

Article Title: Guidance | Criteria | Governments | U.S. Public Finance: Public Pension Funds Data: OVERVIEW AND SCOPE

1. This document provides additional information and guidance related to our criteria "Public Pension Funds," published June 27, 2007. It is intended to be read in conjunction with those criteria. For a further explanation of guidance documents, please see the description at the end of this article.

2. This guidance discusses additional information that S&P; Global Ratings may consider when exercising analytical judgement in assessing pension fund independence, management, and operating and financial performance, as well as when assessing a credit enhancement program issue. Key Publication Information Original publication date: Feb. 26, 2021 This article is related to "Public Pension Funds," published June 27, 2007. We may revise this guidance from time to time when market dynamics warrant reevaluating the variables and assumptions we generally use in our analysis.

GUIDANCE Credit Enhancement Programs

3. To rate a credit enhancement program issue, we first assign a public issuer credit rating to the pension fund itself by applying our "Public Pension Funds" criteria, published on June 27, 2007. We then apply "Guarantee Criteria" or "Commercial Paper, VRDO, And Self-Liquidity," with areas of analysis including the maximum permitted program exposure amount relative to the pension fund as a percentage of total invested assets; the percentage of normal annual net cash flow (income and contributions minus required annual pension benefit payments); and the percentage of annual pension benefit payments.

Pension Fund Independence

4. Factors and questions that S&P; Global Ratings analysts may consider when evaluating pension fund independence include: Are pension board directors appointed independently, with staggered terms, or do they serve at the pleasure of the government sponsor? Are operating and/or investment decisions vested solely in the management of the pension fund, or are they influenced or determined by the government sponsor's representatives? Are contribution rates determined independently, based on plan funding needs, or are they merely a function of the sponsor's annual budget process, subject to the sponsor's financial condition on a year-to-year basis? How can actuarial assumptions used to determine pension funding levels be influenced or revised? Can pension assets be reclaimed or diverted by, and to, the government sponsor for other uses?

5. For example, we view contribution rates, assumptions, and methods that are determined based on plan funding needs by an independent actuary, rather than influenced by a political process, as more favorable. On the other hand, if elected officials may determine annual contributions based on metrics tied to the sponsor's operating budget, rather than the best interest of the pension plan, we view this as weaker.

Pension Fund Management

6. When reviewing management, we focus on three areas: organization, operational effectiveness, and financial risk management.

7. Factors we may consider related to management organization include: How old is the fund and how is the fund organized? How large is the pension fund in terms of staff and function, and what is the role of the board of directors and government sponsor(s)? How involved is the board of directors in the management of the pension fund, including a discussion of committees such as audit and finances committees? What are management's goals and how are strategies developed? Are written policies and procedures communicated to fund staff and signed by staff annually (for example, a code of ethics)? Do investment managers possess a proven track record, what is that track record, and how closely are they monitored? What type of internal audit controls does the fund adhere to?

8. Factors we may consider when assessing management's operational effectiveness include: What are the fund's specific operating and financial goals or targets, and how has the fund performed compared with these goals? Does management maintain any form of operating and/or strategic forecasts that are tied to future retiree benefit payments or other anticipated liabilities? Does management maintain any form of contingency planning?

9. Factors we may consider when assessing financial risk management include: Is there a defined risk management process in place to ensure that assets are managed within their objectives and established risk parameters? Does the fund have predetermined limits for acceptable levels of risk, and are these guidelines detailed or general? What policies are in place for investments or trading by investment managers, and how are they monitored?

10. In general, laws, statutes, or formal policies limiting the extension of pension fund creditworthiness reduce the potential risk to pension assets and required sponsor fund contributions to maintain the solvency of the pension fund for the short and long term. The absence of formal plans to manage, monitor, and limit or control the extension of pension fund credit will impact the assessment of the pension fund. In addition to limits on the extension of pension fund credit, the risks associated with

