May 2016

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ISSUE BRIEF
State and Local Policy

CHICAGO CROWD-OUT

How Rising Pension Costs Harm Current Teachers—and Students

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Executive Summary

Since the 2008 financial crisis, state and local governments have faced significant fiscal challenges, and a few jurisdictions—Detroit, most notably—have filed for bankruptcy. Chicago has a stronger economy but faces many of the same problems that crippled Detroit. It, too, may end up in bankruptcy. But the financial crisis of the Chicago Public Schools (whose budget, as well as its taxing authority, is separate from that of the city) is more immediate, posing a threat to the welfare of 26,261 current teachers and 396,683 students.[1]

Rising retirement costs have contributed significantly to the CPS's budget woes. Since 2001, the CPS's actual pension contribution—for benefits that its teachers, retired or still working, have already earned—has grown more than sevenfold, while the CPS's revenue has grown by only about 11 percent. The growth of pension debt-service payments leaves fewer resources to pay for today's teachers and students.

To contain exploding retirement costs, the CPS has enacted wide-ranging budgetary cuts, from textbooks to coaching stipends. Average salaries for teachers have also stagnated, and the pensions offered to new CPS teachers are worth much less (equal to a reduction of approximately 12 percent of annual pay) than those offered to new teachers only a few years ago.

The Illinois Supreme Court's ban on benefit adjustments for current workers and retirees has severely narrowed the CPS's options for resolving its financial crisis. Absent substantial reforms to CPS pensions, the burden of correcting the CPS's fiscal mismanagement will fall mostly on Chicago's teachers—and students—in the form of pay cuts, layoffs, furloughs, and other reductions to educational services.

I. Introduction

Rising retirement costs are straining state and local budgets across America: since 2001, government contributions to public-employee pensions have nearly tripled, from 6.7 percent to 18.6 percent of public payrolls, even as most jurisdictions have reduced pension benefits.[2] Pension costs have risen because governments have failed to responsibly fund their pension obligations. At present, 70 to 80 cents of every taxpayer dollar contributed to public pensions will be used to pay for pension benefits that workers have already earned, rather than fund the pension benefits that workers will earn in the future.[3]

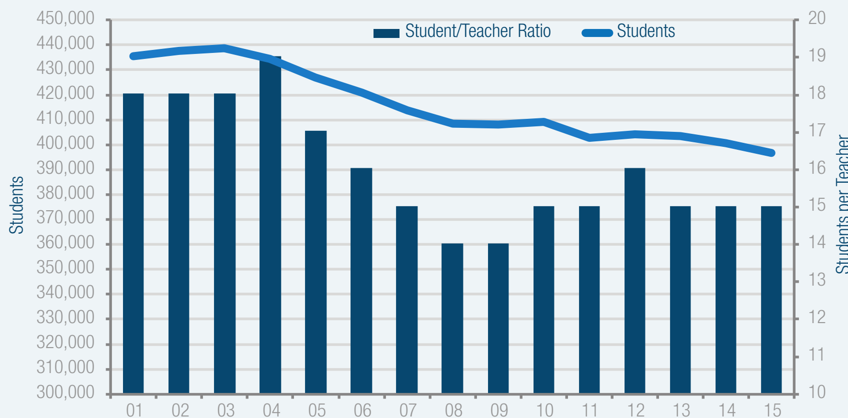
Long-term fiscal mismanagement has caused a few U.S. municipalities to file for bankruptcy. Detroit, America's highest-profile municipal bankruptcy, saw current workers, as well as retirees, assume substantial cuts to their pensions as part of the Motor City's bankruptcy settlement. Still, Detroit remains on shaky ground, with pension costs a large source of the city's continued budgetary problems. Despite facing less dramatic economic and demographic headwinds, Chicago's finances also are troubled, and the public-school system is in dire straits. This paper examines how the rising cost of legacy pension benefits is crowding out spending on current teachers and students.

