MOODY'S
INVESTORS SERVICE

Credit Opinion: Petroleos Mexicanos

Global Credit Research - 19 Dec 2012

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]

	9/30/2012(L)	12/31/2011	12/31/2010	12/31/2009	12/31/2008
EBIT / Book Capitalization	77.8%	73.9%	66.2%	71.2%	142.1%
EBIT / Interest Expense	9.9x	9.2x	6.7x	5.0x	8.0x
Retained Cash Flow / Net Debt	10.3%	11.0%	10.4%	6.2%	73.8%
Gross Debt / Total Capital	96.5%	123.1%	118.3%	134.7%	197.8%
Gross Debt / Total Proved Reserves	$9.09	$8.58	$8.65	$8.61	$6.27
Total Proved Reserve Life (Yrs)	10.4	10.2	10.1	10.2	9.9

[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

* Reserves and production growth challenge

* Benefits and challenges of energy reform implementation

* Rising capital spending trend

* High fiscal burden and elevated financial leverage

* 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 49% of its crude oil exported in 2012, 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 13.8 billion BOE of proved hydrocarbon reserves, and oil and gas production averaging about 3.6 million BOE/day in 2012, its monopoly status, integrated operations, and position as a leading crude oil exporter to the US.

However, PEMEX's heavy tax burden, high financial leverage and challenge in maintaining and growing its core oil production weigh heavily on our fundamental assessment which is incorporated into the baseline credit assessment of 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 equity ownership of reserves.

The company has started to step up deepwater exploration and made its first notable deepwater oil discoveries in 2012, which bodes well for future oil resource development. Still, the deepwater presents large development and technological challenges and will take years of consistent reinvestment and success to become a significant production source. In the meantime, the company will remain focused on growing the production from 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

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 resulted in steady declines in proved reserves and production throughout the earlier part of the decade, particularly as the giant Cantarell oil field went into decline. Still, PEMEX has been increasing capital investment and reserves and production have stabilized since 2010 as reserve replacement has improved. The company achieved full replacement of proved reserves for the first time in many years in 2011, at 101%, up from 88% in 2010 and from 50% since 2007, adding 1.37 billion BOEs via revisions and discoveries from conventional shallow fields, the KMZ fields and other sources, including natural gas. Three-year average reserve replacement was 88% from all sources. We believe the company will fully replace production again in 2012.

PEMEX's total production has largely stabilized in 2012 at about 3.9 million BOE/day, reflecting rising production from the KMZ complex and stable natural gas production. Cantarell continues its decline, contributing about 17% of production. Total crude production is expected to average about 2.56 million bpd in 2012 and remain at that level in 2013, supported by KMZ production, light crude from the offshore Litoral de Tabasco, and other fields such as Ixtal-Manik and Delta del Grijalva.

KMZ is now PEMEX's largest producing complex at about 855,000 bpd and is producing at plateau rates based on staged development of the field complex. Cantarell is producing about 455,000, down from a peak 2.1 million bpd, although its decline rate has been slowed to about 1% per month. Natural gas production was on a rising trend from non-associated gas developments in the Northern basins, as well as from associated gas from offshore fields, but with field declines and recent reductions in Burgos and Veracruz due to low gas prices, overall production is down 3% from 2011 levels, averaging about 5.7 BCF/day.

The ATG complex (formerly Chicontepec) is estimated to have more than 17 billion barrels of 3P reserves but is a technically challenging fractured reservoir with a low recovery factor of 5%-9%. Following a pull back on investing in ATG to evaluate new development technologies, the company is using a "field lab" approach and contract regime, enlisting the major oil service firms to find ways to increase well productivity and reduce costs at ATG. It has increased investment in ATG to $1.6 billion in 2012 and while production response has been slow, it has risen from 44,800 bpd in early 2011 to about 67,000 bpd in 2012.

