



The University of Kansas

Supporting Regional Economic Development through Analysis and Education

THE CENTER FOR **APPLIED ECONOMICS**

THE FUNDING CRISIS IN THE KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

Barry W. Poulson
Professor of Economics
University of Colorado
and
Senior Fellow
Center for Applied Economics
University of Kansas
School of Business

Arthur P. Hall
Executive Director
Center for Applied Economics
University of Kansas
School of Business

Technical Report 09-0904
September 2009

About The Center for Applied Economics

The KU School of Business established the Center for Applied Economics in February of 2004. The mission of the Center for Applied Economics is to help advance the economic development of the state and region by offering economic analysis and economic education relevant for policy makers, community leaders, and other interested citizens. The stakeholders in the Center want to increase the amount of credible economic analysis available to decision makers in both the state and region. When policy makers, community leaders, and citizens discuss issues that may have an impact on the economic development potential of the state or region, they can benefit from a wide array of perspectives. The Center focuses on the contributions that markets and economic institutions can make to economic development. Because credibility is, in part, a function of economic literacy, the Center also promotes economics education.

TABLE OF CONTENTS

| | |
|---|----|
| Executive Summary..... | 1 |
| Flaws in the Design of the KPERS System | 3 |
| Unfunded Actuarial Liabilities (UAL) | 4 |
| Contribution Rates..... | 5 |
| Unsatisfactory Legislative Reforms | 6 |
| Unsatisfactory Incentives | 9 |
| Conclusion | 12 |
| References | 13 |
| Footnotes..... | 14 |

EXECUTIVE SUMMARY

The Kansas Public Employees Retirement System (KPERs) is experiencing a funding crisis. The recent collapse of financial markets has resulted in a significant decrease in the value of the KPERs portfolio. But, the funding crisis in KPERs is not just the result of problems in financial markets. The problems in this defined-benefit pension plan have emerged over several decades, and are symptomatic of the poor incentive structure guiding the governance of many defined-benefit public pension plans. The financial market turmoil has exacerbated these problems, but KPERs is facing a long-run deterioration in its funding status.

The Kansas legislature has enacted several reforms over the past decade to address the KPERs funding problems. These reforms have included changes in benefits, increased contribution rates, and administrative changes. Unfortunately, these reforms have failed to address the fundamentally flawed incentive structure built into the KPERs defined-benefit plan.

This study explores current and past funding shortfalls in KPERs and the inherent challenges associated with the governance of defined-benefit pension plans. The study examines different measures of the magnitude of the funding shortfalls and the past legislative attempts to provide remedies.

Some of the key facts and issues are:

- A sharp decrease in the value of assets in the KPERs system last year caused the funding ratio to fall to 49 percent. Unfunded liabilities in the system doubled, from about \$5 billion to \$10 billion.
- Assuming an eight percent return on assets, Kansas-government employers would have to significantly increase contribution rates to bring the KPERs system into actuarial balance. This would be difficult for state and local employers that are experiencing a revenue shortfall.
- KPERs is bankrupt under current operating assumptions. Using more realistic assumptions regarding the expected rate of return on

assets, it is highly unlikely that the KPERs system will achieve actuarial balance over the appropriate time frame.

- The solution to the funding crises in KPERs will require fundamental reform. Everything should be on the table, including changes in benefits and increased employee contribution rates, as well as increased employer contribution rates. The governments of Kansas should also explore a complete shift to a defined-contribution arrangement, similar to the one used by the Kansas Regents system (and most private employers).

FLAWS IN THE DESIGN OF THE KPERS SYSTEM

Flaws in the design of the KPERS system can be traced to an asset smoothing methodology used to smooth the effects of market fluctuations. The smoothing methodology is used to determine the actuarial value of assets.

KPERS assumes that it will earn an eight percent return on assets in the long run.¹ This estimated return on assets is used to determine the actuarial value of assets. KPERS sets a range around the actual market value of assets. The estimated actuarial value of assets can be no less than 80 percent and no more than 120 percent of the actual market value of assets.

Since the estimated value of assets on December 31, 2008 was in excess of 120 percent of the actual market value of assets, the actuarial value of assets was set at the upper limit of 120 percent of the actual market value of assets. The following table shows the actual market value and actuarial value of assets on that date.