the projects or debts to be guaranteed will be analyzed for their impact on the safety of pension fund assets. Pension Fund Operating And Financial Considerations Obligations and expenditures 11. Factors we may consider when analyzing obligations and expenditures include: Is participation optional, allowing for competing plans and possible withdrawal of participants' and sponsors' contributions and shares of assets into other pension plans? Under what conditions can employee termination withdrawals occur, and what has been the historical experience? If nonvested, do employees have rights to their contributions alone, or are they also entitled to benefits with respect to employer contributions made on their behalf? If termination payments are made to the employees, do sponsor contributions remain in the plan or revert to the sponsor? Has there been a change in actuaries and/or have any significant actuarial assumptions been altered? 12. Examples are pension benefit increases or accelerations that could increase or accelerate payments of pension benefits, such as early retirement legislation, deferred retirement options, or changes in the method of calculation of eligible compensation as the basis for pension payments. Other areas to be reviewed are the vesting rights of employees, as well as obligations for termination payments by the plan when an employee withdraws from the plan or government employment. Furthermore, S&P; Global Ratings will closely examine the pension fund's actuarial assumptions and methods, including amortization method, asset valuation smoothing assumptions, mortality, and inflation. Operating and financial performance measurements 13. S&P; Global Ratings will assess a plan's unfunded liability using the most recent accounting standards. In line with Governmental Accounting Standards Board reporting in the U.S., we consider a plan's unfunded liability to be its net pension liability (NPL). The NPL is established by subtracting the fund's plan fiduciary net position (PFNP) from the total pension liability (TPL). $TPL - PFNP = NPL$ 14. We consider a plan's funded ratio to be the PFNP divided by the TPL. $PFNP / TPL = \text{Funded ratio}$ 15. In addition to the unfunded liability and funded ratio, S&P; Global Ratings employs a variety of quantifiable metrics in order to gauge a pension fund's operating and financial performance. These metrics include: Actuarial assumed return and discount rate assumptions; Return on investments, return on assets (change in net assets divided by total assets), and return on net assets (change in net assets divided by net assets); Total margin (change in net assets divided by total revenue); Pension benefit expense service delivery efficiency; Annual employer contributions as a percentage of the sponsor's budget; Unfunded liability as a percentage of the sponsor's budget; Unfunded liability per capita (for the sponsor's population); Unfunded liability as a percentage of the sponsor's per capita income; Historical pension fund balance sheet and liquidity trends; and Historical pension fund income statement trends. 16. Although funded ratios that are 100% or higher are viewed most favorably, S&P; Global Ratings understands that keeping a pension system at or near full funding is a very difficult balancing act and may not be desirable. For example, very strong funding levels can result in greater pressure to increase benefit levels. Further, in actuarially funded pension systems, full funding results in downward pressure on the contribution rate and, in some cases, outright contribution holidays. Benefit enhancements and/or contribution holidays have the potential to pressure the pension fund's operations and funding status in the event of an adverse investment environment. 17. We suggest the following documentation for a pension fund rating: The statute or constitutional provisions that establish the organization and operation of the pension fund Five years of audited financial reports for the pension fund sponsor(s) Five years of audited financial reports for the pension fund Current pension fund actuarial report with detailed actuarial assumptions Statutory or constitutional requirements for annual sponsor funding contributions, and the terms for employee vesting of plan benefits and employee contributions and refunds The pension fund's operating and funding principles, objectives, and strategies Description of current pension fund board and management Statutory and/or formal regulations or guidelines that control allowable investments, asset allocation, and risk management Ten-year history of pension fund accumulated assets, as well as pension fund unfunded liability, funded ratios, sponsor contributions, employee contributions, and investment performance Five-year trend of investment allocation, including the current target allocation Description of pension plan benefits and changes (if any) over the past five years, plus statutes governing benefit changes Authorizing legislation permitting the extension of guarantees by the pension fund, including any limit on the types or amounts of permissible guarantees Specific terms and documentation of the credit enhancement program (or related guarantee) and capital call requirements, if any Description of the

priority of debt guarantees vis-à-vis pension benefit obligations Legal opinions on validity and enforceability of pension fund guarantees List of current obligations guaranteed by pension fund and a description of proposed and/or future debt obligations that may be considered for future guarantees Current and historical legally available liquid asset balances that are dedicated to the existing or proposed credit enhancement program, as well as monitoring procedures Detailed credit enhancement program asset liquidation plan Monthly cash flow statements Related Publications Related Criteria Public Pension Funds, June 27, 2007 Related Research Assessing U.S. Public Finance Pension And Other Postemployment Obligations For GO Debt, Local Government GO Ratings, And State Ratings, Oct. 7, 2019 Criteria And Guidance: Understanding The Difference, Dec. 15, 2017