MOODY'S
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Credit Opinion: Petroleos Mexicanos

Global Credit Research - 28 Feb 2011

Mexico, Mexico

Ratings

Category	Moody's Rating
Outlook	Stable
Issuer Rating	Baa1
Senior Unsecured	Baa1
NSR Senior Unsecured -Dom Curr	Aaa.mx
NSR BACKED Senior Unsecured -Dom Curr	Aaa.mx
Pemex Project Funding Master Trust	
Outlook	Stable
Senior Unsecured	Baa1
Fideicomiso No. F/163 de Pemex	
Outlook	Stable
Bkd Senior Unsecured -Dom Curr	Baa1
NSR BACKED Senior Unsecured -Dom Curr	Aaa.mx

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Key Indicators

Petroleos Mexicanos

	9/30/2010(L)	12/31/2009	12/31/2008	12/31/2007
EBIT / Book Capitalization	**117.5%**	**106.1%**	**142.1%**	**130.5%**
EBIT / Interest Expense	**5.3x**	**4.7x**	**6.8x**	**9.0x**
Retained Cash Flow / Net Debt	**47.9%**	**43.9%**	**73.8%**	**21.3%**
Gross Debt / Total Capital	**277.1%**	**272.8%**	**197.8%**	**154.5%**
Gross Debt / Total Proved Reserves	**$9.11**	**$8.63**	**$6.27**	**$5.48**
Total Proved Reserve Life (Yrs)	**10.6**	**10.2**	**9.9**	**9.2**

All ratios are calculated using Moody's Standard Adjustments.
Source: Moody's Financial Metrics

Note: For definitions of Moody's most common ratio terms please see the accompanying User's Guide.

Opinion

Rating Drivers

* High fiscal burden and elevated financial leverage

* Challenge of reserves and production growth

* Benefits and challenges of energy reform implementation

* Rising capital spending trend

* Government related issuer with strong implied government support

Corporate Profile

Petróleos Mexicanos (PEMEX) is the state oil company of Mexico. It has monopoly status in the petroleum industry and is 100%-owned by the Mexican government. PEMEX is a fully integrated company with operations in oil and gas exploration and production, refining, distribution and retail marketing, pipelines and petrochemicals. With about 53% of its crude oil exported in 2010, it is also a leading crude supplier to the United States.

Rating Rationale

PEMEX's Baa1 foreign currency and local currency ratings factor in strong implied support and uplift from the government of Mexico (government bond rating Baa1). PEMEX's ratings reflect the company's sizable 13.7 billion BOE of proved hydrocarbon reserves, and oil and gas production averaging about 4.1 million BOE/day in 2010, its monopoly status, integrated operations, and position as a leading crude oil exporter to the U.S. However, on the negative side, PEMEX's heavy tax burden, high financial leverage and a trend of declining core oil production weigh heavily on our fundamental assessment as reflected in the baseline credit assessment of 11 (comparable to Ba1). Even with the benefit of fiscal and energy reforms PEMEX remains capital-constrained, and its ability to attract capital and technology to the upstream is stymied by Mexico's prohibition on foreign investment and equity ownership of reserves. While the company has started to step up deepwater exploration, it will take years of consistent reinvestment there and in other areas to grow production, as well as make necessary upstream and downstream infrastructure investments to meet rising energy and product demand in Mexico.

DETAILED RATING CONSIDERATIONS

HIGH FISCAL BURDEN AND ELEVATED FINANCIAL LEVERAGE

PEMEX's pre-tax cash flow is abundant and could support high levels of investment, but capital retention and investment continue to be stymied by a heavy tax burden, especially when compared to its international peers, and by the prohibition on foreign investment in the Mexican oil sector. While the tax reforms enacted in 2007 and 2009 have been mildly beneficial in terms of cash retention for investment. The elimination of the PIDIREGAS (public works) financing structure also de-linked the national budget setting process, giving PEMEX more autonomy in establishing annual budgets and long-term development plans and to directly issue debt. However, the new fiscal regime has not appreciably increased PEMEX's after-tax cash flows relative to its heavy debt burden in part due to cost caps on deductions against the Ordinary Hydrocarbons Duty that have stayed fixed as capital costs have risen.

