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CREDIT OPINION
26 February 2018

Update

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RATINGS

Medellin, City of

Domicile	Antioquia, Colombia
Long Term Rating	Baa2
Type	LT Issuer Rating - Fgn Curr
Outlook	Negative

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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City of Medellin (Colombia)

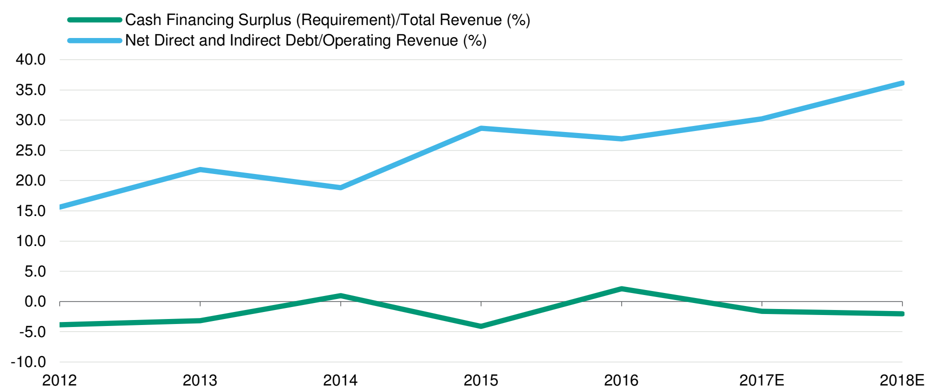
Update following change in outlook to negative from stable

Summary

The credit profile of the City of Medellin (Baa2 negative) reflects a diversified local economy, strong government and management practices, and a solid liquidity position in line with regional peers. We expect these factors to continue in 2018 and 2019.

Medellin's credit profile also takes into account our expectation that the city registered moderate cash financing deficits in 2017 at around 2% of total revenues and that it will continue posting a similar metric in 2018 as a result of its investment plan. As such, we expect debt to increase to 30% and 36% of total revenues in 2017 and 2018, respectively.

Exhibit 1
Cash financing deficits would lead to higher debt levels in 2018



Source: Moody's Investors Service, and financial statements of the City of Medellin.

Credit Strengths

» Economic diversification

» Moderate debt and debt servicing levels

» Solid liquidity position

Credit Challenges

» High exposure to foreign currency debt

» Maintaining low cash financing requirements

» Moderate unfunded pension liabilities

Rating Outlook

The negative rating outlook reflects the negative rating outlook of Colombia's bond rating (Baa2 negative) given the strong linkages between the sovereign and the City of Medellin.

Factors that Could Lead to an Upgrade

» Given the negative outlook, a rating upgrade in the medium-term is unlikely. However, the outlook could be stabilized if the sovereign rating is stabilized and Medellin continues to register moderate debt levels and strong liquidity metrics.

Factors that Could Lead to a Downgrade

» We would consider downgrading Medellin's ratings if Colombia's ratings are downgraded or if Medellin registers high cash financing deficits, leading to high debt levels and a deterioration of liquidity metrics.

Key Indicators

Exhibit 2

City of Medellin

(Year ending 12/31)	2012	2013	2014	2015	2016	2017E	2018E
Net Direct and Indirect Debt/Total Revenue (%)	15.6	21.8	18.8	28.7	26.9	30.2	36.1
Interest Payments/Total Revenue (%)	1.3	1.0	1.6	1.6	1.8	1.7	1.7
Gross Operating Balance/Operating Revenue (%) [1]	-3.9	-3.1	1.0	-4.1	2.1	-1.6	-2.0
Cash Financing Surplus (Requirement)/Total Revenue (%)	-3.9	-3.1	1.0	-4.1	2.1	-1.6	-2.0
Own-Source Revenues/Total Revenue (%)	41.7	41.2	30.0	41.7	44.2	42.5	42.7
Cash / Current Liabilities (x)	1.1	2.0	1.3	0.8	1.7	-	-
GDP per capita as % of the National Average [2]	97.3	97.4	100.2	102.7	103.4	-	-

[1] Throughout this publication, this ratio corresponds to Cash Financing Surplus (Requirement)/Total Revenue
[2] Department of Antioquia
Source: Moody's Investors Service, and financial statements of the City of Medellin.

Detailed Rating Considerations

On 23 February 2018, we affirmed Medellin's Baa2 rating and revised the outlook to negative from stable. The decision to affirm the city's rating reflects our view that Medellin will continue posting moderate debt levels and strong liquidity position. The negative outlook reflects the sovereign action, in which Colombia's government bonds' (Baa2 negative) outlook was revised to negative from stable.

