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Trends in Financial Indicators:

A Comparison of the City of Chicago to 12 Other U.S. Cities from FY2009 through FY2013

EXECUTIVE SUMMARY

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The Civic Federation is an independent, non-partisan government research organization working to maximize the quality and cost-effectiveness of government services in the Chicago region and State of Illinois.

Dedicated to Woods Bowman, long-time friend
and supporter of the Civic Federation,
without whom this report would not have been possible.

EXECUTIVE SUMMARY

This report compares Chicago's fiscal trends to 12 other major U.S. cities using financial indicators. Data are compiled from the audited financial statements from FY2009 through FY2013. The report finds that during the five-year period, the City of Chicago's financial trends were less favorable on average than 11 of the 12 other cities.

Financial condition is a government's ability to provide services and meet current and future obligations.[1] Understanding a government's financial condition is important to understanding its fiscal sustainability. A complete evaluation of a government's financial condition requires a multi-faceted study of the government's economy, finances and demographics—which we do not attempt here—but also an understanding of how it is faring compared to other governments. It is an indication of this last aspect of financial condition that the Federation provides with this report. At a time when Chicago and many other cities are facing ongoing financial difficulty, are Chicago's financial trends more or less favorable than other cities' trends?

In this report, the City of Chicago's FY2009-FY2013 fiscal trends as revealed by nine indicators calculated from its financial statements were compared with the trends of 12 other U.S. cities. The cities were compared by ranking them from the most favorable trend to the least favorable trend for each indicator. An average ranking across all nine indicators was then calculated for each city, producing a summary rank. The Federation then grouped the summary ranks into high, middle and low performance levels.[2]

Financial Indicators Average Ranking of 13 U.S. Cities: FY2009-FY2013

Summary Rank	City	Average Indicator Rank
High	Pittsburgh	3
	Seattle	4
Middle	Los Angeles	6
	Phoenix	6
	Baltimore	7
	Boston	7
	Columbus	7
	Houston	7
	Kansas City (MO)	7
	Philadelphia	7
Low	New York	9
	Chicago	**10**
	Detroit	10

Note: The summary rank is grouped into high performance (1 - 4), middle performance (5 - 8) and low performance (9 - 13).

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[1] While there are many variations in specific wording, the general concept of timely meeting financial obligations is found across the literature on financial condition. See the literature review in the full report for more information.

[2] The Civic Federation used the following methodology to group the cities into performance levels: a high rank reflects an average indicator rank between 1 and 4, a middle rank reflects an average indicator rank between 5 and 8 and a low rank reflects an average indicator rank between 9 and 13.

The table above shows each city's average relative trend ranking based on all nine indicators. A rank closer to 1 reflects favorable performance.[3] The City of Chicago ranked low with an average rank of 10 out of 13. Pittsburgh ranked highest with an average rank of 3. The average ranks of eight of the 13 cities were within a close range between 6 and 7. The top two and bottom three cities were outliers. Pittsburgh and Seattle frequently ranked closer to one in their financial indicator trends, giving them considerably higher average ranks than the majority. The three cities that ranked lowest had significantly lower average ranks from frequently ranking in the bottom half for their financial indicator trends.

While all the cities studied faced unfavorable trends for at least one indicator, Chicago's averaged trends were less favorable compared to 11 of the 12 other cities in FY2009-FY2013. This does not mean that the overall financial condition of the higher ranked cities was better than Chicago's in any of the years studied. It means that they experienced more favorable trends in four areas of financial solvency than Chicago. This fact gives us an indication that other cities may have had a stronger recovery from the recession and other financial challenges.

It is also important to note that there are many additional aspects to Chicago's financial condition that are not directly reflected in its trend rankings, so those rankings should be taken as only part of the story of Chicago's financial sustainability. Most importantly, Chicago's economy is very large and diverse, providing financial advantages and resilience other cities in this report do not have.

The following table summarizes the City of Chicago's trends for the nine financial indicators analyzed in this report. Chicago performed in the more favorable half of the 13 cities based on two of the nine indicators: operating surplus (deficit) ratio (4th) and debt service expenditure ratio (5th). It is important to note that for all but two of the indicators, the fund balance ratio and the operating surplus (deficit) ratio, financial trends for a majority of the cities deteriorated over the five-year period. This is most likely due

[3] For five indicators positive change is considered favorable. For four indicators, negative change is considered favorable. All rankings, however, are arranged such that more favorable performance is indicated by a rank closer to 1. For more information, see the Indicator Trends and Rankings section on page 13 of the full report.

to the recession and its aftermath. It indicates that while the cities' general fund budgetary stability is improving, the financial stability of the government as a whole may still be a problem.

