MOODY'S
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CREDIT OPINION
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New Issue

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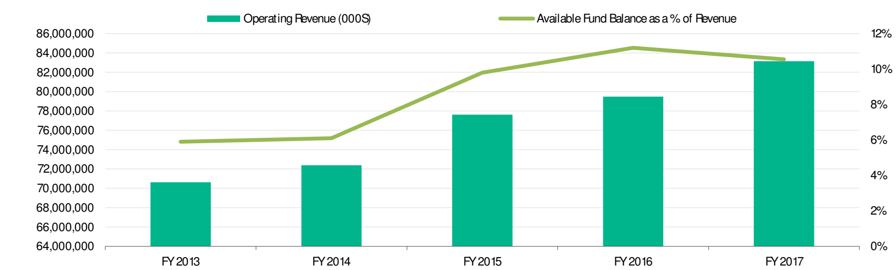
New York (City of)

New Issue - Moody's assigns Aa2 to $850M of NYC GO bonds; outlook stable

Summary Rating Rationale

Moody's Investors Service has assigned Aa2 ratings to the City of New York's $800 million General Obligation Bonds, Fiscal 2018 Series C and $50 million Series D. The outlook is stable. The ratings reflect the city's large and resilient economy, its extraordinarily large tax base, its institutionalized budgetary and financial management controls, growing reserves, its proactive responses to budget strain during economic downturns, the key but diminishing role of the volatile financial services sector, and moderate but growing costs for the combination of debt service, pension, and employee and retiree healthcare.

Exhibit 1
Revenues and reserves grow



Source: New York City audited financial statements; 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	83,148,129
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

Recent Developments

» On November 21 the city updated its financial plan. Fiscal 2018 tax collections were revised slightly downwards, by $207 million, mostly reflecting lower business taxes. Nonetheless, tax revenue is estimated to increase 4.6% on average through fiscal 2021. Forecasted future year budget gaps are manageable and average 3.5% of city-funds revenue; the estimated gaps are $3.2 billion, $2.3 billion and $1.6 billion in fiscal years 2019, 2020 and 2021, respectively.

Detailed Rating Considerations

Economy and Tax Base

New York City's economy is notably large, with real GDP greater than all but four US states, and expanding at a rate that outpaces the nation. Since the recession the city's private employment increased significantly faster than the US rate and the labor force expanded at about the same rate. Through October, city employment had increased 1.5% compared to 1.4% for the nation. Similarly, the unemployment rate has been just above the national rate as city residents seek jobs and In October was 5.0% compared to the US rate of 4.1%.

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. 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

In recent years the city has buttressed its reserves, including $1.2 billion in its General Reserve for fiscal 2018, approximately $4 billion in the Retiree Health Benefits Trust, and established a new Capital Stabilization Reserve ($250 million per year between fiscal 2018-2021). While those reflect a stronger reserve position than the city has had in some recent years, they are slightly lower than the Aa2 large city median which is more than 12%.

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.

LIQUIDITY

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 strong fiscal 2016 ending balance.

Debt and Pensions

DEBT STRUCTURE

The city has nearly $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 eight 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 September 30, 2017 the combined outstanding notional amount of the swaps was $1.3 billion, with a mark-to-market value of -$107 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 20% of operating fund revenues.

Management and Governance

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, and 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.

Legal Security

The bonds are general obligation, full faith and credit obligations of the city, secured by a real property tax levied without limitation as to rate or amount.

Use of Proceeds

Proceeds of the bonds will be used to refund outstanding city general obligation bonds for savings.

Obligor Profile

In addition to its large economy, New York City has a population of 8.5 million people and personal income per capita that is 128% of the US level.

Methodology

The principal methodology used in this rating was US Local Government General Obligation Debt published in December 2016. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

Ratings

Exhibit 3

New York (City of) NY

Issue	Rating
General Obligation Bonds, Fiscal 2018 Series C	Aa2
Rating Type	Underlying LT
Sale Amount	$800,000,000
Expected Sale Date	12/06/2017
Rating Description	General Obligation
General Obligation Bonds, Fiscal 2018 Series D	Aa2
Rating Type	Underlying LT
Sale Amount	$50,000,000
Expected Sale Date	12/06/2017
Rating Description	General Obligation

Source: Moody's Investors Service

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