To view report 10-14

An Evaluation:

State of Wisconsin Investment Board

November 2010

Report Highlights

Over the last three years, as financial markets experienced their worst decline since the 1930s, Wisconsin Retirement System assets fluctuated significantly.

Significant investment losses in 2008 will affect Wisconsin Retirement System participants and employers for the next several years.

A new "risk parity" strategy is intended to reduce the effects of market volatility.

The State Investment Fund's returns consistently exceeded performance benchmarks.

The State of Wisconsin Investment Board manages the assets of the Wisconsin Retirement System, the State Investment Fund, and five other state insurance and trust funds. The Retirement System's Core Fund and Variable Fund account for 93.2 percent of all assets under its management and fund retirement benefits for more than 560,000 current and former state and local government employees. The State Investment Fund provides short-term investment and cash management for the Wisconsin Retirement System; other funds of the State; and the counties, municipalities, and other local units of government that participate in the Local Government Investment Pool.

As of December 31, 2009, the Investment Board managed $78.1 billion in domestic and international investments. Its assets were primarily stocks, bonds, real estate, private equity and debt (including direct loans to Wisconsin companies), and cash. The nine-member Board of Trustees establishes long-term investment strategies and policies, while the Executive Director and professional staff are responsible for day-to-day investment management. For some investments, external managers and advisors supplement staff resources or provide expertise that would otherwise not be available.

Statutes require the Legislative Audit Bureau to perform a biennial management audit of the Investment Board. This evaluation reviews the performance of Wisconsin Retirement System investments in 2007, 2008, and 2009, as well as the implications of recent returns for participants, employers, and the system's long-term goals. We also reviewed the Investment Board's plans to reduce the effects of market volatility on the Core Fund, as well as the performance of the State Investment Fund.

Key Facts and Findings

The Investment Board managed a total of $78.1 billion in assets at the end of 2009.

The Wisconsin Retirement System lost a total of $23.6 billion in 2008, but rebounded strongly in 2009.

The Core Fund and the Variable Fund both exceeded their ten-year performance benchmarks in each of the past three years.

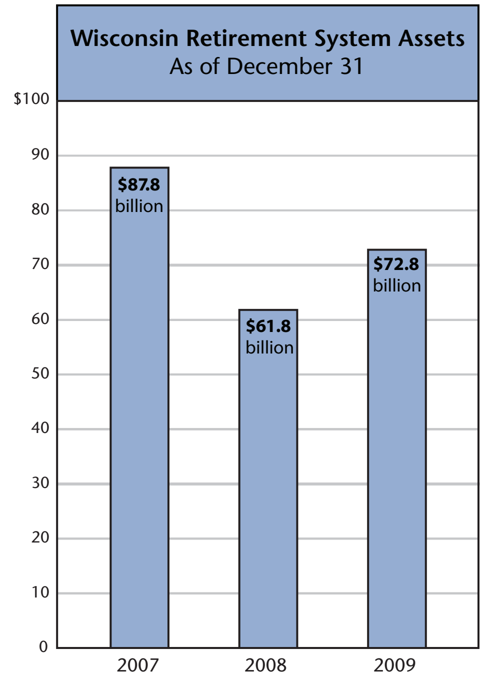
For the first time in the Core Fund's history, retirees experienced reductions in their monthly annuity payments.

The State Investment Fund consistently exceeded its benchmarks during our review period.

The General Fund borrowed more than $1.0 billion from the State Investment Fund during 2009.

Wisconsin Retirement System Investments

The Investment Board's basic investment objective is to provide earnings that, along with contributions from employers and participants, will be sufficient for the system to pay projected pension benefits over time. Assets are managed in two funds. At least one-half of each participant's pension fund contributions are deposited to the larger Core Fund, which is a fully diversified, balanced fund. Approximately 20 percent of participants have also chosen to participate in the more volatile Variable Fund, which is an equity (stock) fund.



As financial markets experienced their worst decline since the 1930s, the value of both funds fluctuated significantly during the period we reviewed. In 2007, their combined value reached a record high of $87.8 billion. In 2008, each fund experienced its largest one-year loss since the Wisconsin Retirement System was created, and together they lost a total of $23.6 billion. Both funds rebounded strongly in 2009, when they gained a total of $13.5 billion. Their combined value on December 31, 2009, was $72.8 billion.

Because growth or decline in absolute terms does not necessarily reflect how well assets are being managed, we assessed the Investment Board's performance by comparing one-, three-, five-, and ten-year returns to benchmarks established by the Board of Trustees.

Both funds exceeded their ten-year performance benchmarks in each of the past three years, but performance relative to shorter-term benchmarks fluctuated.

For example, the Core Fund lagged its one-year benchmark in 2008, when it lost 26.2 percent of its value, but outperformed its one-year benchmark by a large margin in 2009, when its value increased by 22.4 percent. The Variable Fund exceeded its one-year benchmark in 2009, when it achieved its highest return to date and its value increased by 33.7 percent. However, the Variable Fund lost 39.0 percent of its value in 2008, despite meeting its one-year benchmark.

The Investment Board also encountered liquidity issues in 2008, when two external managers imposed withdrawal restrictions on approximately 20 percent of its retirement fund assets. Restrictions remained on a portion of the investments until October 2010.

Funding Public Pensions

The Core Fund's 2009 performance was favorable compared to the average annual rates of return earned by nine other public pension funds. However, the losses of 2008 will significantly affect participants and employers for the next several years.

