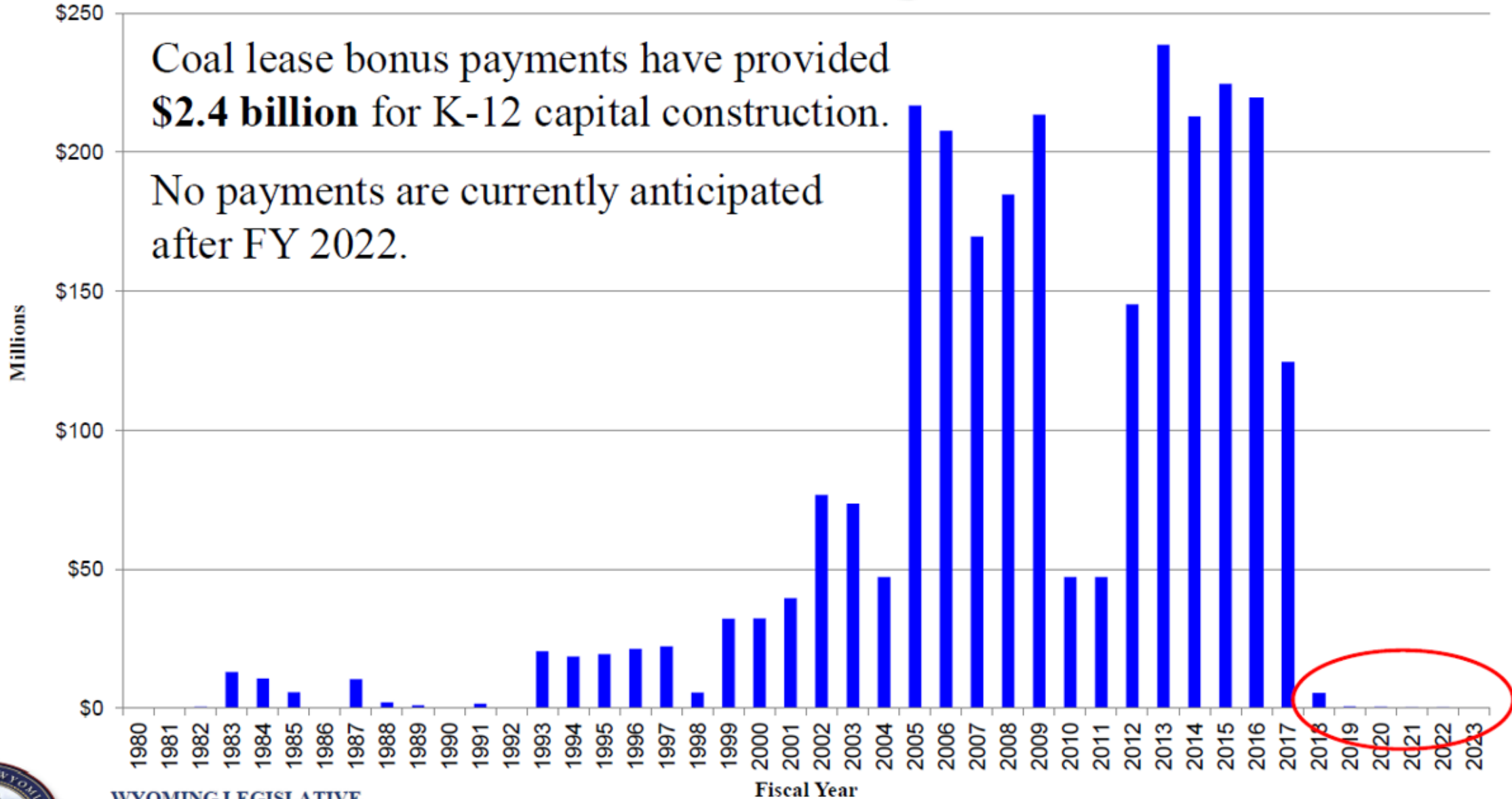
Coal Production



Coal Lease Bonuses: “Canary in the Coal mine?”

Coal lease bonus payments have provided **\$2.4 billion** for K-12 capital construction.

No payments are currently anticipated after FY 2022.



2030 coal, gas and oil production scenarios

-CREG fossil fuel declines incorporated through 2028
(GF, BRA and K-12 education) = minus \$385 million

-Assumed further reduction of 50% coal and 50% natural gas
= minus \$319 million

Total Reduction = \$704 million



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What if oil increases by 25%? = plus \$119 million

Wyoming's mineral income is going down!

Real Rate of Return (RRR)

Real rate of return is defined as:

Nominal rate of return minus the rate of inflation

Why is the RRR so important?

It gives you a clear picture of how your purchasing power is growing or declining.



Are we inflation proofing the portfolio?

-The PMTF's return has averaged 6.3% over a 20 year period.

-Inflation has averaged 2.6% during this time.