As a result, the company continues to report net losses and its debt obligations have risen in 2009 and 2010, after a period of leveling off in 2007-2008. With capital spending increasing in 2010 and exceeding cash flow from operations, PEMEX undertook significant new financings, with total gross debt up some $5.2 billion in dollar terms to approximately $52.2 billion as of September 30, 2010. The increase in net debt of $4 billion was somewhat lower, reflecting the company's substantial cash position. PEMEX is likely to show further debt increases in 2011, if at a lesser rate given the strong oil price environment.

In addition, the company has sizable pension obligations that have continued to increase, totaling M$ 639.7 billion ($51.2 billion) at September 30, 2010. While there has been some dialogue around pension relief and the possible transfer of PEMEX's pension obligations to the government, we do not expect this to happen in the foreseeable future. The pension liabilities are direct obligations of PEMEX and not guaranteed by the government, but we believe the government would never allow PEMEX to default on these obligations.

CHALLENGE OF RESERVES AND PRODUCTION GROWTH

PEMEX is Mexico's sole producer and marketer of crude oil, natural gas and refined products. Despite massive proven hydrocarbon reserves, the dual legacies of high taxation and under-investment have resulted in a declining reserve and production profile and deteriorating energy infrastructure. PEMEX has not replaced production for many years and crude oil reserves have steadily fallen in tandem with the decline of the giant Cantarell oil field.

Still, PEMEX's reserve replacement has gradually improved, with total one-year reserve replacement increasing to 77% in 2009, up from 50% in 2007, adding over 1 billion BOEs in revisions and discoveries during the period from the KMZ fields and other sources, including natural gas. Three-year average reserve replacement was 66% for 2009, primarily from revisions, with replacement in 2010 likely to be in that area or higher in 2010. The company's goal is to achieve 100% replacement by 2012 on a proved reserves basis, a task made more difficult by the development challenges of the Chicontepec field.

While PEMEX continues to be challenged by the fall-off in core oil production, total BOE production in 2010 was down only slightly from 2009 levels at about 4.12 million BOE/day. Crude production averaged about 2.58 million bpd, down very slightly from 2009, and is expected to remain at that level in 2011, with a significant rise in production from the KMZ fields and others such as Ixtal-Manil and Grijalva Delta helping to offset Cantarell declines. Natural gas production has been rising steadily, averaging about 7 BCF/day in 2010, led by non-associated gas developments in the Burgos and Veracruz basins, as well as from associated gas from offshore fields.

The Cantarell field has been in sharp decline from a peak 2 million bpd in 2005. The field continues to undergo nitrogen injection and the rate of decline appears to have leveled off, with crude production of about 501,000 bpd in 2010, about 19% of total crude production for the year, versus more than 60% of production at peak. KMZ and other Marine and Southern fields, along with Chicontepec, are intended to stabilize crude production and gradually offset Cantarell declines. However, KMZ is expected to peak in 2011-2012 and Chicontepec (now known as ATG) has proved to be a technically challenging fractured reservoir. It is estimated to have more than 17 billion barrels of 3P reserves, but is highly drilling-intensive with a low recovery factor of 5%-9% and low well productivity.

ATG's production ramp-up has been slower than expected, with oil averaging about 41,000 bpd in 2010. PEMEX pulled back on investing in ATG during 2010 to evaluate new development technologies. Under a new "field lab" approach and contract regime, it is enlisting major oil service firms such as Schlumberger, Halliburton and Baker-Hughes to find efficient ways to develop ATG and raise production rates. PEMEX expects to increase spending there in 2011 with the goal of further increasing production. At about 2% of PEMEX's crude production in 2011, ATG will make only a limited contribution to stabilizing production in the medium-term.

The deepwater Gulf of Mexico provides the greatest prospects for future reserves and production growth. However, the company lacks deepwater expertise, and its attempts to establish strategic partnerships or technology sharing agreements with the international majors have not made much headway given the prohibition on direct access to production and reserves. The company is increasing deepwater exploration and seismic work but the program is still in an early phase and will require years of investment and development, with first production projected in 2014 or later. To date PEMEX has had only limited potential commercial success, including two natural gas wells discovered in 2010, and an oil discovery from the Tamil-1 well is under evaluation for commerciality. It plans to drill six deepwater wells in 2011 in water depths ranging from 600 to more than 2,900 feet.

