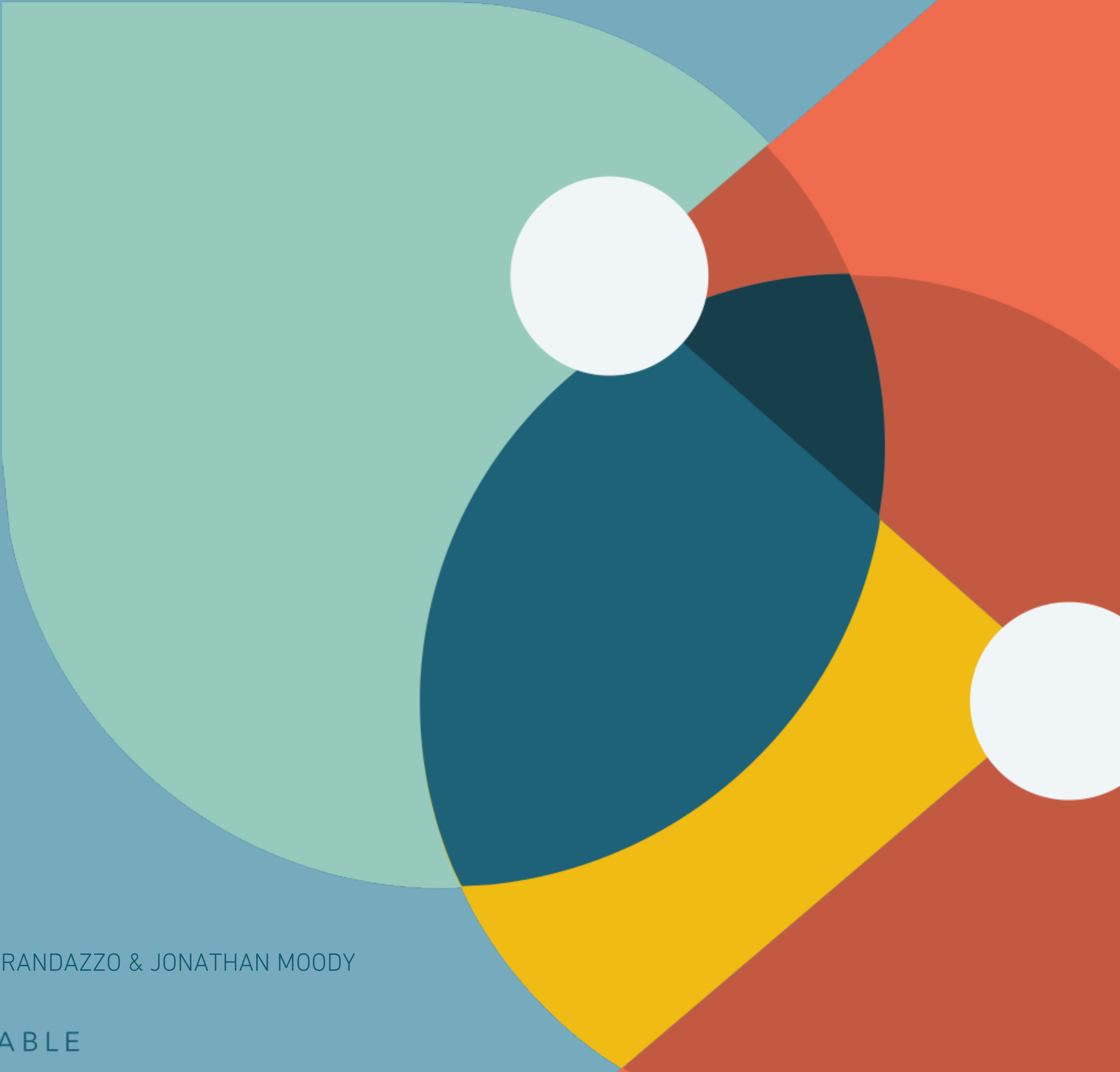
RESEARCH BRIEF

The State of Pensions 2023 | October Update

Market Uncertainty, Politics, and Risk Addiction in the Age of Volatility



ANTHONY RANDAZZO & JONATHAN MOODY

EQUABLE

The State of Pensions Remains Fragile in 2023.

