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Pension Reform Case Study: Michigan 2016 Update

by Anthony Randazzo



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Executive Summary

In 1996, the Michigan state legislature passed a first-of-its-kind bill that closed the state employees' defined benefit pension fund to 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. Pension reform in Michigan has meant the State Employee Retirement system is more solvent today than if the legislature had not closed the defined benefit plan for new hires, with a full system funded ratio of 88% as of 2015, compared to an estimated 68% funded ratio without reform.

However, while Michigan provides valuable insights for how to pursue adopting pension reform—such as taking sufficient time to fully analyze a pension plan's problems, avoiding conflict by communicating with all parties, and having determined elected officials leading the effort—the state has also provided an example of how *not* to manage the implementation of pension reform.

Michigan's poor management of the pension reform process has directly led to the state's growth in unfunded liabilities over the past two decades. A properly managed pension reform process would have added about \$8.4 billion to the assets of MSERS as of 2015, meaning the plan would be overfunded instead of deep in the red.

Closing the MSERS defined benefit plan has prevented the state from taking on even more unfunded liabilities than without a change. But the positive effects of pension reform have been muted by the failure to manage the defined benefit plan well as it is being closed over time. Collectively, the process of reforming the Michigan State Employee Retirement system provides a number of lessons for policymakers today facing similar challenges to their pension plans.

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Part 1

The Problem: Uncertainty of Future Costs

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 first states to undertake major public sector pension reform that closed a defined benefit plan and created a new defined contribution plan for new hires. As a result, the state put itself in a position to avoid billions in losses to its pension system as economic conditions changed entering the 21st century.

The impetus for reform did not start with concerns over an existing pension crisis, but rather fear of future problems. 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 might do, Governor Engler found what he felt was a serious problem: a large, unfunded pension liability with the potential for rapid debt growth in the future.

A. 1943–1996: A Brief Account of Michigan's Pension System

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 In 1996, the state employees' retirement account was 94% funded with \$469 million in unfunded liabilities, but the public school employees' pension fund had an unfunded liability of \$6 billion and was just 79% funded.² Although this did not constitute an immediate fiscal crisis, Governor Engler believed there were long-term risks in the system and that the status quo was not a good deal for taxpayers and would be a disservice to state workers. Governor Engler's office estimated that within 20 to 25 years the promised pension benefits could bankrupt the system.³

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 These figures are on an actuarial value of asset basis. Pension plans report their unfunded liability using both a "market value" and "actuarial value" of assets. For more on this see <http://reason.org/news/show/glossary-of-pension-terminology>

³ Rich Danker, "Implementing Defined Contribution Pension Reform: Five Case Studies," American Principles Project, February 2013.

A deep dive into the annual reports on the state’s pension systems 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% of state employees did not qualify for a pension because they had not worked for the state a sufficient amount of time.⁴ Worse, 59% of public school employees were ineligible for a pension because they had not worked for the state for the requisite minimum years. For example, if a teacher worked for just six years and then moved, he would only receive back the contributions he made to the plan and not receive any accumulated benefits or contributions made on his behalf.⁵ The pension eligibility rules, thus, created the potential for recruitment and retention problems.

However, analyzing the history of the state pension systems, Governor Engler’s administration found that there were structural, long-term challenges that posed a fiscal danger to the state. 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 state-level employees (except those covered under other, vocation-specific pension plans).⁶ 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.⁷ Members were required to contribute 5% of their compensation (up to \$3,600 maximum), and the state employer contributed an actuarially determined amount deemed sufficient to fully fund expected benefits.⁸ Employees would become eligible for retirement at the age of 55 with 30 years of service, or age 60 with at least 10 years of service.⁹

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

⁴ Most state employees needed to work 30 years to be eligible for a full retirement, per the plan’s vesting requirement. Michigan State Employees’ Retirement System, “Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997,” pp. 17, 49.

⁵ The long vesting period created a potentially positive fiscal scenario for the state—workers who 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 to remain in 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.

⁶ 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,” Michigan Public Act 240 of 1943.

⁷ Michigan Public Act 240 of 1943, section 1(o) and section 20, pp. 401, 407, as originally passed, accessed through the Session Law Library.

⁸ Ibid, sections 35 and 38, pp. 412–413, as originally passed, accessed through the Session Law Library.

⁹ Ibid, sections 19(a), p. 407, as originally passed, accessed through the Session Law Library.

adjustment (COLA) benefits, which increased the rate at which pension benefits would grow after an employee retired.¹⁰ Two years later the state eliminated requirements that members contribute 5% of their salaries, and also increased COLAs again.¹¹ 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 early 1980s, MSERS outperformed its targeted 8% return on assets. But rather than save this money to ensure the plan could pay promised pensions, the legislature opted in 1983 to distribute supplemental checks to retirees from investment income earned above the 8% target.¹²

The state adopted an important change to MPSERS in 1986 with the introduction of the Members Investment Plan (MIP).¹³ 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 4% of their pay (later to be lowered to 3.9%) 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 Part 2 in this paper for details).¹⁴

In 1987, MSERS members got another cost-of-living adjustment boost. And in 1988, all state employee benefit recipients became eligible for “automatic 3% annual (non-compounded) benefit increases, with a maximum \$300 annual increase.”¹⁵

As the late 1980s rolled into the 1990s, the funding ratio of both retirement systems fluctuated. As traditional defined benefit plans, 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%.

¹⁰ Michigan State Employees' Retirement System, “Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012.”

¹¹ Ibid.

¹² Ibid.

¹³ 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 and 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.

¹⁴ Michigan Public School Employees' Retirement System, “Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012,” p. 51.

¹⁵ Michigan State Employees Retirement System, “Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012.”

Between 1988 and 1996, MSERS’s funding ratio had fluctuated between fully funded and 81.7% funded.¹⁶ A small surplus at the end of the 1980s turned into an unfunded liability of \$1.1 billion by 1993 and a near 82% funding ratio. The state employee plan’s financial state rebounded though from 1993 to 1996, both with the benefit of investment returns being driven by the dot-com bubble in stock prices and better funding behavior by state employers (see the discussion of ARC payments in Part 2).