The actuarial value of assets reported was almost \$2 billion higher than the actual market value of assets on that date. The asset smoothing methodology determines the timing when actual market experience is recognized in the financial statements. Unfunded liabilities not recognized in the current accounting period will be recog-

Table 1

Market and Actuarial Value of Assets in the KPERS System (millions of dollars)

| | Market Value | Actuarial Value |
|--|-------------------------|----------------------------|
| Assets, December 31, 2007 | \$14,168 | \$13,433 |
| Employer and Member Contributions | 683 | 683 |
| Benefit Payments and Expenses | (1,017) | (1,017) |
| Investment Income | (3,978) | 407 |
| Preliminary Asset Value, December 31, 2008 | \$9,856 | \$13,506 |
| Application of Smoothing Methodology | N/A | (1,678) |
| Final Asset Value, December 31, 2008 | \$9,856 | \$11,828 |

Source: Kansas Public Employees Retirement System (2009A) p.4.

Table 2

Kansas Public Employees Retirement System Investment Performance Report Total Portfolio Net Asset Value \$9,814.9 Million December 31, 2008

| Portfolio | Asset Value Millions | Current Position Percent | Target Value Percent |
|----------------------------------|-------------------------------------|---|-------------------------------------|
| Domestic Equity | 2621.8 | 27.8 | 28.0 |
| International Equity | 1653.4 | 17.8 | 22.0 |
| Global Equity | 469.9 | 5.0 | 5.0 |
| Real Estate | 799.5 | 8.1 | 10.0 |
| Alternative Investment | 397.8 | 4.0 | 6.0 |
| Subtotal for Equity Assets | 5942.4 | 62.7 | 71.0 |
| Fixed Income | 1998.7 | 18.7 | 14.0 |
| Real Return | 1412.3 | 14.4 | 14.0 |
| Cash Equivalent | 453.7 | 4.2 | 1.0 |
| Subtotal for Fixed Income Assets | 3864.7 | 37.3 | 29.0 |

Source: Kansas Public Employees Retirement System (2009D) p.1.

nized in financial statements in future years. Since employer contribution rates are set based on the actuarial value of assets in the current accounting period, some of the losses in the current accounting period are deferred to future years.

Flaws in the design of the KPERS system are also linked to the assumed rate of return on assets of eight percent. Actuaries generally recommend an assumed rate of return on assets substantially below eight percent. For example, the Employees Retirement Income Security Act (ERISA) recommends that private employers assume a 6.1 percent return on assets in private pension plans.

Because KPERS assumes an eight percent return on assets, it must invest in a diversified portfolio of assets including equities as well as fixed income assets. The higher the ratio of equities relative to fixed income assets the more volatility the portfolio is likely to experience. Because of this volatility, some economists question the use of equities in public pension plans.²

Like many state and local pension plans across the country, the Kansas Public Employee Retirement System (KPERS) has experienced a drastic decline in its investment portfolio valuation. As of December 31, 2008 the market value of assets held in KPERS was \$9.9 billion.³ This was a decrease of \$4.3 billion from the December 31, 2007 figure of \$14.2 billion.⁴ The annualized dollar weighted rate of return for 2008 measured on the market value of assets was -28.5 percent.⁵

The KPERS asset allocation reported in Table 2 reveals a portfolio heavily weighted toward equities. The target share for equities is 71 percent, and for fixed income assets is 29 percent. The current position reported in Table 1 is less risky than the target portfolio because of the sharp drop in value for equities over the past year—illustrating precisely why such a high target share for equities can cause volatility.

We can compare the volatility in the KPERS plan with that in the California Public Employees Retirement System (CALPERS). CALPERS reported a 23 percent decline in the value of assets in the system over the past year.⁶ Moody's Investors Services reports that it put the triple-A rating of CALPERS on review for downgrade

for the first time.⁷ Moody's is also considering a downgrade in the triple-A rating of the California State Teachers Retirement System. A lower rating for these pension plans will mean increased borrowing costs for state and local jurisdictions in California.⁸

KPERS reported a sharper decrease in the value of assets in the system than that for the CALPERS system over the same time period. Thus Kansas should expect a similar downgrade in the bonds issued by the KPERS system.

UNFUNDED ACTUARIAL LIABILITIES (UAL)

The Government Accounting Standards Board (GASB) sets standards for reporting pension and other post-employment benefit (OPEB) plans offered by state and local governments.