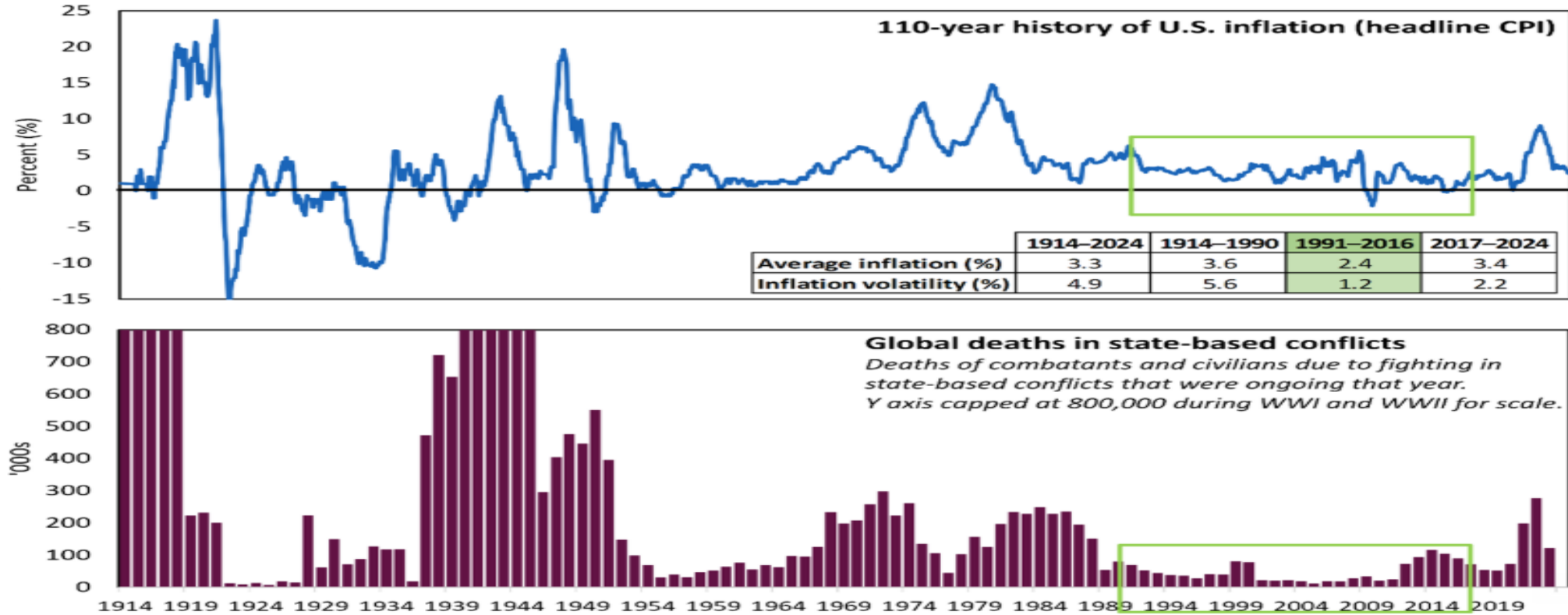
-The RRR "real " rate of return has been $6.3\% - 2.6\% = 3.7\%$

If our spending policy is above 3.7% (currently 5%), the fund loses income in inflation adjusted terms.

Historically, we have "inflation proofed" the fund by adding severance income. Will that continue?

Will low inflation continue for the next 20 years?

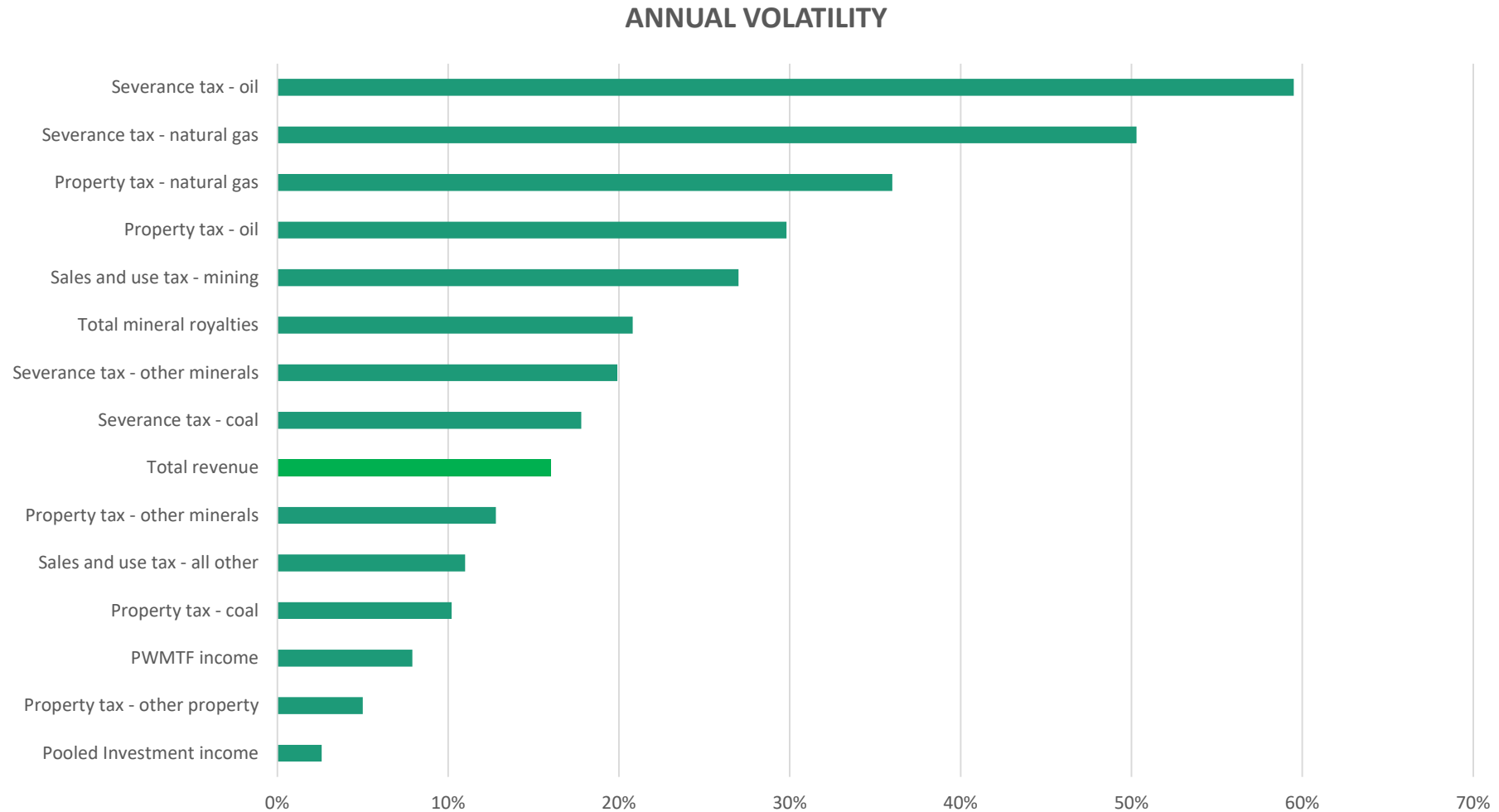
Figure 1: 110-year history of U.S. inflation and global conflicts



