

14 May 2014 | 20 pages

Integrated Oils  
Asia | China

# PetroChina (0857.HK)

## Gas Deal with Russia – Low IRR, but at Least No Big Losses

- **Mr. Putin goes to China** – Negotiations over a major natural gas supply agreement between China and Russia have dragged on for years, but we believe the situation in Ukraine and environmental issues in China have raised incentives on both sides to conclude a deal. We thus see a chance for an agreement during Mr. Putin's trip to Beijing, tentatively scheduled for May 20<sup>th</sup>. We believe the deal would likely focus on a 38bcm/year East Siberia pipeline starting up in 2018, leaving a potential 30bcm/year West Siberia line for later. See Citi's separate note for the contract's impact on [Gazprom](#).
- **No losses expected, but project IRR will be low** – We expect a border price of ~Rmb2.3/m<sup>3</sup> (\$380/mcm) at current oil price levels, in line with the border price for gas from Central Asia. We estimate an average sale price of ~Rmb2.7/m<sup>3</sup>, slightly higher than the average city-gate gas price for "new" gas, leaving the company a positive cash margin of Rmb0.33/m<sup>3</sup>. Economics on Russian gas imports should be significantly better than imports from Central Asia or LNG (Rmb1.0/m<sup>3</sup> loss and Rmb2.8/m<sup>3</sup> loss in 2013 respectively), but expect a very low return on the project (IRR of 4.4% without gearing or 4.8% assuming 50% gearing). We see the NPV of the project as having a negative 4.1% impact on the equity value of the company on an ungeared basis, but only a 1.7% negative if 50% gearing is used.
- **Gas import losses should see a small decline in FY14/15** – We see no room to reduce imports of more expensive LNG on the back of a deal with Russia, as most LNG is imported under long-term contracts. We expect significant growth in gas earnings in 2014/15 driven by profits on domestic gas, while losses on imports should fall modestly. We remain concerned that most of the benefit of rising gas earnings could be offset by rising oil costs.
- **We remain cautious on PetroChina** – While PetroChina trades at 10.2x FY14E reported earnings, we see the stock trading at 12.8x FY14E recurring earnings and 6.0x EV/DACF, which we see as expensive compared to regional and global comps.

<b>Sell</b>	<b>3</b>
Price (13 May 14)	HK\$9.24
Target price	HK\$7.00
Expected share price return	-24.2%
Expected dividend yield	4.4%
<b>Expected total return</b>	<b>-19.8%</b>
Market Cap	HK\$1,691,114M
	US\$218,160M

### Price Performance (RIC: 0857.HK, BB: 857 HK)



### Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Dec	(RmbM)	(Rmb)	(%)	(x)	(x)	(%)	(%)
2012A	115,326	0.630	-13.3	11.8	1.3	11.2	3.8
2013A	129,599	0.708	12.4	10.5	1.2	11.8	4.3
2014E	133,351	0.729	2.9	10.2	1.1	11.5	4.4
2015E	90,823	0.496	-31.9	15.0	1.1	7.5	3.0
2016E	88,101	0.481	-3.0	15.4	1.1	7.1	2.9

Source: Powered by dataCentral

### Graham Cunningham

+852-2501-2744  
graham.cunningham@citi.com

Danny Huang  
danny.huang@citi.com

### See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Citi Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Certain products (not inconsistent with the author's published research) are available only on Citi's portals.

