

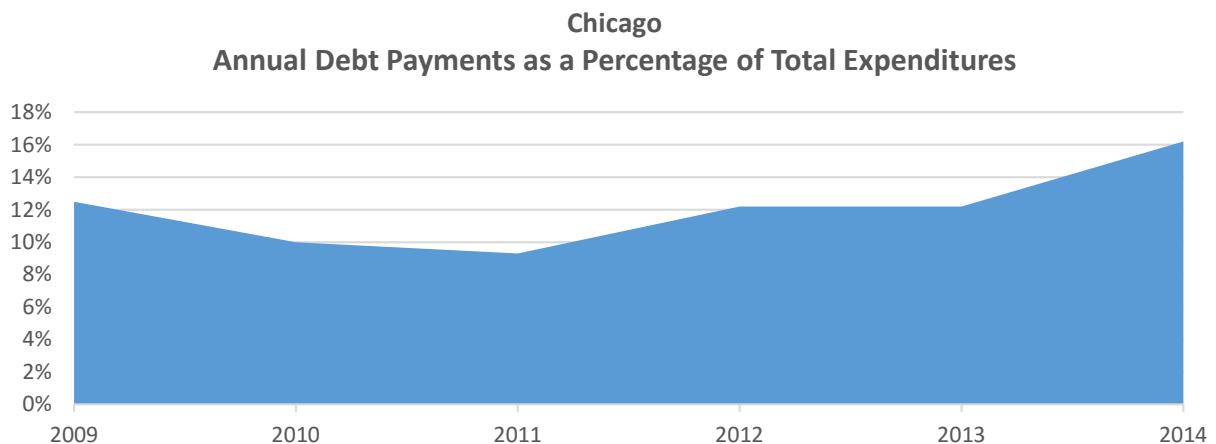
At the beginning of 2016 the City of Chicago was downgraded to below investment grade with most rating agencies also assigning the City a ‘negative’ outlook. The City’s credit quality has been slowly deteriorating for the past two decades. Three of the primary factors affecting the City are a weak financial position, significant long-term pension liabilities and declining demographic trends.

Weak Financial Position

For over ten years the City has maintained a budgetary imbalance. Though these deficits have declined over the past four years, they are still expected to continue for the foreseeable future.

The result of these deficits has been a significant decline in reserves, with the City currently holding just 4% of its revenue in reserve. In general, a local government is considered to be fiscally healthy if it holds no less than 10% of its revenue in reserve. For the current fiscal year the City of Chicago is projecting to completely exhaust all of its reserves.

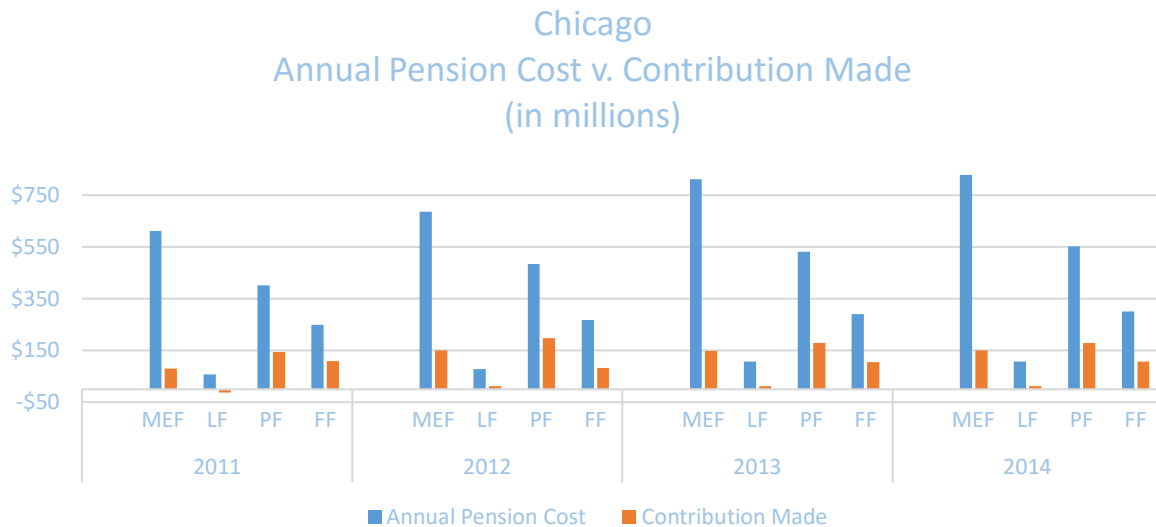
The City has also issued debt to close its budget gaps over a period of several years. This has resulted in an \$8.3 billion debt load for the City (\$3,080 per resident), which represents a 75% increase in debt between 2005 and 2014. The use of debt to correct these budget imbalances has also increased the City’s fixed costs. For fiscal year 2016 nearly a quarter of all revenue will be used for the payment of debt service. Most local governments with healthy finances dedicate no more than 10% of revenue toward the payment of debt. Historically to manage this large debt load the City has often employed financial gimmicks such as ‘scoop and toss’, whereby new debt is issued with a longer maturity to repay existing debt outstanding. For the 2016 fiscal year the City has avoided employing this tactic.