The Chicago Public Schools (CPS) is America's third-largest school district. Like many midwestern urban school districts, the CPS has experienced declining enrollment, from nearly 440,000 students in 2001 to fewer than 400,000 in 2015 (**Figure 1**). In the same period, the number of teachers increased, from 23,935 to 26,261, resulting in lower student-teacher ratios. As the CPS can attest, shrinking student enrollment coupled with rigid labor costs and escalating legacy pension costs can cause considerable budgetary strain.

During 2001–15, the average CPS teacher's inflation-adjusted salary declined, from $112,000 to $98,000 (**Figure 2**). Demographic change likely played a role, as older, higher-earning teachers retired and were replaced with younger, lower-earning teachers. Yet during this period, teachers' salaries also declined as a percentage of the CPS's total budget, from more than 50 percent in 2001 to 40 percent in 2015. Today, the CPS has more teachers than at the turn of the millennium; but those teachers make less, on average, and their salaries constitute less of the CPS's overall spending.

FIGURE 1.

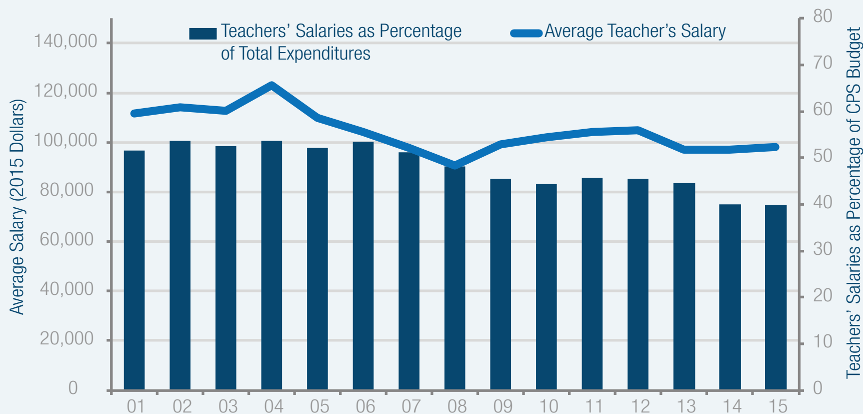
Students and Students per Teacher in the Chicago Public Schools, 2001–15



Source: Author's calculations using data from the Chicago Public Schools Comprehensive Annual Financial Reports, Common Core Data, and Bureau of Labor Statistics

FIGURE 2.

Average CPS Teacher's Salary and CPS Teachers' Salaries as Percentage of Total CPS Budget, 2001–15

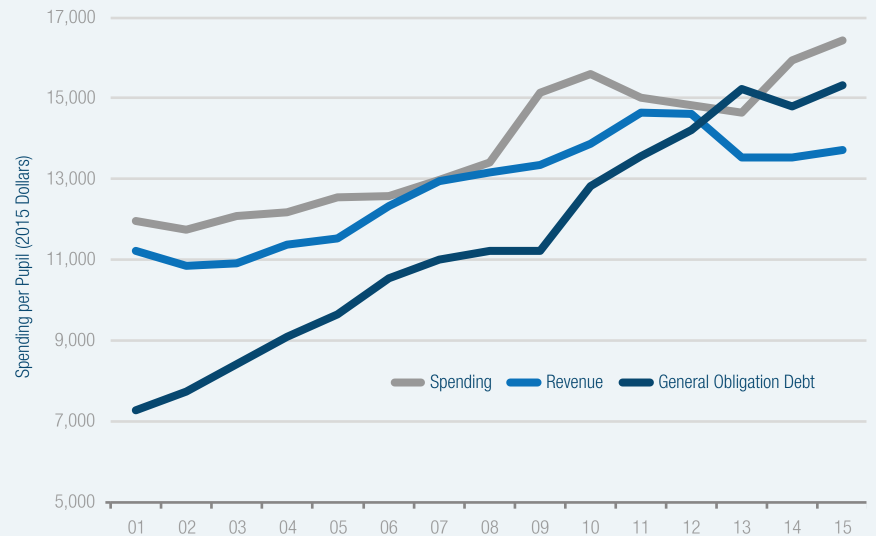


Source: Author's calculations using data from the Chicago Public Schools Comprehensive Annual Financial Reports, Common Core Data, and Bureau of Labor Statistics