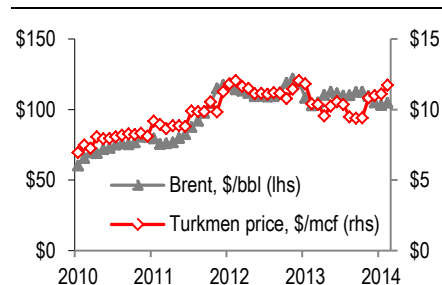
0857.HK: Fiscal year end 31-Dec						Price: HK\$9.24; TP: HK\$7.00; Market Cap: HK\$1,691,114m; Recomm: Sell					
Profit & Loss (Rmbm)	2012	2013	2014E	2015E	2016E	Valuation ratios	2012	2013	2014E	2015E	2016E
Sales revenue	2,195,296	2,258,124	2,387,749	2,410,543	2,519,058	PE (x)	11.8	10.5	10.2	15.0	15.4
Cost of sales	-2,020,777	-2,069,482	-2,180,843	-2,260,140	-2,371,107	PB (x)	1.3	1.2	1.1	1.1	1.1
Gross profit	174,519	188,642	206,905	150,403	147,951	EV/EBITDA (x)	5.1	5.0	4.8	5.5	5.3
Gross Margin (%)	7.9	8.4	8.7	6.2	5.9	FCF yield (%)	-4.8	2.4	1.6	4.3	4.7
EBITDA (Adj)	326,494	352,007	369,067	329,175	343,460	Dividend yield (%)	3.8	4.3	4.4	3.0	2.9
EBITDA Margin (Adj) (%)	14.9	15.6	15.5	13.7	13.6	Payout ratio (%)	45	45	45	45	45
Depreciation	-151,975	-163,365	-162,162	-178,773	-195,509	ROE (%)	11.2	11.8	11.5	7.5	7.1
Amortisation	0	0	0	0	0	Cashflow (Rmbm)	2012	2013	2014E	2015E	2016E
EBIT (Adj)	174,519	188,642	206,905	150,403	147,951	EBITDA	326,494	352,007	369,067	329,175	343,460
EBIT Margin (Adj) (%)	7.9	8.4	8.7	6.2	5.9	Working capital	-61,031	-5,405	-597	8,976	2,198
Net interest	-16,101	-20,859	-21,919	-23,287	-24,707	Other	-19,041	-48,445	-71,354	-15,787	-18,942
Associates	8,262	10,228	8,276	4,512	4,439	Operating cashflow	246,422	298,157	297,116	322,364	326,716
Non-op/Except	131	52	0	0	0	Capex	-311,251	-265,413	-275,113	-263,955	-262,280
Pre-tax profit	166,811	178,063	193,263	131,627	127,682	Net acq/disposals	-7,273	-4,278	-1,000	-1,000	-1,000
Tax	-36,191	-35,789	-42,518	-30,274	-29,367	Other	-19,205	-5,838	39,400	-600	-600
Extraord./Min.Int./Pref.div.	-15,294	-12,675	-17,394	-10,530	-10,215	Investing cashflow	-337,729	-275,529	-236,713	-265,555	-263,880
Reported net profit	115,326	129,599	133,351	90,823	88,101	Dividends paid	-58,041	-53,470	-56,839	-51,077	-40,299
Net Margin (%)	5.3	5.7	5.6	3.8	3.5	Financing cashflow	73,725	-12,848	-60,021	-57,599	-78,068
Core NPAT	115,326	129,599	133,351	90,823	88,101	Net change in cash	-17,582	9,780	382	-790	-15,232
Per share data	2012	2013	2014E	2015E	2016E	Free cashflow to s/holders	-64,829	32,744	22,003	58,409	64,436
Reported EPS (Rmb)	0.630	0.708	0.729	0.496	0.481						
Core EPS (Rmb)	0.630	0.708	0.729	0.496	0.481						
DPS (Rmb)	0.284	0.319	0.328	0.223	0.217						
CFPS (Rmb)	1.346	1.629	1.623	1.761	1.785						
FCFPS (Rmb)	-0.354	0.179	0.120	0.319	0.352						
BVPS (Rmb)	5.814	6.189	6.512	6.672	6.877						
Wtd avg ord shares (m)	183,021	183,021	183,021	183,021	183,021						
Wtd avg diluted shares (m)	183,021	183,021	183,021	183,021	183,021						
Growth rates	2012	2013	2014E	2015E	2016E						
Sales revenue (%)	9.6	2.9	5.7	1.0	4.5						
EBIT (Adj) (%)	-4.4	8.1	9.7	-27.3	-1.6						
Core NPAT (%)	-13.3	12.4	2.9	-31.9	-3.0						
Core EPS (%)	-13.3	12.4	2.9	-31.9	-3.0						
Balance Sheet (Rmbm)	2012	2013	2014E	2015E	2016E						
Cash & cash equiv.	46,245	57,250	57,690	56,959	41,787						
Accounts receivables	74,431	78,387	82,887	83,678	87,445						
Inventory	214,117	227,017	240,049	242,340	253,250						
Net fixed & other tangibles	1,569,888	1,648,823	1,747,628	1,816,932	1,866,092						
Goodwill & intangibles	46,672	81,544	82,044	82,544	83,044						
Financial & other assets	217,543	249,089	256,350	261,611	267,900						
Total assets	2,168,896	2,342,110	2,466,647	2,544,064	2,599,518						
Accounts payable	351,456	383,004	403,614	418,290	438,826						
Short-term debt	151,247	192,767	203,583	214,345	213,384						
Long-term debt	293,774	302,862	319,855	336,764	335,254						
Provisions & other liab	191,671	193,542	201,846	207,700	207,500						
Total liabilities	988,148	1,072,175	1,128,897	1,177,098	1,194,964						
Shareholders' equity	1,064,010	1,132,735	1,191,854	1,221,069	1,258,657						
Minority interests	116,738	137,200	145,897	145,897	145,897						
Total equity	1,180,748	1,269,935	1,337,751	1,366,966	1,404,554						
Net debt	398,776	438,379	465,747	494,149	506,850						
Net debt to equity (%)	33.8	34.5	34.8	36.1	36.1						

For definitions of the items in this table, please click [here](#).