BENEFITS AND CHALLENGES OF ENERGY REFORM IMPLEMENTATION

The tax and energy reforms of 2006-2009 indicate that PEMEX's need to retain capital and reinvest to grow production has gained more widespread recognition across party lines. The reforms affected PEMEX's operations, governance and investments, and included provisions

that allow greater autonomy in setting budgets, higher retentions of windfall oil revenues for internal investment, and new forms of incentive-based contracts.

While energy reform has increased PEMEX's autonomy and ability to control its budgets, the upstream sector remains off-limits to production sharing or other forms of equity ownership that would promote accelerated investment of the deepwater. Most of PEMEX's other operations, such as refining, will also remain closed to foreign investment or ownership.

The new incentive-based service agreements (Performance Contracts) are targeted to provide more flexibility. Partners will be compensated via cost recovery plus a fee per barrel for successful production in mature fields, in ATG fields and the deepwater. The contracts will not allow the contractor/operator to own or control production or book reserves. PEMEX expects to award contracts for re-development of three blocks in mature fields in the South region by third quarter 2011, with the contracts aimed at smaller operating companies. The deepwater contract model is still under development but will follow the same fee model. It is not clear whether it will be of real interest to the major oil companies, given the lack of equity ownership in reserves and potential financial risk on dry holes.

CAPITAL SPENDING ON INCREASING TREND

PEMEX's capital spending trend is positive, with investment up significantly from very low levels since 2002, benefiting in part from reduced royalties through 2012 that allow the company to retain higher levels of cash for internal investment. Capital spending in 2010 was approximately $21 billion, up from $18.6 billion in 2009. The government recently approved the 2011 capital budget of Ps. 286.3 billion ($23.6 billion @12.1/$) based on a $65/bbl crude price, about a 12% increase over 2010. About 85% will be spent in the upstream.

PEMEX still needs to import about 29% of the petroleum products consumed in Mexico, so downstream is focused on new capacity to produce higher quality refined products and back out imports. It has slated substantial downstream investment of about $7.5 billion for 2010-2012, with a focus on increasing heavy oil processing capacity and gradually reducing dependence on product imports. Investments include a major increase in conversion capacity for the Salamanca refinery, as well as for increased diesel and clean fuels production. Planning and design are also moving forward on a 300,000 bpd greenfield refinery at Tula to help reduce reliance on gasoline imports. The refinery is estimated to cost $9 billion, and is undergoing engineering in 2011, with construction bidding to take place in 2012 and refinery startup in early 2016.

STRONG GOVERNMENT SUPPORT AND LINKAGE

PEMEX's debt is not guaranteed by the government or any other government-related entity. However, as a government entity, it is rated according to Moody's government-related issuers (GRI) methodology. PEMEX's Baa1 global local currency rating (GLCR) reflects a baseline credit assessment (BCA) of 11 (equal to Ba1), and a high level of dependence and support from the government. Our assumption of high government support in the event of distress reflects PEMEX's role as a symbol of national sovereignty, its significant contribution to government revenue at about 40% of total fiscal revenues, and its position as a major source of employment, exports and foreign currency reserves. Consequently we believe that in a distress situation the government would support PEMEX's debt, including its pension obligations.

Liquidity

PEMEX's high debt level entails a significant amount of refinancing, and its capital spending, particularly in a lower price environment, could result in debt increases. The company manages its liquidity to keep a substantial amount of cash on the balance sheet, at about $9.7 billion as of September 30, 2010. Committed bank facilities include a $3.25 billion syndicated revolver, approximately US$1.4 billion equivalent in multi-year bilateral facilities established in 2009, and various bank export credit lines. Scheduled debt maturities are fairly heavy at $6.5 billion equivalent (offshore and peso denominated) in each of 2011 and 2012.

PEMEX's access to domestic and international markets has been good in recent years but we note that PEMEX could at some point meet market resistance given the large amount of debt it needs to issue and rising leverage scenarios. Debt issuance including amortizations in 2011 will likely include domestic and international bond markets as well as export credit facilities. In light of energy reform, the company is also exploring the potential issuance of "citizen bonds," which would be issued domestically to Mexican funds and retail investors. The bond return would be tied to PEMEX's financial performance, but would grant no voting rights to holders. PEMEX will need to demonstrate consistent earnings to pursue issuance of citizen bonds in the future.

