Public University Retirement Systems in the Midwest: An Overview

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Abstract

This paper examines the recent financial experience of public university defined benefit retirement plans in several Midwestern states. Generally, funding percentages have declined over the past ten years. In some instances, the decrease in funding level has been on the order of thirty percentage points. Little significant change in average plan asset allocation is seen over the past four years.

I. Introduction

Arguably the biggest changes in the past few decades in the field of retirement planning is the nearly universal switch of private, corporate employers from providing their employees defined benefit pension plans to providing instead some sort of defined contribution retirement plan. In the early to middle twentieth century, those workers whose employers offered a retirement plan tended to stay with employers for a whole career, and as a result looked forward to a stable, known retirement income. Because life expectancies were shorter than now, and because inflation rates and investment rates of return were more stable than now, companies were fairly easily able to guarantee their employees this income, which was a contract obligation of the firm and was based on an employee's tenure, age, and average salary.

In recent years, many privately-held corporations have gone to 401(k) plans or other defined contribution plans as their primary means for providing retirement benefits to their employees. While these plans are less fiscally demanding on the employer, the investment, inflation and superannuation risks are shifted directly from the employer to the employee. As a result, many of our citizens may find themselves ill-prepared for retirement. Until very recently, the conventional wisdom has been that if a worker wanted the protections of a defined benefit pension plan, the best place to work is in the government. This notion has its roots in the fact that governments are not under a profit-maximization constraint and have revenues based on taxing authority which, in theory, leads to stability in cash flows. Many university professors across the country are covered under various defined benefit pension plans for state employees.

Recently, many state and local public employee defined benefit pension plans have received attention due to their poor financial position. For example, the Colorado Public Employees' Retirement Association, which provides a defined benefit pension plan for that state's employees, has recently reported that it had assets of $29.5 billion in July 2009, while the present value of its liabilities was $57 billion. Colorado took aggressive measures in an attempt to remedy this shortfall, passing legislation increasing the retirement age and years of service requirements of retirees, increasing required contributions by both employer agencies and employees, and reducing cost of living adjustments for pensioners (Wojick, 2010). Clearly, employees who seek government or state agency employment in an attempt to avoid retirement

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risks still face some of those risks. The question then becomes "are these plans sustainable over the long-run?"

In the United States, corporate sector workers who are participants in a "qualified retirement plan" enjoy considerable protections through the federal Employee Retirement Income Security Act (ERISA). ERISA protections include requirements for coverage, eligibility, vesting, fiduciary duty, and against prohibited transactions. For defined benefit plans in particular, ERISA establishes a funding requirement. That is, employers are annually required to contribute the actuarially determined amount of benefits earned by employees. Further, if the present value of liabilities of the plan is greater than the plan assets, the plan is required by ERISA to increase annual employer contributions to overcome the deficit. Finally, ERISA requires that private, corporate defined benefit plans insure employee benefits with the Pension Benefit Guarantee Corporation (PBGC). ERISA does not apply to public employee pensions.

This paper makes a preliminary examination of a number of public university retirement systems in the Midwest States in an effort to determine the financial health and viability of the individual systems, as well as the trend in each state. Such results should be of interest to the tens of thousands of state employees who are or will be directly impacted by such plans.

II. University Retirement Plans in the Midwest

We examine the retirement plans in the Midwest region of the United States as defined by the U.S. Census Bureau. This statistical region includes Illinois, Indiana, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. These plans may vary considerably with regard to benefit structure and funding levels as one looks from state to state. At least for university faculty employees, several of the states have recognized the advantages (at least to the employer) of a defined contribution system. Indiana, Michigan, Minnesota, and Nebraska have defined contribution plans as their primary retirement benefit, some of these having switched from a defined benefit plan in the past decade. Some states, like Iowa, have more than one system, and participation varies by institution. Wisconsin has a hybrid plan, which combines features of defined benefit and defined contribution plans. We analyze defined contributions in the remaining states: Missouri, Illinois, Kansas, North Dakota, South Dakota, and Ohio.

Those universities that still offer defined benefit plans are not immune to problems similar to those in Colorado. Under a defined benefit pension plan, the investment risk is borne by the employer. Thus, if investment returns fall short as they have several times in the first decade of the twenty-first century, employers may find themselves having to contribute vast sums of money to make the plan financially stable. A case in point is the Kansas Public Employees Retirement System (KPERS). According to a report released in September 2009 by the Center for Applied Economics at the Kansas School of Business, the pension fund is headed for bankruptcy. This was the case even before the current recession because of structural problems in the plan. However, the current recession has exacerbated the problem. The report concludes that "KPERS is bankrupt under current operating assumptions". Furthermore the report found that when utilizing the market value of assets, the total unfunded actuarial liabilities of the plan have more than doubled from $4.8 billion to $10.25 billion within the last year.