Similarly, MSPERS had some troubled years before the 1996 reform effort. Its funding ratio was 84.3% in 1988, with an unfunded liability of \$2.2 billion.¹⁷ The funding ratio stayed below 80% for most of the 1990s, and the unfunded actuarial accrued liability (UAAL) peaked in 1995 at \$6.9 billion, a funding ratio of 74.6%. By 1996, the funding ratio stood at 78.9%, with an unfunded liability of \$6 billion.

B. Long-Term Liabilities Creating Taxpayer Risk and Uncertainty

The benefit changes adopted for MSERS and MSPERS increased the value of already promised pension benefits—known as accrued liabilities—but did not add additional funds to the plans to ensure they were paid for.¹⁸ In the years before the benefit increases were added employers made annual contributions based on a forecast of what the benefits would be at that time, but with the adjustments such as COLAs, those contributions were no longer enough. Thus, while the benefit changes did not add immediate fiscal costs for the state, they did create additional long-term liabilities that were unfunded.

At the same time, the state and school employee systems were facing other long-term liability challenges due to actuarial assumptions not properly reflecting reality. For example, each system was amortizing its debt over a four-decade time frame, spreading out the debt payments using a method that back-loaded most of the costs. As well, the pension systems were using a discount rate to value liabilities that reflected the risk of plan assets instead of the risk of plan liabilities. As a result, the adopted discount rate for the systems was not capturing economic shifts risk pricing that occurred from the 1980s to 1990s.¹⁹

To make matters worse from a fiscal perspective, pensioners were living longer after retirement than expected, 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

¹⁶ 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.”

¹⁷ Michigan State Employees Retirement System, “Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997.”

¹⁸ Before MIP, public school pensioners received a maximum annual cost-of-living adjustment of \$300, but under MIP the COLA was set at 3% 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.

¹⁹ One proxy for measuring risk is to use the 30-year treasury yield as a risk-free rate of return. Between FYE 1985 and FYE 1995, a three-year rolling average yield on 30-year treasury bonds fell 39% from 11.7% to 7.1%. However, during this time there was no reported substantial change to the discount rates used by either MSERS or MSPERS.

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."²⁰

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.

²⁰ Aaron Steelman, "Finding Solution at Home," Cato Institute, February 26, 1998.

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 38.9.²¹ 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% 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% of the active employees (63,807) had vested pensions. Compared to other states, Michigan’s combined funding ratio of 86.2% 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):

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

State employees were eligible for health benefits, classified as Other Post-Employment Benefits (OPEB).²² These benefits paid 95% of monthly health premiums, and 90% of monthly dental and vision premiums.²³

²¹ United States Census Bureau, “State Median Income,” accessed November 2, 2013.

²² Michigan State Employees Retirement System, “Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997.”

²³ Ibid.

Table 1: Actuarial Financial Data for MSERS and MPSERS (Fiscal Year Ended 1996)

	Michigan State Employees' Retirement System (FYE 1996)	Michigan Public School Employees' Retirement System (FYE 1996)
Total Members:	101,567	412,121
• Active Members	63,807	295,096
• Retirees	31,093	107,465
• Inactive Members	6,667	9,560
Contribution from state employer:		
• Normal Cost	9.2% of payroll	11.88% of payroll
• Unfunded Liability Amortization	1.2% of payroll	3.42% of payroll
Contribution from employee:		
• Normal Cost	0% of payroll	0% of payroll
• Investment Plan, hired before January 1, 1990	n/a	3.9% of payroll
• Investment Plan, hired after January 1, 1990	n/a	3% to 4.3% of payroll
Market Value of Assets	\$7.3 billion	\$30.9 billion
Actuarial Value of Assets	\$6.7 billion	\$22.5 billion
Actuarial Accrued Liability	\$7.2 billion	\$28.6 billion
Unfunded Actuarial Accrued Liability	\$469 million	\$6 billion
Funded Ratio (Actuarial Value Basis)	93.4%	78.9%
Actuarial Assumptions:		
• Assumed Rate of Return	8%	8%
• Discount Rate	8%	8%
• Payroll Growth Rate	5%	4%
• Inflation Rate	4%	4%
• Projected Salary Increase	3%–11.5%	4%–16%

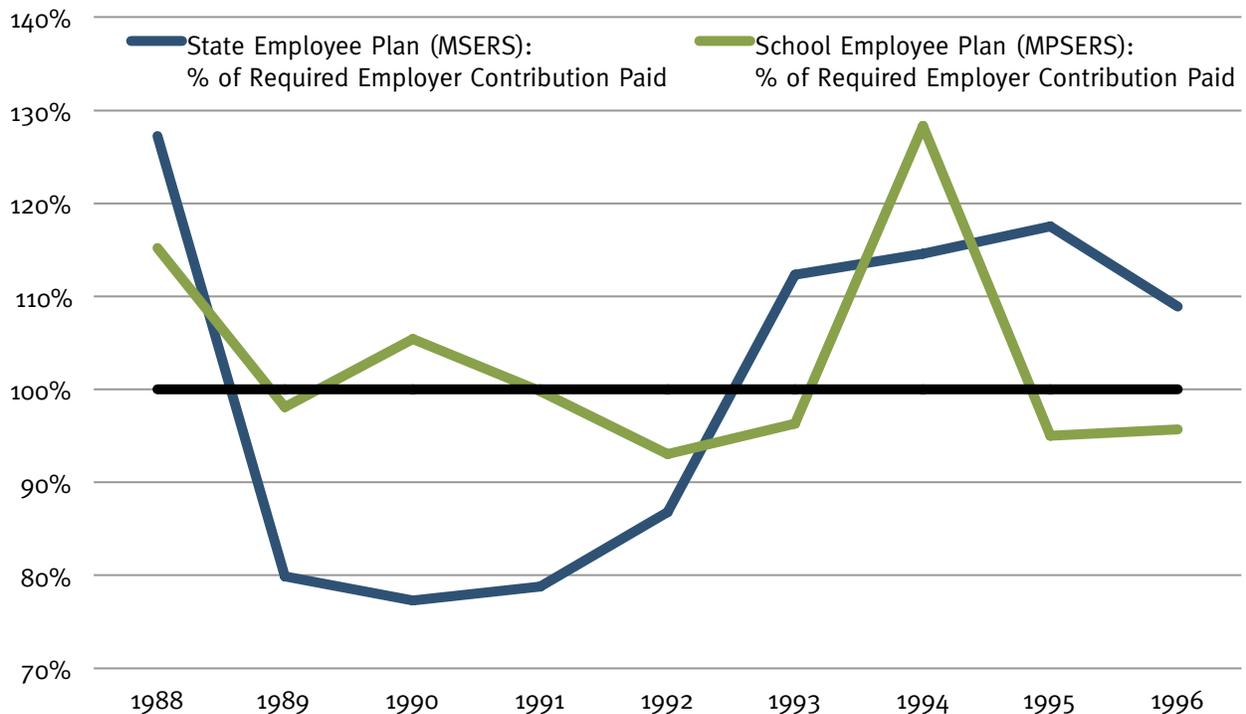
MSERS Notes: See Michigan State Employees Retirement System, "Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997." Individuals in MSERS were eligible to retire at age 55 with 30 years of service, or age 60 with 10 or more years of service. An exception was made for corrections 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. Monthly pensions were based on an average of the highest paid three consecutive years of service. And state employees received a 3% annual cost-of-living adjustment, with a maximum of \$300 a year increase.