Source: Bloomberg data, OurWorldinData.org, Uppsala Conflict Data Program, Peace Research Institute Oslo, and PIMCO calculations as of 31 October 2024

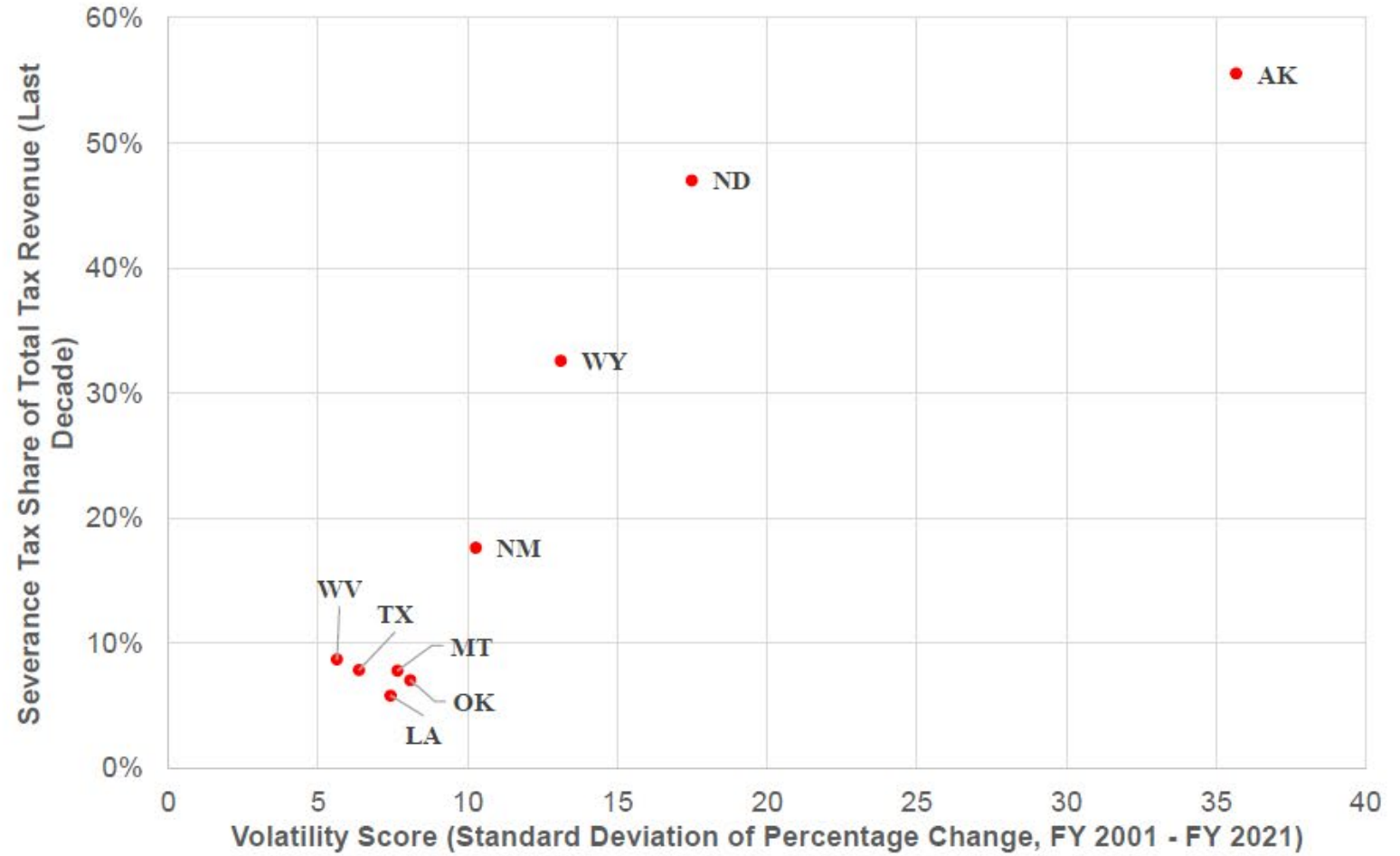
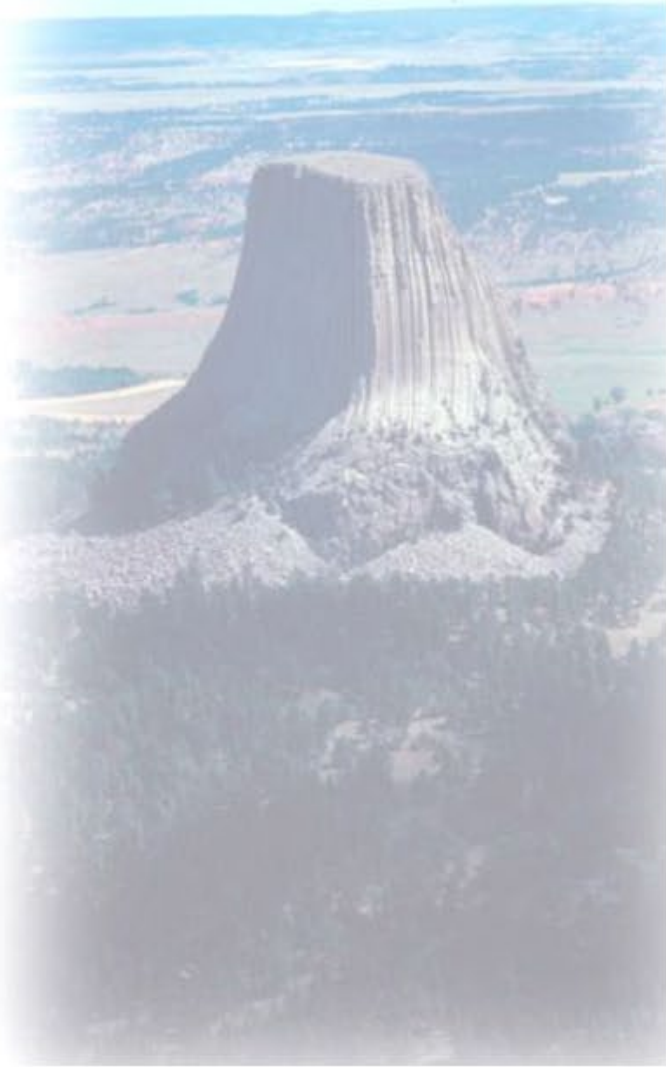
- Globalization
- WTO (World Trade Organization) formed in 1995
- Fall of the Bamboo Curtain - Unleashing the “factory of the world”