The uncertain and volatile financial environment for public pension funds is producing divergent investment performance results. Roughly half of the pension funds who've reported their fiscal year 2023 data over the last three months (plans that end their years in June) indicate that they have exceeded their investment assumption. The other half have missed their investment targets for 2023. This variance has translated into an unremarkable average investment return of 5.6% for public plans in 2023, as of September 30th. On the heels of 2022's -5.9% average investment return, this year's underwhelming, but positive, returns have resulted in a moderate improvement to the average funded ratio for state and local retirement systems.

As we look ahead for public pension plans in the U.S., there are a few things to note:

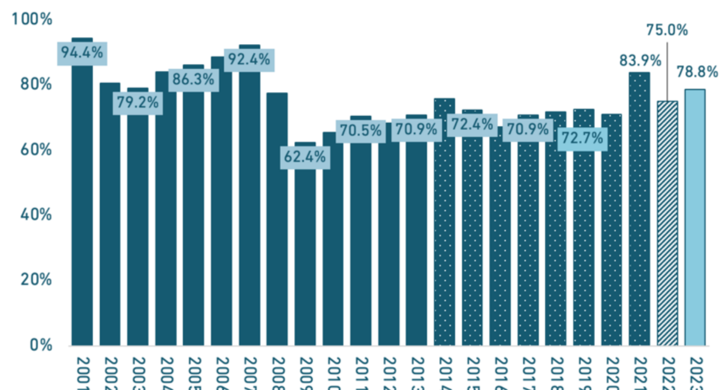
1. Persistent unfunded liabilities mean the potential for uncontrolled and unknown cost increases. If unfunded liabilities levels stagnate, they will require ever increasing contribution rates—which in turn put fiscal pressure on state budgets, municipal governments, and school districts.
2. Assumed rates of return have declined over the last few years, but remain higher than what should be considered reasonable today (somewhere between 5.5% and 6.5% depending on the pension fund).
3. Valuation risk is only growing, as public plans have not adopted any widespread reduction in their allocations to private equity, real estate, and other asset classes that lack transparent market pricing.
4. Underneath the average total fund data is consistently poor performance in private equity and real estate returns. For example, CalPERS reported a -2.3% return on its private equity portfolio (for the period March 2022 to March 2023) and CalSTRS says their private equity investments were -0.9% for the same period.

As markets remain volatile, we expect a high variance in how state and local pension plans manage through the financial and political challenges. It's true that some pension funds will manage through the next decade just fine, but others won't—some are going to lose the PE game, wind up having to recognize misvalued assets, and deal with a crunch from negative cash flow all at the same time. The question is: which plans will these be?

The national funded ratio average is projected to increase from 75.0% in 2022 to 78.8% in 2023.

Investment returns in 2023 have been somewhat variant. For example, Hawaii ERS returned just 2.6% for the year ending June 30, where Nevada PERS earned 9.1% over the same time frame. Several plans did outperform their assumed returns for 2023 which, combined with most states paying required contributions, has led to an improved 2023 funded ratio compared to 2022.

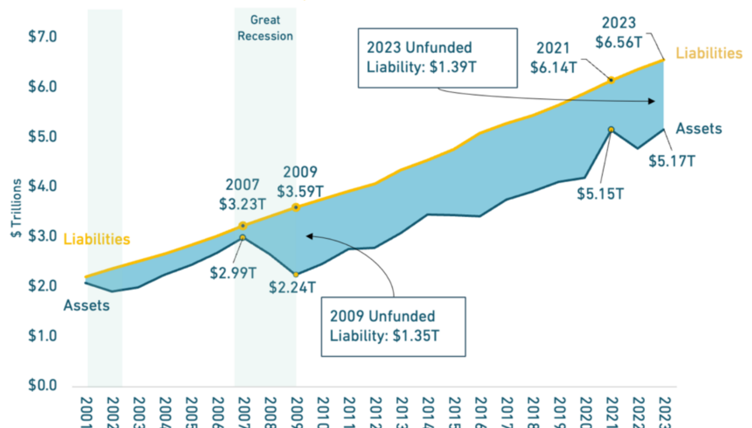
FUNDED RATIO AVERAGE
FOR STATE & LOCAL PENSION PLANS | 2001-2022 + 2023 Estimate



The total pension funding shortfall will decline slightly to $1.39 trillion in 2023 from $1.59 trillion in total unfunded liabilities in 2022.