Unfunded liabilities in pension and OPEB plans must be reported as debt in financial statements of state and local jurisdictions. Further, these standards require that state and local governments show progress toward eliminating unfunded liabilities over a 30-year amortization period. If pension and OPEB plans fail to meet these standards, actuaries must report that the plans are not in actuarial balance. Bond rating agencies, such as Standard and Poor's, take this information into account in rating the bonds issued by state and local government.

GASB standards require that pension funds report two schedules of information regarding the funding status of the plans: (1) The Schedule of Funding Progress and (2) The Actuarial Contribution Rate.

The following table shows the funded ratio and the unfunded actuarial liability using both the market value of assets and the actuarial value of assets over the past six years. The unfunded actuarial liabilities more than doubled from \$4,817 billion to \$10,250 billion in the past year using the market value of assets. The funding ratio fell to 49 percent based on the market value of assets.

The unfunded liability in the KPERS system is equal to about eight percent of state gross domestic product. To put this in perspective, the total state debt in Kansas is equal to about five percent of gross state product.

Using the actuarial value of assets rather than the market value of assets shows less deterioration in the funded status of the system over the past year. However, asset smoothing impacts only the timing of when the actual market experience of assets is recognized. The actuarial value of assets exceeds the market value of assets by 20 percent. This means that \$2 billion in unfunded liabilities is not recognized in these financial statements and will only be recognized in financial statements in future years.

CONTRIBUTION RATES

The actuarial process is the basis for determining employer and employee contributions into the pension plan. To meet GASB standards, the pension plan must calculate an actuarial contribution rate that will eliminate unfunded liabilities in the system within a 30-year amortization period. The actuarial contribution rate is a schedule of employer contributions required to meet this standard. The actuarial contribution rate includes two components:

- A ‘normal cost’ for that portion of projected liabilities allocated by the actuarial cost method for service of members during the year following the valuation date.
- An ‘unfunded actuarial contribution’ to cover the excess of projected liabilities over the actuarial value of assets.

As a result of legislation enacted in 1993, the KPERS system calculates a statutory contribution rate. The purpose was to set statutory payments as a level percentage of payroll to pay off unfunded liabilities in the system over a 40 year amortization period. The legislation set a cap on the amount by which the statutory contribution rate could increase each year. This statutory cap, which has been changed periodically, is currently 0.60% for all KPERS systems.⁹

Due to these statutory caps, the statutory contribution rates for State, School, and Local employers have fallen well below the actuarial contribution rates. The shortfall between these rates is 2.36 percent, 6.19 percent, and

Table 3

Unfunded liabilities and Funded Ratio Using Market and Actuarial Value of Assets

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--|---------|---------|---------|---------|---------|----------|
| Using Market Value of Assets | | | | | | |
| Funded Ratio | 71% | 71% | 72% | 76% | 75% | 49% |
| Unfunded Actuarial Liability | \$3,586 | \$4,742 | \$4,543 | \$4,184 | \$4,817 | \$10,250 |
| Using Actuarial Value of Assets | | | | | | |
| Funded Ratio | 75% | 70% | 69% | 69% | 71% | 59% |
| Unfunded Actuarial Liability | \$3,586 | \$4,743 | \$5,152 | \$5,364 | \$5,552 | \$8,279 |

Source: Kansas Public Employees Retirement System (2009A) p.6.

Table 4

Actuarial and Statutory Contribution Rates, December 31, 2008 Valuation

| System | Actuarial | Statutory | Difference |
|-----------------|-----------|-----------|------------|
| State | 11.13% | 8.77% | 2.36% |
| School | 14.96% | 8.77% | 6.19% |
| Local | 10.42% | 6.74% | 3.68% |
| Police and Fire | 17.88% | 17.88% | 0% |
| Judges | 26.38% | 26.38% | 0% |

Source: Kansas Public Employees Retirement System (2009A) p.7.

