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CREDIT OPINION
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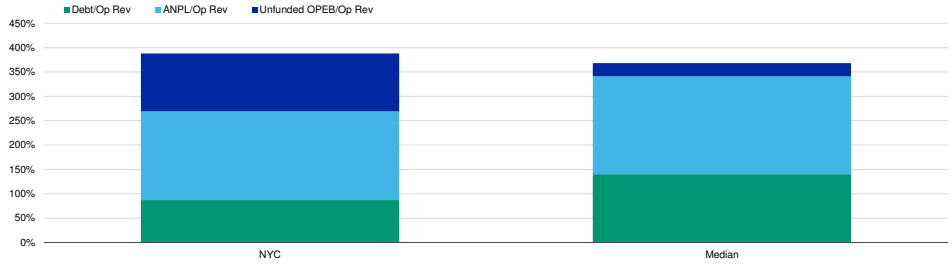
New York (City of) NY

Update to credit analysis

Summary

New York City (Aa2 stable) has a large and resilient economy, an extraordinarily large tax base, notably strong institutionalized budgetary and financial management controls, growing reserves, and a history of proactive responses to budget strain during economic downturns. Economic diversification continues, reducing the impact of the key but volatile financial services sector. Fixed costs for the combination of debt service, pension, and employee and retiree healthcare are moderate but increasing, and require ongoing economic growth to remain affordable.

Exhibit 1
New York City's fixed costs are just above the median for the largest local governments



Source: Moody's Investors Service

Credit strengths

» Exceptionally large and diverse economy driven by city's position as an international center of the high-income financial services industry

» Strong governance and financial best practices, tested through periods of fiscal stress

» Strong liquidity

Credit challenges

» Fixed costs that will require economic and revenue growth to remain affordable

» Cyclical economic base driven by the financial services industry

» Ongoing need to close out-year budget gaps

Rating outlook

The outlook for New York City's general obligation bonds is stable. The city's institutionalized budgetary controls and early recognition of future budget pressure help it maintain a balanced financial position and weather economic downturns. The city's economy is reliant on a volatile financial services sector, but it continues to diversify, and its finances will benefit. Even with strong budgetary controls, growth in costs for debt service, pensions and retiree health care will continue to be a challenge for the city.

Factors that could lead to an upgrade

» Sustained reduction in the growth of the city's debt burden and other fixed costs, and establishment of formal policy for managing debt within prescribed constraints

» Establishment of significant formal budget reserves to buffer the inherent volatility of the financial services sector

» Improved and continuing growth in city employment and the property tax base

Factors that could lead to a downgrade

» Inability to manage rapidly rising costs in non-discretionary spending such as debt service, personnel costs, or pensions

» Divergence from well-established fiscal practices

» Emergence of significant liquidity strain and the need for large cash-flow borrowings

Key indicators

Exhibit 2

New York City	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Total Full Value (000s)	838,003,200	858,102,400	906,273,800	969,430,400	1,064,244,500
Full Value Per Capita	101,343	102,707	107,547	115,042	126,294
Median Family Income as % of US	108.3%	106.7%	106.3%	N/A	N/A
Operating Revenue (000S)	70,631,865	72,387,292	77,608,673	79,487,118	83,287,642
Available Fund Balance as a % of Revenue	5.9%	6.1%	9.8%	11.2%	10.6%
Cash Balance as a % of Revenue	12.8%	16.4%	17.4%	17.9%	14.6%
Net Direct Debt (000's)	67,000,247	68,940,172	69,071,880	69,457,542	72,620,832
Net Direct Debt to Operating Revenue (x)	0.9x	1.0x	0.9x	0.9x	0.9x
Net Direct Debt as % of Full Value	8.0%	8.0%	7.6%	7.2%	6.8%
Moody's ANPL (3-Year Average) to Full Value (x)	10.3x	11.2x	11.1x	11.9x	11.8x
Moody's ANPL (3-Year Average) to Operating Revenues (x)	1.2x	1.3x	1.3x	1.4x	1.5x

Source: New York City audited financial statements; Moody's Investors Service

Profile

New York City is large and diverse, with a population of 8.5 million people and personal income per capita that is 130% of the US level. The city itself is five counties and the nation's largest public school system.

