NASRA/NCTR ISSUE BRIEF:
MARKET DECLINES AND PUBLIC PENSIONS

Sharp drops in global investment markets have resulted in significant losses for all investors, large and small. The experience of governmental retirement systems has been no different, as they too have shared in this extraordinary market decline. However, pension plans covering the vast majority of employees of state and local government remain financially sound and well-positioned to continue paying promised benefits to their participants. By responsibly pre-funding retirement benefits, assets accumulate during employees' public service and are then paid out during their retirement years. Such a funding approach, along with investment and financing strategies that focus on the long-term, have all served to make public pensions durable and resilient, and able to withstand the type of fluctuations investment markets have exhibited in recent months.

Public pension plans are not invulnerable to the current financial crisis confronting all investors. Significantly lower investment returns will have an impact, and most public pension plans are expected to experience higher required contributions as a result of the recent market declines. However, these increases are not likely to emerge immediately, allowing time for the fiscal condition of city and state plan sponsors and the markets to improve. Furthermore, it is difficult to predict the magnitude of any such increased costs, since the extent of higher contributions will depend heavily on the performance of investment markets in 2009 and 2010.

This issue brief describes how public plans 1) employ strategies to soften the effects of market volatility on plan financing; 2) have weathered past market crises; 3) remain disciplined investors, even in the wake of sharp market declines; and 4) are designed to keep contributions predictable and within historical norms.

SHOCK ABSORPTION

With an eye toward the long term, most public pension plans phase in investment gains and losses, thereby softening the effects of shorter term financial market volatility. These so-called "smoothing" methods, which are accepted and commonly-used actuarial tools, result in gradual changes to public pension funding levels and required contributions, spreading changes over several years. Accordingly, not only will the recent investment losses be phased in – typically over the next five years – but also they will be moderated by incorporating investment gains from previous years that have not yet been recognized, further dampening the effects of the latest declines.

Smoothing therefore tempers the impact of market swings, allowing fluctuations to serve as an early warning signal of future changes to required contributions. This advance notice gives state and local governments time to budget for higher pension costs and also allows financial markets time to recover.

Thus, due to actuarial smoothing, as well as other factors, such as the timing of public pension actuarial calculations and market gains and losses, the recent market decline will be recognized into cost projections gradually and may not have a material immediate impact on contribution rates for most plans.

In a brief addressing the effects on public pensions of the recent market declines, the Center for Retirement Research at Boston College confirmed this result, stating:

> [B]ecause [pension plan] sponsors have a buffer – the ability to smooth asset values over five years – they will not be forced to raise contributions just as state and local tax revenues plummet in the midst of a serious recession. … [S]ome poorly funded plans may be forced to increase their contributions, but others may be able to avoid a hike.[i]

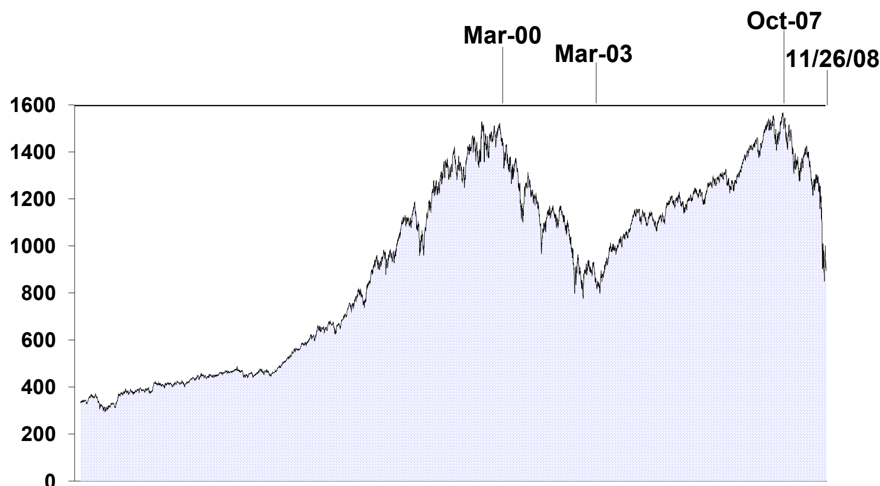
Similarly, recognizing the long-term nature of public pensions and the deferred impact recent market declines are expected to have on state and local government plan sponsors, bond-rating agency Moody's said: *"[B]ecause of the long-term nature of pension liabilities and investment horizons, Moody's does not foresee an immediate impact on state and local government (bond) ratings."*[ii]

EXPERIENCE WITH MARKET TURMOIL

Although the scope and suddenness of the markets' recent decline and the extreme volatility of the current investment environment may be unprecedented, public pensions have survived similar extreme market conditions in the past. For example, through 2007, median public pension fund investment returns have been positive in 22 of the past 25 years. This period includes the market crash of 1987, the 1990-91 recession, the bursting of the dot-com bubble, 9/11, and Enron and WorldCom. Each time investment markets have declined, diversified and disciplined investors, including public pension funds, have been rewarded for their patient, long-term positions with strong subsequent investment returns.

