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PENSION REFORM CASE STUDY: MICHIGAN



by
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Pension Reform Case Study:

Michigan

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Executive Summary

In 1996, the Michigan state legislature passed a first-of-its-kind bill that froze the state employees' defined-benefit pension fund for new members and created a defined-contribution pension system for future hires. Members already in the defined-benefit system were allowed to remain and their benefits continued to accrue as originally promised, though the workers were given an opportunity to take a buyout of their earned benefits and have those transferred to a defined-contribution account. New workers had their pension contributions put into personal accounts that they could manage on their own and take with them if they left employment with the state.

Given that the state employees' defined-benefit fund had a relatively healthy funding ratio at the time, this was an unusual move. But in retrospect, the decision seems highly prescient.

When the Michigan legislature did not vote to reform the public school employees' pension fund, which was operated in the same way as the state employees' defined-benefit system, they inadvertently created a natural experiment to determine which system would be more sustainable in the long-run. This study finds that over the past 15 years, the public school employees' plan accrued unfunded liabilities that would have likely been mirrored by the state employees' fund in the absence of a defined-contribution option. This would have increased fiscal pressure on current state leaders and made Michigan worse off on the whole.

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Part 1

The History: A Brief Account of Michigan's Pension System, 1943–1996

It is rare for policymakers to anticipate a crisis and respond with legislation well in advance of any perceived political need, but Michigan in the 1990s was an exception. In 1996, Michigan became one of the few states to undertake major public pension reform. As a result, it was able to get ahead of any serious problems that would have obligated a change.

The impetus for reform did not start with fears over a pension crisis. Michigan Governor John Engler was midway through his second term and looking for ways to make his state more attractive to businesses. However, a state facing high pension costs and subsequent pressure to raise taxes is not the kind of place most businesses want to move to. In looking at his state's balance sheet, as large businesses considering a move to Michigan would do, Governor Engler found what he felt was a serious problem: long-term pension liabilities.

The state operated two main large pension funds for public workers: the Michigan State Employees' Retirement System (MSERS) and Michigan Public School Employees Retirement System (MPSERS).¹ The state employees' retirement account was well funded, but the public school employees' pension fund had an unfunded liability of \$6.9 billion. Although this did not constitute a drastic near-term fiscal crisis, Governor Engler believed there were long-term risks and that the status quo was not a good deal for taxpayers and would be a disservice to state workers. In fact, Governor Engler estimated that within 20–25 years the promised pension benefits could bankrupt the system.²

A deep dive into the state's balance sheet uncovered a near-term challenge for Governor Engler's administration: many state workers were being left out of the retirement system due to eligibility rules. In 1996, 42 percent of state employees did not qualify for a pension because they had not worked for the state a sufficient amount of time.³ Worse, 59 percent of public school employees were

ineligible for a pension because they had not worked for the state for the requisite minimum of 10 years. For example, if a teacher worked for just six years and then retired or moved, he would not receive any of his accumulated benefits, and the contributions from his salary would provide benefits to other long-term teachers.

The long vesting period created a potentially positive fiscal scenario for the state—workers that left before the 10-year threshold left behind the value of contributions the state had made into the retirement fund on their behalf, making it easier to fully fund the pension system. The long vesting period also creates incentives for workers who might otherwise move on to private sector jobs to remain with the state to ensure they vested in their pensions. As a result, the state may have been hurting its economy by incentivizing disenchanted workers from leaving the public sector, draining resources from the private sector. By 1996, vested state workers were primarily union members with long-held positions in the state bureaucracy.

The first question Governor Engler’s administration needed to consider was where these problems originated. The Michigan legislature created MSERS in 1943 as a single-employer, state-wide, defined-benefit retirement plan for public employees (except those covered under other, vocation-specific pension plans).⁴ Through MSERS, the government promised state employees a specific annual retirement benefit that would be based on a worker’s final years of pay. In 1945, the state established MPSERS to provide retirement benefits in a similar way to public school employees, including teachers and administrators.

When the pension systems were first established, they based pension benefits on the average of the employee’s final five years of service.⁵ Members were required to contribute five percent of their compensation (up to \$3,600 maximum), and the state employer contributed an actuarially determined amount sufficient to fully fund expected benefits.⁶ Employees would become eligible for retirement at the age of 60, and had to have at least 10 years of service to receive a pension benefit, although employees were eligible to receive an annuity based on their own contributions if they worked fewer than 10 years for the state.⁷

The systems remained relatively unchanged between 1945 and the early 1970s, when the state legislature began to make some adjustments. In 1972, the state made its first “one-time” increase in cost-of-living adjustment (COLAs) benefits, which increased the rate at which pension benefits would grow after an employee retired.⁸ Two years later the state eliminated requirements that members contribute five percent of their salaries, and also increased COLAs again.⁹ The state legislature made two more COLA adjustments in the 1970s,

creating a pattern of regular expansion in state and public school employee pension benefits.

In the 1980s, the state earned more than its targeted eight percent return on assets. But rather than save this money for the MSERS retirement fund, the legislature opted in 1983 to distribute supplemental checks to retirees from investment income earned above the eight percent target.¹⁰

The state adopted an important change to MPSERS in 1986 with the introduction of the Members Investment Plan (MIP).¹¹ Members of the public school employees' fund could choose to remain in their current plans that required no employee contribution, or they could choose to contribute four percent of their pay (later to be lowered to 3.9 percent) to the pension fund and in return could retire at any age with 30 years of service—instead of the minimum threshold of 55 years old and 30 years of service. MSPERS members who chose the MIP plan also received more generous terms defining final annual compensation and cost-of-living-adjustments (see section 2 in this paper for details).¹²

In 1987, MSERS members got another cost-of-living adjustment boost. And in 1988, all state employee benefit recipients became eligible for “automatic 3 percent annual (non-compounded) benefit increases, with a maximum \$300 annual increase.”¹³

Most of these benefit changes did not impose an immediate fiscal cost on the state. Rather, they created additional long-term liabilities.

To make matters worse for the fiscal situation, pensioners were living longer after retirement on average, receiving more in total benefits than originally anticipated when the pension fund was established. By the 1990s, it became clear that this longevity risk—combined with the overly generous promises—meant that at some point the pension funds would either require substantial additional infusions from the state, or would fail to pay out as promised unless something was done. As Donald Gilmer, chairman of Michigan's House Appropriations Committee in 1996, noted in an interview a year after the reform legislation passed, “We had to look at the [pension] issue in the long term, because the old system simply wasn't sound from an actuarial standpoint.”¹⁴

With the long-term and short-term challenges in mind, Governor Engler and his team began to develop a reform strategy that would not simply delay problems with the pension system but rather, address them head on.

“...the old system simply wasn't sound from an actuarial standpoint.”

—Rep. Donald Gilmer,
1997

Part 2

The Numbers: Michigan's State Retirement Systems before Reform

Michigan was the eighth most populous state in the union in 1996 with 9.6 million residents, a median household income of \$48,879, and a median age of 38.9.¹⁵ In addition to the two main pension funds MSERS and MPSERS, Michigan was operating four smaller pension funds for other public employees: the State Police Retirement System, Judges Retirement System, Legislative Retirement System and Military Retirement System (for state National Guard).

In 1996, MPSERS was the largest state pension fund with 412,121 members, and MSERS was the second largest with 101,567 members. About a quarter of MPSERS members were retirees receiving benefits (107,465), and 41 percent of the active employees (121,878) had vested pensions (a smaller group of “inactive members” had vested pensions, but were not yet eligible to retire and had left public sector employment, and thus were not accruing more benefits or contributing to the system). About a third of MSERS members were retirees receiving benefits (31,093), and 58 percent of the active employees (63,807) had vested pensions. Compared to other states, Michigan's combined funding ratio of 86.2 percent for MSERS and MPSERS in 1996 was considered relatively healthy.