MPSERS Notes: See Michigan Public School Employees' Retirement System, "Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997." 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. 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. Public school employees under the Basic plan received a 3% annual cost-of-living adjustment, with a maximum of \$300 a year increase. For MIP members, the \$300 maximum did not apply.

B. Michigan's Annual Required Contribution Performance Record

Between 1988 and 1996, Michigan public sector employers had a mixed record in paying their annual required contribution (ARC).²⁴ Each year actuaries determine how much employers should contribute in normal cost and unfunded liability amortization payments, the total of which is the ARC. As Figure 1 shows, MSERS went through a four-year period from 1989 to 1992 where the state only paid out between 77% and 86% of its ARC, and MPSERS fluctuated above and below paying 100%. Then, between 1993 and 1996, state employers sought to make up for this shortfall by overpaying the ARC.

Figure 1: Percentage of ARC Actually Paid, FYE 1988–1996



Source: MSERS Valuations, Reason Foundation Forecasts

This historic pattern suggested that not only were the actuarial assumptions and benefit changes to Michigan's defined benefit systems posing a long-term risk, but the very structure of a defined benefit plan that inherently involves actuarially determined contribution rates posed a systemic risk. However strong the state's pension systems appeared to be, their actuarially reported health was not taking into account future risks that could destabilize the state's finances, something Michigan State Treasurer Douglas Roberts was critical in identifying.

²⁴ Publicly available ARC data go only as far back as fiscal year end 1988.

Part 3

The Reform: Closing the Defined Benefit Plan and Creating a Defined Contribution Plan

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.²⁵ This meant state bureaucracy was dominated by individuals who stuck around because the job offered a healthy pension—not necessarily 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.”²⁶

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.

At the same time, Rep. Gilmer was focused on the problems of the underfunded MPSERS plan and the general concern that the state’s pension systems were overly reliant on continued strong investment returns. He and then-state Rep. Kim Rhead—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. 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.”²⁷

²⁵ Douglas Roberts, via a phone interview with Anthony Randazzo on January 7, 2014. Cited with permission.

²⁶ Ibid.

²⁷ Rich Danker, “Implementing Defined Contribution Pension Reform: Five Case Studies,” American Principles Project, February 2013.

A. Building the Case for Creating a Defined Contribution Plan

The reform effort required nearly a year to build the groundwork for a campaign within the state legislature for pension reform. “There was technical work to do so you had to prepare correctly,” Governor Engler recalled in an interview with the American Principles Project.²⁸ 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 pension plans depend on actuarial assumptions to generate the right contribution amounts each year, so that when workers retire there are enough assets to pay the promised benefits. One assumption is the rate of return those contributions will earn over time, meaning a defined benefit plan relies on the strength of its investments. If the pension fund does not have enough money to pay out an employee’s benefits when he or she retires—whether because investment returns were too low or assumptions about how long people would live were too short—then the public sector employer is required to make up the difference with other tax revenue. As a result, with defined benefit plans taxpayers are perpetually at risk that more tax dollars than expected will be required to pay retirement benefits to public sector workers.

Defined contribution pension plans are different because they do not promise a fixed retirement benefit, but instead offer a fixed annual payment into a personal retirement fund for a public sector worker. In this sense, defined contribution plans are similar to 401(k) plans in the private sector, with the investment risk and reward shifted from the taxpayers to the employee. Since the employee is responsible for managing his or her own retirement finances (like most private sector workers), the employer and taxpayers have 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

²⁸ Ibid.

higher expected returns for funds at least partly under individual employees' control, provided an additional selling point to skeptical legislators and incoming state workers.

B. Managing the Process of Reform Legislation

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 has said he did not want to make the pension reform debate a "cause célèbre" in Michigan.²⁹ 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."³⁰

Opponents of reform made two arguments. First, labor unions and state legislators opposed to reform argued that transitioning from a defined benefit to defined contribution 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."³¹

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% funding ratio, few could argue MSERS was in any immediate danger. And though MPSERS's funding ratio of 78.9% was more troubling, it was argued this was just below a commonly perceived 80% 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.

²⁹ Danker, "Implementing Defined Contribution Pension Reform."

³⁰ Douglas Roberts, via a phone interview with Anthony Randazzo on January 7, 2014. Cited with permission.

³¹ Steelman, "Finding Solution at Home."

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 11.³² 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.³³ 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.

1. Closing the Defined Benefit Plan

The pension reform legislation closed the MSERS defined benefit plan to new workers hired after March 30, 1997. The defined benefit fund was renamed “MSERS Tier 1.”³⁴

Employees already in the system were allowed to remain under the terms when they were hired, able to accrue benefits until they retired. Yet, with no new hires being put into the defined benefit system, MSERS Tier 1 was effectively put on a path to shut down once all eligible members had their benefits paid out. 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 4% annual contribution—this is discussed in the next section).³⁵

2. Creating a Defined Contribution Plan

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 defined contribution fund, which was designed with the following structure.³⁶

³² Michigan Public Act 487 of 1996, as originally passed, accessed November 1, 2013.

³³ Douglas 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 during the 1996 election. When the December 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.