The core Southeastern basin will remain PEMEX's most important producing area for the foreseeable future. However, the deepwater Gulf of Mexico provides the greatest prospects for long-term reserves and production growth. The company is also beginning to evaluate and explore vast onshore shale gas resources. In the deepwater it is increasing seismic and exploration work, where from 2004-2010, it drilled 21 wells with the main potentially commercial discoveries being two natural gas wells and an oil discovery from the Tamil-1 well.

In 2012, the company announced its first two significant light oil discoveries in the Perdido fold belt near the maritime borders with the US. The Trion-1 and Supremus-1 wells indicate vast prospective resources in the Perdido area, based on the company's early assessments. PEMEX is increasing its exploration spending there and hopes to accelerate the development timetable on these discoveries, which are still in an early phase and will require years of investment as well as technological expertise to develop.

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 that give PEMEX greater autonomy in establishing annual budgets. However, the tax reform has not appreciably increased PEMEX's after-tax cash flows, partly because of cost caps on the deductions against the Ordinary Hydrocarbons Duty, which have stayed fixed as capital costs have increased, passing on the benefit of higher oil prices to the government.

The energy reforms did provide for new incentive-based service agreements known as Exploration and Production Integrated Contracts, or Performance Contracts. While the contracts do not allow the contractor/operator to own or control production or book reserves, they provide a cost recovery mechanism plus a fee per barrel for successful production delivered to PEMEX. Contracts are awarded to the bidder with the lowest fee structure.

PEMEX awarded contracts in 2011 for re-development of three mature Southern region fields and concluded a second bidding round in June 2012, with five Northern field contracts awarded that are targeted to double production to 140,000 bpd. (One of the shallow water contracts was not awarded.) In October 2012, the board approved six new ATG blocks to be bid under performance contracts.

The mature field contracts are a start and may prove effective, but it is not clear that the model will work for large deepwater projects. The company lacks deepwater expertise and attempts to establish strategic partnerships or technology-sharing agreements with international companies have not made much headway. The timing is uncertain, but PEMEX could offer a bidding round on deepwater acreage under the new incentive based contracts sometime in 2013.

The constitutional prohibition on private equity ownership of reserves is PEMEX's biggest limitation on accelerating deepwater investment. Newly elected President Enrique Pena Nieto assumed office in December 2012 and has brought the need for energy reform forward as a major initiative. Some form of partial opening of refining, petrochemicals and even shale resources could take place. Based on early public commentary we do not expect to see any partial privatization of PEMEX (and private equity ownership of reserves). However, private investment and ownership in some of the other sectors appears to be under consideration and would at least have the benefit of freeing up additional capital for PEMEX to invest in the upstream.

CAPITAL SPENDING ON INCREASING TREND

Following years of underinvestment, PEMEX's capital spending trend has increased significantly over the past few years. Capital spending in 2012 is estimated to be M$301.2 billion ($23.6 billion), up 5% in peso terms over the 2011 budget, with 85% ($20.1 billion) allocated to the upstream. PEMEX's yearly spending is typically back-end loaded, as indicated by capital spending in the first nine months of 2012 of M$193.7 billion, or about 64% of the total budgeted for the year. The company's requested budget for 2013 at M$387.3 billion ($29 billion) is up about 25% over 2012. Historically, the final approved budget has been lower than the requested budget, but the approved level has increased in recent years.

The largest portions of upstream investment will be for the Cantarell and offshore light crude fields, as well as KMZ, with higher spending also slated for the ATG complex and offshore exploration. Downstream investment is driven by the mismatch between lighter refining capacity and an increasingly heavy crude barrel, and by Mexico's rising product imports, with PEMEX importing about 29% of the petroleum products consumed in Mexico. The company completed the Minatitlan refinery conversion upgrade in 2011. In 2012 it is investing in heavy oil processing capacity for the Salamanca refinery, including a major increase in conversion capacity and to increase 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 the refinery startup targeted for early 2016.

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 company's earnings in 2012 are benefiting from higher prices and increased product sales volumes, but its reported net income of M$ 31.8 billion ($2.5 billion) in the first nine months primarily reflects the impact of an appreciating Peso and foreign exchange gains on its debt liabilities. The company paid 96% or $53.5 billion in taxes and hydrocarbon duties on its pre-tax income .