The following tables provide pre-reform (1996) summary statistics for the Michigan Public School Employees' Retirement System and Michigan State Employees' Retirement System's membership, actuarial assumptions and metrics defined by the Governmental Accounting Standards Board (GASB):

Table 1: Michigan Public School Employees' Retirement System (FY 1996)¹⁶

Total Members:	412,121
• Active Members:	295,096
• Retirees:	107,465
• Inactive Members:	9,560
Contribution from state:	Actuary determined; 10% increase from FY1995
Contribution from employee:	
• Basic Plan:	\$0
• Member Investment Plan, hired before January 1, 1990	3.9%
• Member Investment Plan, hired after January 1, 1990	3-4.3%
As a % of Annual Covered Payroll:	
• Normal Cost:	11.88%
• Amortization of Unfunded Actuarial Liability:	3.42%
Market Value of Assets:	\$30.9 billion
Actuarial Value of Assets:	\$22.5 billion
Actuarial Accrued Liability:	\$28.6 billion
Unfunded Actuarial Accrued Liability:	\$6 billion
GASB Funding Ratio:	78.9%
Accounting Assumptions:	
• Assumed Investment Return Rate:	8%, compounded annually
• Assumed Real Return Rate:	4%
• Assumed Payroll Growth Rate:	4%
• Assumed Inflation Rate:	4%
• Projected Salary Increase:	4% to 16%

Public school employees under the Basic plan were eligible to retire at age 55 with 30 years of service, or at age 60 with 10 or more years of service.¹⁷ MIP members were eligible to retire at any age after 30 years of service. There were also early retirement options for public school employees over 60 years old but with 10 years or less experience. Monthly pensions were based on an average of the highest paid five consecutive years of service for Basic plan members, and highest paid three consecutive years for MIP members.¹⁸ Public school employees under the Basic plan received a three percent annual cost-of-living-adjustment, with a maximum of \$300 a year increase.¹⁹ For MIP members, the \$300 maximum did not apply.

Note: The Actuarial Value of assets is a five-year average of market values. The rolling average allows the state to smooth out its annual required contribution payments, for relatively consistent contribution amounts, rather than large sums in years when the market value is low, and small sums in years when the market value is high. The Real Return Rate is the actual growth in the value of assets after accounting for inflation and investment fees. The Investment Return Rate is the larger target that assumes there will be inflation and fees to the financial institution managing the investments.

Table 2: Michigan State Employees' Retirement System (FY 1996)²⁰

Total Members:	101,567
• Active Members:	63,807
• Retirees:	31,093
• Inactive Members:	6,667
Contribution from state:	Actuary determined; 4.8% decrease from FY 1995
Contribution from employee:	\$0
As a % of Annual Covered Payroll:	
• Normal Cost:	9.2%
• Amortization of Unfunded Actuarial Liability:	1.2%
Market Value of Assets:	\$7.3 billion
Actuarial Value of Assets:	\$6.7 billion
Actuarial Accrued Liability:	\$7.2 billion
Unfunded Actuarial Accrued Liability:	\$469 million
GASB Funding Ratio:	93.4%
Accounting Assumptions:	
• Assumed Investment Return Rate:	8%, compounded annually
• Assumed Real Return Rate:	5%
• Assumed Payroll Growth Rate:	5%
• Projected Salary Increase:	3% to 11.5%

Individuals in MSERS were eligible to retire at age 55 with 30 years of service, or age 60 with 10 or more years of service.²¹ Their monthly pension was based on an average of the highest paid three consecutive years of service.²² And state employees received a three percent annual cost-of-living-adjustment, with a maximum of \$300 a year increase.²³

Note: The Actuarial Value of assets is a five-year average of market values. The rolling average allows the state to smooth out its annual required contribution payments, for relatively consistent contribution amounts, rather than large sums in years when the market value is low, and small sums in years when the market value is high. The Real Return Rate is the actual growth in the value of assets after accounting for inflation and investment fees. The Investment Return Rate is the larger target that assumes there will be inflation and fees to the financial institution managing the investments.

A. OPEB Health/Dental/Vision (FY 1996)

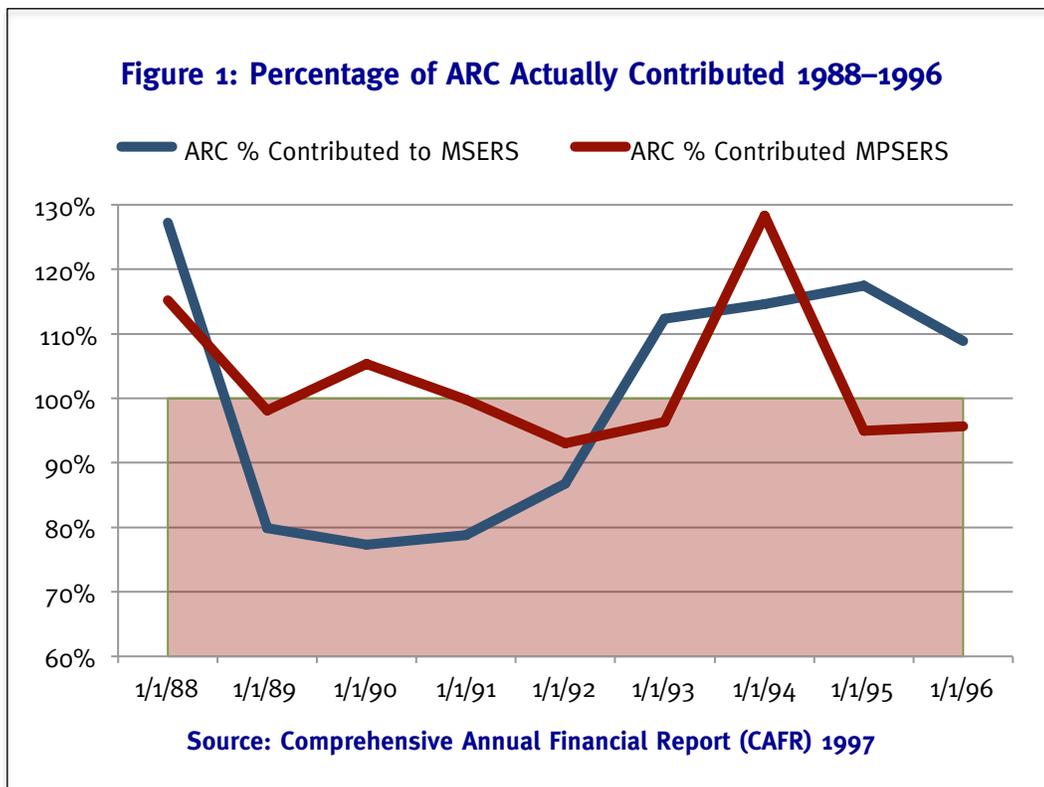
State employees were eligible for health benefits, actuarially labeled Other Post-Employment Benefits (OPEB).²⁴ These benefits provided coverage for 95 percent of monthly health premiums, and 90 percent of monthly dental and vision premiums.²⁵

Table 3: Other Post-Employment Benefits (OPEB)

	MPSERS	MSERS
Eligible	107,465	31,093
Receiving benefits	92,948	28,769

B. Michigan’s Annual Required Contribution Performance Record

In the years prior to reform, Michigan had been, on average, meeting its annual required contribution (ARC) in full (data are only publicly available back to 1988). However, from year to year, the state fluctuated as to whether it would make its actuarially determined ARCs. As Figure 1 shows, MSERS went through a four-year period from 1989 to 1992 where the state only paid out between 77 percent and 86 percent of its ARC. However, between 1993 and 1996, the state made up for this shortfall by overpaying its ARC. Meanwhile, the state never dropped below 93 percent of its ARC for MSPERS and made up a large portion of the shortfall in 1994 with 128.34 percent of the annual required contribution.



Even though the state had been meeting many of its ARC payments, the prescribed contribution amounts were not taking into account future risks that could destabilize the state's finances, something Michigan State Treasurer Douglas Roberts was critical in identifying.

Part 3

The Problem: Uncertainty of Future Costs

Douglas Roberts was Michigan's treasurer from 1991 to 1998. During the early part of his tenure he began to notice that many employees had calendars at their desks opened to the month they would retire, with their retirement date circled prominently.²⁶ This meant state bureaucracy was dominated by individuals who stuck around because the job offered a healthy pension—not because they wanted to serve the state. “What is the benefit to the employee or the citizens who pay taxes to have someone just sitting there waiting until they can walk out the door?” Roberts asks. “Isn't it better to have workers leave when they want? The citizens get better employees, employees who want to be there.”²⁷

Whatever the noble goals of the pre-1997 pension structure, the reality was that state workers who held positions for fewer than 10 years were feeding a system that would benefit the long-term employees who were staying until retirement. Governor Engler argued that this system was fundamentally unfair.