As Chicago's student enrollment declined, inflation-adjusted spending per pupil increased by about 40 percent. In 2001, the CPS spent nearly $12,000 per student; and in 2015, $16,432 (**Figure 3**). Yet CPS revenue has not kept pace: since 2001, CPS per-pupil revenue has not matched per-pupil spending, with revenue falling short, on average, by $1,000 per pupil. More recently, the revenue gap has widened to nearly $3,000 per pupil per year. In response, the CPS has borrowed increasing sums: during 2001–15, the CPS's inflation-adjusted general obligation debt per pupil more than doubled, from about $7,000 to more than $15,000. As the CPS's debt soared—earning it "junk" status from the three main bond-rating agencies—so, too, has its borrowing costs. In its latest bond issue, the CPS had to pay 8.5 percent, three times higher than benchmark government debt.[4]

FIGURE 3.

CPS Spending, Revenue, and Debt per Pupil, 2001–15



Source: Author's calculations using data from the Chicago Public Schools Comprehensive Annual Financial Reports and Bureau of Labor Statistics

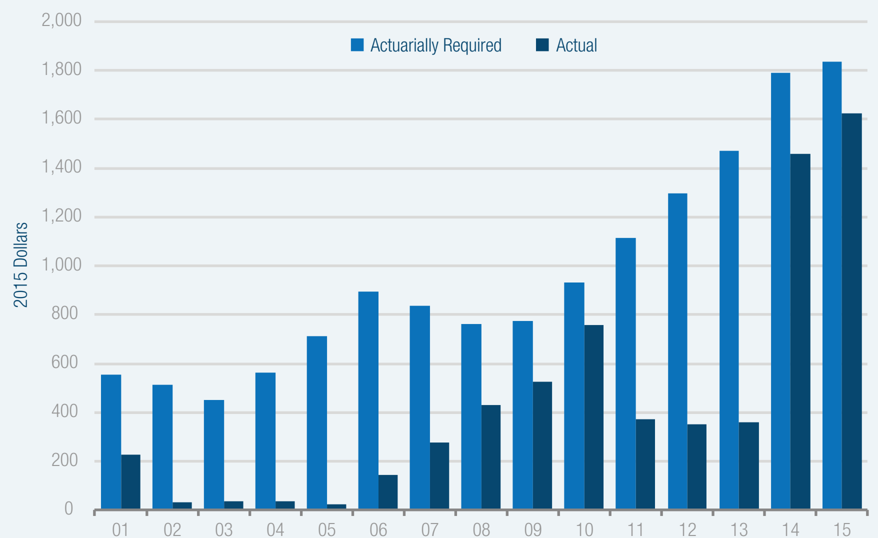
II. Underfunding Pensions

The Chicago Teachers' Pension Fund (CTPF) was established in 1895 and now covers more than 60,000 current and former CPS teachers.[5] Like most other U.S. public-pension funds, the CTPF began the 2000s with nearly enough assets to cover the benefits already earned by workers.[6] However, the CPS soon began taking pension-contribution "holidays"—in effect, off-book borrowing from teachers' pensions—at the same time as the CTPF's investment performance fell short of expectations, resulting in a nearly $2 billion asset shortfall by 2007.

