

MEDIA INQUIRIES: Sam Shaw | Vice President of Public Relations, Equable Institute | Sam@equable.org

In the aftermath of the Covid-19 emergency era, Inflation is a persistent challenge for both institutions and individuals. The effects of inflation are just as significant for U.S. state and local public pension plans as they are for the larger economy.

At the end of 2022, the annual inflation rate for the U.S. came in at 8.0%. By contrast, the average cost-of-living adjustment provided to public pension retirees in 2022 was 1.8%.

Inflation rates have generally improved in the first half of 2023. But the downstream effects on U.S. public pension funds and their members are significant. There are **at least three primary ways** that growing or persistent inflation can negatively affect the value of public retirement benefits and/or increase the cost of providing defined benefit pension plans.

All of the figures provided in this fact sheet are based on Equable Institute's "Public Retirement Benefits Database." The database covers 706 retirement plans within the largest 228 state and local retirement systems with at least \$1 billion in promised benefits. This represents more than 90% of public retirement benefit liabilities in the United States.

1. INFLATION HAS ERODED THE VALUE OF BENEFITS FOR MANY MEMBERS, EVEN WHEN COST-OF-LIVING ADJUSTMENTS WERE ISSUED

- **51% of public pension plans offer cost-of-living adjustments (COLA) that are linked to actual rates of inflation.** However, the vast majority of these place an annual cap on how much benefit can increase from year. For example, "CPI up to 2%" or "local-CPI up to 4%" or "1/2 of the rate of CPI up to 3%."^[1]
- **23% of pension plans offer fixed annual adjustments that might be called "COLAs" or "13th Checks" but that aren't really related to inflation.** These are typically 2% or 3% adjustments. In certain years this might mean benefits grow faster than the cost of living. However, when inflation exceeds the fixed amount for any length of time, the purchasing power of benefits can erode.
- **26% of pension plans do not offer any inflation protection or cost-of-living adjustment.** Retirees in these states will have the value of their benefits eroded by inflation.
- **Even if a retired public employee receives a COLA, the value of their benefit might have been eroded by inflation if they left public service before qualifying for retirement.** Pension benefits are based, in part, on final average salary. Consider, for example, someone serves as a teacher from age 24 to 35 and qualifies for a pension based on a \$50,000 final average salary. They can't draw the pension until age 65. The purchasing power of that salary will have eroded significantly over the 30 years that former teacher waits until they can draw their pension.

2. INFLATION CAN CAUSE INVESTMENT RETURNS TO UNDERPERFORM ASSUMPTIONS

- Pension Inflation rates have significant effects on the broader economy. This influences the value of investments made by pension funds. **Companies that lose or gain money due to inflation may have their stock value change, lowering the rate of return for a pension fund's investments.**
- Federal Reserve monetary policy directly links their decisions on interest rates to the rate of inflation. Interest rate changes have far-reaching effects on financial markets. **Because pension funds are typically diversified across a wide range of asset classes, they are directly impacted by interest rate changes through their investments.** This includes bond yield returns, the stock market (e.g. public equities), the availability of cheap money for private equity companies, real estate prices, and more.

3. FASTER THAN EXPECTED INFLATION WILL INCREASE THE COST OF PROVIDING PUBLIC RETIREMENT BENEFITS

- Pension funds that offer cost-of-living adjustments make assumptions about the annual rate of inflation. They build that into their annual costs of providing benefits. But the typical public pension fund assumes inflation growth rates of between 1% and 2% and recent inflation has far exceeded those expectations. This is a problem because when inflation grows faster than expected, so do the value of benefits. **Pension funds have likely received less money than they need to pay for benefits in the future.**^[2]
 - For example, the Ohio State Teachers Retirement System recorded a \$2.3 billion actuarial loss when providing a higher than assumed COLA in 2022. In their case, the assumption was a 0% COLA, but political pressure to provide inflation adjustment led to trustees deciding to issue a COLA.
- Some pension funds have limits on the compensation that can be used to calculate a pension—such as a maximum pensionable salary of \$100,000. **These caps often are linked to inflation, and thus can rise faster than expected when inflation grows quickly. That in turn creates larger liabilities.**
 - For example, in California the so-called “PEPRA” tier of benefits has a compensation cap linked to inflation. It also divides “normal costs” between members and employers. Due to faster than expected inflation in 2022, the California State Teachers Retirement System calculated an increase in normal costs. This cost increase from 18.15% of payroll to 18.4% of payroll, will require more money from both school districts and teachers’ paychecks.
- Generally, higher inflation rates mean that compensation is increasing. **Higher compensation means workers will earn larger pension benefits.** Costs will rise to pay for those higher pension checks.
- **Unfunded liabilities will likely increase and drive-up costs.** Because past contribution rates were not anticipating future compensation increases, less money was flowing into the system than is currently needed.^[3]
- **Pension funds may also adjust their COLA rate assumptions.** This could increase normal costs in the near-term. It may also cause a growth in unfunded liabilities.

NOTES

[1] A select number of pension funds also adjust benefits over time to ensure that the pension benefits maintain their purchasing power, even beyond a maximum annual limit. For example, CalSTRS ensures that benefits paid provide at least 85% of the purchasing power that a pension was worth in the first year it was paid. So, if inflation erodes the purchasing power of a pension benefit beyond that point, the value of the benefit will be adjusted up irrespective of an annual limit.

[2] The inverse is true: when inflation grows slower than expectations, it means an actuarial “gain” for pension funds. Pension fund actuaries generally try to smooth out these gains and losses by assuming an annual inflation amount that is slightly below the maximum that can be provided, such as assuming a 1.5% annual average inflation rate if the maximum COLA is 2% based on CPI.

[3] Fortunately, when inflation grows slower than assumed inflation this can be a positive thing for a pension fund from the perspective slower growing liabilities, and thus potentially a reduction in unfunded liabilities.