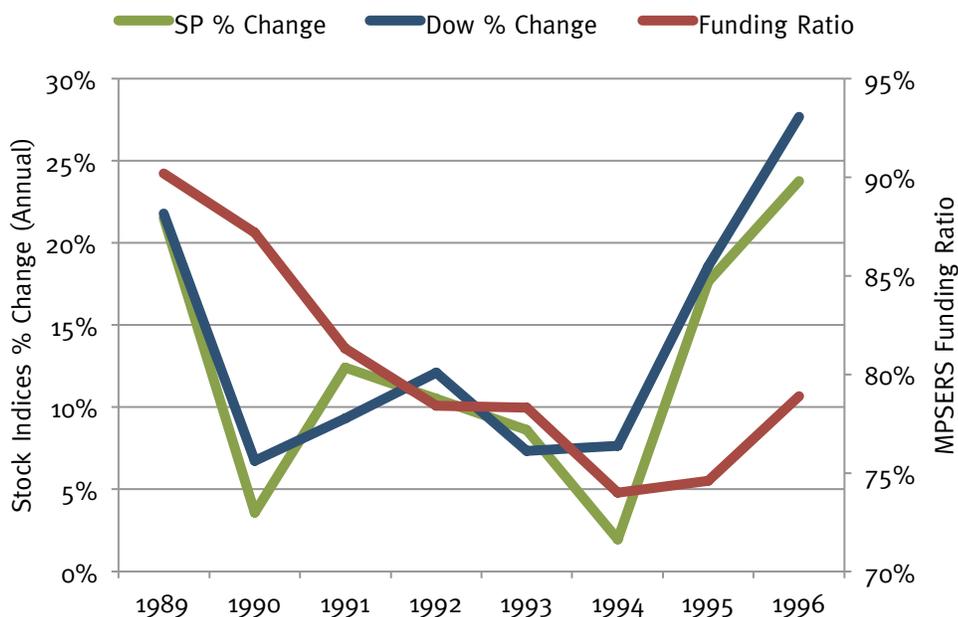
Allowing state workers to become vested earlier in theory meant benefit payouts would grow, but as long as the system had enough revenue to fund the pension costs this would not be a problem. If the state's pension were fully funded and the state met its actuarial commitments, then expanding the benefit pool would not cripple the state budget. Having enough revenue and meeting those commitments, however, was a concern.

As traditional defined-benefit systems, MSERS and MPSERS received annual contributions from the state in amounts that represented a certain percentage of state workers' salaries. The pension systems then invested those dollars with the aim of growing the total assets of the funds so that it would be able to continue to cover payouts to retirees. A system's funding ratio is total pension fund assets relative to the amount of benefits promised to retirees. If, in any given year, the total assets of the system equal less than the promised pension benefits, then the funding ratio would be less than 100 percent.

In the years preceding 1996's movement toward pension reform, MSERS's funding ratio had fluctuated between fully funded and 81.7 percent funded.²⁸ In 1988 the system was fully funded, with a small surplus. However, the following year realized a relatively small, unfunded accrued actuarial liability (UAAL) of \$39 million. This unfunded liability grew to \$1.1 billion in 1993, with a funding ratio low of 81.7 percent before rebounding with the beginnings of the dot-com bubble in stock prices.

From 1988 to 1996, both the S&P 500 and the Dow Jones Industrial Average indices saw annual growth, however the rate of growth was not consistent. For instance, from 1988 to 1989 the stock market grew 22 percent, but in the following year it grew just four percent. While MSERS and MPSERS invested in a range of assets that included, but were not limited to, index funds, their investment returns roughly followed the trend of the U.S. stock market, as can be seen in Figure 2. The correlation (R square) between the mean percentage change in annual growth for stock market indices and the MSERS funding ratio is 0.652. This ratio is on the low end of a strong correlation (typically defined as a correlation between 0.6 and 0.8), meaning that while the funding ratio was not completely dependent on the market, there was a significant relationship between changes in the stock market as a whole and the MSERS funding ratio.

Figure 2: Relationship between Stock Indices and MSERS Funding Ratio, 1989–1996



Source: Federal Reserve, 1997 MSERS CAFR, Reason Foundation calculations

Similarly, MSPERS had some troubled years before the 1996 reform effort. Its funding ratio was 84.3 percent in 1988, with an unfunded liability of \$2.2 billion.²⁹ The funding ratio stayed below 80 percent for most of the 1990s, and the UAAL peaked in 1995 at \$6.9 billion, a funding ratio of 74.6 percent. By 1996, the funding ratio stood at 78.9 percent, with an unfunded liability of \$6 billion.

The MIP program that was implemented in 1987 also created unexpected financial complications. Before MIP, public school pensioners received a maximum annual cost-of-living adjustment of \$300, but under MIP the COLA was set at three percent of final compensation with no cap. This meant that if a teacher retired under the Basic MSPERS plan with final compensation of \$35,000, he would receive the maximum \$300 a year, while under the MIP program he would receive \$1,050 in annual adjustment. After 20 years of retirement, the difference in cost-of-living adjustment between MSPERS and MIP would be \$6,000 vs. \$21,000, respectively.

For Rep. Gilmer, the problems of an underfunded system were tied to concerns about a system that was overly reliant on continued strong investment returns. He and then-state Rep. Kim Rhead—who would eventually become the primary sponsor of the reform legislation—emphasized that investment returns in fact varied considerably over time and historically had rarely remained at the level assumed by pension fund actuarial accounting. They also worried about MSPERS’s already large unfunded liability. If investment returns declined at the same time as outlays rose, the state would face enormous unfunded liabilities, with potentially serious consequences either for taxpayers (if they were forced to foot the bill) or pensioners, or both. Rhead recalls looking at the numbers and thinking the future was “going to be a train wreck.”³⁰

Part 4

The Reform: “Soft Freezing” the Defined-Benefit System, Creating a Defined-Contribution System

The reform effort required nearly a year to build the groundwork for a campaign within the state legislature for pension reform.³¹ “There was technical work to do,” Governor Engler recalled in a recent interview with Rich Danker for the policy group American Principles Project, “so you had to prepare correctly.”³² The reform proposal consisted primarily of closing the defined-benefit systems to new hires and launching new defined-contribution systems for state and public school employees to participate in.

Defined-benefit (DB) pension systems put investment risk on the employer (in this case, the state of Michigan) to ensure the necessary funds are available to pay promised annual benefits to retirees. A portion of each employee’s compensation is paid into a pooled fund that is invested on behalf of all employees. In exchange, the employee is promised a pension upon retirement of an amount defined by the rules of the system (usually some proportion of the former employee’s salary). If the fund does not grow at a rate large enough to pay out the promised amounts to retirees, then the employer is obligated to make up the difference required to pay those pension benefits.

Defined-contribution (DC) pension systems shift the investment risk to the employee and limit the risk to the employer. A portion of a worker’s compensation is paid into a personal fund that workers manage based on their risk appetite and retirement goals. In exchange, the employee usually receives slightly higher wages, some of which can be set aside for retirement at the employee’s discretion. Since the employee is responsible for managing his or her own retirement finances, the employer has no further obligations.

Governor Engler and his team decided to focus on the three benefits a defined-contribution system could provide to the state of Michigan:

- (1) Reform was good for taxpayers because they would no longer bear the liability of increased contribution costs from missing investment targets or rising benefit payments from employee longevity;
- (2) Reform would make the pension system fairer by expanding the proportion of state workers and public school employees that could receive benefits, and
- (3) Reform would mean current and new state workers could take control of their retirement and customize their investment portfolio to meet personal goals.

These would hopefully solve the problems of a pension system that was threatening the financial stability of the state and was not adequately providing retirement security to the whole body of state employees and public school employees. A bull market for equities and excitement about technology investments, implying higher expected returns for funds at least partly under individual employees' control, provided an additional selling point to skeptical legislators and incoming state workers.

The pension reform group inside the governor's office spent a year researching the best way to build and frame reform, keeping the process largely private. Governor Engler told American Principles Project that he did not want to make the pension reform debate a "cause célèbre" in Michigan.³³ He feared a vocal statewide debate would push unions into a corner from which they could not compromise.

The governor's team also hired lawyers with specialized pension knowledge to help navigate the legal elements of the reform proposal. Roberts recalls sitting in a room with lawyers for several days, going line by line through proposed reform legislative language to make sure there were no loopholes or problematic concepts. "It wasn't a very fun process to go through all of the minutiae," Roberts says on reflection. "But it was important work, and it really helped us get out in front of criticism that inevitably was thrown at us."³⁴

Opponents of reform made two arguments. First, labor unions and state legislators opposed to reform argued that transitioning from a DB to DC system would result in some pensioners outliving their savings. In part this argument rested on a claim that requiring individuals to manage their own retirement funds would be too complicated for unsophisticated state workers and public

school employees. To that, Rep. Rhead responded by pointing out that “[what] opponents of defined-contribution plans are saying is that people are too stupid to take care of their own pensions. That just isn’t true.”³⁵

Second, reform opponents pointed out that there was no immediate crisis as both the state and public school employees’ systems were well funded. At its then-93.4 percent funding ratio, few could argue MSERS was in any immediate danger. And though MPSERS’s funding ratio of 78.9 percent was more troubling, it was argued this was just below a commonly perceived 80 percent threshold for when funds might be in trouble. At the same time the stock market was surging and the risks of underfunding appeared to be low. But Governor Engler countered this by pointing out that it ignores possibly lower future growth in the value of assets as well as demographic changes that would increase liabilities.

Neither of these critiques addressed the fact that roughly half of state employees and public school employees were not vested in their pensions because they had not spent a decade as a state worker.