3.68 percent, respectively, for the State, School and Local Systems.¹⁰

To meet GASB standards, the KPERS system must demonstrate that the statutory contribution rate will converge with the actuarial contribution rate within a 30-year amortization period. Given the assumptions in these projections, the dates when the statutory and actuarial contribution rates converge are 2022 for the State Group and 2020 for the Local Group. The statutory and actuarial contribution rates for the School Group do not converge within the amortization period. The School System is not in actuarial balance with respect to either GASB standards, or the statutory requirements set in the 1993 legislation.¹¹

The investment losses in 2008 have caused a serious deterioration in the funded status of the KPERS system. \$2 billion of these losses are not accounted for in estimating the above actuarial contribution rates due to the smoothing of asset values. To underscore the impact of these market losses, contribution rates are calculated based on the market value of assets. Table 5 compares the actuarial contribution rates with these contribution rates based on market values of assets. Using market valuation of assets, the employer contribution rate for the State/School System would have to increase to 16.5 percent, almost double the statutory contribution rate. The employer contribution rate for the Police and Fire

System would have to increase from 17.88 percent to 20.86 percent.¹²

No one can predict the future returns on assets in the KPERS system. However, the assumption of an eight percent return on assets to determine contribution rates must be questioned. The return on assets in 2008 was -28.5 percent. Compared to an assumed rate of return of eight percent, the gap between the actual return and assumed return in 2008 was 37 percent. If future returns on assets continue to fall below the assumed eight percent rate of return, the funded status of the system will deteriorate further. In those circumstances, it is possible that none of the KPERS systems would be in actuarial balance or meet GASB standards over a 30-year amortization period.

UNSATISFACTORY LEGISLATIVE REFORMS

KPERS faces a clear funding crises. Over the years, the Kansas legislature has enacted a number of well-intentioned reforms that have failed to bring actuarial balance to the system. It is important to understand why these reforms have failed in order to move forward with reforms that will bring actuarial balance to the system.

The stated objective of the 1993 reforms was “to establish contribution rates that over time will remain relatively level, as a percentage of payroll, and to pay off

Table 5

Contribution Rates Using Actuarial and Market Valuations, December 31, 2008

| | State/School | | KP&F | |
|--------------------------------------|--------------|----------|-----------|---------|
| | Actuarial | Market | Actuarial | Market |
| Actuarial Liability | \$14,492 | \$14,492 | \$2,098 | \$2,098 |
| Asset Value | 8,252 | 6,877 | 1,480 | 1,233 |
| Unfunded Actuarial Liability | 6,240 | 7,615 | 618 | 865 |
| Funded Ratio | 57% | 47% | 71% | 59% |
| Contribution Rate | | | | |
| Normal Cost Rate | 8.53% | 8.53% | 14.71% | 14.71% |
| Unfunded Actuarial Liability Payment | 9.56% | 11.62% | 9.70% | 12.68% |
| Total | 18.09% | 20.15% | 24.41% | 27.39% |
| Employee Rate | 4.00% | 4.00% | 6.53% | 6.53% |
| Employer Rate | 14.09% | 16.15% | 17.88% | 20.86% |

Source: Kansas Public Employees Retirement System (2009A) p.8.

Why the KPERS Funding Crises may be Worse when Evaluated by Private Pension Plan Requirements

A recent study by the National Bureau of Economic Research (NBER) suggests that the funding status in KPERS and other public pension funds is worse than reported (Novy-Marx and Rauh 2009). These pension systems are likely to experience significant funding shortfalls in future years, even if the economy recovers and financial markets stabilize. These funding shortfalls will impose a heavy burden on future generations.

The potential for future funding shortfalls in pension plans can be estimated from future assets and future liabilities. Future liabilities are estimated based on the current actuarial value of liabilities, the discount rate employed by the plan, and the amortization period. Future assets are estimated based on the expected growth rate and volatility of the plan's assets.

The NBER study of a sample of state pension plans finds that future under funding in these plans is actually greater than that reported in their financial statements because of the accounting rules used to estimate future assets and future liabilities in the system.

The NBER study, and other studies as well, point out that the eight percent average discount rate used by KPERS and other state pension systems is almost certainly too high (Novy-Marx and Rauh 2009; Barclays Global Investors 2004). This discount rate assumption is based on Government Accounting Standards Board (GASB) ruling 25 and Actuarial Standards of Practice (ASOP) item 27. These standards require a discount rate determined by the accrued return on pension plan assets. Critics argue that the discount rate should be based on the market risk inherent in the system

the unfunded liability by the 2033 valuation.²¹³ The statutory contribution rate was set below the actuarial contribution rate. As a result, the dollar amount of unfunded liabilities was scheduled to increase during the initial years of the amortization period. Payments on the unfunded liabilities were scheduled to increase four percent per year. Given the actuarial assumptions at that time, the statutory contribution rate was projected to converge with the actuarial contribution rate, and unfunded liabilities would be paid off within the amortization period.