Detailed credit considerations

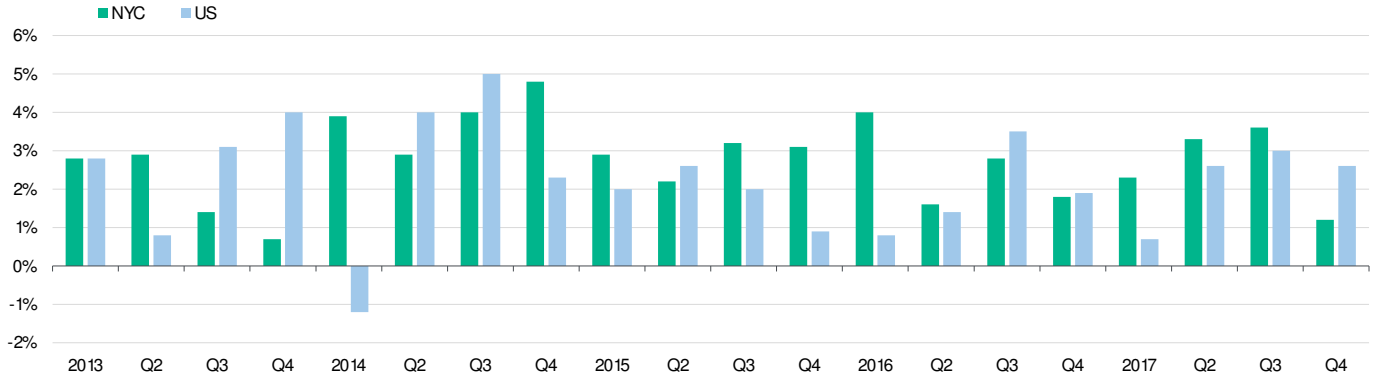
Economy and Tax Base: Robust and Diverse

New York City's economy is notably large, with real GDP greater than all but four US states, and largely has expandied at a rate that outpaces the nation. City GDP in 2017 increased by 2.4%, slightly higher than the US rate, but it slowed in the fourth quarter to a level below the national average (see Exhibit 3). Since the recession the city's private employment has increased significantly faster than the US rate and the labor force expanded at about the same rate. Employment growth in 2017 was 1.7%, exceeding the US rate. The city's unemployment rate declined to 4.5% in 2017, also just higher than the US rate.

Exhibit 3

City economy outpaces the nation but slows in late 2017

Percent change in GDP



Source: New York City Comptroller, Bureau of Economic Analysis

Financial activities accounts for nearly 11% of the city's employment and played a key role in helping the city regain jobs following the early 2000s recession, but employment performance is volatile. Jobs in the sector account for 24% of earnings in the city. The city's economy is diversifying, with strong higher education and health care sectors and a burgeoning high tech industry. Ongoing growth in those areas will continue to mitigate the volatility of finance.