In terms of its effect on equity markets (as shown in Figure A), the extent of the current decline is similar to that experienced from 2000 to 2002, a downturn followed by four and a half years of unprecedented investment earnings for public pension funds. From 2004 to 2007 (the latest data available), public pension funds' investment earnings exceeded $1 trillion.

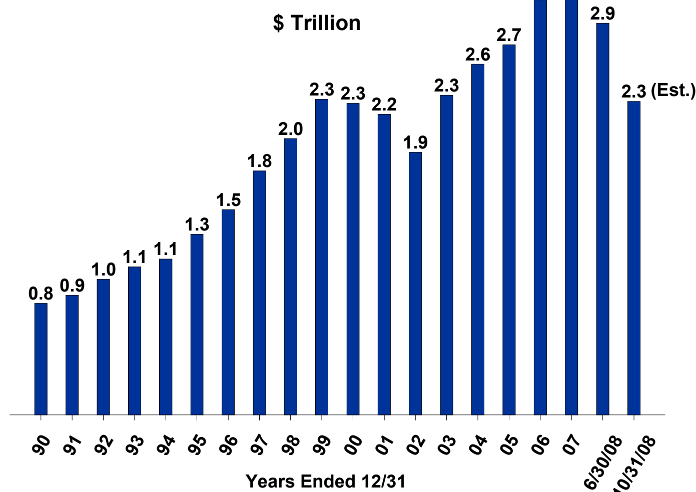
Figure A. Daily closing price of the S&P 500, January 1990 - November 2008



Source: Standard & Poor's Inc.

Assets held by state and local government-sponsored pension funds have vacillated, but the overarching trend has been upward. Figure B illustrates the volatility of public pension asset values, plotting their aggregate market value since 1990.

Figure B. Aggregate market value of state and local government pension funds, 1990 to 2008



Source: U.S. Federal Reserve Quarterly Flow of Funds report (est. amount by NASRA/NCTR)

Although investment market volatility is not unusual, the brief period in which the most recent declines have occurred, is exceptional. The peak-to-trough decline in 2000 to 2002, when the S&P 500 dropped by 48 percent, was 37 months in duration; during the current decline, the S&P 500 has dropped by approximately 48 percent again, but over a period of only 13 months.

PRUDENCE IN INVESTMENTS

As documented in a recent analysis of public pension plan investment practices in both bull and bear markets, released by the National Institute on Retirement Security (NIRS), public plans can be expected to continue to demonstrate prudence in their asset allocation and investment practices. The data show that in past market downturns, public pension plans followed prudent investment behavior by regularly rebalancing their investment mix, learning from industry leaders rather than “following the herd,” and avoiding moral hazard and employer conflicts of interests. [iii]

The NIRS study also indicates that funds that are more severely underfunded actually are more, not less, conservative in their investments. It shows that public pension plans do not “double down” in search of more risk to compensate for investment losses, but instead “buckle down” and continue a careful approach focused on a long-term strategy.

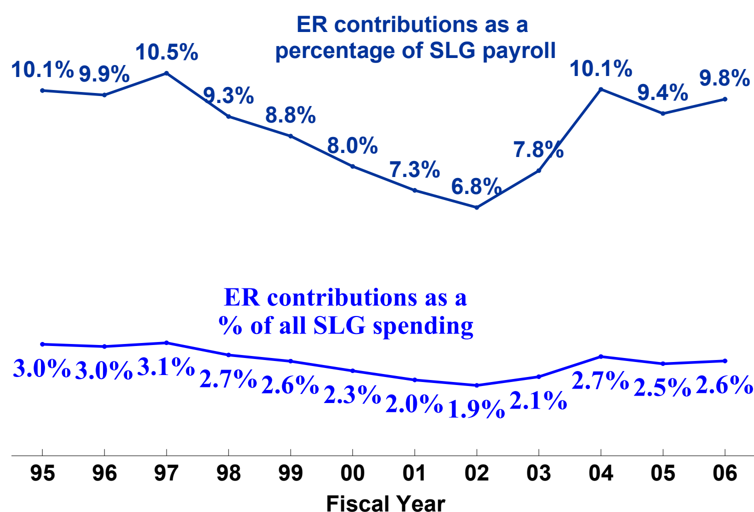
These results definitively refute anecdotal claims about fund managers investing imprudently when their funding ratios are on the decline. While increased public pension fund allocation to alternative

investments is often cited to support such unfounded allegations, they in fact comprise a relatively small portion (less than 5% on average) of portfolios. A recent report by the United States Government Accountability Office (GAO) focusing on pension funds' alternative investments, found that these types of investments are used by funds to achieve "diversification of portfolio investments" and "steadier, less volatile returns," thereby improving overall fund performance. Further, the GAO report specifically noted states take a variety of commendable approaches to overseeing and monitoring such investments, including documentation of due diligence steps in the selection of fund managers, and public information on investment decisions, fund performance, and reporting.[iv]

CHANGES TO CONTRIBUTIONS

Investment losses in public pension plans, if they persist, may have to be made up with additional contributions, either from employers (taxpayers), employees, or both. However, it is important to keep in mind that pension fund contributions, as shown in Figure C, currently account for less than three percent of all state and local government spending, and contributions as a percentage of employee payroll, remain at or below historical levels.