The 2008 financial crisis made things worse. By 2010, the CPS had $7.4 billion in unfunded pension liabilities, with its statutory contribution per pupil more than tripling since 2001. Yet the CPS and the Illinois legislature did not respond by adopting a more responsible pension-funding strategy. Instead, during 2011–13, the CPS reduced its contributions well below the actuarially determined rates. According to the CTPF's 2015 report, the CPS owes the fund at least $9.3 billion, with an actuarially determined 2015 contribution of $1,836 per pupil, or more than three times larger, per pupil, than that required in 2001 (**Figure 4**).

FIGURE 4.

CPS Pension Contributions per Pupil, 2001–15



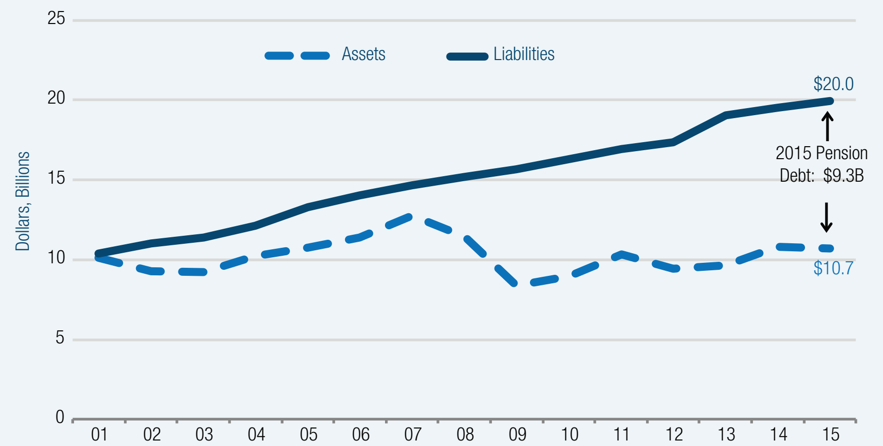
Source: Author's calculations using data from the Bureau of Labor Statistics and the Comprehensive Annual Financial Reports of the Chicago Teachers' Pension Fund and the Chicago Public Schools

Since 2001, the CPS has paid, on average, only 38 percent of its actuarially determined pension contribution. As a result, the CPS's pension debt has grown considerably (**Figure 5**). **Figure 6** shows that, in 2015, the CPS had total per-pupil debt of $38,657: $15,000 in general obligation debt and $23,000 in pension debt.

When allowed to compound over many years, pension debt can balloon. For example, if the CTPF achieves a modest 5 percent investment return over the next five years and the CPS does not pay any amortization, the CPS's current $9.3 billion pension debt would grow by more than $2.5 billion, simply because those assets were not available to earn the plan's realized return (of course, pension debt would also increase because 5 percent is well below the plan's assumed return). Ideally, each year, the CPS would pay enough into the CTPF to cover interest costs (i.e., missed investment returns due to unfunded liabilities), as well as pay down a portion of its pension debt. In reality, the CPS plans to allow its pension debt to grow to $12.7 billion by 2039—a strategy that assumes an average annual 7.75 percent investment return. Yet even with the CPS's current (far smaller) pension debt, pension-debt service is already crowding out CPS spending on current teachers' pensions: in 2015, debt-service payments made up more than 80 percent of the total actuarially determined contribution requirement (**Figure 7**).

FIGURE 5.