There was little change in unfunded liability amounts between 2022 and 2023, reflecting muddled investment returns this year. In fact, $1.39 trillion in 2023 unfunded liabilities is little changed from $1.35 trillion in 2009 unfunded liabilities. Our estimate for 2023's funding shortfall is effectively equivalent to the average unfunded liability from 2009-2023: $1.38 trillion.

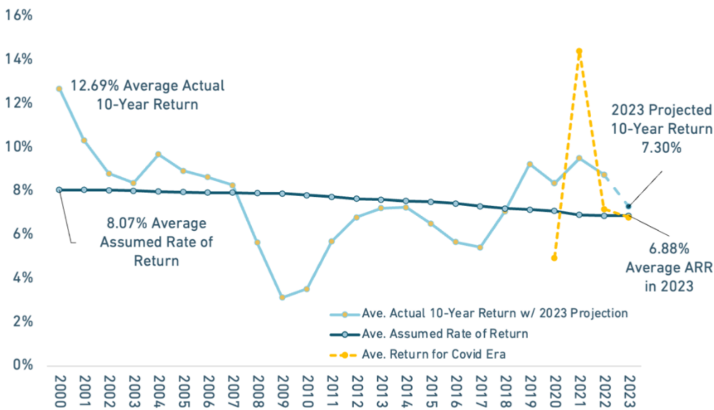
TOTAL UNFUNDED LIABILITIES
FOR K-12 PENSION PLANS | 2001-2022 + 2023 Estimate



A 5.6% average investment return for the 2023 fiscal year has left public plans with similar funded status to 2022.

Preliminary 2023 investment returns (for data reported as of September 30) show a 5.6% return on average for state and local plans. Roughly half of the plans who have reported actual returns for fiscal year 2023 beat their assumed return target (averaging 6.9% nationally), while the others have underperformed.

INVESTMENT RETURN AVERAGES
COMPARED TO ASSUMED RATES OF RETURN | 2001-2023

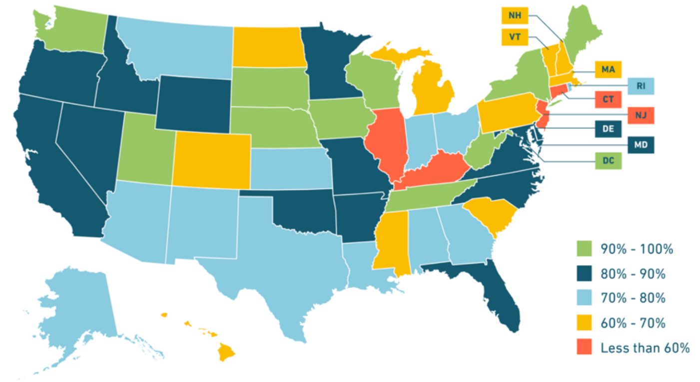


Particularly notable is the continued decline in the rolling 10-year average return. This has dropped year over year, and is likely to decline again next year. The current look back period (2014-2023) includes 2014's 14% average return for state plans, but next year that will roll off the decade review. The average return in 2015 was 2%, which will sink the average performance.

A majority of U.S. state and municipal pension plans are distressed or fragile.

Within the states, funded ratios and unfunded liability levels continue to vary considerably from state to state. The vast majority of plans have a fragile (90% to 60%) or distressed (60% or less) funded status.

2023 ESTIMATED AGGREGATE STATE FUNDED RATIOS BASED ON ESTIMATED ASSETS FOR STATE & LOCAL PENSION PLANS



HOW THIS UPDATE CHANGES OUR FINDINGS FOR STATE AND LOCAL PENSION PLANS:

- The average 2023 estimated rate of return shifted from 5.3% to 5.6% after factoring in reported preliminary returns and updated private equity data for the second quarter of 2023.
- The average 2023 estimated funded ratio shifted from 77.4% to 78.8% based on updated return data.
- The total 2023 unfunded liability estimate shifted from $1.49 trillion to $1.39 trillion based on updated data.
- The average 2022 actual funded ratio shifted from 75.4% to 75.0% based on additional reported plan data.
- The total 2022 actual unfunded liability reported shifted from $1.57 trillion to $1.59 trillion based additional reported plan data.

