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The 80% Pension Funding Standard Myth

An 80% funded ratio[1] often has been cited in recent years as a basis for whether a pension plan is financially or "actuarially" sound. Left unchallenged, this misinformation can gain undue credibility with the observer, who may accept and in turn rely on it as fact, thereby establishing a mythic standard. This issue brief debunks that myth and clarifies how actuaries view funding levels for pension plans and how the funded ratio relates to the general idea of "soundness" or the "health" of a pension plan or system. The Pension Practice Council of the American Academy of Actuaries finds that while the funded ratio may be a useful measure, understanding a pension plan's funding progress should not be reduced to a single measure or benchmark at a single point in time. Pension plans should have a strategy in place to attain or maintain a funded status of 100% or greater over a reasonable period of time[2].

Key Points

- Frequent unchallenged references to 80% funding as a healthy level threaten to create a mythic standard.
- No single level of funding should be identified as a defining line between a "healthy" and an "unhealthy" pension plan.
- Funded ratios are a point-in-time measurement. The movement or trend of the funded ratio is as important as the absolute level.
- Most plans should have the objective of accumulating assets equal to 100% of a relevant pension obligation.
- The financial health of a pension plan depends on many factors in addition to funded status—particularly the size of any shortfall compared with the resources of the plan sponsor.

What a Funded Ratio Is and Is Not

The funded ratio of a pension plan equals a value of assets in the plan divided by a measure of the pension obligation. Confusion sometimes can result when the term "funded ratio" is used without a clear understanding of how the pension obligation is measured or whether some

[1] Please see Appendix: Development and Sample Usage of the "80% Standard."
[2] Only in unusual situations would a goal other than a 100% funded ratio be targeted. These might include nonqualified pension plans, legislated funding targets or special concerns that a plan sponsor has with setting aside assets equal to the full value of the pension obligation. Social insurance programs, particularly pay-as-you-go programs like Social Security, also do not have a goal of 100% advance funding.

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form of asset smoothing is being used. Actuaries use different methods to measure a pension obligation for different purposes. For example, the measurement of the obligation used to determine a contribution strategy is often different from the measurement used for financial reporting or estimating settlement costs. The context for a funded ratio is important; but a detailed discussion of the various reasons for or methods used to measure different types of pension obligations is outside the scope of this brief.

Actuarial funding methods generally are designed with a target of 100% funding—not 80%. If the funded ratio is less than 100%, contribution patterns are structured with the objective of attaining a funded ratio of 100% over a reasonable period of time.

While it is unclear when widespread use began, an 80% benchmark has appeared in research reports, legislative initiatives, and in the media as a dividing line between healthy and unhealthy plans. A 2007 Government Accountability Office (GAO) report on government pension plans identified 80% as a de facto standard, citing experts without attribution. Subsequent uses of the 80% level often cite the 2007 GAO report.

The Pension Protection Act of 2006 (PPA) limits benefit improvements, lump sum payments, and use of the funding balances based on an 80% ratio of assets to the PPA funding target. Also under PPA, multiemployer plans use 80% as a level below which stricter funding rules become effective. As a final note, credit rating agencies use various funded ratios, including 80%, as a general indicator of a public pension plan's financial health.

Identifying specific levels of funding as "too low" as PPA does is useful for some purposes (e.g., implementing benefit restrictions); but it does not follow that achieving or maintaining a funded ratio at some particular level should be considered healthy or adequate. A plan with a funded ratio above 80% (or any specific level) might not be sustainable if the obligation is excessive relative to the financial resources of the sponsor, if the plan investments involve excessive risk, or if the sponsor fails to make the planned contributions.

Just as being more than 80% funded does not assure a plan is adequately funded, a plan with a funded ratio below 80% should not necessarily be characterized as unhealthy without further examination. A plan's actuarial funding method should have a built-in mechanism for moving the plan to the target of 100% funding. Provided the plan sponsor has the financial means and the commitment to make the necessary contributions, a particular funded ratio does not necessarily represent a significant problem.

In addition, the funded ratio is a measure of a plan's status at one time. A plan that is responsibly funded easily can have its funded status vary significantly from one year to the next solely because of external events. Funded ratios should be looked at over several years to determine trends and should be viewed in light of the economic situation at each time. Higher funded ratios are to be expected following periods of strong economic growth and investment returns such as at the end of the 1990s. Lower funded ratios are to be expected after recessions or years of poor investment returns such as the economic downturn that began in 2008. Whether a particular shortfall affects the financial health of the plan depends on many other factors—particularly the size of the shortfall compared to the resources of the plan sponsor.

The funded ratio is most meaningful when viewed together with other relevant information. Other factors that might be considered in assessing the fiscal soundness of a pension plan include:

- Size of the pension obligation relative to the financial size (as measured by revenue, assets, or payroll) of the plan sponsor.
- Financial health (as measured by level of debt, cash flow, profit or budget surplus) of the plan sponsor.
- Funding or contribution policy and

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whether contributions actually are made according to the plan's policy.

- Investment strategy, including the level of investment volatility risk and the possible effect on contribution levels.

Each of these factors should be examined over several years and in light of the economic environment.

Plan sponsors experience a variety of circumstances that could lead to funded levels that are less than 100% at any point. Volatile investment returns and interest rates, tight budgets, and benefit increases are some of the most important reasons why pension plans may be underfunded. The consequences of becoming underfunded include larger future contribution requirements, less security for participant/member benefits, and the potential that the current cost of pension benefits may need to be paid by future stakeholders (e.g., shareholders or taxpayers). All of these risks can be managed through appropriate benefit, funding, and investment policies.