WYOMING'S REVENUE VOLATILITY BY SOURCE



Source: State of Wyoming Consensus Revenue Estimating Group, Wyoming State Treasurer's Office

Revenue Volatility



Source: LSO analysis of "Tax Revenue Volatility" prepared by Pew Charitable Trusts, data published January 19, 2023.



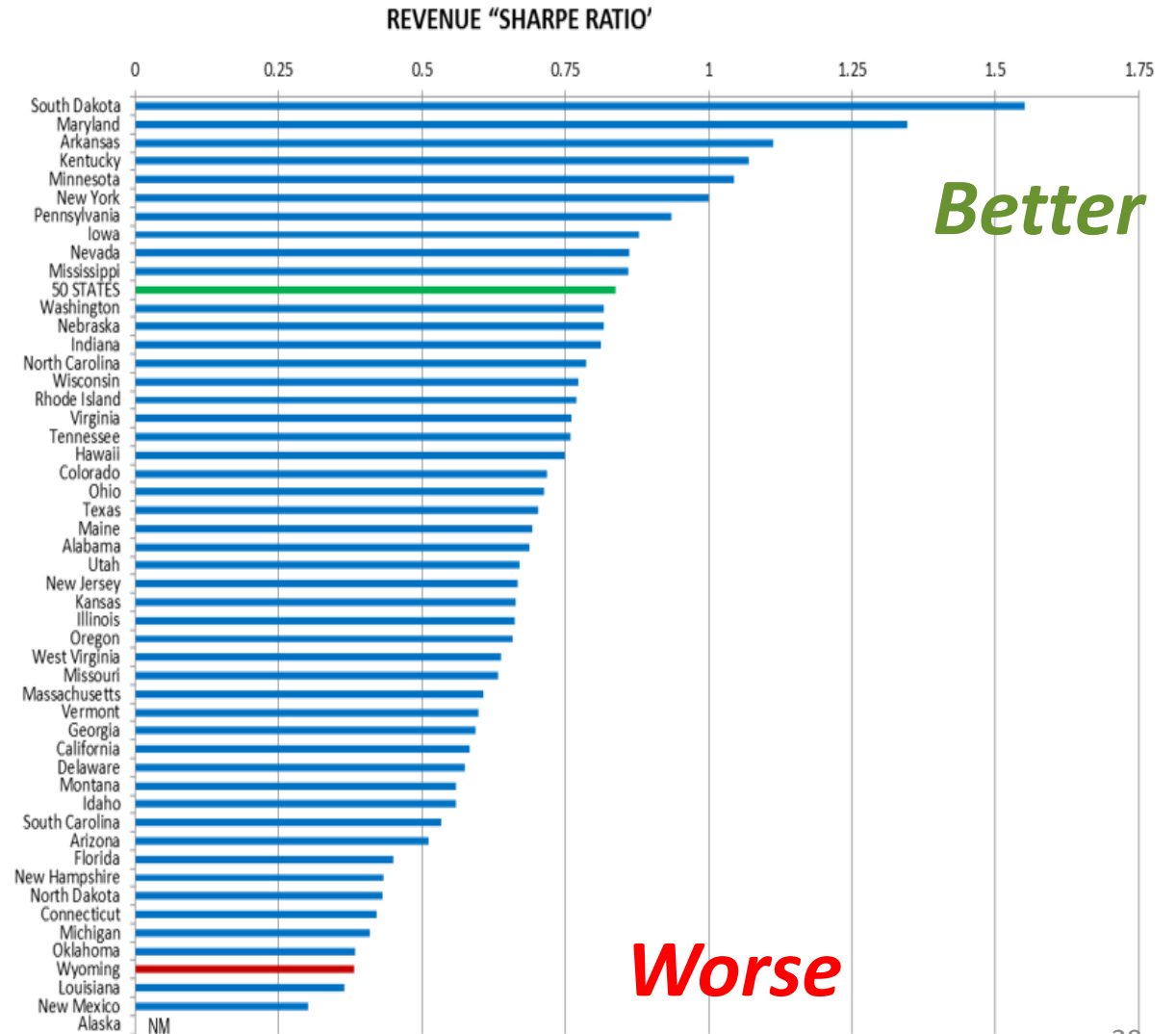
Sharpe Ratio

VOLATILITY ADJUSTED REVENUE GROWTH BY STATE

A Sharpe ratio is a great way to see the risk adjusted return of an investment. This is WSTO number one mandate.