The reform legislation was introduced in the Michigan House of Representatives on November 19, 1996, after the elections that year. In the lame-duck session, debate over the above issues moved swiftly. A bill to reform MSERS passed the House 56–40 on December 5 and the Senate 21–16 on December 11.³⁶

However, a bill to reform MPSERS in the same way failed to garner enough votes for passage, primarily because of pressure from the teacher’s union to not experiment with their pension system.³⁷ Governor Engler, who was not up for re-election that year, signed the MSERS reform bill on December 23, 1996.

The following are the elements of reform for the Michigan State Employees Retirement System as signed into law.

A. Freezing the DB System

The pension reform legislation initiated a “soft freeze” for MSERS, meaning it closed the system to new workers hired after March 30, 1997. The defined-benefit fund was renamed “MSERS Tier 1.”

Employees currently in the system were allowed to remain and the system was put on a path to shut down once all eligible members had their benefits paid out, recently estimated to be by 2037.³⁸ There were no changes made to cost-of-living adjustments, no changes in retirement age, and no accounting adjustments. At the time, employees were not required to contribute additional

money to the system (however, in 2011, the state legislature voted to require a four percent annual contribution—this is discussed in the next section).³⁹

B. Structure of the DC System

The centerpiece of reform was the creation of a defined-contribution system called “MSERS Tier 2.” All employees hired on or after March 31, 1997 were automatically enrolled in this DC fund, which was designed with the following structure:⁴⁰

- The state contributes four percent of each employee’s salary into the DC fund.
- The state will match additional contributions made voluntarily by an employee up to another three percent of the salary. Employees can contribute more beyond this, but it will not be matched.
- Any contributions from the state vest at a faster rate than Tier 1 benefits: employees attain ownership of 50 percent of their accumulated benefits from state contributions to their DC fund after two years of service, 75 percent after three years of service, and 100 percent after four years.
- Any contributions from the state employee to the DC fund vest immediately. If the employee chooses to leave before two years of service, he would still own those funds.
- State workers can be enrolled in either a 401(k) or 457 fund. The funds differ primarily in the restrictions each faces on when money can be taken out. Both plans offer more than a dozen options for individuals to choose from depending on their investment appetite and retirement goals, including a totally self-managed plan. Financial companies compete to offer fund management services for these 401(k) and 457 plans.

So, for example, if an employee left after three years of service, he would take with him 75 percent of the contributions from the state—the four percent of salary standard contribution and any matched monies—as well as 100 percent of any additional salary he personally contributed to his own DC fund.

Under this new system, the liability of the state of Michigan is limited to the obligations to the state employees who remain in the closed DB-system.

C. Buyout: Offering an Opportunity to Switch for Current State Employees

The pension reform legislation offered current Michigan state employees the option to terminate their membership in the DB system (Tier 1) and have the actuarial present value of their accrued benefits transferred into a DC system (Tier 2).⁴¹ This amounted to a buyout because the state was giving the worker the pension benefits they had earned ahead of time. State employees choosing to switch had to accept the buyout offer and submit their decision to switch by April 30, 1998.⁴² Approximately 5.5 percent of state employees, amounting to about 5,100 employees, took this buyout.⁴³

D. Other Post-Employment Benefits

At the time, state employees in MSERS Tier 2 were made eligible for the same post-employment health care benefits (OPEB) offered to Tier 1 employees.⁴⁴ The original law provided 95 percent premium payments for health care and 90 percent premium payments for dental and vision. The OPEB benefits structure has since changed, however they remain equally available to members of Tier 1 and 2.⁴⁵

Part 5

The Outcome: Fiscal Success Achieved, Long-Term Risks for the Frozen Plan Remain

The Michigan 1996 pension reform for MSERS has been a success from two main perspectives. Michigan has saved taxpayer money in normal cost pension contributions—essentially the pension paychecks and benefit coverage promised by the pension fund. And it has seen a sharp increase in the number of state employees with control over their vested pensions.

The process of winding down a soft-frozen defined-benefit fund has not been without some challenges, though. This section examines how the 1996 reform affected the state budget, particularly by using the failure of the state legislature to reform MPSERS in 1996 as a case study of how MSERS might have turned out without reform.

A. Summary Statistics for MSERS Defined-Benefit vs. Defined-Contribution

MSERS has seen steadily declining membership in its DB system since the 1996 reform, as would be expected for a system not admitting any new entrants. Total members, including retirees and active workers, have declined from 101,567 then to 80,419 today. This has significantly lowered potential pension liability for the state because it is moving the state toward fully eliminating its longevity risks. See Table 4 for summary details.

Table 4: MSERS Today: Summary Statistics for Tiers 1 and 2

	2012 Tier 1: Defined-Benefit	2010 Tier 2: Defined-Contribution
Total Members	80,419	32,856
Active	17,860	26,516
Nonactive/Retired	62,043	6,340
Market Value of Assets	\$2.26 billion	\$570.3 million
Actuarial Value of Assets	\$10.21 billion	<i>Not applicable</i>
Actuarial Accrued Liability	\$15.60 billion	\$0
Unfunded Actuarial Accrued Liability	\$5.39 billion	\$0
GASB Funding Ratio	65.5%	<i>Not applicable</i>

Source: 2012 CAFR.⁴⁶ Note: The most recent data available for Tier 2 membership are from fiscal year 2010.

An important figure to note about MSERS Tier 1 is that the funding ratio has actually fallen, and the unfunded liability has grown to \$5.4 billion from roughly \$0.5 billion in 1996. This is because the state has not fully been meeting its annual required contributions. As will be shown below, around 2002 the state began to systematically underfund the pension, and by 2012 it had accumulated \$5.4 billion in unfunded liabilities. This will likely be an ongoing policy challenge for the state unless it decides to start meeting its full ARC responsibilities.

B. Increased Number of Vested State Employees

State employees in MSERS Tier 2 are fully vested in contributions to their own retirement funds, and become partially vested in state contributions within 24 months of employment. This has achieved a goal of the pension reform to make the retirement system fairer and more accessible.

The DB system has also seen a higher percentage of state employees become vested as those who were in the system with just a few years' experience passed the 10-year service line. And at the same time, there are fewer total active state employees in the DB system, having shrunk from a pre-closure 55,434 to 17,860 today, which helps drive up the vested percentage. In 1996, 58 percent of state employees were vested; by 2007 this had risen to 97 percent and has not fallen below that level since.

C. Financial Benefits of MSERS Reform

Supporters of pension reform in Michigan feared that without changes to the status quo, retirement benefit costs would increase to unsustainable levels while the state's ability to pay out benefit checks would decline. Not only has Michigan avoided increases in normal costs, MSERS reform has generated at least \$167 million in financial savings for Michigan from reduced normal cost—essentially the pension paychecks and benefit coverage promised by the pension fund—according to analysis by Richard C. Dreyfuss for the Mackinac Center for Public Policy in 2011.⁴⁷ This does not account for potential losses the state has taken related to subsequent mismanagement of its remaining Tier 1 members (discussed in the next subsection), so the savings are not on net. However, they do suggest that the defined-contribution approach can be a cost saver.

1996
58% VESTED
IN PENSION

2007
97% VESTED
IN PENSION

Dreyfuss also estimates closing the defined-benefit plan has saved the state by changing political incentives:

Since proper funding of a defined-benefit plan requires taxing current voters to provide pension benefits that may not be paid out for years, sound funding policy can be unappealing to legislators seeking re-election and hoping to provide visible benefits now. In contrast, a defined-contribution plan cannot be legally underfunded, and any increase in the plan's benefits must essentially be paid for when the change is made. A defined-contribution plan thus reduces the political opportunities to defer funding of pension benefits to a future generation of taxpayers and avoids placing a questionable burden on taxpayers who may have been too young to vote when benefits were granted and funding was postponed.⁴⁸

Prior to reform there were many union-connected, long-term jobs in the state bureaucracy, but not for all state employees. As a result roughly half of MSERS active members were not vested in their pensions because they had not reached a 10-year minimum of employment with the state (and often times would not stay in a job that long unless it was a long-serving bureaucratic post).

Today, the incentive structure has changed for getting and keeping a state job, and now almost all state employees are vested. There is no need to anchor oneself to a bureaucratic post just to get pension money at the end of a career. This has likely contributed to some savings for the state, as Dreyfuss suggests, but it is impossible to quantify.

D. Assessing a Natural Experiment

Prior to 1996, the structures of the Public School Employees Retirement System and the State Employees Retirement System were relatively similar. Because MSERS was substantively changed and MPSERS was not (at least until 2010), we are afforded a rare opportunity in policy analysis: a natural experiment to test competing claims about arguments for and against pension reform.

Governor Engler and his legislative colleagues were concerned about longevity risks driving up costs for taxpayers and the fairness of the system for pension members. The fiscal collapse of the MPSERS system demonstrates the plausibility of these concerns.