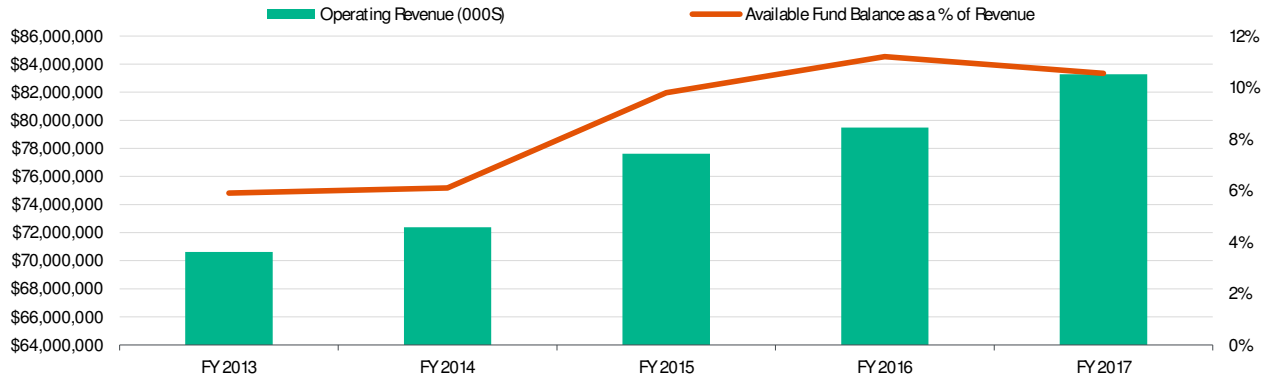
Similar to the size of the city's economy, New York's real property tax base is the largest of any US city, with a fiscal 2017 full value of a $1 trillion; preliminary data for fiscal 2019 indicate that will increase to $1.2 trillion. State law that limits the amount of real property tax that a municipality may levy in any year do not apply to New York City. Proposals from time to time would extend the limitation to the city and while one has never passed, if it did it would significantly constrain the city's financial flexibility.

Financial Operations and Reserves

The city has buttressed its reserves in recent years, a positive development for a budget that is highly sensitive to economic swings. There is now $1 billion in its General Reserve and approximately $4.3 billion in the Retiree Health Benefits Trust. It also established a Capital Stabilization Reserve ($250 million per year) that acts as additional budgetary cushion. While those reflect a stronger reserve position than the city has had in some recent years (see Exhibit 4), they are slightly lower than the Aa2 large city median which is more than 12%.

Exhibit 4

Revenues and reserves grow



Source: New York City audited financial statements; Moody's Investors Service

The city has subsidized its large public hospital system, New York City Health + Hospitals (formerly the Health and Hospitals Corporation, or HHC) since it was created, providing both operating and capital support, as well as a capital reserve replenishment

obligation on the system's $747 million of outstanding bonds. Amid increasing healthcare costs, declining federal reimbursements for the uninsured and underperforming patient revenue, the system faces significant financial challenges. The city has increased its financial support of the hospital system significantly. That support includes both direct operating support payments and eliminating debt service reimbursements from the hospitals for capital projects financed with city-issued debt. The city and hospital system have formulated a multi-year plan to increase revenue and decrease expenditures to stabilize the system's financial position. The increased size of the subsidies illustrates the enterprise risk the hospital system poses to the city, especially during a period of lower revenue growth and also underscores potential risk from cuts in federal funds that could adversely affect the hospital system. For example, the recent federal budget continuing resolution delays cuts to disproportionate share hospital payments that support safety net hospitals such as H+H; the city estimates it will not lose $300 million in fiscal 2018 and $400 million in fiscal 2019 it would have if the cuts were implemented.

The fiscal 2018 preliminary budget released earlier this month conservatively reflects only economic change in city tax revenues, not the potential impact of recently enacted federal tax law changes. That measure generally is negative for state and local governments, especially high cost and higher tax ones such as New York City and the State of New York (Aa1 stable). Potential state tax law changes in response to the federal measure also could impact the city's tax base and make balancing the budget more difficult. Similarly, the recently proposed state budget also could have negative consequences for the city, especially measures to require the city to fund a greater share of Metropolitan Transportation Authority (MTA, A1 stable) expenditures or to allow the MTA to create special districts round transit projects within the city and capture the incremental property tax growth within them.

LIQUIDITY

Liquidity is strong but recently has trended lower than prior years. The city had three consecutive record high ending cash balances in fiscal years 2014-2016. Reflecting slower non-property tax revenues, the fiscal 2017 ending cash balance was $9.3 billion, strong but $2.3 billion less than the extraordinarily robust fiscal 2016. Cash in fiscal 2018 had trended lower amid slower tax collections, slower receipt of state and federal aid payments, and higher spending. Balances through March are projected to average $4.6 billion.