Sharpe = return/risk or volatility

A Sharpe of one or more is ideal.



What is intergenerational equity?



Intergenerational Equity

Key Principles:

1. Strives for egalitarian equity between present and future generations in the State of Wyoming.
2. Aims to ensure citizens of tomorrow have the same opportunities and purchasing power as the citizens of today.

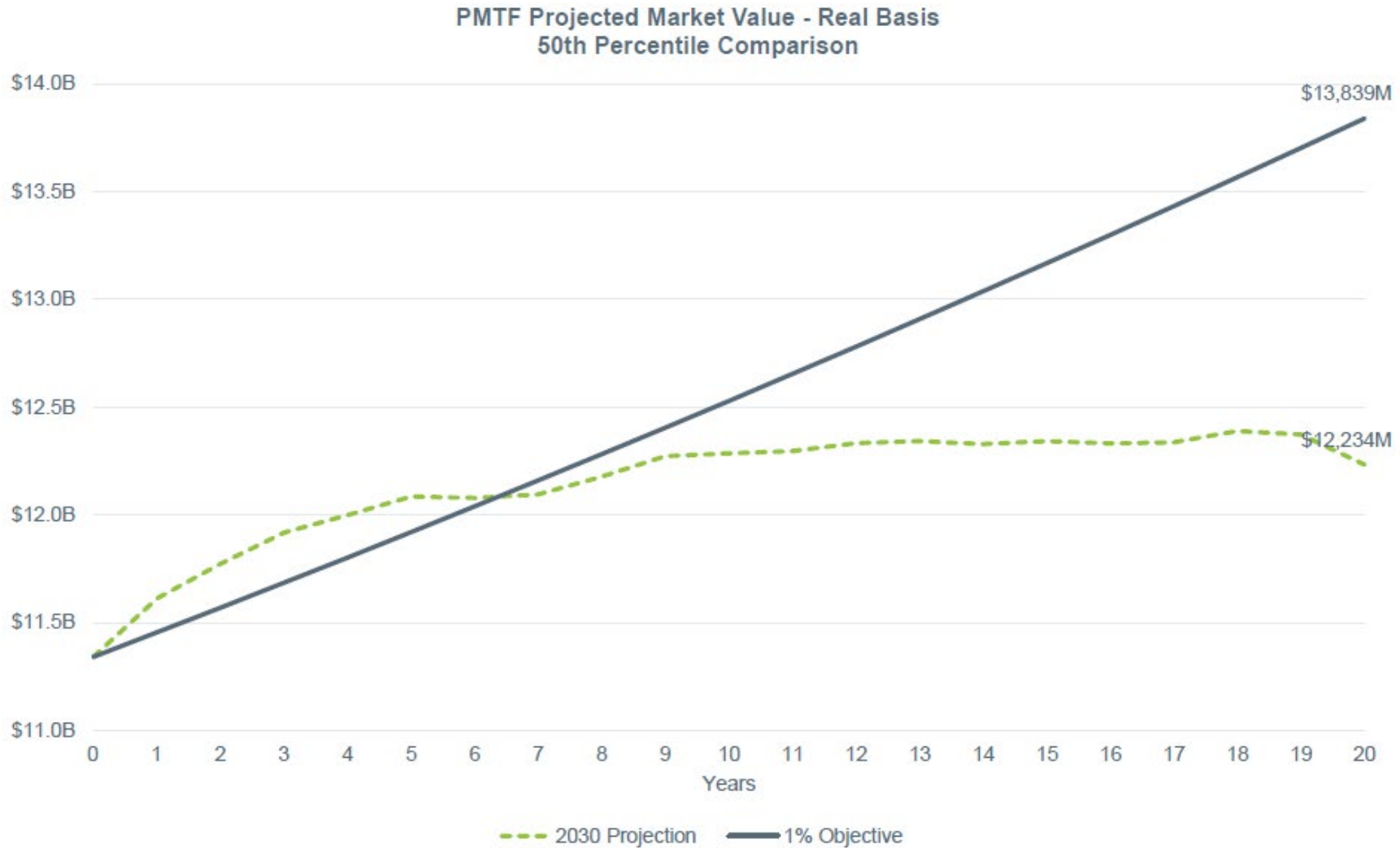
Components:

Each plays an important role in maintaining Intergenerational Equity.