Rating Outlook

The outlook for PEMEX's Baa1 GLCR and Baa1 foreign currency bond rating (FCBR) is stable. While the company is highly leveraged and taxed, we see little chance for significant private investment in the Mexican oil sector anytime soon. The stable outlook depends on the company's ability to fund its capital without further significant leverage increases, at least in the near-term.

What Could Change the Rating - Down

A material increase in its financial leverage, or further significant deterioration in its production outlook could affect PEMEX's ratings. We will continue to monitor the impact of energy reform, including developments around the incentive contracts, and PEMEX's efforts to stabilize production in the medium-term. A reduction in the BCA would result in a downgrade of the global local currency and foreign currency bond ratings, at which point PEMEX would be rated below the sovereign.

What Could Change the Rating - Up

An upgrade is not likely at this time. In the longer term, stronger cash flow retention and an improving reinvestment and production profile could lead to a higher BCA.

Other Considerations

Methodology Comment: We use the integrated oil methodology to analyze PEMEX, comparing the grid implied rating outcome to its BCA of 11 (equivalent to Ba1). The integrated methodology yields an indicated rating of Baa1 (LTM 9/30/10) versus its current BCA. The grid generally reflects high scoring on the scale of reserves, production and benefit of integration, but also lower reinvestment metrics and high financial leverage. These metrics are historically based and do not reflect potential increases in capital spending and financial leverage in 2011 and beyond. Including Factor 6, which notches the rating to reflect the negative impact of the government's reliance of PEMEX for its fiscal revenues, the methodology outcome is B1. The integrated methodology and BCA also do not capture the impact of Mexican regulatory and

economic risks on day-to-day operations, or directly capture transfer or currency convertibility risk. PEMEX's Baa1 global local currency rating derives uplift from high dependence (default correlation) and high imputed government support. Its Baa1 FCBR reflects both the Baa1 GLCR and the degree of sovereign interference anticipated in times of stress.

Rating Factors

Petroleos Mexicanos

Integrated Oil & Gas [1][2]	**Current LTM 9/30/2010**		[3]**Moody's 12-18 month Forward View As of February 25, 2011**	
Factor 1: Reserves & Production Characteristics (25%)				
a) Average Daily Production (Mboe/d)	3,523	Aaa		Aaa
b) Proved Reserves (Million boe)	13,685	Aaa		Aaa
c) Total Proved Reserve Life (Yrs)	10.6	A		A
Factor 2: Re-Investment Risk (10%)				
a) 3-Year All-Sources Reserve Replacement	65.8%	B		B
b) 3-Year All-Sources F&D Cost ($/boe)	$12.9	A		Baa
Factor 3: Operating & Capital Efficiency (10%)				
a) Return on Capital Employed (ROCE) (3 Year Avg)	116.9%	Aaa		Aaa
b) Leveraged Full-Cycle Ratio	3.4x	Aa		Aa
Factor 4: Downstream Rating Factors (15%)				
a) Total Crude Distillation Capacity ('000 bpd)	1,540	A		A
b) # of Refineries with Capacity > 100 M bpd	6.0	A		A
c) Segment ROCE (3 Year Avg)	-118.0%	Caa		Caa
Factor 5: Financial Metrics (40%)				
a) Retained Cash Flow / Net Debt (3 Year Avg)	60.7%	Aaa		Aa
b) EBIT / Interest Expense (3 Year Avg)	5.9x	Baa		Baa
c) Gross Debt / Total Proved Reserves	$9.1	B		B
d) Gross Debt / Total Capital	277.1%	Caa		Caa
Rating:				
Indicated Rating from Grid Factors 1-5		Baa1		Baa1
Notching for Government Fiscal Dependence	6			
a) Indicated Rating from Grid		B1		B1
b) Assigned BCA Rating				11 (Ba1)

[1] All ratios are calculated using Moody's Standard Adjustments. [2] As of 9/30/2010(L); Source: Moody's Financial Metrics [3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures

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