Significant Long-Term Pension Liability

The City manages four pension systems: the Municipal Employees Fund (MEF), the Laborers Fund (LF), the Policemen Fund (PF), and the Firemen Fund (FF). These pension systems’ current funding levels are 41%, 64%, 26%, and 23%, respectively (actuaries consider a pension system ‘healthy’ if funding levels

are at or above 80%). The poor funding ratio and large combined liability of \$20 billion is due to the City having failed to adequately contribute the full annual cost to its pension systems since the mid-1990s, due in large part to the unrealistic 7.75% rate of return assumptions in these pension systems (returns have averaged just under 6%). In order to meet the shortfalls in early 2016 the City increased its property tax rate, with this additional revenue being dedicated toward the pension funds.



In addition, during the week of September 12, 2016 the Chicago City Council approved a 29.5% utility tax increase which is specifically designed to address the funding shortfall of its Municipal Employees Fund (MEF). The MEF is by far the largest of the city’s pension liabilities (chart). The tax on water and sewer services will be incremental with a 7.7% increase occurring in 2017; an 8.4% increase in 2018; an 8.2% increase in 2019, and a 5.2% increase in 2020. The City expects that this tax will provide a 90% funding ratio of the MEF by 2057. However, no actuarial study was provided by the City to verify this estimate.