³⁴ Pension terminology can be confusing. Technically, MSERS is one “system” that has two “tiers”—a defined benefit tier and a defined contribution tier. Other states use the word “plan” in the same place that Michigan uses the term “tier.” For the sake of simplicity, we will refer to MSERS Tier 1 as the defined benefit plan and MSERS Tier 2 as the defined contribution plan.

³⁵ Also, because the defined benefit system was not fully closed, there were no “transition costs” from changing GASB accounting standards that sometimes exist when converting workers in a defined benefit system to a defined contribution system.

³⁶ Michigan Public Act 240 of 1943, as amended Sections 38.63-64, accessed November 1, 2013.

- The state contributes 4% of each employee’s salary into the defined contribution fund.
- The state matches additional contributions made voluntarily by employees up to another 3% of their salary. Employees can contribute more beyond this, but it is not matched.
- Any contributions from the state vest at a faster rate than Tier 1 benefits: employees attain ownership of 50% of the state’s contributions to their defined contribution accounts after two years of service, 75% after three years of service, and 100% after four years.
- Any contributions from the employee to the defined contribution account vest immediately. If the employee chooses to leave before two years of service, he or she 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% of the contributions from the state—the 4% of salary standard contribution and any matched monies—as well as 100% of any additional salary he personally contributed to his own defined contribution 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 defined benefit plan.

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

The pension reform legislation offered existing Michigan state employees the option to terminate their membership in the defined benefit plan (Tier 1) and have the actuarial present value of their accrued benefits transferred into a defined contribution plan (Tier 2).³⁷ This amounted to a buyout because the state was giving workers 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, 1998.³⁸ Approximately 5.5% of state employees, amounting to about 5,100 employees, took this buyout.³⁹

³⁷ Michigan State Employees Retirement System, “Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012.”

³⁸ Ibid.

³⁹ Leslie E. Papke, “Pension Plan Choice in the Public Sector: The Case of Michigan State Employees,” *National Tax Journal*, Vol. 57, No. 2, Part 1 (June, 2004), pp. 329–339.

4. Maintaining 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.⁴⁰ The original law provided 95% premium payments for health care and 90% premium payments for dental and vision. The OPEB benefits structure has since changed, however they remain equally available to members of Tier 1 and 2.⁴¹

⁴⁰ Michigan Public Act 240 of 1943, as amended Section 38.68. Accessed November 1, 2013.

⁴¹ Michigan State Employees Retirement System, “Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 1997.”

Part 4

The Outcome: Solvency Improved, Long-Term Costs Mismanaged

The Michigan 1996 pension reform for MSERS has been a success from two main perspectives. First, the plan is more solvent today than it otherwise would be without having closed the defined benefit plan. Second, there has been a marked increase in the number of state employees fully vested in their benefits and with control over their retirement.

At the same time, the state has severely mismanaged the implementation process of pension reform, costing state taxpayers billions. This mismanagement was caused by explicit underfunding of the defined benefit plan by state employers, as well as implicit underfunding by the MSERS board through the actuarial assumptions adopted by the plan.

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

Since 1997, 67% of the MSERS payroll has shifted from the defined benefit plan to the defined contribution plan, as new hires have entered Tier 2 and members of Tier 1 have retired. The value of MSERS assets have not grown as fast as accrued liabilities, though, in part due to underfunding by employers and in part due to underperformance of investment returns. Table 2 shows these and other summary details for MSERS as of FYE 2015.

	1997 Tier 1: Defined Benefit	2015 Tier 1: Actual Defined Benefit Plan	2015 Tier 2: Actual Defined Contribution Plan
Active Members	63,807	13,795	36,100
Retired/Inactive Members	37,760	62,668	1,200
Total Covered Payroll	\$2,273 million	\$947 million	\$2,010 million
Accrued Liabilities	\$8,213 million	\$16,230 million	\$0
Market Value of Assets	\$8,875 million	\$10,730 million	\$2,901 million
Unfunded Liability	(\$662 million)	\$5,550 million	\$0
Funded Ratio: Defined Benefit Plan	108%	66.1%	100%
Funded Ratio: Full System	108%	88%	88%

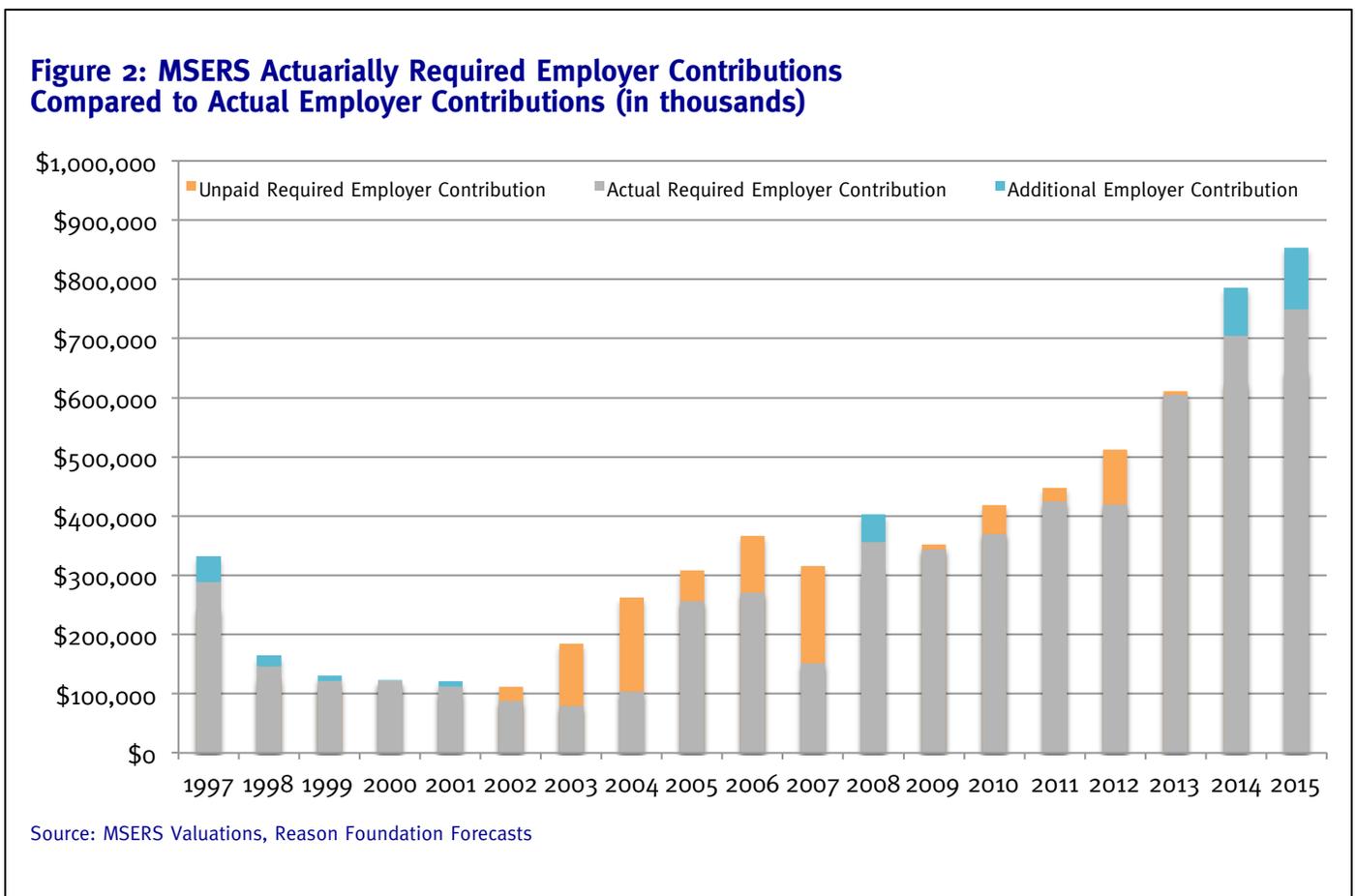
Source: "MSERS Comprehensive Annual Financial Reports 1997 and 2015," "MSERS Actuarial Valuation Report 2015," "State of Michigan Comprehensive Annual Financial Report 2015," Reason Foundation Calculations.