The Wisconsin Retirement System is unique among public pension plans in that participants share investment risk. Therefore, for the first time in the Core Fund's history, retirees experienced reductions in their monthly annuity payments as a consequence of the 2008 investment losses. Core Fund annuity payments were reduced by 2.1 percent in 2009 and 1.3 percent in 2010. Annuity payments funded by the Variable Fund were reduced by 42.0 percent in 2009 but increased by 22.0 percent in 2010.

Likewise, public employers' costs to fund pension benefits increased from 10.4 percent of employee salaries in 2009 to 11.0 percent in 2010 and 11.6 percent in 2011, which will be the highest rate since 1996.

Wisconsin Retirement System funds are invested for the long term, and actuarial expectations for the long-term earnings necessary to meet pension obligations are currently 7.8 percent. From the current system's inception in 1982 through 2009, the Core Fund has returned 10.5 percent. However, the ten-year returns of 3.8 percent in 2008 and 4.3 percent in 2009 suggest that careful review of future investment expectations and performance will be important to ensuring the continued long-term health of the Wisconsin Retirement System.

Changes in Investment Strategy

The Investment Board's authority for the Wisconsin Retirement System's investments was significantly increased in "investment modernization" legislation enacted in 2007 Wisconsin Act 212. The Investment Board is using this authority to pursue a new "risk parity" investment strategy that will shift some Core Fund assets from equities to less-volatile investments and may attempt to increase returns through leverage by investing in futures and other derivatives.

In January 2010, the Board of Trustees approved the first year of a three-year plan that potentially reduces the Core Fund's asset allocation targets from 55.0 percent equities in 2009 to 43.0 percent equities in 2012.

The plan also allocates funds for the Investment Board to establish its first hedge fund portfolio, and it explicitly allows the Investment Board to leverage up to 4.0 percent of the Core Fund's value for investment purposes in 2010. Up to 20.0 percent of the Core Fund's value could potentially be leveraged through the use of futures or other derivatives by 2012. As of October 2010, the Investment Board had not implemented the use of leverage allowed in the plan.

Leverage is not a new strategy for the Investment Board or most other pension fund managers. In the past, its use has both helped and harmed the performance of funds under the Investment Board's management. For example, the leverage used in many real estate investments improved the Core Fund's performance in 2005 and 2006 but significantly reduced returns in 2008 and 2009.

Because leverage multiplies losses as well as gains, its risks increase with the ratio of leveraged investments. The Investment Board's current risk parity plan allows it to leverage the Core Fund up to a ratio of 1.04-to-1 in 2010, and the ratio could potentially increase to 1.2-to-1 if 20.0 percent of the Core Fund's value were leveraged in 2012. Failed private firms that misused leverage had much higher ratios. For example, Lehman Brothers Holdings Inc. was leveraged at a ratio of 44-to-1.

Although the merits of risk parity strategies remain subject to debate by investment professionals and academics, there seems to be agreement that key risks and challenges need to be effectively managed and that investors who adopt these strategies must be prepared to accept short-term underperformance relative to more traditional investment strategies during some periods—such as in a strong equities market—in exchange for less volatility over the long term. Our report includes a recommendation for the Investment Board to report on its efforts to manage risk and increase its oversight capabilities.

State Investment Fund

During the period we reviewed, approximately one-half of deposits to the State Investment Fund were made by participants in the Local Government Investment Pool.

Most of the State Investment Fund's investments are either explicitly or implicitly guaranteed by the federal government, and its returns consistently exceeded benchmarks during the entire period we reviewed. Returns benefited from the Investment Board's ability to extend the average maturity of investments and its decision to hold more than one-half of State Investment Fund investments in federal agency securities rather than U.S. Treasury Bills.

The State's General Fund is authorized to borrow from the State Investment Fund if it cannot meet current funding obligations. Borrowing increased during the period we reviewed, although it did not exceed statutory limits.

We reviewed steps the Investment Board has taken to minimize the risk of credit default associated with its investments in the Wisconsin Certificate of Deposit Program, which loans funds to Wisconsin banks.

Recommendations

To help ensure effective oversight and risk management, our report includes recommendations that:

☑ the Investment Board and the Department of Employee Trust Funds provide a status report to the Legislature by May 31, 2011, on their current assessment of the appropriate actuarial investment expectation for the Core Fund and the ability of the Investment Board to meet the expectation in the short- and long-term future *(p. 32)*; and

☑ the Investment Board's annual report to the Legislature include a discussion of efforts to enhance entity-wide risk management capabilities *(p. 37)*.

Additional Information

For a copy of report 10-14, which includes a response from the State of Wisconsin Investment Board's Executive Director, call **(608) 266-2818** or visit our Web site:

www.legis.wisconsin.gov/lab

Address questions regarding this report to:

Diann Allsen
(608) 266-2818

Legislative Audit Bureau

22 East Mifflin Street
Suite 500
Madison, WI 53703
(608) 266-2818

Janice Mueller
State Auditor

The Legislative Audit Bureau is a nonpartisan legislative service agency that assists the Wisconsin Legislature in maintaining effective oversight of state operations. We audit the accounts and records of state agencies to ensure that financial transactions and management decisions are made effectively, efficiently, and in compliance with state law, and we review and evaluate the performance of state and local agencies and programs. The results of our audits, evaluations, and reviews are submitted to the Joint Legislative Audit Committee.

To view report 10-14