MOODY'S
INVESTORS SERVICE

Credit Opinion: Petroleos Mexicanos

Global Credit Research - 07 Dec 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[1]

	6/30/2011(L)	12/31/2010	12/31/2009	12/31/2008	12/31/2007
EBIT / Book Capitalization	**77.5%**	**66.3%**	**71.2%**	**142.1%**	**130.5%**
EBIT / Interest Expense	**8.9x**	**6.7x**	**5.0x**	**8.0x**	**9.3x**
Retained Cash Flow / Net Debt	**19.7%**	**10.0%**	**6.2%**	**73.8%**	**21.3%**
Gross Debt / Total Capital	**118.0%**	**118.6%**	**134.7%**	**197.8%**	**154.5%**
Gross Debt / Total Proved Reserves	**$8.88**	**$8.65**	**$8.61**	**$6.27**	**$5.48**
Total Proved Reserve Life (Yrs)	**10.6**	**10.1**	**10.2**	**9.9**	**9.2**

[1] 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

* Reserves and production growth challenge

* 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 51% of its crude oil exported in 2011, 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 13.5 billion BOE of proved hydrocarbon reserves, and oil and gas production averaging about 3.7 million BOE/day in 2011, 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 challenge in stabilizing and growing its 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 and success before it can become a significant production source. In the meantime, the company will remain focused on its traditional basins, including recent light oil discoveries, as well as on 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. The tax reforms enacted since 2006 have been only mildly beneficial in terms of cash retention for investment. The elimination of the PIDIREGAS (public works) financing structure also de-linked PEMEX from the national budget setting process, giving it more autonomy in establishing annual budgets and long-term development plans and the authority 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, passing on the benefit of higher oil prices to the government.

As a result, the company continues to report losses despite higher revenues and operating profits, with a net loss of US$5.04 billion in the first nine months of 2011. Its capital spending is also on an increasing trend and is in excess of cash flow from operations, which in conjunction with large debt amortizations will require large debt issuance and some draw down in its cash position. PEMEX's debt in peso terms increased 9% to M$723.4 billion as of September 30, 2011, while it remained roughly flat in US$ terms at $53.9 billion in part due to peso depreciation. Even in a strong oil price environment PEMEX is likely to show further debt increases in 2012, and expects to undertake more than US$10 billion in financing to cover negative cash flow and debt amortizations.

PEMEX also has sizable pension obligations that have continued to increase, totaling M$718 billion ($53.5 billion) at September 30, 2011, an amount almost equal to its funded debt. 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, a legacy of high taxation and under-investment has 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 fallen in tandem with the decline of the giant Cantarell oil field.

Still, PEMEX has been increasing capital investment and its reserve replacement has improved, with total one-year reserve replacement increasing to 85% in 2010, up from 50% since 2007, adding over 1.13 billion BOEs via revisions and discoveries from the KMZ fields and other sources, including natural gas. Three-year average reserve replacement was 78% in 2010, primarily from revisions, with replacement in 2011 likely to be in that area or higher. The company's goal is to achieve 100% reserve replacement by 2012 on a proved reserves basis, a task made more difficult by the development challenges of the ATG (Chicontepec) field complex.

PEMEX's total production has largely stabilized in 2011 at about 4.12 million BOE/day despite the impact of the Cantarell field decline. Cantarell is producing about 459,000 bpd in 2011, down from a peak 2.1 million bpd, although its decline rate has been slowed to about 1% per month in 2011. Total crude production averaged about 2.55 million bpd for the nine months ending September 30, 2011, and is expected to remain at that level in 2012, with a significant rise in production from the KMZ fields, light crude from the offshore Tabasco Littoral, and other fields such as Ixtal-Manil and Grijalva Delta helping to offset Cantarell declines. KMZ production is expected to plateau at its recent higher level over the next 2-3 years based on the company's staged development plan of the field complex. Natural gas production has been on a rising trend led by non-associated gas developments in the Burgos and Veracruz basins, as well as from associated gas from offshore fields, but declined slightly in 2011, averaging about 6.7 BCF/day.