City of Chicago Relative Financial Condition Trends: FY2009-FY2013				
Area of Solvency	**Indicator**	**Rank**	**Five-Year Change**	**Average Annual Change**
Cash	Working Capital to Expenses Ratio	11	(2 weeks)	(3 days)
Budgetary	Continuing Services Ratio	12	-22.3%	-5.6%
	Unrestricted Fund Balance Ratio*	12	-5.7%	-2.8%
	Operating Surplus (Deficit) Ratio	4	12.5%	3.1%
Long-Run	Net Worth Ratio	13	-14.3%	-3.6%
	Debt Service Expenditure Ratio	5	-0.5%	-0.1%
Service-Level	Expenses Per Capita	12	$ 353	$ 88
	Liabilities Per Capita	11	$ 3,300	$ 825
	Taxes and Fees Per Capita	10	$ 338	$ 85
	Average Rank	**10**		

*The unrestricted fund balance ratio trend reflects a three-year change because of a revision to GASB reporting standards for all statements after FY2011. For more information see the Fund Balance Ratio section of this report.

Note: For all indicators, a rank closer to 1 is favorable.

Source: City of Chicago Comprehensive Annual Financial Reports, FY2009-FY2013.

The financial indicators selected for this report reflect four areas of financial condition: cash solvency, budgetary solvency, long-run solvency and service-level solvency. We chose indicators that were relatively commonly used in the literature and would make intuitive sense to a non-academic audience. For definitions of these and other financial terms used in this report, see the Glossary on page 45 of the full report.

The **working capital to expenses ratio** is a measure of cash solvency, which demonstrates a government's ability to generate sufficient financial resources to pay its current liabilities. The working capital to expenses ratio compares net current government-wide assets to monthly expenses and approximates how many months the government is able to pay for operations.[4] A higher ratio and an increasing trend are considered favorable. The City of Chicago's working capital to expenses ratio decreased by 0.6 months over the five-year period, a trend that placed it eleventh among the 13 cities. At its lowest point in FY2013, Chicago's government-wide working capital to expenses ratio dropped to 3.6 months. In other words, at any point during the fiscal year 2013, Chicago had enough working capital to fund approximately three months and two weeks of operations. Despite its low trend rank, Chicago had the fifth highest average working capital to expenses ratio over the five years at 4.0 months.

The three indicators of budgetary solvency demonstrate a government's financial ability to maintain current or desired service levels. The **continuing services ratio** examines unrestricted net assets as a percentage of governmental expenses.[5] Over the five-year period, Chicago's continuing services ratio

[4] Government-wide financial statements report the activities of the primary government, which include governmental activities that are normally supported by taxes and intergovernmental revenues, as well as business-type activities that are normally supported by user fees and charges for services. These statements use the full accrual basis of accounting.

[5] Unrestricted net assets are government-owned assets that have no external restrictions and are not assigned to any specific purpose.

experienced an unfavorable trend which placed it twelfth of the 13 cities. Chicago had the fourth lowest average continuing services ratio over five years. More troubling was the significantly unfavorable trend over the last two years, which means that Chicago was accumulating liabilities without maintaining or accumulating offsetting assets.

The **fund balance ratio** compares unrestricted general fund fund balance to general fund expenditures and reflects the government's budgetary reserves.[6] While the majority of cities experienced favorable trends in their fund balance ratios since FY2011,[7] the City of Chicago's fund balance ratio declined over the three-year period from 10.2% to 4.6%, placing it twelfth in rank. Chicago's low levels of unrestricted fund balance are below the 17% recommended by the Government Finance Officers Association (GFOA) and the steady depletion of those funds is a cause for concern. It is important to note that Chicago maintains additional reserves generated from long-term asset leases, though these reserves are not reported as unrestricted general fund fund balance and are therefore not included in the trend analysis.[8]

The **operating surplus (deficit) ratio** shows general fund operating surplus or deficit as a percentage of total operating expenses. Chicago steadily reduced its operating deficit each year, which placed Chicago fourth among the 13 cities. Although the improvement in Chicago's operating deficit ratio is favorable, annual deficits in each of the past five years indicate that operating expenses consistently exceeded revenues, which is a cause for concern.