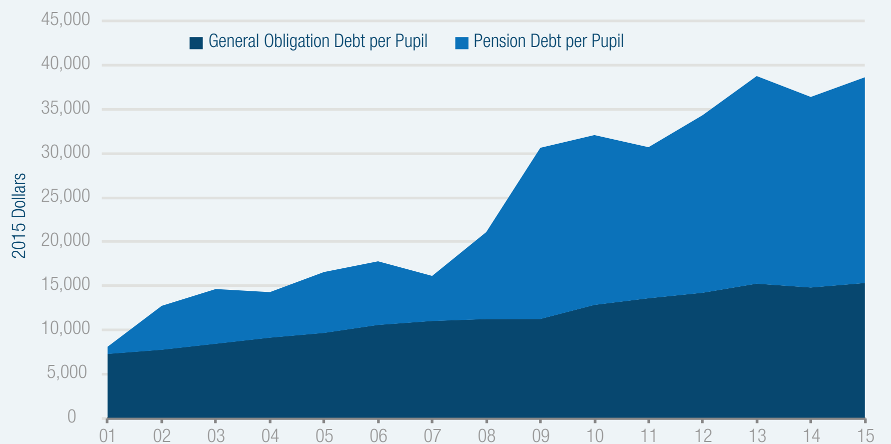
CPS Pension Debt, 2001–15



Source: Author's calculations using data from the Chicago Teachers' Pension Fund's Comprehensive Annual Financial Reports

FIGURE 6.

CPS Debt per Pupil, 2001–15

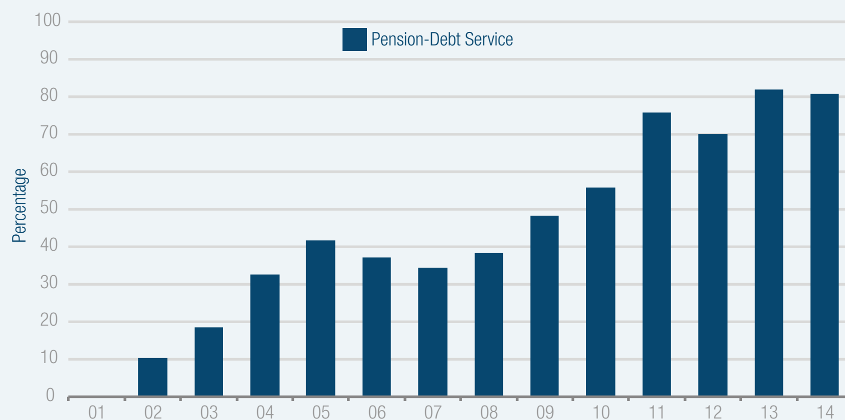


Source: Author's calculations using data from the Bureau of Labor Statistics and the Comprehensive Annual Financial Reports of the Chicago Teachers' Pension Fund and the Chicago Public Schools

Further, the 7.75 percent annual investment return—which is above the median rate (7.6 percent) for public pension plans and (probably) unrealistic under current conditions of low economic growth—likely underestimates the CPS's pension liabilities (**Figure 8**). If the CTPF's assumed annual rate of return were reduced to 7 percent or to 6 percent, the CPS's pension debt would rise from $9.3 billion to $11.5 billion or $14.8 billion, respectively. In other words, relatively modest changes to the CTPF's discount rate would cause the CPS's current pension debt to rise by 20 percent–60 percent. It is also true that the CPS's pension liabilities have increased relative to the CPS's revenue, from 2.7 (liabilities/revenue) in 2001 to 3.7 in 2015. When pension promises increase relative to government resources, small misses on investment returns can translate into big budgetary problems.

FIGURE 7.

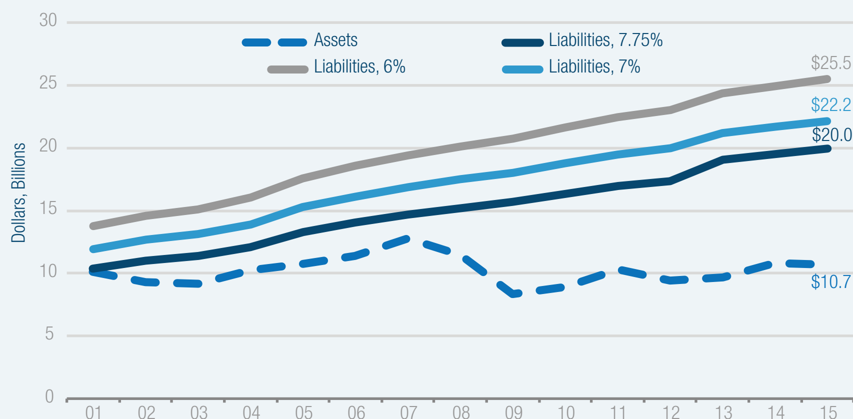
CTPF Pension-Debt Service as Percentage of Actuarially Required Contributions, 2001–14



Source: Author's calculations using data from the Chicago Teachers' Pension Fund's Comprehensive Annual Financial Reports

FIGURE 8.