ATG has proved to be a technically challenging fractured reservoir with a slow ramp up in production, averaging about 58,000 bpd in 2011. ATG is estimated to have more than 17 billion barrels of 3P reserves, but the reserves are highly drilling-intensive with a low recovery factor of 5%-9% and low well productivity. PEMEX has pulled back on investing in ATG to evaluate new development technologies. Under a new "field lab" approach and contract regime, it is enlisting the major oil service firms to find efficient ways to develop ATG and raise production rates. It is planning on increasing investment in ATG to $1.6 billion in 2012.

Despite the continuing importance of PEMEX's core Southeastern basin, the deepwater Gulf of Mexico provides PEMEX's greatest prospects for future reserves and production growth in the longer term.

However, the upstream sector remains off-limits to production sharing or other forms of equity ownership that could accelerate deepwater investment and the company lacks deepwater expertise at this time. Its attempts to establish strategic partnerships or technology sharing agreements with the international companies have not made much headway given the prohibition on direct access to production and reserves.

While it is increasing deepwater exploration and seismic work, the program is still in an early phase and will require years of investment and development. From 2004-2010, PEMEX drilled fifteen wells with only limited potential commercial success, with the main discoveries being two natural gas wells in 2010, and an oil discovery from the Tamil-1 well. In 2012, the company plans to spend $1 billion to drill up to six deepwater wells, including its first well to 3,000 feet in the Perdido fold belt bordering the U.S. Gulf waters.

BENEFITS AND CHALLENGES OF ENERGY REFORM IMPLEMENTATION

The tax and energy reforms of 2006-2009 have affected PEMEX's operations, governance and investments, and included provisions to allow greater autonomy in setting budgets, and higher retentions of windfall oil revenues for internal investment. Most of PEMEX's operations remain closed to foreign investment or ownership but the reforms enacted have provided new incentive-based service agreements (Performance Contracts). Under the contracts, the partners are compensated via cost recovery plus a fee per barrel for successful production. The contracts do not allow the contractor/operator to own or control production or book reserves, but provide a cost recovery mechanism on production delivered to PEMEX.

PEMEX awarded contracts in 2011 for re-development of three mature smaller field blocks in the Southern region, with plans to award contracts on six mature Northern fields and ATG blocks in 2012. The Southern field contracts are targeted to increase production from 14,000 bpd to 55,000 bpd. The ATG and deepwater contract models are still under development but are expected to largely follow the same fee model. While the initial mature field contracts with smaller/mid-sized operators are a start, we are not clear whether the model will work for large deepwater projects that need expertise or be of much interest to the major international 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 has increased significantly over the past few years, following years of under-investment earlier in the decade. Capital spending in 2010 was approximately $20.8 billion, up from $18.6 billion 2009. Capital spending in 2011 is budgeted at M$286.3 billion ($23.6 billion). While PEMEX's spending tends to be back-end loaded, it could be lower given the actual spending in the first nine months of M$125.3 billion ($9.3 billion), which included about $1.5 billion for the increase in its investment in RepsolYPF. PEMEX's draft budget proposal for 2012 capital expenditures totals almost $27 billion, a 15% increase over the 2011 budget proposal. It includes $22 billion for the upstream and $5 billion in the downstream.

The largest portions of upstream investment will be for the Cantarell and offshore light crude fields, as well as KMZ. In the downstream, PEMEX still needs to import about 29% of the petroleum products consumed in Mexico, so investment is focused on new capacity to produce higher quality refined products and reduce dependence on product imports. The company finished the Minatitlan refinery conversion upgrade in 2011 and in 2012 will focus on increasing heavy oil processing capacity for the Salamanca refinery, including a major increase in conversion capacity and for increased diesel and clean fuels production. Front end engineering is also moving forward on a $9 billion 300,000 bpd greenfield refinery at Tula to produce low sulfur diesel and gasoline, 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, 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), with uplift based on high level of imputed government support and dependence (default correlation). Our assumption of high government support in the event of distress reflects PEMEX's role as a symbol of national sovereignty, its significant contribution at about 40% of total government fiscal revenues, and its position as a major source of employment, exports and foreign currency reserves. We believe that in a distress situation the government would support PEMEX's debt, including its pension obligations.