1. Sustainable Spending Policy
2. Investment Returns (After Inflation)
3. Contribution Policy



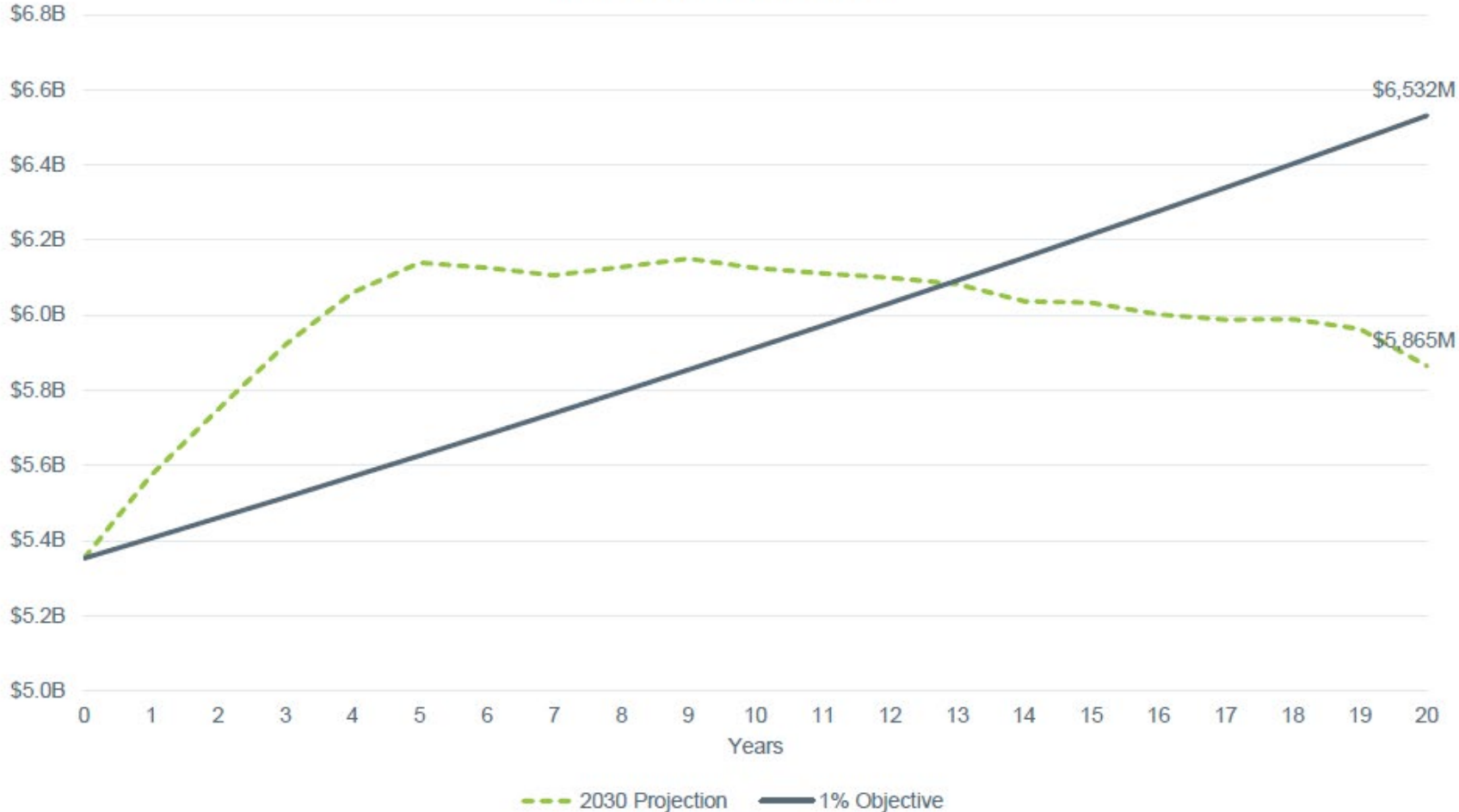
Scenario Analysis: PMTF



All data is shown in real terms (after 2.50% annual inflation). Model assumes investment earnings always meet or exceed the annual spending policy amount. Contribution assumptions for FY24-28 were based on the January 2024 Consensus Revenue Estimating Group (CREG) with further revisions through 2030 provided by the Wyoming Legislative Service Office. Income projections beyond 2030 are assumed to decline by 2% real per year.

Scenario Analysis: CSPLF

CSPLF Projected Market Value - Real Basis
50th Percentile Comparison



All data is shown in real terms (after 2.50% annual inflation). Model assumes investment earnings always meet or exceed the annual spending policy amount. Contribution assumptions for FY24-28 were based on the January 2024 Consensus Revenue Estimating Group (CREG) with further revisions through 2030 provided by the Wyoming Legislative Service Office. Income projections beyond 2030 are assumed to decline by 2% real per year.



What is the opportunity set for the State of Wyoming?

Take advantage of longer term investing.

- Deferred distributions...Power of compounding

- Receive the illiquidity premium

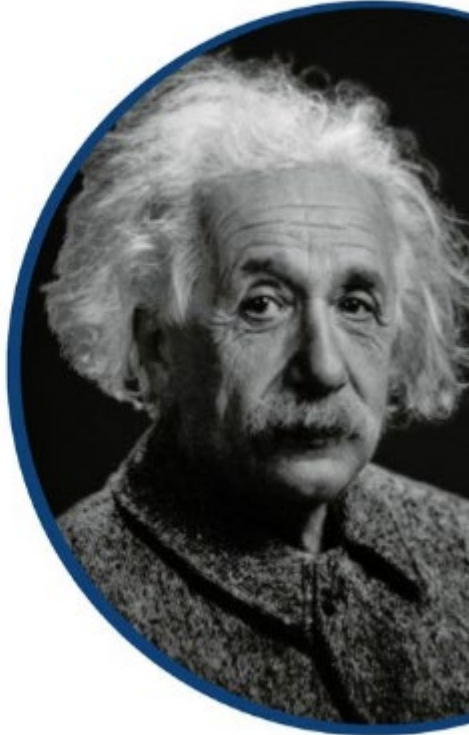
- Inflation proof

- Generational fund

“

Compound interest is the eighth wonder of the world. He who understands it, earns it. He who doesn't, pays it.

— ALBERT EINSTEIN



This is extremely important to understand. By not distributing “income”, the fund size grows dramatically.

If we did not have to distribute 5% in “earnings”, we could invest in assets that have a higher return.

Does this mean more risk?