Table 6 traces unfunded liabilities in the KPERS system since the 1993 reforms. In the 1990s, the funding status of KPERS followed the projections made in the 1993 legislation. Indeed, in the late 1990s, the funding ratio improved significantly due to strong returns in the investment portfolio. However, these actuarial assumptions proved to be overly optimistic.

KPERS reported that: “By the early 2000s, it became clear that the planned employer rate increases were insufficient to fund the benefits, creating a long term funding shortfall.”²¹⁴

The deterioration of the funding status of KPERS began with the recession in 2001. Over the next five years, the funding ratio fell—declining below 70 percent from 2004 to 2006. After a brief recovery above 70 percent in 2007, the funding ratio fell again, and is now below 50 percent.

In response to this deterioration, in the funding status of the system a number of reforms have been enacted in recent years. The 1993 legislation set a cap on the annual rate of increase in statutory contributions, and that cap has been increased several times. In 2003, the legislature increased the cap on the State/School employer contribution from 0.20 percent to 0.40 percent in FY 2006, 0.50 percent in FY 2007 and 0.60 percent in FY 2009 and beyond. It also changed the methodology used to determine contribution rates.

In 2007, the legislature changed the benefit structure for new employees to reduce costs in the system. These changes included:

- First Day Membership in KPERS.
- Stricter eligibility requirements for pension benefits.

liabilities (Novy-Marx and Rauh 2009; Gold 2002; Bader and Gold 2004).

Support for the critics' position comes from the discount rate used in private pension plans (Novy-Marx and Rauh 2009). In contrast to government pension plans, private pension plans use a discount rate applied to liabilities that is a blend of corporate bond yields and Treasury bond yields. The NBER study uses a lower discount rate to estimate the present value of future liabilities in their sample of state pension systems. In 2005, the present value of liabilities in these state plans—based on an eight percent discount rate—is estimated at \$2.5 trillion. Using the Municipal bond rate to determine the discount rate results in an estimated present value of liabilities equal to \$3.1 trillion; using the Treasury rate as the discount rate, the present value of the liabilities is estimated at \$4.0 trillion (Novy-Marx and Rauh 2009).

- Averaging salaries over a longer time period in determining final average salary (FAS).
- Two percent annual automatic cost of living (COLA) adjustment in benefits at age 65.
- Increased employee contribution rates.

The legislature has also enacted some reforms that have increased costs in the system.

In 2007, the legislature eliminated “year of service” requirements for all non-school members. It also decreased vesting requirements for current employees from 10 years to five years.¹⁵ In 2008, the legislature provided a \$300 one-time benefit payment to all retirees (and their joint survivors) who retired on or before July 1, 1998, and who had ten or more years of service credit.¹⁶

In 2009, the legislature enacted minor changes in the pension system (via HB 2072, as amended in the Senate). However, the funding crises in the system went unaddressed.

The sharp fall in the funding ratio and the increase in unfunded liabilities motivated KPERS leadership to

Table 6

Summary of Historical Changes in Total System Unfunded Actuarial Liabilities as of December 31, 2008 Valuation. (\$ in millions)

| Year | Change in Unfunded Actuarial Liabilities, using June 30 Valuations | Change in Unfunded Actuarial Liabilities, using December 31 Valuations | Total cumulative Unfunded Actuarial Liabilities, December 31, 2008 |
|------|--|--|--|
| 1994 | \$537 | | |
| 1995 | (25) | | |
| 1996 | (36) | | |
| 1997 | (68) | | |
| 1998 | 215 | | |
| 1999 | (194) | | |
| 2000 | (164) | \$72 | |
| 2001 | | 475 | |
| 2002 | | 1048 | |
| 2003 | | 757 | |
| 2004 | | 1157 | |
| 2005 | | 409 | |
| 2006 | | 211 | |
| 2007 | | 188 | |
| 2008 | | 2727 | \$8279 |

Source: Kansas Public Employees Retirement System(2008) p. 14, and Kansas Public Employees Retirement System (2009A) p.4.