First, it is only reasonable to assume that the systematic underfunding of MPSERS—an average ARC contribution of 87.1 percent between 2003 and 2012—would have been mirrored for all of MSERS pensions in the absence of

reform. This would have meant an even more underfunded MSERS plan. Calculating the unfunded liability gap would require a series of actuarial assumptions about how the state would have managed hiring practices in lieu of reform, however it is clear that liabilities would have been higher without reform, and shorting ARC payments toward those higher liabilities would have only increased today's poor funding levels.

Second, the public school employee system's actuarial assumptions for investment return have not been accurate. For instance, while MPSERS has assumed an eight percent annual return on assets, it has only experienced an average annual rate of return of 1.6 percent over the last five years. The recent performance was no doubt adversely affected by the financial crisis, though that only demonstrates the risks that result from promises made by elected officials when those promises relate to the far future, when they will no longer be in power.

Third, MSERS Tier 1 troubles would likely have been amplified by demographic trends if there had been no reform. The trends in membership for MPSERS and MSERS have followed similar lines. Like the trends for public school employees toward a greater number of retirees than active members, the combined membership of MSERS Tier 1 and 2 has seen the ratio between active state employees and retirees shrink. In 1996, there were more than two active members for every retiree; in 2010, the most recent year for combined membership data, there were 56,802 retirees but only 51,994 active members. And since then 12,000 Tier 1 members have retired with active membership declining by 7,500, suggesting that the overall ratio is even worse. Any time retirees outnumber active members, the ability to properly fund benefits requires large contributions from the state that would otherwise be taxpayer dollars spent on services (or spent on tax cuts).

Given that Michigan's practice of underfunding MPSERS over the past decade has been mirrored with the defined-benefit portion of MSERS, it is highly likely that the state retirement systems would be in substantially worse shape today but for the 1996 pension reform.

It is worth noting that the most recent funding ratios for MSERS Tier 1 (65.5 percent) and MPSERS (64.7 percent) are similarly abysmal and both systems have underfunding, unrealistic actuarial assumptions, and baby-boomer demographic troubles. However, MSERS also has been dealing with the expected complications of a declining membership contribution base as the frozen system unwinds. MPSERS has reached its unfunded liabilities problems by mismanagement alone. This suggests that time really is money when it comes

to reform. While MSERS has contained its damage by shifting to a DC system, MSPERS is just starting out on this process, and its problems are likely to continue to worsen in the near term.

E. Challenges from Closing a Defined-Benefit System

When a DB system is closed with a soft-freeze, benefits continue to accrue, but the money required from the state to keep the system funded can increase because there are no new state employees being added along with their contributions. Prior to reform, MSERS was funded on an “open group” basis where new members were constantly being added, representing increased contributions to the system.⁴⁹ Without new state employees, contributions based on payroll began to decline. As a result, from 1997 to 2012 required contributions from the state increased from nine percent of covered payroll to 33.3 percent.⁵⁰

This change is to be expected in closing any DB system; the question for a state in transition is how to manage the process. One way to avoid high ARC payments in the future is for a state to make a large up-front addition to pension assets that will grow over time. Michigan did not do this. This did not guarantee fiscal woes, just as a declining membership may not lead to fiscal challenges for a DB system being closed if benefits are lower than expected or investment returns are higher than expected. However, Michigan made its funding problems worse than they had to be by systematically underfunding the annual required contribution. And this practice will definitely lead a state to fiscal challenges.

From 1997 to 2001 Michigan met its ARC with at least a 100 percent contribution. But in 2002 the state only met 78.4 percent of the ARC. As Table 5 shows, in the decade to follow, Michigan would only contribute the full ARC in one year.

This failure to properly fund the MSERS defined-benefit system has led to a declining funding ratio and growing unfunded liability. The MSERS funding ratio in 1996 was 93.4 percent and by 2002 was still considered healthy at 98.7 percent. In the decade to follow the funding ratio would fall annually to 65.5 percent in 2012. During the same decade the MSERS Tier 1 unfunded liability grew from \$137 million to \$5.4 billion in 2012.

Table 5: Trends for Annual Required Contribution to Tier 1 MSERS System
Years where contributions were less than 90% marked in orange

Fiscal Year	Annual Required Contribution (\$)	Actual Contribution (\$)	% Contributed
1997	244,102,003	288,366,799	118.1%
1998	126,396,181	145,734,677	115.3%
1999	111,415,984	121,119,857	108.7%
2000	120,906,261	121,817,366	100.8%
2001	102,989,963	112,299,808	109.0%
2002	111,551,549	87,486,128	78.4%
2003	184,214,419	79,291,851	43.0%
2004	262,546,900	103,873,294	39.6%
2005	308,208,544	256,433,052	83.2%
2006	366,650,515	270,705,017	73.8%
2007	316,138,419	150,858,506	47.7%
2008	308,019,761	355,732,115	115.5%
2009	351,646,663	343,787,486	97.8%
2010	418,427,738	369,952,868	88.4%
2011	447,924,105	424,546,805	94.8%
2012	590,570,637	419,926,997	71.1%

Source: 2012 MSERS CAFR, 2003 MSERS CAFR

In 2011, the Michigan legislature tried to curb this growing cost by giving Tier 1 members a choice: they could volunteer to immediately leave the DB system and move their benefits over to the DC system, or they could begin paying a four percent contribution of their annual compensation to the DB fund.⁵¹ This represented a second buyout offer similar to the opportunity to switch in early 1997. Those staying in the DB fund could also elect to be automatically transitioned to the DC system once they reached 30 years of service, but until then they would still have to make the four percent contribution. In August 2013, the State of Michigan Court of Appeals ruled this four percent requirement violated the state constitution.⁵² At the time of this writing, the governor had yet to decide if his office would appeal to the State Supreme Court.

Additionally, former Michigan Treasurer Douglas Roberts questions whether allowing workers to switch from the DB to DC ultimately is fiscally responsible. The option to leave the DB system offered in both 1997 and 2011 amounted to a buyout of a contributing member. This meant removing assets from the MSERS system that previous actuarial accounting was assuming would remain in the fund, accruing interest. While buying out workers also meant future benefits would not have to be paid out, this does not inherently mean that the pension

fund saved money. Roberts says that he thinks these early out options have also contributed to the weak performance of the DB fund over the past decade and a half, exacerbating the challenges Michigan created by not fully meeting its ARC payments.⁵³

F. Challenges from Underfunding Health Care Benefits

Other post-employment benefits (OPEBs) offered for MSERS Tier 1 and 2 members have also been systematically underfunded. MSERS Comprehensive Annual Financial Reports began listing the liabilities of OPEBs in 2007, and since then the state has not made a 100 percent ARC contribution, as shown in Table 6. As of 2012, there is a \$14.3 billion unfunded liability for MSERS' OPEB.

Table 6: Trends for OPEB Annual Required Contribution

Fiscal Year	Annual Required Contribution	Actual Contribution	Other Gov't Contributions	% Contributed
2007	\$898,716,522	\$359,375,055	\$0	40.0%
2008	\$879,245,817	\$342,186,903	\$23,003,762	41.5%
2009	\$922,791,423	\$362,419,285	\$21,986,686	41.7%
2010	\$870,011,953	\$360,125,502	\$27,058,460	44.5%
2011	\$1,020,144,325	\$388,196,118	\$64,773,181	44.4%
2012	\$960,639,525	\$648,881,078	\$23,774,071	70.0%