To read more about State of Pensions visit Equable.org/StateofPensions2023

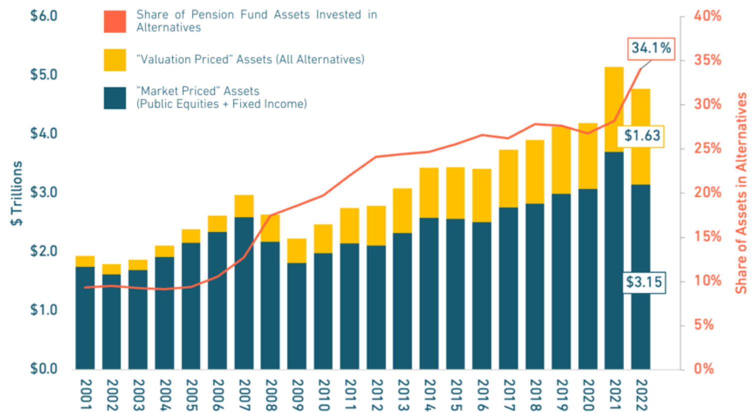
VALUATION RISK: AN EMERGING CONCERN

Public pension funds are facing an emerging concern: "valuation risk." This is the risk that currently recorded asset values which are based on valuations — as opposed to market prices — eventually turn out to be overstatements.

The share of pension fund portfolios exposed to this type of risk has grown significantly in the last two decades – from 9% in 2001 to 34.1% today.

The two largest sources of valuation risk are private equity portfolios and real estate portfolios. In both cases, the values of investments held by pension funds are generally based on "fair price" valuations, as opposed to public market prices based on actual transactions. The fair price valuations may be reasonable, or they may overstate values. What is important is that the reported values of these assets are used to determine contribution rates. If these valuations are off, then today's contribution rates have been miscalculated.

PENSION FUND ASSETS WITH VALUATION RISK
COMPARED TO MARKET PRICED ASSETS

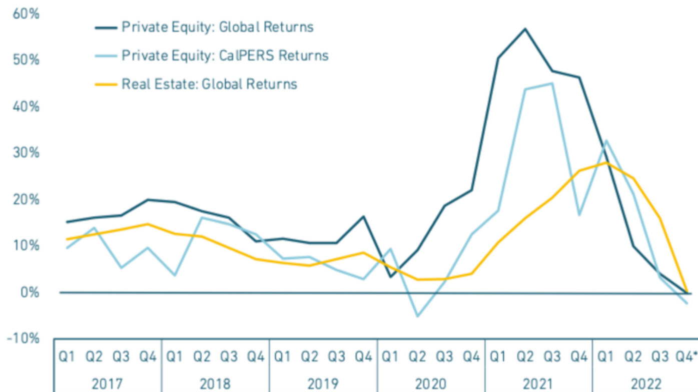


The recent decline in valuations for private equity portfolios reflects how valuation risk may be a serious problem.

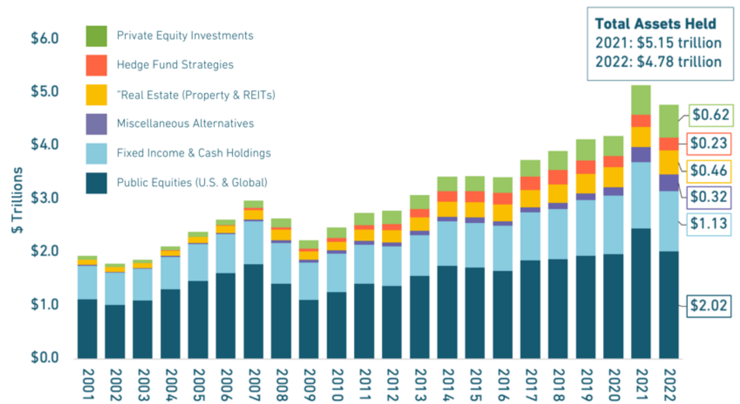
Private equity and real estate investments are spread across a complex range of funds and assets. The process of updating the valuation of those investments typically has a three-to-nine-month lag from the point of time being measured. As shown in the figure below, private equity and real estate returns in 2021 were strong and that was reflected in 2022 fiscal year reporting. However, between 2022 and 2023 the returns have been falling and with them the valuation of these investments has declined.