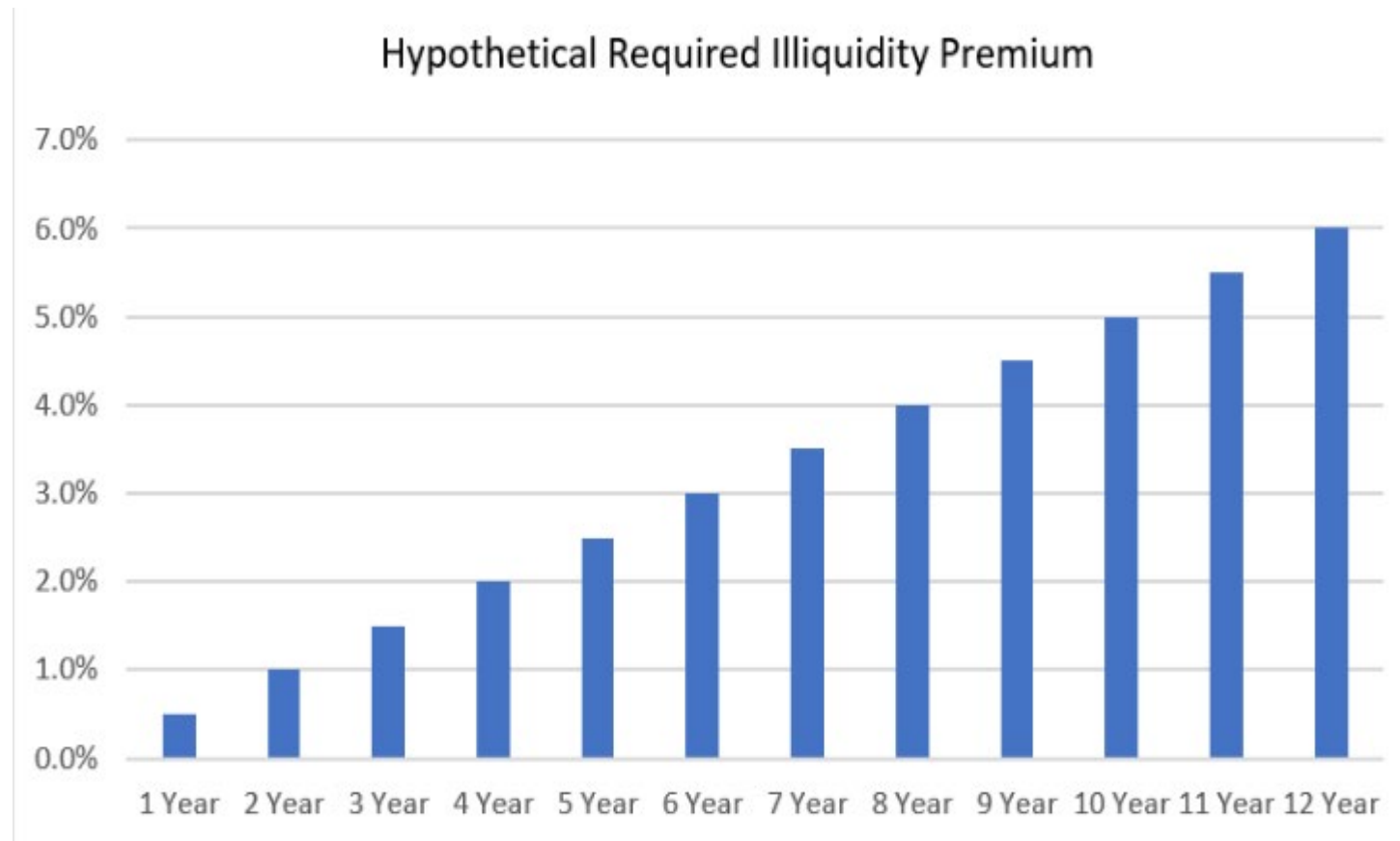
Not necessarily. The biggest difference is investing in assets with similar risks but are usually less liquid.

By deferring distributions, we can take advantage of the “illiquidity premium”.

What is the Illiquidity Premium?