Note: For Tier 1 and Tier 2 2015 financial figures, accrued liability is reported total pension liability, market value of assets is reported fiduciary net position, and unfunded liability is reported net pension liability. For Tier 2 2015 membership figures, we have inferred the member counts and covered payroll by taking the difference between reported Tier 1 data and reported OPEB membership and payroll data (which comprises members and payroll from both tiers). The most recent publicly available OPEB data is for 2014, so we estimate the figures up to 2015 based on the historic trend. For Tier 2 market value of assets, we report the amount currently held in employee defined contribution accounts.

B. A Brief History of MSERS Pension Reform Implementation

1. Michigan Explicitly Underfunded MSERS Defined Benefit Plan

For the first few years after reform began, the state paid the full actuarially determined employer contribution to the plan.⁴² Even if a plan is closed to new members, obligations are still being added to the plan that require the employer to pay normal cost for members still under the defined benefit plan. And unfunded liability amortization payments are still necessary during the closing of a plan. However, since 2002 Michigan has systematically failed to pay the actuarially determined rates, shown in Figure 2:



The underperformance clearly starts in the sixth year of reform, with only 78% of the employer contribution requirement paid in 2002, 43% paid in 2003, and a historic low of 40% paid in 2004. In 2007 the state legislature decided to only pay the interest portion of the amortization payment, leading to just a 48% contribution relative to what actuaries determined was necessary. This was well before the financial crisis.

⁴² Portions of this case study were previously published as Anthony Randazzo and Truong Bui, *Did Pension Reform Improve the Sustainability of Pension Plans? Evidence from a Counterfactual Analysis of Michigan and Alaska*, Policy Study #450 (Los Angeles: Reason Foundation, March 2016).

Overall, Michigan officials have contributed less than 88% of the annual required employer contributions during the years since MSERS closed its defined benefit plan. The lower-than-required contributions made budgeting easier for lawmakers, but at the long-term expense of the plan, with the missed payments simply being added to unfunded liabilities.

2. Investment Returns Underperformed Expectations

Since 1997, MSERS has seen its assets underperform the long-standing 8% assumed rate of return. Between 1997 and 2015, MSERS has averaged a return of only 6.85%.⁴³ Figure 3 shows the variation in the returns, along with the average assumed rate and the average actual return rate.

The assumed rate of return being used by the plan is clearly disconnected from the actual experience of the plan—i.e. it is unrealistic.⁴⁴ The average market return on assets (6.85%) has been below the assumed return (8.0%) for nearly the last two decades. Similarly, the actuarially valued returns (smoothed on a five-year basis) have almost always been below the assumed rate of return since 2001.

One reason the state hasn't changed the rate, though, is because MSERS uses the assumed return as the discount rate as well—a common practice for public sector plans, though not a good practice.⁴⁵ If the assumed return were lowered then the discount rate would come down too. And reducing the discount rate would result in an increase in the net present value of accrued liabilities, which in turn would increase the reported unfunded liabilities.

The arguments for a lower discount rate and lower assumed return rate are different, but lead to the same result. A discount rate that reflected the risk of the liabilities would be much lower than the status quo, given the state of Michigan's constitutional provisions protecting retiree benefits. Using MSERS's historic investment return experience as a guide, plus the fiduciary principle of minimizing taxpayer risks, a more responsibly set assumed rate of return would at least be lower than the status quo. Combined, the use of a lower discount rate and assumed return would mean that the actual unfunded liabilities of the plan are higher than actually being reported as of 6.85%.⁴⁶