Summary

A funded ratio of 80% should not be used as a criterion for identifying a plan as being either in good financial health or poor financial health. No single level of funding should be identified as a defining line between a "healthy" and an "unhealthy" pension plan. All plans should have the objective of accumulating assets equal to 100% of a relevant pension obligation, unless reasons for a different target have been clearly identified and the consequences of that target are well understood.

APPENDIX: DEVELOPMENT AND SAMPLE USAGE OF THE "80% STANDARD"

This appendix provides an overview of where use of the 80% funded "standard" has been observed, from academic to general media reports. Note that this is a small sample and by no means an exhaustive list and is provided for illustrative purposes only.

References in academic and other research-based reports

U.S. Government Accountability Office, *State and Local Government Retiree Benefits— Current Status of Benefit Structures, Protections, and Fiscal Outlook for Funding Future Costs*, September 2007, http://www.gao.gov/assets/270/267150.pdf

- "A funded ratio of 80% or more is within the range that many public sector experts, union officials, and advocates view as a healthy pension system."

Pew Research Report, *The Trillion Dollar Gap— Underfunded state retirement systems and the roads to reform*, February 2010, http://www.pewstates.org/uploadedFiles/PCS_Assets/2010/Trillion_Dollar_Gap_Underfunded_State_Retirement_Systems_and_the_Roads_to_Reform.pdf

- "Many experts in the field, including the U.S. Government Accountability Office, suggest that a healthy system is one that is at least 80% funded."

Stanford Institute for Economic Policy Research, *More Pension Math: Funded Status, Benefits, and Spending Trends for California's Largest Independent Public Employee Pension Systems*, Feb. 21, 2012, http://www.cacs.org/images/dynamic/articleAttachments/7.pdf

- "None of the systems is at or above 80% funded, which is the conventional minimum funded ratio."
- "A plan is typically considered well-funded if its funded ratio is greater than 80%…"

Legislative references

Description of New Jersey pension legislation passed in 2011, http://blogs.app.com/capitolquickies/files/2011/06/S-2937-Summary-revised.pdf

- "In addition, these changes allow all pension systems to reach an 80% funding ratio, which is the ERISA and Government Accountability Office standard for a healthy pension system."

General media references

Connecticut Gov. Dan Malloy quoted in January 2012 online report, http://connecticut.onpolitix.com/news/97016/gov.-talks-about-employee-pension-fund

- "We need to be fiscally strong, we need to repair the damage that has been done by successive administrations in this state," [Connecticut Governor] Malloy said. "It is no honor to have the worst funded pension program in the country."

Malloy continued on to say, "What I actually aspire to is getting to an 80% funding as rapidly as we can and the fact that we can do that and save the taxpayers $6 billion is pretty important."

Bloomberg, "Texas Teacher Pension Needs 21% Return to Keep 80% Funded Ratio," April 19, 2011, http://www.bloomberg.com/news/2011-04-19/texas-teacher-pension-needs-21-return-to-keep-80-funded-ratio.html

- "The Teacher Retirement System of Texas needs an annual return of 21% in the year ending Aug. 31 to maintain an 80% funded ratio, the level actuaries consider adequate to cover liabilities, said its deputy director."

Gerri Willis, "Pension Bust," Fox Business, March 16, 2012, http://www.foxbusiness.com/on-air/willis-report/blog/2012/03/16/pension-bust

- Typically a pension plan is considered healthy if it meets an 80% funded benchmark.

Credit rating agencies

Standard & Poor's, "U.S. State Ratings Methodology," Global Credit Portal, Jan. 3, 2011, http://www.standardandpoors.com/prot/ratings/articles/en/us/?articleType=HTML&assetID=1245320477069

Pension Funded Ratio	
Strong	90% or above
Above Average	80% to 90%
Below Average	60% to 80%
Weak	60% or below

Fitch Ratings, "Enhancing the Analysis of U.S. State and Local Government Pension Obligations," Feb.17, 2011, http://www.ncpers.org/Files/2011_enhancing_the_analysis_of_state_local_government_pension_obligations.pdf

- "Fitch generally considers a funded ratio of 70% or above to be adequate and less than 60% to be weak, while noting that the funded ratio is one of many factors considered in Fitch's analysis of pension obligations."

Online commentary on "80% Standard"

Girard Miller, "Pension Puffery—Here are 12 half-truths that deserve to be debunked in 2012," Jan. 5, 2012, http://www.governing.com/columns/public-money/col-Pension-Puffery.html

- "Half-truth #4: "Experts consider 80% to be a healthy funding level for a public pension fund." This urban legend has now invaded the popular press, so it's about time somebody set the record straight. No panel of experts ever made such a pronouncement. No reputable and objective expert that I can find has ever been quoted as saying this. What we have here is a classic myth. People refer to one report or another to substantiate their claim that some presumed experts actually made this assertion (including a GAO report and a Pew Center report that both cite unidentified experts), but nobody actually names these alleged "sources." Like UFOs, these "experts" are always unidentified. That's because they don't actually exist. They can't exist, because the pension math and 80 years of data from capital markets history just don't support these unsubstantiated claims."

Keith Brainard and Paul Zorn, "What is the source of the 80-percent threshold as a healthy or minimum funding level for public pension plans?" January 2012, **https://www.nasra.org/files/Topical%20Reports/Funding%20Policies/80_percent_funding_threshold.pdf**

- "Recently, some have challenged the idea that an 80% funding level is a healthy level for public pension plans and have asked about the origins of such statements. Based on our research, the use of 80% as a healthy or minimum public pension funding level seems to have its genesis in corporate plans, for which it was a statutory threshold. This standard was also applied to private sector multiemployer plans."