## Valuing a Gas Deal With Russia – Low IRR, but at Least No Big Losses

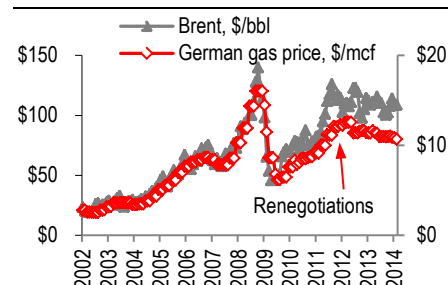
**Price would likely be similar to Central Asia** – Unnamed sources inside Gazprom have told Vedomosti (Russian language business daily) that the price range is now down to the \$360-\$400/mcm range delivered at the Russian-Chinese border (\$10.2-\$11.3/mcf, Rmb 2.3-2.5/m<sup>3</sup>). Assuming that the price range is based upon recent oil prices of c\$108/bbl (Brent), the implied slopes<sup>1</sup> are comparable to both the inferred slope on China's Turkmen gas price of c10.3%<sup>2</sup> per our calculations (Figure 1) and to the recent slope for Gazprom's (GAZP.MM; US\$3.97; 1) contract deliveries at the German border (Figure 2) of 10.4% following price renegotiations in 2010.<sup>3</sup>

Figure 1. China's Turkmen gas price vs. oil



Source: Bloomberg, Citi Research

Figure 2. Russian gas at German border vs. oil



Source: Bloomberg, Citi Research

Figure 3. "New gas" city-gate prices (ex-VAT) – Target markets

Province	Rmb/m <sup>3</sup>
Heilongjiang	2.57
Jilin	2.57
Liaoning	2.76
Beijing	2.78
Hebei	2.76
Tianjin	2.78
Shandong	2.76

Source: NDRC, Citi Research

**Price should leave PetroChina a positive margin** – We estimate an average sale price of Rmb2.67/m<sup>3</sup> based on the city-gate gas price of key delivery provinces (see Figure 3) leaving PetroChina a positive price spread of Rmb0.33/m<sup>3</sup> based on an import price of Rmb2.34/m<sup>3</sup> (\$380/mcm). In PetroChina's eyes, this may still be "loss making" gas imports because this price spread will be insufficient to cover the pipeline transportation tariff, which the company should theoretically receive (PetroChina separates its gas importation business from pipeline transmission business, but books both in the Natural Gas and Pipeline division), but at least will be able to sell at a price higher than its purchase cost, unlike current gas imports from Central Asia and LNG.

**A low return project, but at least not loss making** – We estimate the project IRR at 4.4% on an ungeared basis (see Figure 4), rising to 4.8% with 50% gearing (see Figure 5). Assuming a cost of equity of 10% we estimate project NPV to PetroChina's equity value at –Rmb53.4bn/ –Rmb22.6bn on an ungeared/ geared basis respectively. Considering PetroChina's current market cap of Rmb1.3tn we see the project as having a negative 4.1% impact on the equity value of the company on an ungeared basis, but only a 1.7% negative impact if the company finances 50% of the project with debt, as we believe would be likely.

By the time the pipeline is fully ramped up in 2021, we estimate reported earnings of Rmb4.4bn/ Rmb1.7bn from the project if it is ungeared/ geared, equal to 3.4%/ 1.3% of PetroChina's 2013 reported earnings.

**Value impact: 1.7% negative to PetroChina's equity value if the project is 50% geared (negative 4.1% if ungeared)**

**Earnings impact: 1.3% positive by 2021 if the project is 50% geared (3.4% if ungeared)**

<sup>1</sup> This is the coefficient relating the price of gas in \$/mcf to the price of oil in \$/bbl, and is typically used in LNG contracts.

<sup>2</sup> 90-day smoothing of oil prices, 9-month lag

<sup>3</sup> 90-day smoothing of oil prices, 6-month lag.