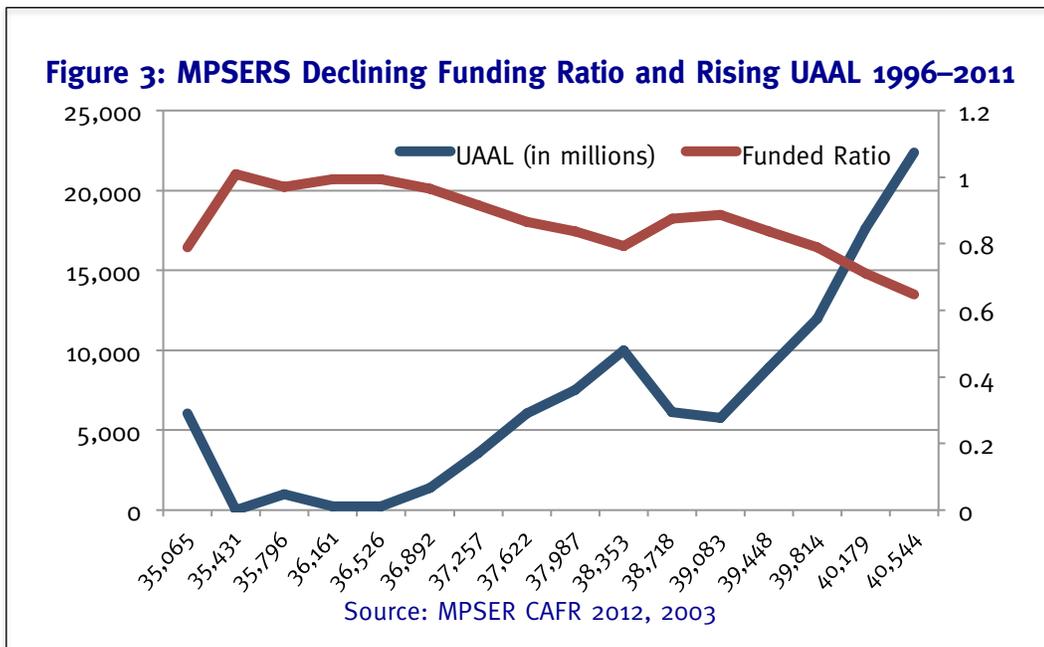
Source: MSERS CAFR 2012

G. Challenges from Not Reforming MPSERS

Although the legislature failed to pass a bill that would have closed MPSERS in 1996 with a soft freeze, the state adjusted its valuation method the following year, reassigning the fair market value of MPSERS assets to “realize all of the market gains that occurred and thus wiped out all gains and losses to be used in future years.”⁵⁴ Michigan uses a common actuarial accounting method where liabilities are measured against a rolling average of the value of assets to determine what, if any, unfunded liability exists. This allows for governments to smooth out any extra payments needed to ensure the system is properly funded. Sometimes the rolling average is higher than the fair market value of the assets in any given year, but that is not always the case. So what Michigan essentially did in 1997 was abandon the rolling average approach, counting its assets at the full fair market value—which was higher than the rolling average—and then report that it no longer had an unfunded liability.

The accounting methodological trick meant the MPSERS went from unfunded liability \$4.7 billion to an overfunding of \$259 million overnight.⁵⁵ What would

have been an 84.4 percent funding ratio was turned into a 100.9 percent ratio. From 1998 until 2002, MPSERS maintained a funding ratio above 90 percent. In the decade that followed, however, its fiscal health declined. As shown in Figure 3, the funding ratio dropped to 64.7 percent in fiscal year 2011 (the most recent available), with a \$22.4 billion unfunded liability.

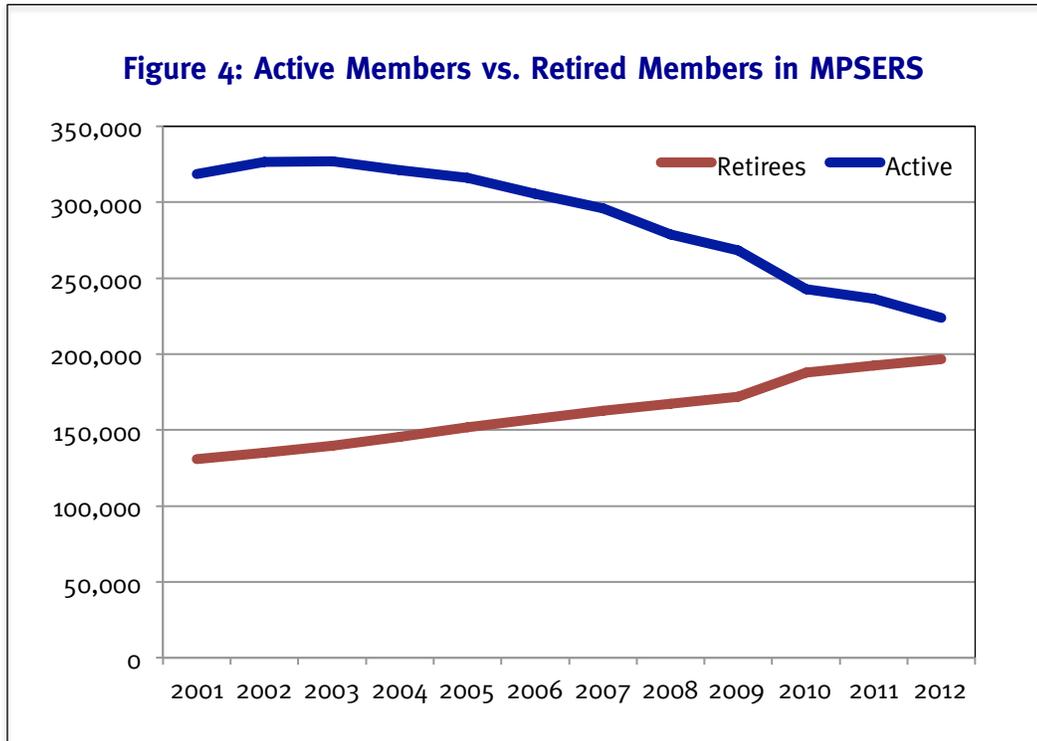


One source of these fiscal challenges is that Michigan began to lower its contribution to the public school employee fund. Between 1993 and 2002 the average state contribution was 106.9 percent of ARC. But between 2003 and 2012 the average contribution was 87.1 percent of ARC.⁵⁶

In addition, the state did not fully fund its OPEB annual required contributions. From 2007 to 2012, the most comprehensive data available, the state never contributed more than 42.5 percent of ARC for the retiree’s health care fund. This is part of the reason the MPSERS unfunded liability for OPEBs was \$25.9 billion in 2011 (according to the most recent available information).

Another factor has been demographic shifts leading to fewer members of MPSERS being contributors to the fund. Figure 4 shows that the ratio between active members MPSERS and retired members has been rapidly tightening, particularly as the baby boomer generation has begun retiring. Within a few years, there will be more members withdrawing monthly pension checks from the system than public school employees contributing from their paychecks into the system.

The unfunded liability for MPSERS benefits, including both pension and health care, was \$48.3 billion in 2012. In the face of this dismal fiscal scenario the state has tried a number of adjustments to MPSERS, but not wholesale reform. Laws passed in 2010, 2011 and 2012 have met with varying degrees of success in generating revenue but have also drawn legal challenges.



(1) Public Act 75 of 2010

In 2010, the legislature passed a law that sought additional revenue through three channels. First, the state offered increased benefits for the 38,000 public school employees eligible to retire if they did so the following year.⁵⁷ The effect was to try and buyout public school employees so they could hire new ones that cost less to employ and would be making contributions to the system. Second, the state created a hybrid DB/DC plan for new public school employees. New hires were enrolled in the DB fund, but would not vest in those benefits without at least 10 years' experience (similar to previous law) and would have higher contribution requirements.⁵⁸ They would also get a two percent of salary contribution to a DC fund with up to one percent of salary matched by the state.⁵⁹ Third, the state began to require that all members of MPSERS, including retirees, contribute three percent of their salaries to a fund for paying health care benefits.⁶⁰

In April 2011, a Michigan Court of Claims ruled the three percent contribution increase was in violation of the state constitution. This was upheld by a Court of Appeals in August 2012, with the state then appealing to the Michigan Supreme Court. As of August 2013 the case has not yet been resolved.⁶¹

(2) Public Act 38 of 2011

In another attempt to provide funding for MPSERS, the legislature changed the laws regarding tax exemptions for retiree benefits. This law was challenged with a class action lawsuit in August 2013, with the status of the case still pending.⁶²

(3) Public Act 300 of 2012

In August 2012, the legislature attempted to solve some problems with the 2010 bill by giving public school employees the option of joining a defined-contribution plan like MSERS Tier 2, or pay the three percent contribution to health care benefits. In addition the law reduced the state subsidy for health care premiums to 80 percent for current employees, but ended all OPEBs for new hires and instead established health savings accounts for them with contributions of two percent of salary.⁶³ The Michigan Education Association filed suit against the 2012 law as unconstitutional, but a Court of Claims judge rejected the claim in November 2012. The case has been appealed to the Court of Appeals, which is still pending.⁶⁴

Part 6

Lessons and Conclusion

Ultimately, Michigan has saved money in normal costs because of its pension reform, allowed more workers to vest in their pensions, reduced longevity liability for the state, and avoided potential further losses that could be reasonably expected to have occurred if MSERS followed a similar non-reform path as MPSERS. The process of successfully reforming MSERS thus provides a number of lessons for policymakers today facing similar challenges to their retirement systems.