The company's capital spending is on an increasing trend and generally exceeds 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 of M$744.4 billion declined 5% in the first nine months of 2012, but was up 12% over year-end 2010 in peso terms, and up some 8% at $57.9 billion in dollar terms. PEMEX is likely to show further debt increases in 2013, and will be active in both the domestic and international markets to cover cash flow deficits and debt amortizations.

PEMEX also has sizable pension obligations that have continued to increase, totaling M$878 billion ($68.3 billion) as of September 30, 2012, an amount higher than its funded debt. The government does not guarantee PEMEX's pension liabilities but we believe it would never allow PEMEX to default on these obligations.

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 ba1, with uplift based on high level of imputed government support and dependence (default correlation). We assume high government support in the event of distress, reflecting PEMEX's role as a symbol of national sovereignty, its significant contribution at about 35% 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 $8.9 billion as of September 30, 2012. Committed bank facilities include two syndicated revolvers of $.125 billion each, due in 2013 and 2017, US$800 million equivalent of peso bank borrowing facilities, and various bank export credit lines. Scheduled debt maturities are substantial at $6.6 B in 2013.

PEMEX has maintained good access to domestic and international markets, raising funds in dollars, Swiss Francs and Australian dollars, as well as via domestic issuance under a Pesos 300 billion certificados bursatiles program and export credit agencies including US EXIM Bank. The company could face increased financing risk if it meets market resistance at some point in the future, given the large amount of debt it needs to issue.

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 significant deterioration in production 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.

What Could Change the Rating - Up

A ratings 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 Baa2 (LTM 9/30/12) vs. PEMEX's BCA of ba1. The methodology outcome reflects its large-scale operations, but also high financial leverage. The integrated methodology and BCA do not capture the impact of Mexican regulatory risks on day-to-day operations or transfer/currency convertibility risk. Factor 6 on Government Fiscal Dependence notches the rating for the negative impact of the government's fiscal reliance on PEMEX, with an outcome of Ba2.

Rating Factors

Petroleos Mexicanos
94100

Integrated Oil & Gas [1]	**LTM as of 9/30/2012**		[2]**Moody's 12-18 Month Forward View**
Factor 1: Reserves & Production Characteristics (25%)	Measure	Score	Score
a) Average Daily Production (Mboe/d)	3536	Aaa	Aaa
b) Proved Reserves (Million boe)	13484	Aaa	Aaa
c) Total Proved Reserve Life (Yrs)	10.4	A	A
Factor 2: Re-Investment Risk (10%)			
a) 3-Year All-Sources Reserve Replacement	88%	Ba	Ba
b) 3-Year All-Sources F&D Cost ($/boe)	$11.6	A	A
Factor 3: Operating & Capital Efficiency (10%)			
a) Return on Capital Employed (ROCE) (3 Year Avg)	77.0%	Aaa	Aaa
b) Leveraged Full-Cycle Ratio	5.5x	Aaa	Aaa
Factor 4: Downstream Rating Factors (15%)			
a) Total Crude Distillation Capacity ('000 bpd)	1,690	A	A
b) # of Refineries with Capacity > 100 M bpd	6.0	A	A
c) Segment ROCE (3 Year Avg)	-143.9%	Caa	B
Factor 5: Financial Metrics (40%)			
a) Retained Cash Flow / Net Debt (3 Year Avg)	0.3%	Caa	Caa
b) EBIT / Interest Expense (3 Year Avg)	8.1x	A	Baa
c) Gross Debt / Total Proved Reserves	$9.1	B	B
d) Gross Debt / Total Capital	96.5%	Caa	Caa
Rating:			
Indicated Rating from Grid Factors 1-5		Baa2	
Notching for Government Fiscal Dependence		4	
Indicated Rating from Grid		Ba2	
Actual Baseline Assigned		ba1	

Government-Related Issuer	**Factor**
a) Baseline Credit Assessment	**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