CPS Pension Assets and Liabilities Under Different Discount Rates, 2001–15



Source: Author's calculations using data from the Chicago Teachers' Pension Fund's Comprehensive Annual Financial Reports

III. Chicago Crowd-Out

Adding to the CPS's financial woes is its growing gap between revenue and outlays. During 2001–15, inflation-adjusted spending per pupil increased by 37 percent and inflation-adjusted pension contributions skyrocketed by 618 percent; but inflation-adjusted revenue rose by only 22 percent.[7] "CPS is facing a budgetary crisis," notes CPS CEO Forest Claypool, "due to declining state funding and exploding pension costs."[8]

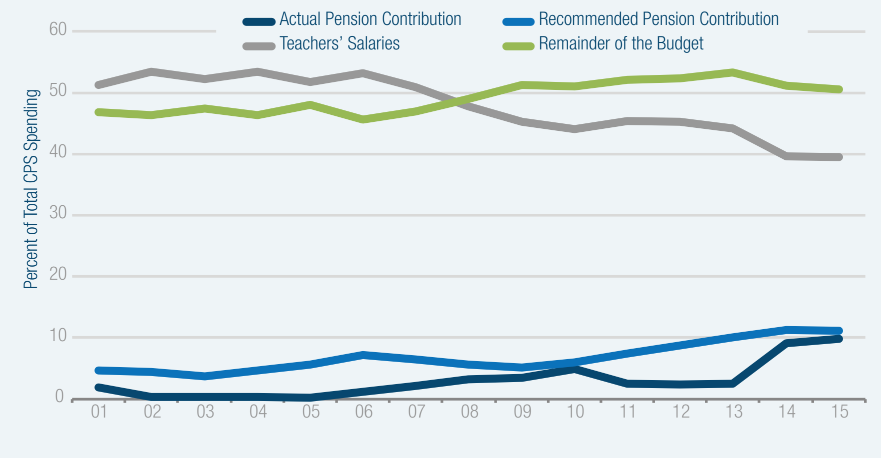
The CPS has scrambled to keep pace while protecting classroom spending. Since 2011, the CPS has made nearly three-quarters of a billion dollars in budget cuts "away from the classroom," with administrative and programmatic spending hit especially hard.[9] Nevertheless, from 2001–15, annual per-pupil inflation-adjusted spending on textbooks declined by 36 percent, and spending on classroom and other supplies fell by nearly 60 percent.

The budgets for elementary school sports (coaching stipends and equipment) were cut by the millions, and annual per-pupil spending on capital repairs and replacement dropped by 55 percent.[10]

Because the majority of a school district's spending is on salaries and benefits, there is only so much that can be cut elsewhere. As Figure 2 shows, average CPS teacher salaries declined slightly over the past decade. Since 2001, CPS teacher salaries, as a share of total CPS spending, have also fallen by more than 20 percent, while pension contributions jumped, from 2 percent of total CPS spending to more than 10 percent (**Figure 9**).

FIGURE 9.

CPS Teacher Salaries and Pension Contributions, 2001–15



Source: Author's calculations using data from the Comprehensive Annual Financial reports and Actuarial Valuation Reports of the Chicago Teachers' Pension Fund and the Chicago Public Schools

Such data suggest that the CPS's pension spending is crowding out spending on teachers' salaries. For current teachers, this is undesirable for at least two reasons. The first is that teachers—as well as other workers—typically value take-home pay more highly than deferred retirement compensation. In a 2014 paper, Maria Fitzpatrick of Cornell University found that Illinois teachers value deferred retirement compensation at only one-fifth of its present value.[11] Dedicating more of the CPS's budget to pensions while decreasing the share devoted to salaries is therefore unlikely to be the best strategy for recruiting and retaining high-quality educators.