These three indicators reveal a general deterioration in Chicago's budgetary flexibility, suggesting that Chicago was experiencing difficulty in maintaining services with the existing revenue structure. Although the City has managed to reduce budget shortfalls since FY2012, which it attributes to governmental efficiencies and an improving economy, Chicago warns that budgetary challenges remain with growing salaries, growing debt obligations and the cost of funding pensions.[9]

Indicators of long-run solvency assess the availability of future resources to pay for existing long-term obligations. The **net worth ratio** measures restricted and unrestricted net assets as a percentage of total assets. Chicago's net worth ratio has declined from 2.3% in FY2009 to a deficit of 15.8% in FY2013, an unfavorable trend that ranks it last of the 13 cities. The deficits in net worth indicate a lack of available restricted and unrestricted net assets for governmental activities and the steady decline suggests that Chicago has leveraged its assets.

The **debt service expenditure ratio** measures the portion of governmental expenditures allocated to debt service. Chicago's debt service expenditure ratio trend placed it fifth of the 13 cities. Although the indicator generally experienced a favorable trend over the five-year period, Chicago is among the cities with a higher proportion of governmental expenditures being allocated to debt service. Chicago's average debt service expenditure ratio over the five years was the sixth highest of the 13 cities.

Lastly, the report considers service-level solvency by using per capita indicators that reflect a government's ability to provide services at the level and quality required for the health and welfare of its

[6] The governmental funds statements report additional, more detailed information about the primary government, including the activities of the general fund, which is the government's main operating fund. These statements use a modified accrual basis of accounting.
[7] Due to the implementation of GASB 54 in FY2011, a five-year trend analysis of fund balance ratio is not available so FY2011 to FY2013 is used for ranking. For more information about GASB 54, see the Fund Balance Ratio section on page 26 of the full report.
[8] The GFOA recommends that general-purpose governments maintain no less than two months, or approximately 17%, of general fund expenditures or revenues as reserves. For more details on the fund balance ratio and the City's long-term reserves, see page 26 of the full report.
[9] City of Chicago, Annual Financial Analysis 2015, p. 49.

citizens. All indicators are adjusted for inflation and reflect 2013 dollars. Chicago's above average growth in real **expenses per capita** over the five-year period (growth of $353 per person) and real **liabilities per capita** (growth of $3,300 per person) have given it a ranking of twelfth place and eleventh place, respectively. Higher than average rates of expenses per capita and liabilities per capita suggest an expensive government and a lower ability to maintain those services long-term if nothing changes going forward. From FY2009 to FY2013, Chicago's real **taxes and fees per capita** have grown by $338 per person, placing it in tenth place of the 13 cities. Chicago's unfavorable trend in taxes and fees per capita reflects a relatively large growth in tax and fee burden on residents, compared to the other cities.

The following table shows the performance of the City of Chicago using the six ratios and three per capita indicators.

City of Chicago
Financial Indicators: FY2009-FY2013

Indicator	FY2009	FY2010	FY2011	FY2012	FY2013	Five-Year Change	Indicator Trend
Working Capital Ratio	4.2	4.4	3.9	4.1	3.6	(0.6)	Unfavorable
Continuing Services Ratio	-50.5%	-58.5%	-51.4%	-68.9%	-86.2%	-35.6%	Unfavorable
Unreserved Fund Balance Ratio	0.1%	2.7%	-	-	-	-	-
Unrestricted Fund Balance Ratio*	-	-	10.2%	6.8%	4.6%	-5.7%	Unfavorable
Operating Surplus (Deficit) Ratio	-15.0%	-13.9%	-8.5%	-5.2%	-2.5%	12.5%	Favorable
Net Worth Ratio	2.3%	-1.6%	-6.4%	-10.4%	-15.8%	-18.1%	Unfavorable
Debt Service Expenditure Ratio	12.5%	11.9%	9.3%	12.2%	12.0%	-0.5%	Favorable
Real Expenses Per Capita	$ 2,925	$ 3,255	$ 3,235	$ 3,284	$ 3,278	$ 353	Unfavorable
Real Liabilities Per Capita	$ 8,983	$ 10,627	$ 11,283	$ 11,790	$ 12,283	$ 3,300	Unfavorable
Real Taxes and Fees Per Capita	$ 1,827	$ 1,971	$ 2,008	$ 2,089	$ 2,165	$ 338	Unfavorable

*The unrestricted fund balance ratio trend reflects a three-year change because of a revision to GASB reporting standards for all statements after FY2011. For more information see the Fund Balance Ratio section of the full report.