Liquidity

PEMEX's high debt levels and amortizations entail a significant amount of refinancing risk. The company keeps a substantial amount of cash on the balance sheet, at about $9.56 billion as of September 30, 2011. Committed bank facilities include a $3.25 billion syndicated revolver, US$1.4 billion equivalent in multi-year bilateral facilities, and various bank export credit lines. Scheduled debt maturities are substantial at $6.5 billion equivalent (offshore and peso denominated) in 2011 and $6.3 billion in 2012.

PEMEX has maintained good access to domestic and international markets but could face increased financing risk in the future if at some point it meets market resistance given the large amount of debt it needs to issue and rising leverage scenarios. Debt issuance in 2012 will likely include domestic and international bond markets as well as export credit facilities. The company also is working on approval from the Ministry of Finance to issue Citizen Bonds, possibly in 2012, as another source of funding. Citizen bonds would represent a form of investment akin to equity ownership for Mexican citizens, with a fixed and additional return tied to PEMEX's financial performance.

Rating Outlook

The outlook for PEMEX's Baa1 GLCR and Baa1 foreign currency bond rating (FCBR) is stable. The stable outlook depends on the company's ability to fund its capital without significant leverage increases, at least in the near-term and on its continuing market access.

What Could Change the Rating - Down

A material increase in 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 success in keeping production stable 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 and debt ratings.

Other Considerations

Methodology Comment: The integrated oil methodology yields an indicated rating of Baa1 (LTM 9/30/11) vs. PEMEX's BCA 11 (equivalent to Ba1). The methodology outcome reflects its large scale operations, but also lower reinvestment metrics and high financial leverage. Factor 6 notches the rating to for the negative impact of the government's fiscal reliance on PEMEX, with an outcome of B1. The integrated methodology and BCA do not capture the impact of Mexican regulatory and economic risks on day-to-day operations or transfer/currency convertibility risk.

Rating Factors

Petroleos Mexicanos
94100

Integrated Oil & Gas [1]	**LTM as of 06/30/2011**		[2]**Moody's 12-18 Month Forward View**
Factor 1: Reserves & Production Characteristics (25%)	Measure	Score	Score
a) Average Daily Production (Mboe/d)	3479.4	Aaa	Aaa
b) Proved Reserves (Million boe)	13476.33	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	78%	B	Ba
b) 3-Year All-Sources F&D Cost ($/boe)	$12.3	A	A
Factor 3: Operating & Capital Efficiency (10%)			
a) Return on Capital Employed (ROCE) (3 Year Avg)	82.9%	Aaa	Aaa
b) Leveraged Full-Cycle Ratio	4.2x	Aaa	Aaa
Factor 4: Downstream Rating Factors (15%)			
a) Total Crude Distillation Capacity ('000 bpd)	1540.0	A	A
b) # of Refineries with Capacity > 100 M bpd	6.0	A	A
c) Segment ROCE (3 Year Avg)	-104.7%	Caa	Caa
Factor 5: Financial Metrics (40%)			
a) Retained Cash Flow / Net Debt (3 Year Avg)	36.8%	A	A
b) EBIT / Interest Expense (3 Year Avg)	6.5x	Baa	Baa
c) Gross Debt / Total Proved Reserves	$8.9	B	B
d) Gross Debt / Total Capital	118.0%	Caa	Caa
Rating:			
Indicated Rating from Grid Factors 1-5		Baa1	
Notching for Government Fiscal Dependence		6	
Indicated Rating from Grid		B1	
Actual Baseline Assigned		11 (Ba1)	

Government-Related Issuer	**Factor**
a) Baseline Credit Assessment	**11 (Ba1)**
b) Government Local Currency Rating	**Baa1**
c) Default Dependence	**Very High**
d) Support	**Very High**
Final Rating Outcome	**Baa1**

[1] All ratios are calculated using Moody's Standard Adjustments. Source: Moody's Financial Metrics [2] his represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not

incorporate significant acquisitions and divestitures