Using these lower discount rates to estimate the present value of future liabilities results in much higher estimates of unfunded liabilities in these state pension plans. In their financial statements, these public pension plans estimate unfunded liabilities at \$312 billion. The NBER study estimates unfunded liabilities at \$901 billion using the Municipal bond discount rate and \$1.9 trillion using the U.S. Treasury discount rate. Unfunded liabilities as a ratio of assets in the plans is estimated at 41 percent and 86 percent, respectively, for these lower discount rates (Novy-Marx and Rauh 2009).

One way to assess the magnitude of the funding crises in state pension plans is to use the same government standards as those applied to private defined-benefit pension plans. Private defined-benefit pension plans are considered 'safe' by government standards if they have enough assets to support at least 80 percent of pension benefit obligations (Life and Health Insurance News.com 2009). In 2008, only nine percent of a sample of state and local government pension plans met this standard (Munnell, A. H., J. Aubrey, and D. Muldoon 2008).

Private defined-benefit pension plans are considered 'critical' if the value of assets in the plan is 65 percent or less of pension benefit obligations (Life and Health Insurance News.com 2009). This year more than half of state and local government pension plans are likely to fall in this 'critical' category. A number of states have already seen this ratio fall below 50 percent this year, including Connecticut, West Virginia, and Indiana (Wall Street Journal 2009C). As of December 2008, the KPERS system has also fallen into this critical category.

The most important finding in the NBER study is the prospect of future under-funding in state pension plans based on more realistic discount rates. Using a 15-year amortization period, the NBER study estimates, conservatively, that there

acknowledge a funding crises. In January of 2009, Glenn Deck, executive director of KPERS, presented this testimony before the House Select Committee on KPERS:

"Projections indicate that the combined State/School group is not in actuarial balance and will not reach the [actuarial required contribution] rate during the remainder of the amortization period with a level 8% return assumption."¹⁷

He reported that unprecedented market declines have impacted the long-run funding status of the system. Deck recommended that the legislature consider options to increase employer contribution rates, and that KPERS continue to monitor the funding status of the system:

"Options for increasing statutory employer contribution caps in future years need to be considered to bring the System back into actuarial balance over the long term."¹⁸

UNSATISFACTORY INCENTIVES

Defined-benefit retirement plans do not align the incentives of employers and employees as well as defined-contribution plans (like that used by the Kansas Regents System). Defined-benefit plans can defer promised benefits and their cost into the uncertain future. Defined-contribution plans match expected future benefits to current contributions to better align current incentives.

The KPERS system continues to offer pension benefits superior to that available to employees in the private sector.¹⁹ Elected officials have significantly increased employer contributions to KPERS—contributions that will increase taxpayer liability for many decades. The assumption of KPERS executives appears to be that government-employers in Kansas will continue to increase employer contribution rates to the level necessary to bring the system into actuarial balance. However, there is growing evidence that the legislature will encounter constraints from taxpayers in continuing to pursue this option.

Even with the assumption of an eight percent return on assets, employer contribution rates into the State/School system would have to double; and, employer contribution rates into other parts of the system would have to increase in excess of 20 percent of payroll. This would require hundreds of millions of dollars in additional

employer contributions into the KPERS system, a difficult step in a year when state and local jurisdictions are experiencing a revenue shortfall. If the assumption of an eight percent return on assets is unrealistic, as many economists argue, and the system earns a lower rate of return on assets, actuarial balance may not be achieved even with the higher employer contribution rates.

Increasing employer contribution rate into the KPERS system will require some combination of higher taxes and decreased public services. Across the country citizens are no longer willing to bear the costs imposed by public sector pension funds. Legislators are facing taxpayer resistance to funding pension plan imbalances.

A good example is the California Public Employees' Retirement System (CALPERS). CALPERS reports that the sharp drop in the funding ratio will require an increase in employer contribution rate between two percent and four percent of payroll.²⁰

Even with increased employer contribution rates, California legislators are encountering constraints in funding CALPERS. Moody's Investor Services reports that it put the triple-A rating of CALPERS on review for downgrade for the first time. The review reflects the deterioration in the funding status of CALPERS, and of the California state government.

