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RESEARCH SUMMARY

OHIO PUBLIC PENSION SYSTEM
Traditional Funding Ratios Are Not Enough for Pension Funds

Investment returns have suffered since 2008, and—largely as a result—the probability that many public sector pension plans will remain solvent has declined, raising concerns about their sustainability. The average funding ratio, commonly used to evaluate the fiscal solvency of public sector pensions, has declined nationwide from about 84 percent in 2008 to 72 percent in 2012. Ohio in particular has severely underfunded state public pensions; the funds' small stocks of current assets are grossly insufficient to pay public employees' earned retirement benefits.

In "Ohio Public Pension System: Traditional Funding Ratios Are Not Enough for Pension Funds," economists Erick M. Elder and David Mitchell examine the structure and history of Ohio's largest public pension plans in order to calculate the probability that each fund will be able to meet its obligations in the future. Given that Ohio's pensions are less than fully funded, they will almost certainly not be able to pay their future liabilities and will need additional resources. Although there is a positive relationship between funding levels and the ability to pay future liabilities, even a "fully funded" pension may be unable to pay all its future promised payments without additional contributions or an increase in taxes. If the financial health of Ohio's public pension system does not improve, state employees and taxpayers may end up bearing the burden.

KEY FINDINGS

Because Ohio's four largest pension plans have low funding ratios and because investment returns are volatile, these plans only have sufficient assets to pay benefits with complete certainty for the next five years. After that point, the likelihood that the plans will fulfill their promised obligations begins to fall very rapidly.

The four largest Ohio pension plans are the Ohio Public Employees Retirement System (OPERS), the Ohio School Employees Retirement System (SERS), the Ohio State Teachers Retirement System (STRS), and the Ohio Police and Fire Pension Fund (OP&F). They have funding ratios ranging between 86 percent and 72 percent.

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- There is only a 50 percent chance that OPERS—Ohio's largest pension plan—will be able to fulfill its obligations by 2037. There is only a 25 percent chance that OP&F will be able to do so.

- Though funding ratios are often used as indicators of a pension plan's health, they do not fully represent a plan's ability to fund its promised benefit payments without additional resources.

Ohio Pension Plans Need More Assets to Pay Promised Benefits

When pension plans don't have sufficient assets to pay future liabilities, they impose a cost on future generations in the form of increased contributions or reduced benefits. For states such as Ohio with low funding levels, necessary pension reform could affect current and future public-sector employees and retirees, as well as taxpayers. These states will need to acquire more assets in order to pay promised benefits. Otherwise, higher taxes will be necessary.

- *More assets are necessary*. To significantly increase the probability that Ohio's pension plans will fulfill their future obligations using their current distribution of investments, they will need approximately two-and-a-half times as many assets as they currently have.

- *But there is a potential for overfunding*. There is a tradeoff between the probability of being able to pay a pension's liabilities and the probability of having "too many" assets. Any effort to reduce the risk of running out of assets before all pensions can be paid also increases the risk that pension funds will end up with too much money. A surplus can lead to significant political pressure to raise pension benefits, which could exacerbate pension funding problems.

A Funding Ratio Does Not Fully Represent a Plan's Solvency

The funding ratio focuses solely on the amount of assets a plan has in its portfolio in relation to its liabilities. But the ability to meet future payments also depends on the performance of those assets.

- A "fully funded" pension, or a plan that has assets *on hand* that equal the present value of its future liabilities, is not guaranteed to have sufficient assets to pay all its promised future liabilities because actual returns may be less than expected.

- If Ohio's pensions are funded at 100 percent (or become funded at this level in the near future), there is still only a 50 percent probability they will pay all their promised benefits through the year 2045 and only a 35 percent probability they will pay all their currently promised benefits over the next 63 years.

CONCLUSION

Ohio's four largest public pension plans are severely underfunded based on traditional metrics of pension solvency, and they are only *guaranteed* to be able to finance their promised obligations for roughly the next decade without additional taxpayer contributions.

However, the funding ratio does not take into consideration the investment risk associated with pension plan assets; even if Ohio's pensions were fully funded today, they would still only have a fifty-fifty chance of being able to fulfill their promises in the year 2045. Looking beyond the funding ratio reveals that even states with fully funded pension plans should be wary of the assets they have on hand in order to be better prepared to meet their obligations in the future.