III. Midwest Defined Benefit Plans

We examine reported assets, liabilities and investments of the defined benefit plans in the six Midwest defined benefit states. Data are collected from the published annual reports issued by each plan. Government pension plan financial statements are subject to standards set by the Government Accounting Standards Board (GASB); thus, to the extent that any corporate financial statements are comparable, the annual reports of these pension funds are comparable. However, like corporate accounting, government pension accounting statements are not perfectly comparable (states may use different fiscal years or use different allowable accounting treatments), so inferences must be made with caution.

One of the most critical measurements used to determine the financial health of a defined benefit pension plan is the percentage of liabilities funded by each plan. Unfunded liabilities are representative of the debt obligation to cover future and current benefit payouts that are greater than the current assets of the plan. A plan that has enough assets to cover current and future benefit obligations is said to be "fully-funded". Many pension experts believe that a defined benefit pension plan is in excellent shape if it has a funding level of 80% or more (that is to say the plan has assets to cover 80% of all current and future obligations).

Table I shows funding percentages for six Midwestern states' public university retirement plans over the years 2000 to 2009. Over that time period, all plans showed a downward trend in funding levels, with some seeing critical decreases in funding percentage. Four states, Illinois, Kansas, North Dakota and Ohio, each saw their funding percentages drop by at least thirty percentage points. Of those four, only North Dakota continues to meet the 80% level. Two plans, Missouri and South Dakota, also decreasing their funding levels, have avoided the massive declines of the other four. In fact, both of these states continue to meet the 80% benchmark.

It is interesting to note the plans' decline during the 2008-2009 fiscal year. Most state retirement plans use a fiscal year ending in June. Thus the 2008-2009 fiscal year would contain the critical stock market decline of 2008. Every one of the states saw its funding percentage drop from 2008 to 2009, undoubtedly in response to the decimation of equity prices in that time period. The average decline across the six states over this period was 8.5 percent. While alarming, these results compared favorably when looking at state plans of all types across the nation which lost an average of twenty percentage points (Diamond, 2010). Two states in particular, Kansas and Ohio, saw very large declines (12 and 19 percentage points, respectively) in funding percentages in that year. The other states saw much more modest decreases.

The extreme nature of the losses of the Kansas and Ohio plans, in response to the 2008 stock market decline is hard to explain, particularly given the asset allocation of the six plans. Table II shows asset allocation percentages for these six state plans for the fiscal years ended in 2006 thru 2009, as well as the year-end total assets of those plans. At year end 2008, Kansas and Ohio had less exposure to domestic equity than at least two of the other states (South Dakota reports domestic and international equities as one class). Kansas and Ohio had exposure to international equities that was comparable to the other states. The time period was also a difficult time for mortgage-backed bonds, and it may be possible that these two states were holding this type of debt, categorized as fixed income.

Also, Table II shows a significant decline in total plan assets for each of the six states. As a percentage of 2008 assets, the plans lost an average of 24.1 percent with even the best performing state plan losing 22.5 percent. It was a brutal year for these plans as well as state plans across the country that lost an average of 21.4% in plan assets (Diamond, 2010).

Most of the states made few significant adjustments to their asset allocations between fiscal years 2008 and 2009. On average, across the six states, equity holdings (domestic and international) declined slightly (less than 2 percent). In fact, despite the major decline in domestic equity values over this period, four of the states slightly increased their allocation percentages in domestic equities. Two states that implemented significant changes in asset allocations were Missouri and North Dakota. Missouri decreased its cash and equivalents and significantly increased its alternative investments. North Dakota significantly increased its position in fixed income securities. These limited changes in asset mixes may indicate resolve to remain with a long-term strategy through limited re-balancing.

IV. Conclusions

While several public retirement plans in the Midwest have changed to defined contribution, the financial state of the remaining defined benefit plans leaves the participants effectively bearing risk due to the low funding levels and the absence of PBGC insurance. There is considerable disparity in the funding levels among the plans, as well as the past decade's funding trend. As states suffer from shortfalls in revenue throughout the country, it is indeed tempting to shift from the defined benefit plan to defined contribution plans for state university employees. State legislatures across the Midwest and the entire country have much to consider with regard to the future funding of these defined benefit plans as state revenues have declined significantly. The funding of state services hangs in the balance.

While this report should help in assessing the financial well-being of university employees with regard to the adequacy of their primary retirement plan, other research should be done with regard to the additional sources of retirement funds available to U.S. retirees. This is a major concern for all Americans in that an elderly person without adequate financial resources puts a burden on the entire society in which he or she lives. Such information will help policy makers determine the best course of action for the future.