A. Achieving Reform Goals

1. **Determined Policymakers Can Drive Reform.** Governor Engler, Treasurer Roberts, Rep. Gilmer and Rep. Rhead all played critical roles in creating pension reform. The governor drove the process, with the technical support of the treasurer’s office, and the necessary allies in the legislature who could guide a bill through procedural hurdles.
2. **Preparation Matters.** The governor’s office hired the requisite legal counsel to make sure the reform plan would avoid legal challenges, the kind that have plagued nearly every recent pension reform effort in Michigan. The reform process took nearly a year in the planning stage and the proposed reforms were matched directly to the articulated problems with the status quo.
3. **Avoid Direct Conflict.** During the reform process the governor avoided overhyping the process so as to not make it a “cause célèbre.” This meant that the governor might not enjoy a “big political win,” but it also avoided making opponents dig in their heels to fight the process. In today’s political climate it is unlikely that a major pension reform will escape public notice, but reformers can still work to avoid rhetoric that forces their opponents to take hard lines in negotiations.
4. **Highlight Risks to the Taxpayers.** It is possible that reform might not have passed the state legislature if not for a strong stock market making individual

retirement accounts appear so appealing. And in the wake of the financial crisis, it is unlikely that arguments for defined-contribution accounts can be persuasive if they rest on similar arguments. As of 2010, actuaries estimated that on average defined-contribution accounts would provide annual payouts of \$9,000, whereas defined-benefit members could expect about \$30,000 in annual benefits on average.⁶⁵ DC members carry the responsibility for their retirement and bear the risks of losses in events like the financial crisis, whereas DB members are promised the same payouts even if the system's assets take a hit from investment losses. However, Michigan pension reformers also were focused on long-term risks to taxpayers, and policymakers today can point out that defined-benefit funds are also dependent on investment returns. The lack of certainty for investment returns puts taxpayers at long-term risk, especially if actuarially determined annual contributions are based on unrealistic assumptions.

B. Managing the Post-Reform Process

1. **Don't Underfund a Closed DB System.** The first five years following MSERS reform demonstrate how a soft freeze can effectively close a DB fund and establish a DC fund. The last decade demonstrates that a state must commit itself to properly funding its DB system during the closure period; missing ARC payments will create unfunded liabilities quickly. And because a closed system already faces the challenge of falling contributions from active salaries, it is much harder to catch up on underfunding than in an open DB system. In 2012, MSERS commissioned a study into its liabilities and risks over the next two decades. The Asset/Liability Study found that “assuming the current contribution policy remains unchanged, the System would need to experience annual returns in excess of 12.20 percent over the next 10 years or 9.00 percent over the next 20 years without exception in each and every year in order to reach full funding. Achieving these lofty returns on such a sustained basis is extremely unlikely in our judgment and underscores our conclusion that investment returns alone cannot move the System to full funding or even near it.”⁶⁶
2. **Review Actuarial Assumptions.** A closed DB system should still be monitored for fiscal risks, and ensure actuarial assumptions are realistic. Not only has Michigan underfunded MSERS Tier 1 plans but its risk assumptions likely need to change, which would make the gap larger. The 2012 Asset/Liability Study modeled how projections of MSERS fiscal stability would change if the assumed return rate were off by just 100 basis points, i.e., 7 percent rather than the assumed 8 percent. The authors

estimated this would mean a \$1.6 billion difference in asset values, and require \$1.7 billion more in contributions from the state over a 20-year period.⁶⁷ The report concluded: “given the widely shared concerns about a low return environment in the capital markets over the foreseeable future, this is a conclusion that should be thoroughly understood and appreciated. In the event that capital markets do not support returns commensurate with the assumed rate of return (8.00 percent), [this] effectively increases the reliance on contributions to complete the payout of the System’s liabilities, especially in later years.”⁶⁸ Additionally, if members of a DB system are being offered an opportunity to leave through some kind of buyout program, the cost of removing those liabilities *and* the assets should be actuarially assessed.

3. **Do Not Ignore OPEB Risks.** Michigan did not adequately address the risks of OPEB unfunded liabilities during the reform process, and today the MSERS health care fund is facing a shortfall of \$14.3 billion.

C. Conclusion: A Successful Reform for the Great Lakes State

The citizens of Michigan today are benefiting from prescient political leadership nearly two decades ago. The 1996 reform of MSERS has undoubtedly saved taxpayers today from higher unfunded liabilities than exist today and perhaps even saved them tax dollars in spending on normal costs. There are still challenges for Michigan, particularly in addressing a pattern of systematically underfunding the state’s DB systems. However, comparing the trajectory of MSERS post-reform and the unreformed MPSERS demonstrates that Governor Engler and his pension reform team were right to worry about future investment returns. Their reform efforts have also allowed dramatically more state employees to be vested in their pensions and have more control over how they are invested, meaning pension reform created benefits for both taxpayers and state employees.

About the Author

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Related Resources

George Passantino and Adam B. Summers, *The Gathering Pension Storm: How Government Pensions are Breaking the Bank and Strategies for Reform*, Policy Study No. 335 (Los Angeles: Reason Foundation, June 2005), <http://reason.org/studies/show/the-gathering-pension-storm>.

Adam B. Summers, *How to Fix California's Public Pension Crisis*, Policy Study No. 382 (Los Angeles: Reason Foundation, June 2010), <http://reason.org/studies/show/fix-california-pension-crisis>.

Sal Rodriguez, "Reason Foundation's Fall Pension Reform Webinar Material," *Out of Control Policy Blog*, November 13, 2013, <http://reason.org/blog/show/reason-foundations-pension-reform-w>.

Anthony Randazzo, *Pension Reform Case Study: Rhode Island*, Policy Study No. 428 (Los Angeles: Reason Foundation, January 2014), <http://reason.org/studies/show/pension-reform-rhode-island>.

Adam B. Summers, *Pension Reform Case Study: San Jose*, Policy Study No. 429 (Los Angeles: Reason Foundation, February 2014), <http://reason.org/studies/show/pension-reform-san-jose>.

Endnotes

- ¹ The state also operated four smaller pension funds for state workers, including the Legislative Retirement System, State Police Retirement System, Judges' Retirement System, and Military Retirement Plan. An additional municipal employees system was also operated by the state.
- ² Rich Danker, *Implementing Defined Contribution Pension Reform: Five Case Studies*, American Principles Project, February 2013, <http://americanprinciplesproject.org/wp-content/uploads/2013/02/Implementing-Defined-Contribution-Pension-Reform.pdf>.
- ³ Michigan State Employees' Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, p. 17, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf; Rich Danker, *Implementing Defined Contribution Pension Reform: Five Case Studies*, American Principles Project, February 2013, <http://americanprinciplesproject.org/wp-content/uploads/2013/02/Implementing-Defined-Contribution-Pension-Reform.pdf>.
- ⁴ The pension system applies not only to general state employees, but also employees of: American Legion, American Veterans, Veterans of Foreign Wars, Disabled American Veterans, Mackinac Island State Park, Marine Corps League, Michigan Bar Association, Business Enterprise Program, Third Circuit Court, Records Court and 36th District Court. See Michigan State Employees' Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012*, http://www.michigan.gov/documents/orsstatedb/SERS_2012_CAFR_412883_7.pdf; Michigan Public Act 240 of 1943.
- ⁵ Michigan Public Act 240 of 1943, section 1(o) and section 20, page 401, 407, as originally passed, accessed through the Session Law Library.
- ⁶ Michigan Public Act 240 of 1943, sections 35 & 38, page 412–413, as originally passed, accessed through the Session Law Library.
- ⁷ Michigan Public Act 240 of 1943, sections 19(a), page 407, as originally passed, accessed through the Session Law Library.
- ⁸ Michigan State Employees' Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012*, http://www.michigan.gov/documents/orsstatedb/SERS_2012_CAFR_412883_7.pdf.
- ⁹ Ibid.
- ¹⁰ Ibid.
- ¹¹ According to the 1997 MPSERS CAFR: "Member Investment Plan (MIP) members enrolled in MIP prior to January 1, 1990 contribute at a permanently fixed rate of 3.9% of gross wages. The MIP contribution rate was 4.0% from January 1, 1987, the effective date of the MIP, until January 1, 1990 when it was reduced to 3.9%. Members first hired January 1, 1990 or later and returning members who did not work between January 1, 1987 through December 31, 1989 contribute at the following graduated permanently fixed contribution rate: 3% of the first \$5,000; 3.6% of \$5,001 through \$15,000; 4.3% of all wages over \$15,000." Michigan Public School Employees' Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, p.21, http://www.michigan.gov/documents/mpsers1997cafr_124450_7.pdf.