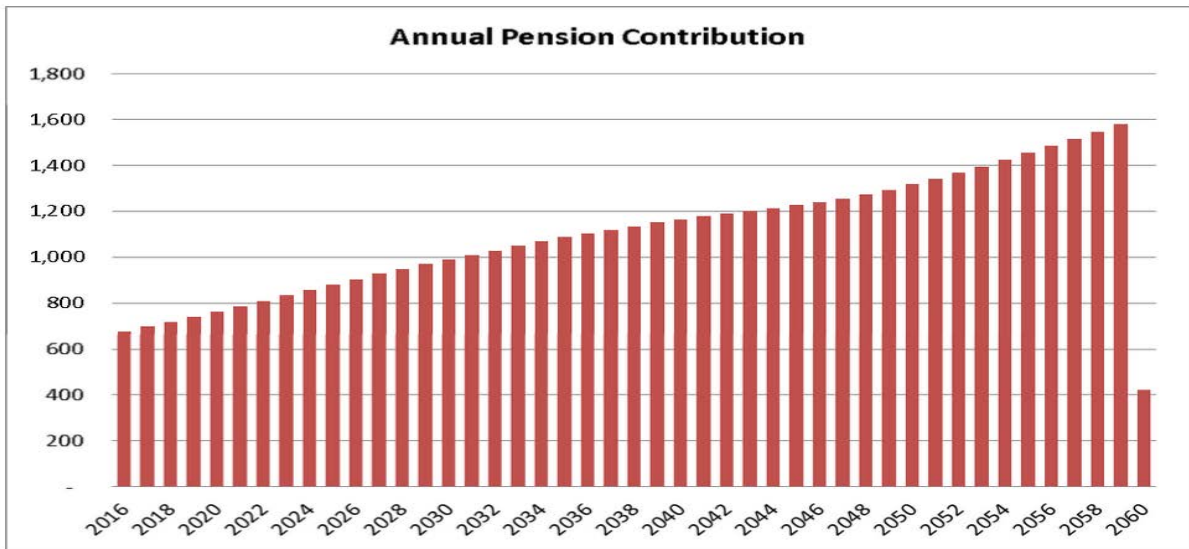
Chicago Public Schools

The City’s school system, Chicago Public Schools (CPS), is also financially weak. At the end of fiscal year 2015 CPS had operating reserves representing roughly 7% of total revenue and liquidity representing roughly ten days cash-on-hand. In general a school district is considered to be financially healthy if it holds no less than 10% of its revenues in reserve and liquidity is at least fifty days cash-on-hand. Already rated well below investment grade, Moody’s Investor Services recently downgraded CPS from B2 to B3.

CPS faces challenging demographic issues similar to those that face the city (below). Enrollment at CPS schools has dropped roughly 5% between 2000 and 2010. Further, the percentage of school-aged children in the City (ages 0-19) has declined 17% between 2000 and 2010 suggesting that enrollment is unlikely to grow in the future. Specifically in 2016 CPS reported a net enrollment decline of 3.5% versus 2015. In spite of these declining enrollment trends CPS’ total expenditures increased 10% between 2010 and 2015.

Many of the rising costs that CPS faces are connected to labor contracts that limit classroom sizes and mandate costly employee healthcare and retirement benefits. These labor contracts exert the most pressure

on CPS' underfunded pension system. In fiscal year 2016 CPS will have to make a \$676 million pension contribution which will consume 10% of its total budget. This cost will continue to rise as CPS is under a state mandate to achieve 90% funding in its pension system (which is currently only 58% funded) by 2058.



(Source: Chicago Public Schools)

To a large extent, the underfunding of the pension system has been due to CPS failing to make its annual contribution payments in recent years. As recently as 2001 CPS' pension system was more than 100% funded.

CPS faces labor unrest due to the school district seeking concessions from its teachers' labor union. Points of contention primarily center on pay increases, health insurance benefits and teacher pension contributions. Currently, teachers only contribute 2% of their salary in pension contributions while CPS would like to increase that amount to 9% of a teacher's salary. The teachers' union went on strike in 2012 over these concession demands. On September 28, 2016 the union and its leaders authorized another strike with an effective date of October 11, 2016. The resolution of this strike will bear close watching as the upcoming negotiations undoubtedly will have an impact on the city's finances.

Declining Demographic Trends

As of August 2016 the City of Chicago unemployment rate stood at 6.10% which is higher than both the State average (5.50%) and the national average (4.90%). Additionally, the City has experienced declining population for five of the past six decades. Between 2000 and 2010, the City's population declined by 6.9%. Estimates since the 2010 Census indicate that the City is experiencing one of the largest population declines of the twenty-five largest cities in the country. A high unemployment rate and declining population will further constrain the City's financial health as it loses taxpayers.

Other Factors

The City faces additional uncertainty due to the fact that the State of Illinois is also confronting financial challenges. Due to the State's poor finances a financial rescue for the City seems unlikely. To this point

in time Governor Rauner and downstate legislators have been unwilling to offer the City additional financial support. This posture will also bear watching in light of the potentially looming teacher's strike.

Recommendation

C.W. Henderson does not believe that the City of Chicago is a safe credit for purchase at this time and is unlikely to be considered safe for purchase any time in the near future. We currently do not hold any debt directly connected with the City and would not recommend buying or holding the City's debt. Further, C.W. Henderson strongly advises against purchasing or holding Chicago Public Schools debt.

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