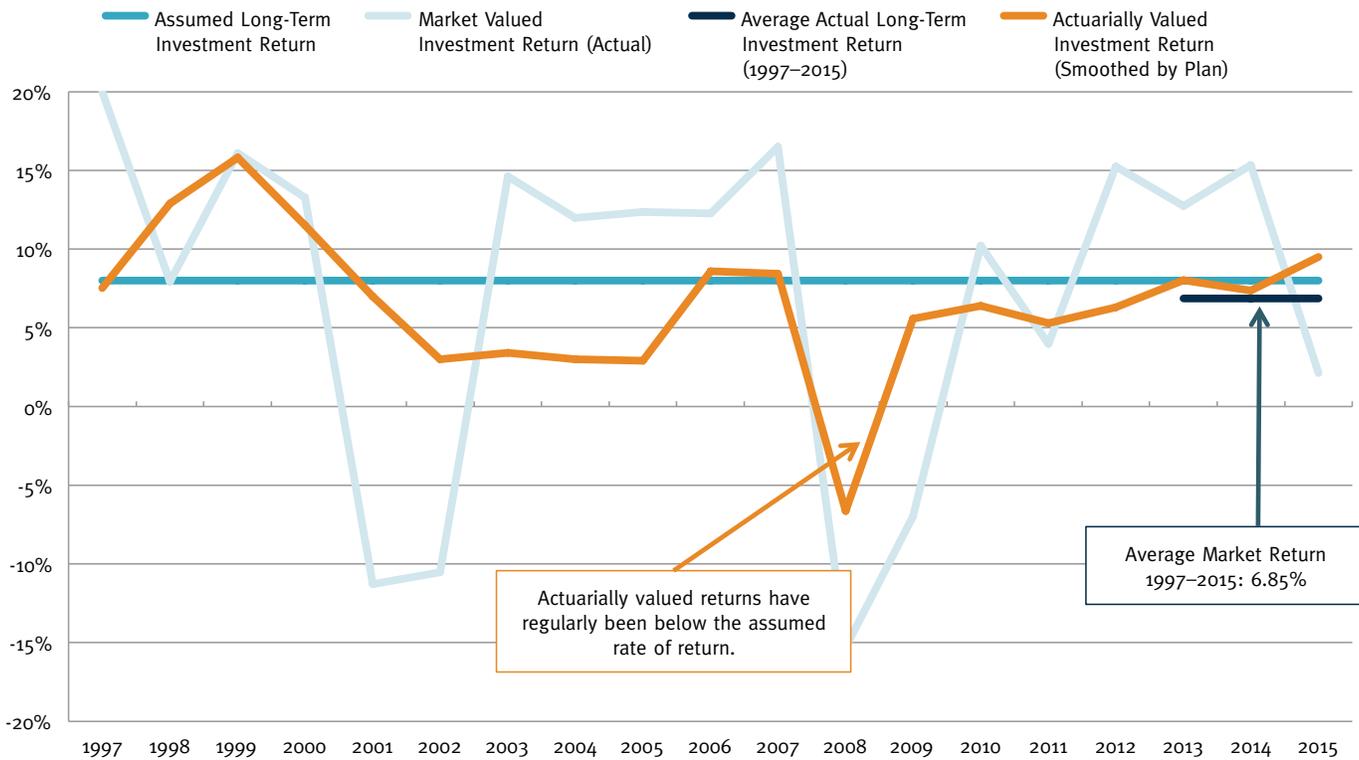
⁴³ 7.1% is the geometric average of market returns reported in valuations from FYE 1997 to 2014.

⁴⁴ Past performance is not always the best measure of future performance. Markets change, as does the allocation of plan assets. However, the most recent historic performance is a better measure of future performance than older history. And to the degree that historic data are available, we can judge whether an actuarial assumption has been realistic to date. What the likelihood of achieving an assumed rate of return might be should consider the allocation of plan assets and a range of forecasts for those assets.

⁴⁵ The discount rate used to value pension liabilities should reflect the risk inherent in the obligations, not the risk of the assets. This is not standard practice among actuaries, but we argue that it should be. For more, see Truong Bui and Anthony Randazzo, "Why Discount Rates Should Reflect Liabilities: Best Practices for Setting Public Sector Pension Fund Discount Rates," Policy Brief #130 (Los Angeles: Reason Foundation, September 2015).

⁴⁶ It is important to note that changes to actuarial assumptions can mean a plan has more debt, but the changes themselves don't generate the debt. Lowering the discount rate to reflect a more accurate net present value of accrued liabilities wouldn't actually cause an increase in the amount owed to pensioners (liabilities), but would instead result in a more accurate reflection of the true long-term value of promised pensions. By contrast, Michigan's failure to pay 100% of its annual required contributions did actively cause an increase in unfunded liabilities greater than would have happened otherwise. Similarly, the plan's underperforming investments have contributed substantially and directly to a growth in pension debt.

Figure 3: Historic MSERS Investment Returns, Long-Run Pattern of Underperformance



Source: Reason Foundation Analysis of MSERS Valuation Data

3. MSERS Board Adopted Irresponsible Amortization Policy

One reason MSERS has struggled with its unfunded liability in recent years is because of the long-term amortization schedule MSERS has used. In 1997, MSERS had 39 years remaining on its amortization schedule, a very large number of years relative to most pension plans (which are typically on 15-year to 30-year schedules).

All else equal, the longer an amortization schedule for paying down unfunded liabilities, the more total taxpayer dollars will be required to pay off the pension debt. Just as taking 30 years to pay off student loans will result in a larger total amount paid for those loans relative to paying them off in 10 years (due to compounding interest), so too are long amortization schedules more expensive in the long run for taxpayers. We argue the amortization approach taken by the MSERS board violated the fiduciary responsibility it had to protect taxpayers from excessive risk. The long amortization period also violates a principle of intergenerational equity by pushing payments on pension debt for today’s employees off onto future taxpayers.

In 2005, the state made the reasonable choice to switch the calculation of unfunded liability payments to a level-dollar method—i.e. amortizing the pension debt such that the same dollar amount is paid each year of the schedule. From a near-term budgeting perspective, the downside of adopting the level-dollar method means that in the first years of the schedule, payments will be higher than sticking with the level percent of payroll method.²⁰ From one perspective this may appear as if pension reform has increased costs. However, only payments in the short term have gone up, not the long-term actual cost of pension benefits. By paying more toward the debt earlier on, fewer total taxpayer dollars will be spent on pensions overall, much like paying off a student loan early. The change has thus increased the actuarially determined employer contribution rates, and thus meant that unfunded liabilities are lower today than without the change (assuming the contribution rates were fully paid, which in many years after 2005 they were not).

In short, MSERS unfunded liabilities are higher today than they otherwise would be, in part because the amortization schedule in place two decades ago meant a very slow pace of paying off the pension debt. By contrast, unfunded liabilities are lower today than they would have been if Michigan lawmakers had not adopted a more responsible policy for amortizing the existing unfunded liabilities in 2005. Neither one of these policy choices was necessarily related to the concurrent closure of the defined benefit plan and its phase out over time.