Debt and Pensions: Moderate Overall Leverage But Requires Future Economic Growth to Keep Pace

DEBT STRUCTURE

The city has approximately $36 billion of general obligation debt outstanding. Of that, $5.2 billion is variable rate demand debt (14% of outstanding GO debt). The New York City Transitional Finance Authority (TFA, senior lien Aaa stable, subordinate lien Aa1 stable) has a total of $3.0 billion of outstanding variable rate demand debt. Additionally, the city has $30 million of appropriation-backed variable rate debt outstanding. Counterparty risk is mitigated through the use of a diverse array of liquidity providers: 16 banks provide liquidity support for general obligation variable rate debt and 15 support TFA variable rate demand debt.

The city manages its variable rate portfolio proactively to renew or replace expiring liquidity facilities or to convert variable rate bonds to fixed rate or other interest rate modes if necessary. In an effort to reduce its overall borrowing costs and mitigate bank exposure, the city has converted various variable demand bonds to floating rate index modes. Those bonds do not have the put risk associated with demand debt but the city must refinance most of them at specific dates or interest rates will step up to higher levels. Those risks are manageable given the city's record of market access. The city currently has $1 billion of general obligation index mode bonds outstanding and $711 million outstanding issued through TFA. The city also has $635 million of general obligation auction rate bonds outstanding, and $222 million issued through TFA.

DEBT-RELATED DERIVATIVES

The city has seven outstanding interest rate swap agreements associated with its general obligation bonds, with four separate counterparties, and two swaps related to city-appropriation backed debt issued through the Dormitory Authority of the State of New York (DASNY) with two counterparties. In our analysis, the swap portfolio's potential risks to the city are manageable: rating triggers that would cause the agreements to terminate early or post collateral are low, ranging between Baa1 and Baa3. As of December 31, 2017 the combined outstanding notional amount of the swaps was $1.3 billion, with a mark-to-market value of -$102 million.

PENSIONS AND OPEB

Unlike most other large cities, no separate school district or county government exists that also finances New York City's capital costs, which results in a relatively greater bonded debt load when compared to similarly-rated local governments: New York City net debt

as a percentage of full value is 6.8% compared to 3.1% for Aa2-rated large local governments, although unlike most property tax dependent local governments, New York City's revenue base includes personal income taxes, sales taxes and other taxes.

The city's pension system includes three multi-employer cost-sharing plans (the New York City Employees Retirement System, Teachers Retirement System, and Board of Education Retirement System), and separate plans for fire and police. The city's shares of the multi-employer plans are 54.3%, 97.6% and 99.9%, respectively. Reflecting those plans, New York City's fiscal 2017 Moody's adjusted net pension liability (ANPL) is $130.8 billion, or 157% of operating revenues. That figure ranks in the lower half of the fifty largest local governments.

The city's combined pension contributions were 130% of the Moody's-calculated "tread water" level and were 11% of revenue. The "tread water" indicator measures the annual government contribution required to prevent the reported net pension liability from growing, under reported assumptions. Contributions above this level cover all net pension liability interest plus pay down some principal; this is stronger from a credit perspective compared to contributions below this level. Ratios comparing government contributions to the "tread water" level and "tread water" costs to government revenues shed light on budgetary fixed cost burdens. The city's fixed costs (debt service, pension contribution and OPEB requirement) are 21% of operating fund revenues.

Management and Governance: Strong Financial Management Practices

The city's financial management is characterized by strong, institutional financial management practices that emerged from the 1970s fiscal crisis. These include four-year financial planning and quarterly updates, which must be submitted to a state oversight board; the segregation of real property tax revenue into a General Debt Service Fund held by the state comptroller; the state's covenant not to impair the rights of city bondholders to be paid when due; a statutory requirement to phase-in changes in property tax billable assessed value over five years evens out ups and downs in the city's real estate market; quarterly interest rate derivatives reporting, submitted to a state oversight board; and oversight by a state control board and by the state comptroller.

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