Source: City of Chicago Comprehensive Annual Financial Reports, FY2009-FY2013.

During the five-year period, the City of Chicago's relative financial trends were generally unfavorable in all four areas of solvency.

Chicago's ability to generate financial resources in the short-term has generally declined, indicating a weakened but still relatively healthy cash solvency. A majority of the 13 cities experienced declines in the ratio, also indicating weakened liquidity but not necessarily an overall poor cash position.

Two of Chicago's three budgetary solvency indicators were unfavorable as well. The significant decline of the continuing services ratio reflects the large and growing deficits of unrestricted net assets, particularly Chicago's loss of $3.7 billion in unrestricted net assets. This is primarily driven by inadequate funding for long-term liabilities including net pension obligations.[10] A positive budgetary trend was its reduced operating deficit over the five-year period. However, Chicago also built up and then steadily depleted its budgetary reserves, with fund balance levels well below the GFOA's recommended levels.

A majority of cities experienced unfavorable trends with the continuing services ratio. However, a large majority experienced favorable trends with the fund balance and operating surplus (deficit) ratios. This may suggest an overall improvement in the fiscal condition of the cities' general funds, but that the cities

[10] Reported net pension obligations are the cumulative difference between annual pension costs and the employer's contributions to its plans since 1986 as required by reporting standards in GASB Statement No. 27. The cumulative pension funding shortfalls reported in the City's audited financial statements do not represent total unfunded pension liabilities.

continue to face challenges in government-wide operations, including the accumulation of long-term liabilities that are greater than the current value of their assets.

The long-run solvency indicators expose significant challenges for Chicago to meet its existing long-term obligations. Chicago's plummeting net worth ratio is a warning that the City may face difficulty in the future in paying off existing long-term liabilities. Despite an overall decline in the debt service expenditure ratio, the average over the five years for Chicago is among the higher half of the 13 cities.

A majority of the cities not only experienced unfavorable trends with the net worth ratio, but a majority also maintained deficits of net assets in at least four of the five years studied. Meanwhile, the debt service expenditure ratio increased for a majority of the cities. This indicates that other cities may also face difficulty in meeting their long-term liabilities if nothing is done to offset the unfavorable trends.

Finally, while Chicago's real expenses and real taxes and fees have grown by a similar amount over the past five years of 12.1% and 18.5%, respectively, Chicago's real liabilities have grown by a significantly larger 30.1%. Chicago's service-level solvency indicators suggest that Chicago is experiencing a growing imbalance between its long-term obligations and the means to fund them.

A majority of the cities experienced slower than average growth in expenses per capita and liabilities per capita, which is a favorable outcome. This suggests that only a group of outlier cities experienced declining service-level solvency. A majority of the cities also experienced above average growth in taxes and fees per capita, which may have been at least partly driven by an improving economy.

Methodology

We chose the cities included in this report following analysis by the Pew Charitable Trusts' Philadelphia Research Initiative.[11] The group of cities combined the largest cities in the U.S., early industrial cities, geographically diverse cities and cities hit particularly hard by the 2007-2009 recession.

The data in this report reflect a specific time frame that includes part of the Great Recession and its aftermath. For information on the economic conditions in the cities from 2009 to 2013, see page 14 and Appendix E on page 55 of the full report.

As noted above, a full financial condition analysis evaluates the financial health or status of a government using annual financial statements data as well as external economic and demographic data.[12] Also important to understanding a government's financial health is a comparison to other governments. Direct comparison of one government's financial condition to others is rendered difficult by 1) the lack of objective standards or benchmarks for most financial indicators calculated from financial statements and 2) by the lack of comparability of the governments themselves. For many financial indicators there is no specific benchmark to which a government should aspire, simply an idea that a higher or lower number would be better, within reason. Even governments of a similar type, such as large cities, vary significantly in size, structure and services, making direct financial comparisons extremely difficult.