- ¹² Michigan Public School Employees' Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, p.51, http://www.michigan.gov/documents/mpsers1997cafr_124450_7.pdf.
- ¹³ Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012*, http://www.michigan.gov/documents/orsstatedb/SERS_2012_CAFR_412883_7.pdf.
- ¹⁴ Aaron Steelman, "Finding Solution at Home," *Cato Institute*, February 26, 1998, <http://www.cato.org/publications/commentary/finding-solution-home>
- ¹⁵ United States Census Bureau, "State Median Income," accessed November 2, 2013, <http://www.census.gov/hhes/www/income/data/statemedian/>
- ¹⁶ Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf
- ¹⁷ An exception was made for corrections officers who were eligible to retire at age 51 with 25 or more years of service or age 56 with 10 or more years of service, and conservation officers who could retire after 25 years of service regardless of age, see Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf
- ¹⁸ Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf
- ¹⁹ The state opted to use entry age normal actuarial cost methodology, with standard GASB level percent pay amortization.
- ²⁰ Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf
- ²¹ An exception was made for corrections officers who were eligible to retire at age 51 with 25 or more years of service or age 56 with 10 or more years of service, and conservation officers who could retire after 25 years of service regardless of age, see Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf
- ²² Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf
- ²³ The state opted to use entry age normal actuarial cost methodology, with standard GASB level percent pay amortization.
- ²⁴ Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf
- ²⁵ Ibid.
- ²⁶ Douglas Roberts, via a phone interview with Anthony Randazzo on January 7, 2014. Cited with permission.
- ²⁷ Ibid.

- ²⁸ This is based on MSERS publicly available data for 1988 onward starting in its 1997 CAFR. See Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf
- ²⁹ Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf
- ³⁰ Rich Danker, *Implementing Defined Contribution Pension Reform: Five Case Studies*, American Principles Project, February 2013, <http://americanprinciplesproject.org/wp-content/uploads/2013/02/Implementing-Defined-Contribution-Pension-Reform.pdf>.
- ³¹ Ibid.
- ³² Ibid.
- ³³ Ibid.
- ³⁴ Douglas Roberts, via a phone interview with Anthony Randazzo on January 7, 2014. Cited with permission.
- ³⁵ Steelman, “Finding Solution at Home.”
- ³⁶ Michigan Public Act 487 of 1996, as originally passed, available at <http://legislature.mi.gov/doc.aspx?1996-HB-6229>, accessed November 1, 2013.
- ³⁷ Doug Roberts recalls that there were several Republican members of the state legislature who promised the teacher’s union that they would not vote in favor of changing teacher’s pensions. In exchange those Republicans received endorsements and support from the state teacher’s union. When the vote was called, there were enough Republicans who kept their word to not change teacher’s pensions that voted for changing MSERS, but not MPSERS.
- ³⁸ Eileen Norcross, “Michigan’s Pension Reform Experience,” *Mercatus Center at George Mason*, October 26, 2010, at <http://neighborhoodeffects.mercatus.org/2010/10/26/michigans-pension-reform-experience/>
- ³⁹ Also, because the DB system was not fully closed, there were no “transition costs” from changing GASB accounting standards that sometimes exist when converting workers in a DB system to a DC system.
- ⁴⁰ Michigan Public Act 240 of 1943, as amended Sections 38.63-64, accessed November 1, 2013.
- ⁴¹ Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012*, http://www.michigan.gov/documents/orsstatedb/SERS_2012_CAFR_412883_7.pdf
- ⁴² Ibid.
- ⁴³ Leslie E. Papke, “Pension Plan Choice in the Public Sector: The Case of Michigan State Employees,” *Michigan State University* (March 2004), at <https://www.msu.edu/~ec/faculty/papke/NTJforum.vr1.pdf>; Danker, *Implementing Defined Contribution Pension Reform: Five Case Studies*.
- ⁴⁴ Michigan Public Act 240 of 1943, as amended Section 38.68. Accessed November 1, 2013.
- ⁴⁵ Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf
- ⁴⁶ Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012*,

http://www.michigan.gov/documents/orsstatedb/SERS_2012_CAFR_412883_7.pdf; “About the State Employees’ Retirement System,” *Office of Retirement Services*, <http://www.michigan.gov/ors/0,1607,7-144-6183-109542--,00.html>, accessed November 1, 2013

- ⁴⁷ Dreyfuss also estimates the state has saved from reform by avoiding a larger unfunded liability. He notes that in 2011, the defined-benefit portion of MSERS had a \$4.1 billion UAAL, and estimates that this would have been higher if not for the creation of the DC fund. This could be true, however, it is also possible that part of the present UAAL has come from a decreased membership in the DB fund as it is being closed down. What savings the state has achieved from having a lower unfunded liability is not necessarily clear. See Richard C. Dreyfuss, “Estimated Savings from Michigan’s 1997 State Employees Pension Plan Reform,” *Mackinac Center for Public Policy*, June 23, 2011, at <http://www.mackinac.org/archives/2011/2011-03PensionFINALweb.pdf>
- ⁴⁸ Dreyfuss, “Estimated Savings from Michigan’s 1997 State Employees Pension Plan Reform.”
- ⁴⁹ “A Review of Defined Benefit, Defined Contribution, and Alternative Retirement Plans,” *Pension Review Board, Texas*, May 2012, at <http://www.prb.state.tx.us/files/education/research/finaldbdcwhitepaper.pdf>
- ⁵⁰ The Center for Retirement Research at Boston College also argues, “much of this large increase is due to the fact that [MSERS] amortizes its unfunded liability in level dollar amounts, which has the effect of front loading amortization payments compared to rates calculated as level percent of payroll each year.” See “Summary: The State of Michigan,” *Center for Retirement Research at Boston College*, February 2013, <http://crr.bc.edu/wp-content/uploads/2013/02/Michigan.pdf>; Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997*, http://www.michigan.gov/documents/sers1997cafr_115293_7.pdf; Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012*, http://www.michigan.gov/documents/orsstatedb/SERS_2012_CAFR_412883_7.pdf
- ⁵¹ Michigan Public Act 264 of 2011; Michigan State Employees Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012*, http://www.michigan.gov/documents/orsstatedb/SERS_2012_CAFR_412883_7.pdf
- ⁵² *Michigan Coalition of State Employee Unions v. State of Michigan*, State of Michigan Court of Appeals, No. 314048, LC No. 12-000017-MM, August 13, 2013, at http://publicdocs.courts.mi.gov:81/OPINIONS/FINAL/COA/20130813_C314048_45_314048.OPN.PDF
- ⁵³ Douglas Roberts, via a phone interview with Anthony Randazzo on January 7, 2014. Cited with permission.
- ⁵⁴ Michigan House Fiscal Agency, at http://house.michigan.gov/hfa/PDFs/append_e.pdf (accessed August 27, 2013).
- ⁵⁵ Ibid.
- ⁵⁶ Michigan Public School Employees’ Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012*, at http://www.michigan.gov/documents/orsschools/MPERS_2012_CAFR_412874_7.pdf; Michigan Public School Employees’ Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2003* at http://www.michigan.gov/documents/mpsers2003cafr_124456_7.pdf

- ⁵⁷ “An Analysis of Public Act 75 of 2010 – MPSERS Reform,” *Michigan Association of School Boards Retirement Reform Government Relations*, at <http://www.masb.org/Portals/0/pdf/PA752010.pdf> (accessed August 27, 2013)
- ⁵⁸ “State Pension Reform Revisited,” *Center for State & Local Government Excellence*, at <http://slge.org/uncategorized/state-pension-reform-revisited> (accessed August 27, 2013)
- ⁵⁹ Michigan Public Act 75 of 2010, as originally passed, at <http://www.legislature.mi.gov/documents/2009-2010/publicact/pdf/2010-PA-0075.pdf>
- ⁶⁰ “Public Act 75 of 2010 Summary,” *Michigan Office of Retirement Services*, at http://www.michigan.gov/documents/orsschools/R0833C_Legislative_Summary_329206_7.pdf (accessed August 27, 2013)
- ⁶¹ “Welcome,” *Michigan Office of Retirement Services: Public School Employees Retirement System*, at <http://www.michigan.gov/orsschools> (accessed August 27, 2013)
- ⁶² Brian Smith, “Michigan Attorney General Bill Schuette seeks to dismiss class-action lawsuit against pension taxes,” *August 9, 2013*, at http://www.mlive.com/news/index.ssf/2013/08/attorney_general_bill_schuette_4.html
- ⁶³ Michigan Votes, “Senate Bill 1040: Revised school pension system,” *Mackinac Center for Public Policy*, <http://michiganvotes.org/2012-SB-1040> (accessed November 1, 2013)
- ⁶⁴ “MEA retirement lawsuits still pending in court system,” *Michigan Education Association*, April 12, 2013, at <http://www.mea.org/mea-retirement-lawsuits-still-pending-court-system>
- ⁶⁵ “A Review of Defined Benefit, Defined Contribution, and Alternative Retirement Plans,” *Pension Review Board, Texas*, May 2012, at <http://www.prb.state.tx.us/files/education/research/finaldbdcwhitepaper.pdf>
- ⁶⁶ RVKuhns & Associates, Inc., “State Employees’ Retirement System Asset/Liability Study - Executive Summary,” *State of Michigan Retirement Systems*, September 6, 2012, at http://www.michigan.gov/documents/treasury/AssetLiabilityStudy_StateEmployees_368378_7.pdf
- ⁶⁷ Ibid.
- ⁶⁸ Ibid.



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