State payments into CALPERS are a major source of the shortfall in the state budget. California voters rejected, by a two to one margin, Governor Schwarzenegger's proposal to solve the budget crises by, among other things, increasing taxes \$16 billion, and issuing more debt.²¹ Governor Schwarzenegger has called California's pension system "unsustainable". He is proposing changes in the pension system, including increas-

ing the age at which public employees are eligible for retirement benefits.²²

The funding crises in KPERS is actually worse than that in CALPERS. KPERS has experienced a sharper decline in the value of assets, and a greater deterioration in funding status of the system. Kansas legislators should expect to encounter constraints in funding KPERS similar to that in California. A downgrade in KPERS bonds would impact borrowing costs of state and local jurisdictions.

Achieving actuarial balance will require fundamental reform of the KPERS system. Across the country state and local jurisdictions are enacting reforms in pension plans similar to those introduced in the private sector. In the long run, the most effective way to eliminate unfunded liabilities is to require new employees to enroll in a defined-contribution plan—a plan like the one used by the Kansas Regents. As employees in the defined-contribution plan replace those retiring from the defined-benefit plan, unfunded liabilities are eliminated.

Current employees in the defined-benefit plan must begin to share the burden of unfunded liabilities in the plan along with employers. This requires modifications in benefits to reduce costs. It also requires increased employee contribution rates to share costs equally with employers. Current employees in the defined-benefit plan should be given the option of enrolling in the defined-contribution plan. For employees who choose to remain in the defined-benefit plan, employee contribution rates must increase to share in the cost of that plan equally with employers. This will permit the state to begin to earmark a greater share of contributions to pay off unfunded liabilities in the system. A future paper by the authors of this study will explore these proposed reforms of KPERS in greater depth.

is a 50 percent chance of under-funding greater than \$750 billion; a 25 percent chance of under-funding greater than \$1.75 trillion; and a 10 percent chance that under-funding will exceed \$2.48 trillion. These estimates do not include any under-funding in other post employment benefit (OPEB) plans in these state pension systems (Novy-Marx and Rauh 2009).

CONCLUSION

KPERS is a public pension system that is ultimately the responsibility of Kansas taxpayers. Taxpayers are already liable for \$10 billion in unfunded liabilities, and they will have to pay for any future unfunded liabilities incurred in the system. The key finding of the study is that the KPERS system will not be in actuarial balance over the thirty year amortization period set in GASB standards. This means that KPERS will continue to accumulate unfunded liabilities for the foreseeable future. It is highly likely that KPERS will continue to impose a heavy tax burden on future generations. The result will be an intergenerational transfer of wealth from future generations to the present generation through the pension system.

Kansas citizens may well ask how they got into this KPERS mess. The explanation is that the people making these pension decisions do not have to bear the cost. The KPERS Board and the unions who represent public sector employees negotiated benefits for those employees that they could not afford. Elected officials charged with oversight of the state pension system failed to fulfill their charge to oversee the system. As a result, taxpayers will be paying taxes to finance these benefits long after these decision makers have left. Without reform, spending on almost every other state-funded program will have to be cut, or taxes increased. It is simply not fair for Kansas citizens and the Kansas Legislature to sanction such an intergenerational transfer of wealth through the pension system.

The poor incentive structure will continue as long as the KPERS pension plan is based on defined-benefits rather than defined-contributions. Third parties will continue to negotiate pension benefits and costs under a defined benefit plan. The reality is that Kansas citizens cannot do much about the funding crises that already exists in KPERS; but, they can stop the bleeding by enacting fundamental reforms in the state pension system.

In response to the funding crises, KPERS executives recommend that the legislature continue to muddle along with the defined-benefit pension plan. The position taken

in this paper is that bringing the KPERS system into actuarial balance will require more fundamental reform. Everything should be on the table, including changes in plan structure, changes in benefits, increased employee contribution rates, and increased employer contribution rates.