The second reason is that current teachers are not even benefiting from the big increase in resources devoted to pensions: the majority of the CPS's current pension contributions are being used to pay for pension benefits that were earned in the past. (The CPS's contribution to legacy pension costs [26 percent of payroll] is more than double the U.S. average [10.7 percent].)[12]

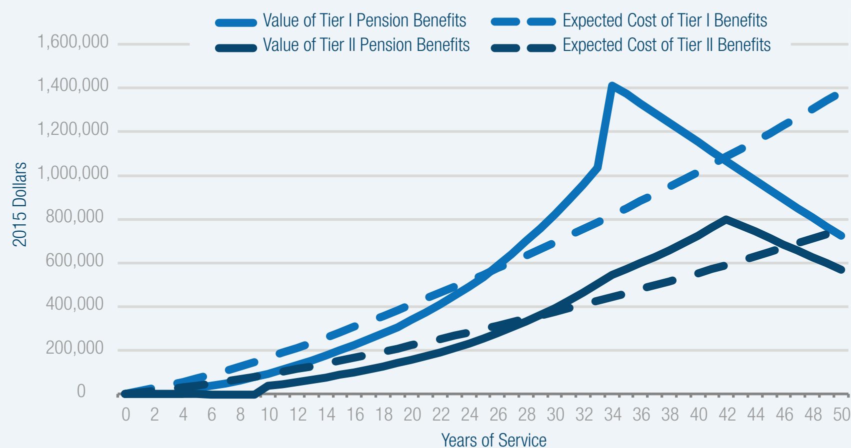
In 2011, in another sign of crowd-out, the Illinois legislature implemented a less generous retirement-benefits package, "Tier II," for new CPS teachers. Tier II pensions include a longer vesting period (ten years), later retirement eligibility, and much smaller cost-of-living adjustments in retirement. Tier II pensions represent a substantial pay cut for new teachers,

too: equal to a reduction of approximately 12 percent of annual pay—or a nearly 10 percent decrease in total compensation (**Figure 10**). The CPS is also considering ending its practice of paying the employee contribution to the pension fund, currently equal to 7 percent of payroll.[13]

Then there are job cuts. The 2016 CPS budget[14] eliminated roughly 1,400 positions, including those of some teachers. CPS CEO Forest Claypool has warned of further layoffs before the end of the 2015–16 school year.[15] Swelling pension costs mean that the CPS's budgetary pressures will not ease anytime soon, either—a fact aggravated by the CPS's repeated failure to meet its actuarially recommended pension contributions and the CTPF's (probably) unrealistic investment-return assumption.

FIGURE 10.

CPS Tier I v. Tier II Pensions*



*Solid lines correspond to the present value of retirement compensation and are compared with a cost-equivalent system featuring a smooth-accrual pattern across the teacher's career (i.e., the benefits earned are a constant percentage equal to the normal cost of benefits).
Source: Author's calculations using data from the Comprehensive Annual Financial reports and Actuarial Valuation Reports of the Chicago Teachers' Pension Fund and the Chicago Public Schools

IV. Conclusion

For more than a decade, the CPS has struggled with a widening structural budget deficit. The CPS papered over its annual shortfalls by borrowing vast sums from bond markets. As a result, CPS bonds are now rated as "junk." By failing to make the necessary contributions, the CPS has also, in effect, borrowed from the teachers' pension fund—and so today, for every dollar of pension contributions, 80 cents goes to pay for benefits that have already been earned and only 20 cents goes to pay for retirement benefits that teachers are earning in today's classrooms.