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[11] Pew Charitable Trusts Philadelphia Research Initiative, "Tough Decisions and Limited Options: How Philadelphia and Other Cities are Balancing Budgets in a Time of Recession" (May 18, 2009). Due to a change in the fiscal year for the City of Atlanta in 2006 that led to inconsistent trend analyses when compiling the previous report, this report continues to substitute the City of Houston for Atlanta.
[12] Steven A. Finkler, *Financial Management for Public, Health and Not-for-Profit Organizations* (Boston: Pearson Education, 2013).

However, it is possible to overcome these limitations by examining whether changes to a government's financial condition over time are favorable or unfavorable relative to other governments. Trend analysis allows a researcher to compare one government with itself over time, reducing concerns about comparability. Again, such an analysis does not provide an indication of good or bad overall financial condition but of whether a government is doing better or worse than it was a certain time period before. That government's trend can then be compared to other governments' trends to show the direction and magnitude of change relative to the other governments. Thus, a researcher can determine whether a government's trends are generally more or less favorable than the others and therefore whether a government's overall trends, good or bad, are out of the mainstream.

It is important to note that data in this report are compiled from each city's audited financial statements. These statements offer a comprehensive look at government obligations over the long-term, which is different from the government's budget. The budget is a short-term, cash-based document that reflects the government's policy decisions for the upcoming year. For in depth analysis of the City of Chicago's budgetary actions to address its financial challenges, see the Civic Federation's website for annual analyses of the City's proposed budgets.[13]

Limitations of this Report

Due to a number of factors, the analysis presented in this report has certain limitations including the following:

- This report does not prescribe the way in which all governments ought to be examined to determine financial trends. There is a universe of hundreds of possible indicators of financial condition. The Civic Federation strove in this report to select useful, familiar financial indicators that make intuitive sense to present the City of Chicago's relative financial trends to a non-academic audience. Another analysis using different indicators could possibly come to a different conclusion;
- The 13 cities selected in the analysis represent vastly different governments and demographics. Each city has unique governmental operations, social and demographic compositions and local and state laws, all of which could influence the indicators but are not accounted for in the analysis;
- Primary government operations for each of the cities can include vastly different services. For example, the New York City public school system is a branch of the municipal government, whereas Chicago's public school system is a separate district governed by the Board of Education. In FY2013 nearly 29.7% of New York's general fund expenditures were allocated to education. In the City of Chicago, however, public education is funded through Chicago Public Schools (CPS);
- In addition to varying services, the report does not examine differences in the responsibilities of each government or compare capital condition;
- Although all cities are analyzed during the same time period (2009-2013 fiscal years) and include the economic recession and aftermath, regional differences can affect the indicators and are not accounted for in the analysis;
- Cities may implement accounting changes for any given fiscal year. These changes can have a significant impact on how financial data is reported and, when examining financial indicators over time, could create a misleading trend;
- The report uses pre-GASB 68 audited financial statements and therefore do not include a consistently applied measurement of unfunded actuarial accrued pension liabilities; and

[13] See www.civicfed.org for annual analyses of the City's proposed budgets, as well as the Federation's *Recommendations for a Financially Sustainable City of Chicago*.

- An indicator that appears to have a negative trend may reflect a planned service choice by a government. For example, a city may have increasing debt service expenditures as a result of a major capital or infrastructure project. Conversely, a government with falling debt service expenditures could be neglecting its capital condition.

Trends in Financial Indicators: Full Report

The full report of the Civic Federation's *Trends in Financial Indicators* is available on the Civic Federation's website.[14]

The report begins with an introduction to the analysis, including a brief literature review on the value of financial condition analysis and financial indicators. The introduction also continues the discussion on the methodology used to conduct the analysis with details on data compiled from audited financial statements.

Following the introduction is a snapshot of the City of Chicago's economic climate. The section examines population, unemployment, inflation and gross domestic product data during the time period used for the analysis. Complete economic data for all cities is provided in the appendix of the report.

The findings of the report offer detailed analysis of each of the nine financial indicators, including the rankings of the cities and indicator outcomes for all cities over the five-year period. Analysis of trends for the City of Chicago as well as the highest and lowest performers is included in this section.

Following the findings of the report are appendices that include a glossary of terms used in the report, a summary chart of the selected financial indicators and their formulas, limitations of financial indicator trend analysis and the economic data for all cities analyzed in this report.

[14] See www.civicfed.org.