Table I
Liability funding percentage of selected Midwest university defined benefit retirement plans, 2000-2009

Year	Illinois	Kansas	Missouri	N. Dakota	Ohio	S. Dakota
2000	88.20%	89.00%	84.90%	115.10%	92.00%	96.00%
2001	72.10%	88.00%	93.50%	110.60%	91.20%	96.40%
2002	58.90%	85.00%	92.50%	104.20%	77.40%	96.70%
2003	53.90%	78.00%	87.90%	98.10%	74.20%	97.20%
2004	66.00%	75.00%	82.00%	94.00%	74.80%	97.70%
2005	65.60%	70.00%	82.30%	90.80%	72.80%	96.60%
2006	65.40%	69.00%	82.80%	86.80%	75.00%	96.70%
2007	68.40%	69.00%	84.30%	93.40%	82.20%	97.10%
2008	58.50%	71.00%	83.40%	92.60%	79.10%	97.20%
2009	54.30%	59.00%	80.70%	85.10%	60.00%	91.80%
Average	65.13%	75.30%	85.43%	97.07%	77.87%	96.34%
Median	65.50%	73.00%	83.85%	93.70%	76.20%	96.70%
Minimum	53.90%	59.00%	80.70%	85.10%	60.00%	91.80%
Maximum	88.20%	89.00%	93.50%	115.10%	92.00%	97.70%

Source: States' respective pension plan annual reports.

Table II
Asset allocation percentages of selected Midwest university defined benefit retirement plans, 2006-2009

Asset Class 2009	Illinois	Kansas	Missouri	N. Dakota	Ohio	S. Dakota	Average
Domestic Equities	35.00%	27.67%	20.40%	32.40%	31.75%	52.90%	33.35%
International Equities	26.00%	21.98%	21.00%	12.10%	20.95%	*	20.41%
Fixed Income	23.00%	30.81%	23.20%	44.00%	20.10%	24.10%	27.54%
Real Estate	5.00%	6.16%	6.20%	5.70%	12.83%	8.50%	7.40%
Cash & Short-term Investments	2.00%	9.77%	0.90%	0.60%	8.65%	0.30%	3.70%
Alternative Investments	9.00%	3.61%	28.30%	5.20%	5.72%	14.20%	11.01%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Total Assets	$11.6B	$10.2B	$6.2B	$1.3B	$54.7B	$5.6B	
Asset Class 2008							
Domestic Equities	39.50%	29.14%	22.20%	37.70%	33.35%	49.80%	35.28%
International Equities	23.50%	22.58%	19.80%	13.90%	21.50%	*	20.26%
Fixed Income	26.00%	34.63%	23.10%	35.70%	20.90%	19.60%	26.66%
Real Estate	6.00%	3.60%	6.20%	6.70%	12.57%	13.00%	8.01%
Cash & Short-term Investments	1.00%	7.07%	9.00%	0.50%	6.69%	1.30%	4.26%
Alternative Investments	4.00%	2.98%	19.70%	5.50%	4.99%	16.30%	8.91%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Total Assets	$15.2B	$13.2B	$8.0B	$1.8B	$72.6B	$7.3B	

* Domestic and international equities combined.

Source: States' respective pension plan annual reports.

Table II, continued

Asset Class 2007	Illinois	Kansas	Missouri	N. Dakota	Ohio	S. Dakota	Average
Domestic Equities	41.50%	30.60%	29.20%	41.00%	37.82%	53.50%	38.94%
International Equities	23.50%	24.60%	22.40%	16.30%	22.33%	*	21.83%
Fixed Income	21.00%	28.50%	28.30%	31.40%	22.00%	24.10%	25.88%
Real Estate	6.00%	7.10%	5.40%	5.90%	10.71%	8.50%	7.27%
Cash & Short-term Investments	0.00%	6.20%	0.00%	1.00%	3.71%	0.30%	1.87%
Alternative Investments	8.00%	3.00%	14.70%	4.40%	3.43%	13.60%	7.86%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Total Assets	$16.0B	$14.2B	$8.1B	$1.9B	$79.6B	$8.2B	
Asset Class 2006							
Domestic Equities	42.00%	32.00%	28.50%	41.00%	39.30%	56.90%	39.95%
International Equities	23.50%	25.10%	23.10%	14.60%	22.75%	*	21.81%
Fixed Income	22.00%	23.50%	29.00%	33.30%	22.70%	16.50%	24.50%
Real Estate	6.00%	7.50%	4.90%	6.00%	10.51%	6.40%	6.89%
Cash & Short-term Investments	0.00%	8.30%	0.00%	1.00%	1.87%	8.30%	3.25%
Alternative Investments	6.50%	3.60%	14.50%	4.10%	2.87%	11.90%	7.25%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Total Assets	$14.2B	$13.4B	$7.0B	$1.6B	$67.4B	$6.8B	

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