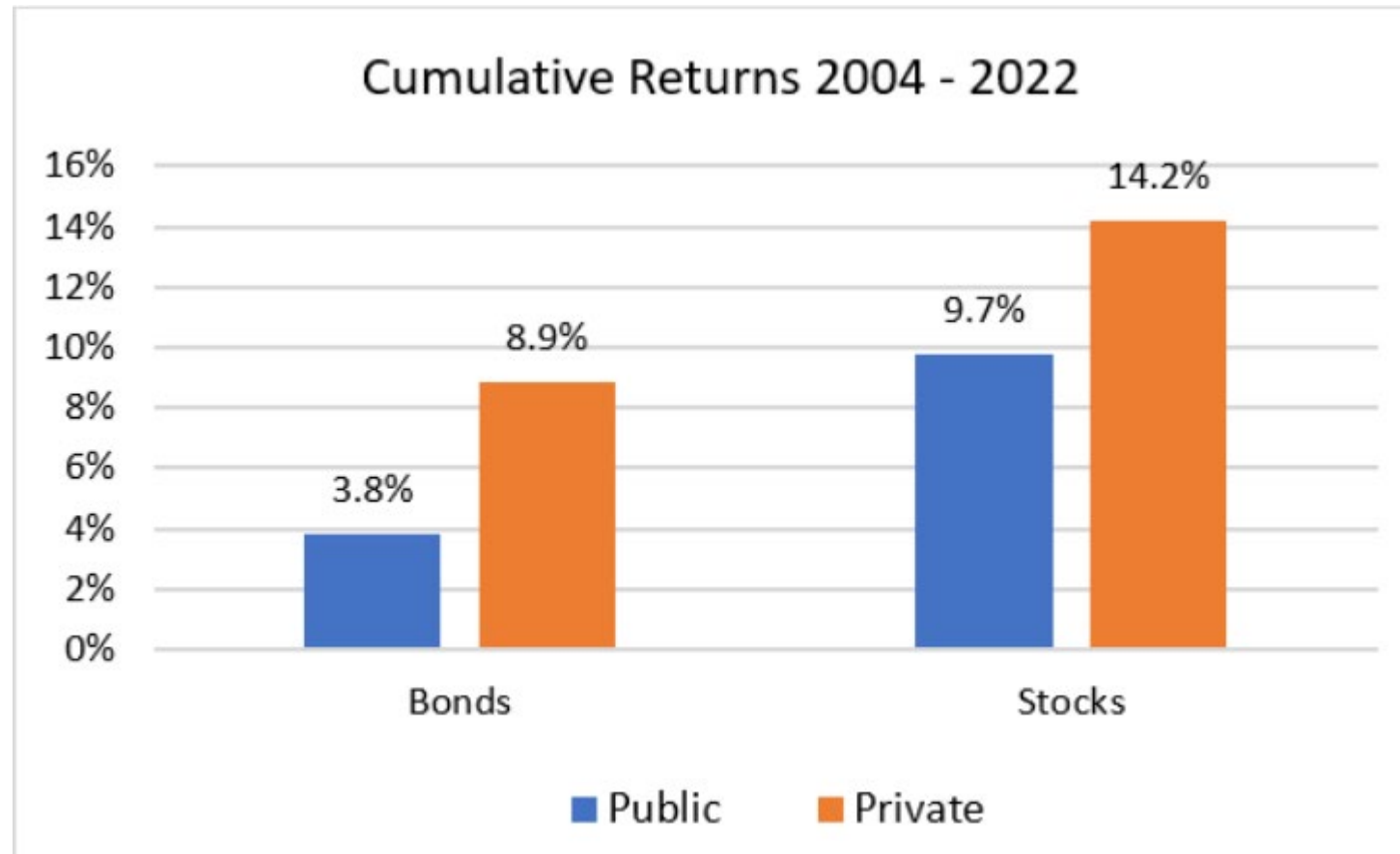
The illiquidity premium is the additional return an investor requires if the investment cannot be sold quickly at the fair market price. This number varies across the different asset classes and depends on the current market environment. When the market is stressed, the illiquidity premium increases.



The actual illiquidity premium that we would have received between a public investment and a less liquid private:

Bonds = 5.1%

Stocks = 4.5%



What can we do?

Create a Generational Fund!

An example is New Zealand. In 2003 the fund started with \$2.4B, and the government has contributed \$26.7B since then.

- AUM is now valued at \$78.3B
- First distribution is expected in 2035.

NZ Super Fund performance:

As at 31 August 2024	Last 12 months	Last 5 years p.a.	Last 10 years p.a.	Last 20 years p.a.	Since inception p.a.
NZ Super Fund return	18.51%	10.44%	10.39%	10.31%	10.11%

The Rule of 72

$$\frac{72}{\text{Interest Rate}} =$$

Number of years to double
your Investment

Interest Rate	Years
6%	12
10%	7.2
12%	6

Without distributions, we can take advantage of compounding and increasing our illiquid asset allocation, which moves us from our historical 6% return towards a 10% return.

At 10% (Generational fund target)

\$100M = \$200M in 7.2 years

\$200M = \$400M in 14.4 years

\$400M = \$800M in 21.6 years

\$800M = \$1.6 Billion in 28.8 years!

At 6% (PMTF and CSPLF 20 year avg.)

\$100M = \$200M in 12 years

\$200M = \$400M in 24 years

At 12%..... \$100M = \$1.6 Billion in 24 years?

This does not include any additional annual contributions. Additional contributions increase the long term return dramatically.
(See New Zealand Super)

Key Takeaways

- \$30 Billion of Assets Under Management are NOT available for Expenditure
Every dollar has a constituent
- Keep legislation and investment decisions separate
- Increase essential STO Staff
Benefit > Cost
- Create a generational fund!
Mineral revenues are declining

Appendix of Terms

ACRONYMS AND DEFINITIONS

Alpha	The return you receive above a benchmark
Asset Class	A group of investments that share similar characteristics, like stocks (equities), bonds (fixed income), cash equivalents, real estate, commodities or currencies, allowing investors to categorize investments based on their risk and potential return profile, and to diversify their portfolios by investing across different asset classes.
AUM	Assets Under Management - The total market value of investments that a financial institution or investment manager manages for its clients.
Basis Point	One basis point is equivalent to 0.01% (1/100th of a percent) or 0.0001 in decimal form. Likewise, a fractional basis point such as 1.5 basis points is equivalent to 0.015% or 0.00015 in decimal form.
BRA	Budget Reserve Account
Cap Fin	Legislative Select Committee on Capital Financing and Investments
CREG	Consensus Revenue Estimating Group

CSPLF	Common School Permanent Land Fund (sometimes referred to as CS, or Common School); income from investment funds public schools
Fund	A collection of monetary resources of the government that are used to finance government activities. Funds are created by Statute.
GF	General Fund
Inviolable	To be protected and not spent
IFC	Investment Funds Committee
IPS	Investment Policy Statement - A document that outlines how the State of Wyoming's investments will be managed - https://statetreasurer.wyo.gov/
PMTF	Permanent Mineral Trust Fund; original generational fund; earnings fund 30% of the general fund.
Pool	An investment tool where one or many state funds are invested in specific asset classes to meet stakeholder needs.

RVK	State's investment consultant
SLIB	State Loan and Investment Board
STO/WSTO	State Treasurer's Office
TRR	Total Rate of Return

Please also find the following reports at <https://statetreasurer.wyo.gov/>;
Treasurer's Annual Report
Monthly Portfolio Status Report

Wyoming State Treasurer's Office