4. Early Retirement Incentives

In 2010, the Michigan Legislature offered to let some employees retire early to speed up the process of shifting payroll over to the defined contribution plan of MSERS.⁴⁷ The state offered a modest benefit increase to employees who selected this option (a 0.1 percentage point increase in the multiplier), which had a small but meaningful influence on the unfunded liability, as previous contribution rates had not accounted for a retroactive increase in benefits.

Former Michigan Treasurer Douglas Roberts questions whether allowing workers to switch from the defined benefit to defined contribution ultimately is fiscally responsible. The option to leave the defined benefit plan offered in both 1997 and 2010 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 defined benefit plan over the past decade and a half, exacerbating the challenges Michigan created by not fully meeting its ARC payments.⁴⁸

⁴⁷ Michigan Public Act 264 of 2011; Michigan State Employees Retirement System, “Comprehensive Annual Financial Report for the Fiscal Year Ended September 30, 2012.”

⁴⁸ Douglas Roberts, via a phone interview with Anthony Randazzo on January 7, 2014. Cited with permission.

C. Comparing Actual Experience to Never Having Closed the Defined Benefit Plan

There is no doubt that MSERS has more reported unfunded liabilities today than it did in the year before pension reform was adopted, even accounting for inflation. But pension reform closing the defined benefit plan did not *cause* the increase. In fact, had the December 1996 vote to close MSERS failed along with the vote to close MPERS, the plan would have even more unfunded liabilities and a lower system-wide funded ratio.⁴⁹

Table 3 shows a financial comparison between the actual experience of MSERS over the past two decades and a counterfactual scenario where the plan was not closed, adding new members as if no changes were made, and the system made the same investment returns and paid the same percentage of actuarially required employer contributions.⁵⁰

	Counterfactual 1: No Pension Reform	Actual Experience: Pension Reform	Difference	Percentage Change
Market Asset Value, Defined Benefit Plan	\$12.70 billion	\$10.73 billion	-\$1.96 billion	-15.5%
Accrued Liabilities	\$18.76 billion	\$16.23 billion	-\$2.53 billion	-13.5%
Unfunded Liabilities	\$6.06 billion	\$5.50 billion	-\$562 million	-9.3%
Funded Ratio: Defined Benefit Plan	67.7%	66.1%	-1.6%	-2.3%
Funded Ratio: Full System	67.7%	88.0%	+20.3%	+30.0%
Defined Benefit Plan Contributions, 1997 to 2015	\$7.6 billion	\$6.3 billion		
Defined Contribution Plan Contributions, 1997 to 2015	\$0	\$2.4 billion		

Source: MSERS valuations, Reason Foundation forecast.

Notes: (1) Forecast uses a roll-forward model that utilizes the plans' assumptions for apples-to-apples comparisons. More accurate actuarial assumptions would likely mean higher required contributions, but lower long-term unfunded liabilities and thus lower long-term costs. (2) The "Full System" references the funded ratio for both the defined benefit tier and the defined contribution tier of MSERS. We weight the funded status of each tier by the percentage of total payroll that tier represents. (3) "Plan Contributions" represent both employer and employee contributions. The MSERS defined contribution tier comprises 62% of the total MSERS payroll. Contributions paid do not necessarily equal contributions actuarially required.

There are several important findings from this table. First, while we estimate the value of assets would be higher today without pension reform, so too would accrued liabilities. So much so that unfunded liabilities would be roughly \$562 million larger today. At a minimum, the actual experience of the plan would be preferred to no reform because today's unfunded liability is lower than it otherwise would have been.

⁴⁹ Anthony Randazzo and Truong Bui, *Did Pension Reform Improve the Sustainability of Pension Plans? Evidence from a Counterfactual Analysis of Michigan and Alaska*, Policy Study #450 (Los Angeles: Reason Foundation, March 2016), p. 16.

⁵⁰ For details on our counterfactual scenario forecasting, see the Methodology section of Randazzo and Bui, *Did Pension Reform Improve the Sustainability of Pension Plans? Evidence from a Counterfactual Analysis of Michigan and Alaska*, Policy Study #450, (Los Angeles: Reason Foundation, March 2016) p. 44.

Second, notice that the funded ratio for MSERS as a whole is better today (88%) under actual experience than it would have been without pension reform (68%).⁵¹ As of 2015, roughly two-thirds of MSERS payroll was in the defined contribution plan, and member benefits for that plan are inherently 100% funded.

Finally, the table shows the cumulative contributions to retirement benefits under each scenario. The contributions to a defined contribution plan are technically not relevant to the solvency or sustainability of a defined benefit plan. However, it is analytically helpful to compare the total amounts paid under both scenarios when considering what the net results have been.

Under the no-reform scenario we forecast, \$7.6 billion would have been paid into the plan during the last two decades without reform and assuming the same funding policy. The result would have been a pension system roughly 68% funded with \$6.1 billion in unfunded liabilities. By contrast, under actual experience of the plan, contributions were about \$1.1 billion higher, with \$6.3 billion going toward defined benefit obligations plus about \$2.4 billion in contributions to defined contribution accounts, for a total of \$8.7 billion. The result has been a pension system roughly 88% funded with \$5.5 billion in unfunded liabilities.

D. Comparing Actual Experience to Properly Managed Pension Reform

Michigan could have avoided the billions in unfunded liabilities MSERS has added by managing the process of pension reform properly. To start, the state could have made 100% of its actuarially determined employer contributions. Plus, if the plan had achieved the assumed rate of return that was assumed when pension reform was adopted, unfunded liabilities would be much less.

Table 4 shows a financial comparison between the actual experience of MSERS over the past two decades and a counterfactual scenario where the plan was closed but actual investment returns matched the assumed rates of return and employers had a responsible funding policy of paying the full actuarially required bill every year.