The credit profile of Medellin, as expressed in a Baa2 negative rating, reflects (1) a baseline credit assessment (BCA) of baa2, and (2) a strong likelihood of extraordinary support from the central government.

Baseline Credit Assessment

Economic diversification that supports the city's own-source revenue base

The diversified economy and the own revenue base provide financial flexibility to the municipality. The main local taxes are the industrial, commercial and property, but there are other taxes such as, construction telephone and gasoline taxes. Medellin maintains an active fiscal policy by maintaining updated its taxpayer registry and reinforcing tax payments. As a result, Medellin registers a level of own-source revenues in line with regional peers expected to continue above 40% of total revenues during 2018 and 2019.

Challenge to maintain low cash financing requirements

Medellin's creditworthiness is upheld by a track record of relatively low cash financing requirements, which averaged -1.6% of total revenues between 2012 and 2016. As of June 2017, Medellin had already collected 60% of budgeted revenues while expenditure execution was equivalent to 52% of annual budget. Despite expenditures were lower than revenues as of June 2017, we expect that

Medellin posted a cash financing deficit at around 1.8% of total revenues in 2017 and that it will register a similar metric in 2018 as a result of the projects incorporated in the City's Operating Annual Plan of Investments.

The main projects that Medellin is planning to execute are related to education, health, housing and public transportation. The City is planning to finance these projects through extraordinary transfers from EPM, debt and available cash.

Approximately 20% of Medellin's revenues comes from dividends paid by Empresas Públicas de Medellín (EPM, Baa2), which are registered as capital revenues. EPM is a public utility wholly owned by the municipality of Medellin that provides directly or indirectly through its subsidiaries, natural gas, electricity, water and telecommunications services. During 2018, Medellin is going to receive extraordinary transfers from EPM equivalent to COP 300,000 million, amount that will be used to finance part of the principle projects of the city's development plan, mainly related to education and health.

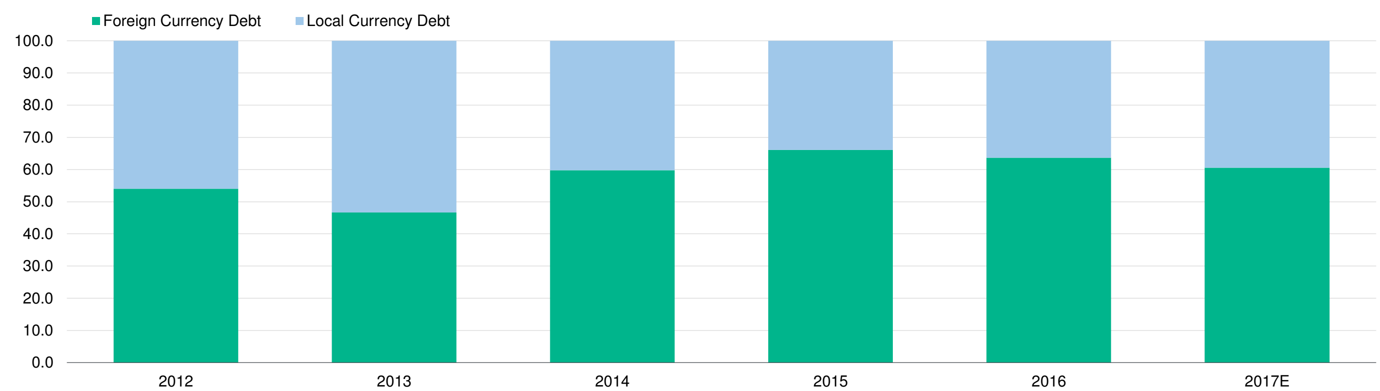
Moderate debt and debt servicing levels

Medellin's credit profile is supported by moderate debt levels equivalent to 26.9% of total revenues in 2016, compared to a 28.7% in 2015. The decrease reflects the amortization of the bonds issued in 2006 of COP 141,000 million. As a result, debt service payments increased to 5.7% in 2016, compared to 2.1% in 2015. We expect debt costs to decline to around 4% and 2% in 2017 and 2018 despite Medellin's plans to acquire additional debt.