As of 2022, as much as one-third of the $4 trillion in assets that pension funds reported owning were based entirely on non-transparent valuation approaches from asset managers (not market-based prices like stocks).

DECLINING PRIVATE EQUITY AND REAL ESTATE RETURNS
ONE-YEAR ROLLING INTERNAL RATES OF RETURN, 2017-2022



DOLLAR DISTRIBUTION OF PENSION FUND INVESTMENTS
BY ASSET CLASS, 2001-2022



VALUATION RISK EXAMPLE | **INSTACART**

A concrete example of valuation risk: the privately held grocery-delivery service Instacart raised money in 2021 based on a $39 billion valuation. At that time there were already dozens of public pension funds with small stakes in the grocery company. But when Instacart went public in September 2023 it priced its initial stock offering based on a $10 billion valuation. That decline in value from 2021 to 2023 changed the ultimate value of what pension funds earned on their investment. For these public pension funds, the reported values of their assets in 2021 and 2022 will have been based on the higher valuation figure. That influenced the measured value of unfunded liabilities in 2022 and 2023, as well as the calculation of changes to contribution rates last year and the 2024 fiscal year. This means that unfunded liabilities were undermeasured in previous years due to inaccurate valuations and contribution rates should have been relatively higher.

WHAT IS INCLUDED IN THIS UPDATE?

When we published State of Pensions in July 2023, there were still 33 state or local retirement systems that had not released data for the fiscal year ending 2022. These plans amounted to 5.4% of anticipated accrued liabilities for 2022. Further, our July report relied almost entirely on estimated investment returns using benchmarks for the various reported asset classes that pension funds were using as of 2022.

Over the last three months several retirement systems have released new and updated data, including preliminary investment return reports. This October 2023 fact sheet uses those reports to include the following:

- Updated 2022 actual financial data, including the addition of actuarial valuation report data from 26 retirement systems that represent 4.7% of the accrued liabilities in our dataset. There are still outstanding 2022 reports from three state systems (CalPERS, Pennsylvania Municipal, and Michigan Municipal) and two municipal systems.

- Updated 2023 estimates use preliminary investment returns from retirement systems, pension fund trusts, and state treasurer or comptroller offices. As of this update, 126 (56%) of the 225 retirement systems in the available data have reported preliminary returns for their full fiscal 2023. For the remaining retirement systems included, 76 plans have reported partial investment returns during the 2023 fiscal year, meaning our estimate combine a partial year preliminary actual returns and benchmarks. The remaining 28 plans have not reported any investment performance for fiscal 2023, meaning that their estimates are based entirely on market benchmarks and their respective asset allocations.

The Equable Public Retirement Research Database includes 232 retirement plans; however, data were insufficient to include seven of these plans in State of Pensions analysis because of delayed reporting.

ABOUT STATE OF PENSIONS

State of Pensions is Equable Institute's annual report on the status of statewide public pension systems, put into a historic context. Governments face a wide range of challenges in general – and some of the largest are growing, and often unpredictable, pension costs. State of Pensions analyzes trends in public pension funding, investments, contributions, cash flows, and benefits for 225 of the largest statewide and municipal retirement systems in all 50 states to illuminate the scale and effects of these challenges. Click here to access previous editions of State of Pensions, as well as additional data and resources.

ABOUT EQUABLE INSTITUTE

Equable Institute is a bipartisan nonprofit that works with public retirement system stakeholders to solve complex pension funding challenges with data-driven solutions.

ABOUT THE AUTHORS

Anthony Randazzo (Executive Director) is a national expert on public sector pension policy and has provided technical assistance to more than a dozen states and cities on ways to improve retirement plan sustainability.

Jonathan Moody, PhD (Vice President for Research) has developed a wide range of academic and policy research on municipal finance subjects, including state budgeting and reserve funds, state credit ratings, state fiscal management, and public retirement benefits.

MEDIA CONTACT: Sam Shaw, Vice President of Communications | sam@equable.org | +1 (646) 980-8850