For this counterfactual scenario, “Properly managed” is defined as simply targeting an achievable rate of return and paying 100% of the actuarially determined employer contribution, though a well-managed pension plan involves more than simply these elements. However, just making these two changes would

⁵¹ The funded ratio of the defined benefit plan alone is forecast to be slightly better under the no-reform scenario, but this is not necessarily a sign of greater health. Funded ratios should always be considered in connection to the associated unfunded liabilities (and vice versa). In this instance, we noted that the unfunded liability was higher in the no-reform scenario, which suggests the slightly better funded ratio is a function of the greater magnitude of liabilities and assets. (For example, a plan with \$8 in assets and \$10 in liabilities—80% funded with \$2 in unfunded liabilities—is actually better off than a plan with \$17 in assets and \$20 in liabilities—85% funded with \$3 in unfunded liabilities.)

have added roughly roughly \$8.4 billion to MSERS’s assets today.⁵² And since the accrued liabilities would not have been changed, this would have meant a \$2.9 billion surplus for MSERS by the end of 2015.⁵³

Table 4: MSERS 2015 Financials, Actual and Projected, Counterfactuals 1 and 2

	Counterfactual 1: No Pension Reform	Counterfactual 2: Pension Reform Properly Managed*	Actual Experience: Pension Reform
Market Value of Assets, Defined Benefit Plan	\$12.70 billion	\$19.15 billion	\$10.73 billion
Accrued Liabilities	\$18.76 billion	\$16.23 billion	\$16.23 billion
Unfunded Liabilities	\$6.06 billion	(\$2.92 billion)	\$5.50 billion
Funded Ratio: Defined Benefit Plan	67.7%	118%	66.1%
Funded Ratio: Full System	67.7%	106%	88.0%
Defined Benefit Plan Contributions, 1997 to 2015	\$7.6 billion	\$6.9 billion	\$6.3 billion
Defined Contribution Plan Contributions, 1997 to 2015	\$0	\$2.4 billion	\$2.4 billion

Source: MSERS valuations, Reason Foundation forecast.

Notes: (1) Forecasts use a roll-forward model that utilizes the plans’ assumptions for apples-to-apples comparisons. More accurate actuarial assumptions would likely mean higher required contributions, but lower long-term unfunded liabilities and thus lower long-term costs. (2) The “Full System” references the funded ratio for both the defined benefit tier and the defined contribution tier of MSERS. We weight the funded status of each tier by the percentage of total payroll that tier represents. (3) “Plan Contributions” represent both employer and employee contributions. The MSERS DC tier comprises 62% of the total MSERS payroll. Contributions paid do not necessarily equal contributions actuarially required. (4) Assumes legislators paid 100% of the annual required employer contribution rate, and that the plan’s investments actually achieved their expected rate of return.

It is probable that Michigan will need to undertake some additional reform effort for MSERS, such as paying a large lump-sum payment toward the unfunded liability, before the plan pays its final pension check. 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% over the next 10 years or 9.00% 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.”⁵⁴ Properly managing the pension reform process would have avoided this challenge.

⁵² Randazzo and Bui, *Did Pension Reform Improve the Sustainability of Pension Plans?*, p. 19.

⁵³ It is probable that well before a \$2 billion surplus was reached, that funding policy would have changed to reduce contributions into the plan. However, a large surplus would have been beneficial to build because it would serve as a cushion against future potential underperforming markets.

⁵⁴ R.V. Kuhns & Associates, Inc., “State Employees’ Retirement System Asset/Liability Study—Executive Summary,” State of Michigan Retirement Systems, September 6, 2012.

Part 5

Lessons and Conclusion

Pension reform in Michigan has meant its state employee plan is more solvent today than if the legislature had not closed the defined benefit plan for new hires. The full MSERS funded ratio is 88% compared to an estimated 68% without reform. And because employees in the defined contribution plan are vested after just 24 months and the defined benefit plan is now made up of only vested members, the ratio of vested to non-vested state employees is substantially improved.

However, the state has not managed the pension reform process well and as a result unfunded liabilities have grown. A properly managed pension reform process would have added about \$8.4 billion to the assets of MSERS as of 2015, meaning the plan would be overfunded instead of deep in the red. Collectively, the process of reforming MSERS 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.⁵⁵ Defined contribution members carry the responsibility for their retirement and bear the risks of losses in events like the financial crisis, whereas defined benefit 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. Pay 100% of Required Employer Contributions

There is never a good time to take a “pension holiday” and underfund a defined benefit pension plan, but it is particularly problematic to stop paying required contributions when a plan is closed. There are fewer years left in the plan for investment returns to help a plan recover from the missed payments, and that is assuming the plan is returning more than its assumed rate on a consistent basis.

⁵⁵ “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>

2. Review Actuarial Assumptions

A closed defined benefit plan should still be monitored for fiscal risks, and boards should ensure actuarial assumptions are realistic. Not only has Michigan underfunded MSERS Tier 1 plans, but its assumption about how well its investments will return and the discount rate being used to value liabilities need to change so that taxpayers are not carrying so much risk. The MSERS 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% rather than the assumed 8%. 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.⁵⁶ As of this case study, MSERS is *still* using an 8% assumed rate of return and discount rate.

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 defined benefit plans. While the MSERS reform demonstrates overall success, the failure to reform the more troubled MPSERS plan leaves Michigan taxpayers tied to the growing unfunded liabilities of the larger defined benefit plan for the foreseeable future. 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.

⁵⁶ The MSERS 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%), [this] effectively increases the reliance on contributions to complete the payout of the System's liabilities, especially in later years." R.V. Kuhns & Associates, Inc., "State Employees' Retirement System Asset/Liability Study—Executive Summary," State of Michigan Retirement Systems, September 6, 2012.

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Anthony Randazzo is managing director of Reason Foundation's Pension Integrity Project. His research focuses on public sector pension funding, with an emphasis on identifying the factors that cause public officials to underfund pension obligations. Randazzo's work has been featured in *The Wall Street Journal*, *Forbes*, *Barron's*, *Bloomberg View*, *The Washington Times*, *The Detroit News*, *Chicago Sun-Times*, *RealClearMarkets*, *Reason* magazine, and various other online and print publications.

Randazzo has also testified before state and local legislative bodies on pension policy matters, as well as testifying before the House Financial Services Committee on topics related to housing policy and government-sponsored enterprises. He holds a multidisciplinary M.A. in behavioral political economy from New York University.

Related Studies

How Public Sector Defined Benefit Plans Are Funded, Anthony Randazzo, Reason Foundation (March 2014)

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