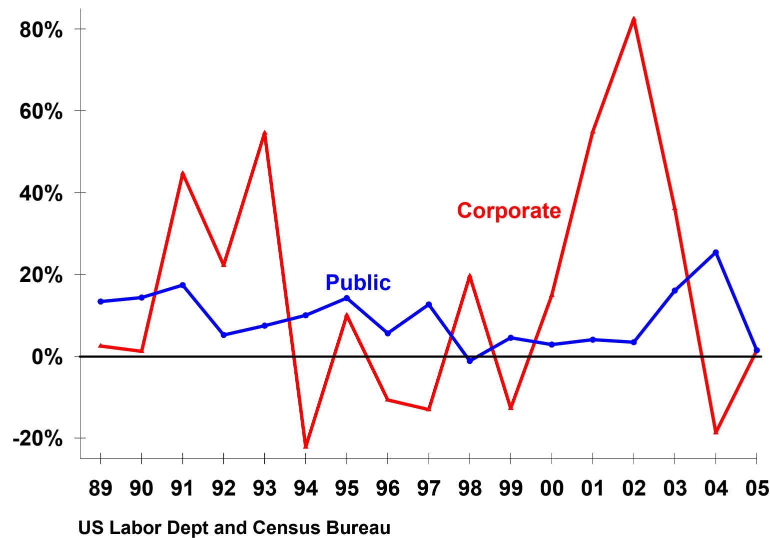
Figure C. State and local government pension (ER) contributions as a percentage of state and local government payroll and of all spending



Public pension contributions are tied to long-term expected investment returns and, thanks to actuarial smoothing methodologies, are designed to remain level as a percentage of payroll. In addition, the vast majority of public plans require employee contributions. To the extent required plan costs rise, employees may share some portion of this responsibility. By contrast, contributions to corporate pensions are made solely by employers, are determined largely by current interest rates, and reflect limited smoothing of asset values. As a result, required corporate pension contributions are volatile and uncertain, depending on changes in interest rates and investment returns. The resulting uncertainty of

required contributions has been identified as a leading factor in the decision by many corporate pension plan sponsors to freeze or terminate their pension plan in recent years. For example, another recent GAO report on plan freezes found that 69 percent of sponsors of frozen plans cited "unpredictability/volatility of plan funding requirements" as a reason why they froze their largest plan, making it one of the top most cited reasons for such freezes.[v]

Figure D. Percentage change from prior year in corporate and state and local government pension contributions



CONCLUSION

Funding a pension benefit provided by a governmental defined benefit plan takes place over decades, as plans accumulate the assets needed to pay promised benefits. The financing objective of most public pension plans is to establish contribution rates that remain relatively level as a percentage of employer payroll from generation to generation of taxpayers. This strategy promotes intergenerational equity, i.e., pension expenses are assigned to periods in such a manner that each period is charged a relatively constant percentage of payroll, which equitably allocates the cost of an ongoing benefit program among different generations of taxpayers. Asset smoothing is critical to this strategy; without it, required contribution rates would fluctuate from one year to the next based on short term market activity and other fluctuating actuarial experiences, and costs of benefits would be more likely to be shifted to or from future generations.

Despite these inherent protections, public pension plans are not immune from the current financial crisis facing all investors. Investment losses will have an impact, and most public pension plans are expected to experience higher required contributions. However, these increases are not likely to emerge immediately, allowing time for the fiscal condition of city and state plan sponsors and the markets to improve. Predicting the magnitude of such increased costs is difficult and will depend on factors unique to each plan, as well as the performance of investment markets in subsequent years.

What *can* be expected, however, is that governmental plans should have no problem making the benefit payments guaranteed to their beneficiaries. Sticking to long-view, prudent investment strategies and funding mechanisms not only provides public plans the liquidity needed to pay promised benefits in the near term, but also positions plans to accumulate assets that will allow them to continue to do so responsibly and indefinitely.

ENDNOTES

[i] Alicia H. Munnell, Jean-Pierre Aubry, and Dan Muldoon, "The Financial Crisis and State/Local Defined Benefit Plans," Center for Retirement Research, November 2008

[ii] Moody's Investors Service, "Pension funding may suffer from 2008 stock market declines" November 2008

[iii] Christian E. Weller and Jeffrey Wenger, "The investment behavior of public pensions," National Institute on Retirement Security, November 2008

[iv] United States Government Accountability Office (GAO), "Defined benefit pension plans: Guidance needed to better inform plans of the challenges and risks of investing in hedge funds and private equity" August 2008

[v] GAO, "Defined benefit plans: plan freezes affect millions of participants and may pose retirement income challenges" July 2008

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