There are three ways to right the CPS's sinking financial ship: secure additional revenue, reduce teachers' retirement benefits, or cut services for current students. Start with revenue. The Illinois legislature is currently debating a bill that would change the state's school-funding formula and provide additional state aid for operations and pension costs.[16] Given that the legislature is mired in a long-running budget standoff, the bill's passage seems unlikely. Raising additional local revenue faces another constraint: Chicago's property-tax increases are capped at the rate of inflation.[17] As for cuts to retiree benefits, the Illinois Supreme Court has prohibited pension reductions for all but future hires, thereby disallowing even the modifications to teachers' benefits already agreed to by union leadership.[18] For these reasons, major service cuts to Chicago's public schools—however undesirable—appear most plausible.

Illinois governor Bruce Rauner has proposed a fourth option: allow the CPS to declare bankruptcy, a move that would require the state legislature's approval. The alternative to bankruptcy—ad hoc, draconian service cuts and a de facto insolvency similar to that experienced by Detroit's public schools—would be far worse for CPS students, says Rauner.[19] Regardless of the ultimate solution, Chicago's current students and teachers will likely suffer disproportionately as Illinois policymakers seek to fix the Windy City's troubled finances.

Endnotes

[1] 20th-day enrollment for 2014–15; see Chicago Teachers' Pension Fund's "120th Comprehensive Annual Financial Report for the Year Ended June 30, 2015," http://www.ctpf.org/AnnualReports/cafr2015.pdf.

[2] Author's calculation based on data from Boston College's Center for Retirement Research; see http://crr.bc.edu/data/public-plans-database.

[3] Ibid.

[4] "Nuveen, Goldman Buy Chicago School Debt," *Pension & Investments* (March 2016), http://www.pionline.com/article/20160331/ONLINE/160339976/nuveen-goldman-buy-chicago-school-debt. In February 2016, the state of Illinois sold 25-year bonds at yields of 4.27 percent.

[5] See n. 1 above.

[6] According to data from Boston College's Center for Retirement Research, most U.S. public-pension plans were nearly 100 percent funded in the early years of the last decade.

[7] Author's calculations using data from the Comprehensive Annual Financial Reports of the Chicago Public Schools and the Chicago Teachers' Pension Fund.

[8] See n. 1 above and http://cps.edu/FY16Budget/Pages/FY16Budget.aspx.

[9] Ibid.

[10] Author's calculations using data from the Comprehensive Annual Financial Reports and budget documents of the Chicago Public Schools.

[11] Maria Donovan Fitzpatrick, "How Much Are Public School Teachers Willing to Pay for their Retirement Benefits?," National Bureau of Economic Research (2014), http://www.nber.org/papers/w20582.

[12] Based on funding data from 48 State Educator Pension Plans; see Ben Backes et al., "Benefit or Burden? On the Intergenerational Inequality of Teacher Pension Plans," National Center for Analysis of Longitudinal Data in Education Research (2016), Working Paper no. 148, http://www.caldercenter.org/sites/default/files/WP%20148.pdf.

[13] See n. 1 above.

[14] July 1, 2015–June 30, 2016 fiscal year.

[15] See http://cps.edu/FY16Budget/Pages/FY16Budget.aspx.

[16] Greg Hinz, "Springfield Dems Float New School Funding Plan, and GOP Protest," *Crain's Chicago Business* (April 5, 2016), http://www.chicagobusiness.com/article/20160405/BLOGS02/160409926/springfield-dems-float-new-school-funding-plan-and-gop-protests.

[17] See n. 1 above.

[18] Mark Peters, "Illinois High Court Strikes Down Chicago Pension Changes," *Wall Street Journal* (March 24, 2016), http://www.wsj.com/articles/illinois-high-court-strikes-down-chicago-pension-changes-1458833504.

[19] See, e.g., http://www.chicagotribune.com/news/local/breaking/ct-illinois-republicans-cps-bankruptcy-met-20160119-story.html.