REFERENCES

- Bader, Lawrence N. and Jeremy Gold (2004), "The Case Against Stock in Public Pension Funds," Pension Research Council Working Paper.
- Barclays Global Investors (2004), "The Retirement Benefit Crises: A Survival Guide," Barclays Global Investors Investments Insights 7(5).
- Forbes.com (2006), "The Big Chill", Dec. 4.
- Gold, Jeremy (2002). "Risk Transfer in Public Pension Plans," Working Paper 2002-18, Wharton Pension Research Council.
- Kansas Legislature (2009A), "Minutes of the House Select Committee on KPERS Committee," House of Representatives, January 29.
- Kansas Legislature (2009B), "Second Conference Committee Report Brief House Bill No. 2072," Legislative Research Department, May, 7.
- Kansas Public Employees Retirement System (2008), 2008 Comprehensive Annual Financial Report.
- Kansas Public Employees Retirement System (2009A), Valuation Report as of December 31, 2008.
- Kansas Public Employees Retirement System (2009B), "Long Term Retirement Funding," Issue Brief, April 13, 2009.
- Kansas Public Employees Retirement System (2009C), "KPERS Benefits Changing for Future Members," Issue Brief, April.
- Kansas Public Employees Retirement System (2009D), "Kansas Public Employees Retirement System Investment Performance Report," December 31, 2008.
- Lauzen, C., and B.W. Poulson (2009), "Is There a Gorilla in Your Backyard?" American Legislative Exchange Council, Policy Forum, May.
- Life and Health Insurance News.com (2009), "The Big Pension Freeze", May 19.
- Munnell, A. H., J. Aubrey, and D. Muldoon (2008), "The Financial Crises and State/Local Defined Benefit Plans", Center for Retirement Research, Number 8-19, November.
- Novy-Marx, Robert, and Joshua D. Rauh (2008), "The Intergenerational Transfer of Public Pension Promises," Working Paper 14343, National Bureau of Economic Research, Cambridge, MA, September.
- Passantino, George and Adam Summers (2005). "The Gathering Pension Storm: How Government Pension Plans are Breaking the Bank and Strategies for Reform", Reason Foundation, Policy Study 335, June.
- Poulson, B. W. (2009A), "What Now for PERA: Déjà vu All Over Again", Independence Institute, IP-2-2009, March, Golden, Colorado.
- Poulson, Barry W. (2009B), "Is There A Gorilla In Your Backyard," Pension and Other Post Employment (OPEB) Liabilities, American Legislative Exchange Council, May 1,
- Standard and Poor's (2007), "U.S. States Are Quantifying OPEB Liabilities and Developing Funding Strategies As the GASB Deadline Nears", Ratings Direct, November 12.
- _____ (2008), "Market Volatility Could Shake Up State Pension Funding Stability", Ratings Direct, February 20.
- U.S. Government Accountability Office (2008), "State and Local Government Retiree Benefits: Current Funded Status of Pension and Health Benefits", GAO-08-223, Washington, D.C., U.S. Government Printing Office.
- Wall Street Journal (2009A), "GM, UAW Reach Crucial Cost Cutting Pact", May 22.
- _____ (2009B), "Golden (State) Opportunity", May 21.
- _____ (2009C), "Pension Bills to Surge Nationwide", March 16.
- _____ (2009D), "Springfield Tax Revolt," June 6-7.
- _____ (2009E), "Calpers Will Report Big Annual Decline", July 21.
- Woo, S., and B. White (2009), "California Cities Irked By Borrowing Plans", Wall Street Journal, May 22.

FOOTNOTES

- 1 Kansas Public Employees Retirement System (2009A), p.2.
- 2 For a discussion of the arguments against this high ratio of stocks in public pension funds see Bader and Gold (2004).
- 3 Kansas Public Employees Retirement System (2009A) p.4.
- 4 Ibid.
- 5 Ibid.
- 6 Wall Street Journal (2009E).
- 7 Ibid.
- 8 Ibid.
- 9 Kansas Public Employees Retirement System (2009A) p.6-7.
- 10 Ibid
- 11 Ibid.
- 12 Kansas Public Employees Retirement System (2009A) p.8.
- 13 Kansas Public Employees Retirement System (2009A), p.6.
- 14 Kansas Public Employees Retirement System (2009B), p.1.
- 15 *Ibid.*
- 16 Kansas Public Employees Retirement System (2009A), 2008 Comprehensive Annual Financial Report, Fiscal Year ended, June 30, 2008
- 17 Kansas Legislature (2009A), “Minutes of the House Select Committee on KPERS Committee,” House of Representatives, January 29.
- 18 Kansas Legislature (2009A p.1).
- 19 For a comparison of the pension benefits offered in public and private sector pension plans see Passantino and Summers (2005).
- 20 Wall Street Journal (2009E).
- 21 *Ibid.*
- 22 Ibid



Center for Applied Economics

University of Kansas School of Business
Summerfield Hall, 1300 Sunnyside Avenue
Lawrence, KS 66045-7585
www.cae.business.ku.edu
(785) 864-5134