The municipality had plans to acquire additional debt for up to COP 268,800 in 2017 to finance its main projects. If Medellin acquired the total approved amount, debt levels could increase to 30.2% of total revenues. Moreover, the city could acquire additionally COP 475,500 million during 2018, further increasing debt to 36% of total revenues, still a manageable level. Given Medellin's high share of debt denominated in foreign currency (63% of total debt as of June 2017), debt and debt service estimations are subject to the stability of the Colombian peso exchange rate. Further depreciation of the Colombian peso could push Medellin's debt metrics upwards.

Exhibit 3

Medellin registers a high share of debt denominated in foreign currency



Source: Moody's Investors Service, and financial statements of the City of Medellin.

Given the level of foreign currency debt, exposure to foreign exchange is an important challenge, as Medellin does not have a hedge for these risks. The way in which the administration of Medellin partially mitigates foreign exchange risks is by using a stress scenario for the exchange rate used in the medium-term projections and in the annual budget, which has given some space at the moment of the budget execution.

We expect that the credit risk posed by debt denominated in foreign currency will continue in 2018 and 2019 and represents one of the main credit risks of the city. The Municipality has the authorization by the national Ministry of Finance to contract hedging instrument and is in the process of negotiating the confirmation letters, which are general guidelines to obtain these instruments. However, we do not expect Medellin to contract these instruments in the near to medium-term.

Solid liquidity position

As a result of the balanced fiscal position, and reinforced by well developed cash management policies, Medellin maintains a solid liquidity position. Cash and investments covered 1.7x current liabilities at the end of 2016, while net working capital (current assets less current liabilities) represented 74.7% of total expenditures, a higher level than regional peers. We expect the city to maintain cash to current liabilities of at least 1.0x during 2017 and 2018, considering that almost 50% of Medellin's current liabilities are related to estimated unfunded pension liabilities, practice not followed by regional peers. Without considering such amount, we expect cash to represent 2x current liabilities in the near future.

Moderate unfunded pension liabilities

According to an actuarial study and including the workers of Metrosalud (municipal enterprise that provides health related services), pension liabilities stood at COP 2.8 trillion at the end of 2016. Once the assets held by the municipality in the National Pension Fund for Territorial Entities (FONPET) are considered, the actuarial deficit represents around 45% of total revenues in 2016. These pension obligations are backed by a plan for their financing and a clear payment schedule according to the Colombian legislation.

The national government exercises a high degree of oversight in administering pension obligations, including calculating unfunded pension liabilities and monitoring pension contributions within a broader target of seeing that liabilities are paid off over by 2029.

Extraordinary support considerations

Moody's assigns a strong likelihood that the Government of Colombia (Baa2 negative) would act to prevent a default by the city. The strong likelihood of support reflects Moody's assessment regarding the high oversight on all regional and local governments in the country that the central government exerts.

Rating Methodology and Scorecard Factors

In the case of Medellin, the BCA matrix generates an estimated BCA of baa3, close to the BCA of baa2 assigned by the rating committee. The matrix-generated BCA of baa3 reflects (i) an idiosyncratic risk score of 3 (presented below) on a 1 to 9 scale, where 1 represents the strongest relative credit quality and 9 the weakest; and (ii) a systemic risk score of Baa2, as reflected in the sovereign bond rating for Colombia.

Exhibit 4

Medellin, City of Regional and Local Governments

Baseline Credit Assessment	Score	Value	Sub-factor Weighting	Sub-factor Total	Factor Weighting	Total
Scorecard						
Factor 1: Economic Fundamentals						
Economic strength	5	102.44	70%	5	20%	1.00
Economic volatility	5		30%			
Factor 2: Institutional Framework						
Legislative background	1		50%	2	20%	0.40
Financial flexibility	3		50%			
Factor 3: Financial Performance and Debt Profile						
Gross operating balance / operating revenues (%)	5	0.17	12.5%	1.75	30%	0.53
Interest payments / operating revenues (%)	3	1.71	12.5%			
Liquidity	1		25%			
Net direct and indirect debt / operating revenues (%)	1	26.90	25%			
Short-term direct debt / total direct debt (%)	1	4.60	25%			
Factor 4: Governance and Management - MAX						
Risk controls and financial management	5			5	30%	1.50
Investment and debt management	5					
Transparency and disclosure	5					
Idiosyncratic Risk Assessment						**3.43(3)**
Systemic Risk Assessment						**Baa2**
Suggested BCA						**baa3**

Source: Moody's Investors Service

Ratings

Exhibit 5

Category	Moody's Rating
MEDELLIN, CITY OF	
Outlook	Negative
Issuer Rating	Baa2

Source: Moody's Investors Service

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