Figure 4. Sino-Russian gas deal – Ungeared

	2015	2016	2017	2018	2019	2020	2021	2022	2023-2045	2046	2047	
Time	0	1	2	3	4	5	6	7	8-30	31	32	Assumptions
Sales price				2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	Capex Rmb bn 120.0
Gas cost				2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	Gearing % 0%
Cash margin (pipeline tariff)				0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	Opex Rmb/m <sup>3</sup> 0.07
Volume (bcm)				10.0	20.0	30.0	38.0	38.0	38.0	38.0	38.0	COE % 10.0%
Revenue				3.3	6.6	9.9	12.6	12.6	12.6	12.6	12.6	
Operating costs				-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	Output
D&A				-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	IRR % 4.4%
Pretax earnings				-3.4	-0.1	3.2	5.9	5.9	5.9	5.9	5.9	NPV Rmb bn (53.4)
Income tax				0.8	0.0	-0.8	-1.5	-1.5	-1.5	-1.5	-1.5	
Net income				-2.5	-0.1	2.4	4.4	4.4	4.4	4.4	4.4	
Capex	-40.0	-40.0	-40.0									
Cash flow	-40.0	-40.0	-40.0	1.5	3.9	6.4	8.4	8.4	8.4	8.4	8.4	

Source: Citi Research estimates

Figure 5. Sino-Russian gas deal – Geared

	2015	2016	2017	2018	2019	2020	2021	2022	2023-2045	2046	2047	
Time	0	1	2	3	4	5	6	7	8-30	31	32	Assumptions
Sales price				2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	Capex Rmb bn 120.0
Gas cost				2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	Gearing % 50%
Cash margin (pipeline tariff)				0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	Opex Rmb/m <sup>3</sup> 0.07
Volume (bcm)				10.0	20.0	30.0	38.0	38.0	38.0	38.0	38.0	COE % 10.0%
Revenue				3.3	6.6	9.9	12.6	12.6	12.6	12.6	12.6	COD % 6.0%
Operating costs				-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7	Output
D&A				-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	-4.0	IRR % 4.8%
Interest expense				-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	-3.6	NPV Rmb bn (22.6)
Pretax earnings				-7.0	-3.7	-0.4	2.3	2.3	2.3	2.3	2.3	
Income tax				1.7	0.9	0.1	-0.6	-0.6	-0.6	-0.6	-0.6	
Net income				-5.2	-2.8	-0.3	1.7	1.7	1.7	1.7	1.7	
Capex	-40.0	-40.0	-40.0									
Debt issued	20.0	20.0	20.0								-60.0	
Cash flow	-20.0	-20.0	-20.0	-1.2	1.2	3.7	5.7	5.7	5.7	5.7	-54.3	

Source: Citi Research estimates

## Gas Import Losses from Other Sources Should be Unaffected

We see some hope in the market that signing such a large supply agreement with Russia may reduce pressure on the company to import gas from other, more expensive sources. However, most of the LNG we expect PetroChina to import the company has committed to under long-term contracts, and we believe at least some volume of spot LNG purchases will continue to be needed to meet seasonal peak demand. Therefore, while signing a deal with Russia may reduce pressure on PetroChina to commit to additional LNG imports, we see no room to reduce our LNG import volume or loss estimates.

**A deal with Russia may reduce pressure on PetroChina to sign more L-T LNG contacts, but losses from contracts already signed will continue**

Our estimates factor in 4.2bcm/year of LNG from Qatar and 6.0bcm/year from the Gorgon project (Australia) starting in 2016 (see Figure 6), both under long-term commitments. We factor in spot LNG purchases, which the company has some discretion over, of 2.0bcm per year going forward down from 3.1bcm in 2013. We do not believe the company will be able to reduce spot purchases much further than this. PetroChina's LNG import capacity is currently 18.2bcm/year, rising to 26.6bcm/year by 2017 (see Figure 7), significantly more than our LNG import volume estimate (12.2bcm in 2017). Therefore, we still see the possibility of higher than expected LNG imports as a downside risk to our earnings forecasts.

**Figure 6. PetroChina – Natural gas import volume**

In bcm	2012	2013	2014E	2015E	2016E	2017E
Central Asia Pipeline	22.8	27.5	32.0	37.0	45.0	52.0
Myanmar	-	0.4	4.0	7.0	10.0	12.0
Russia	-	-	-	-	-	-
<b>Total Pipeline Gas</b>	<b>22.8</b>	<b>27.9</b>	<b>36.0</b>	<b>44.0</b>	<b>55.0</b>	<b>64.0</b>
Qatar	4.2	4.2	4.2	4.2	4.2	4.2
Gorgon	-	-	-	-	3.0	6.0
Other	-	-	-	-	-	-
Spot	1.0	3.1	2.0	2.0	2.0	2.0
<b>Total LNG</b>	<b>5.2</b>	<b>7.3</b>	<b>6.2</b>	<b>6.2</b>	<b>9.2</b>	<b>12.2</b>
<b>Total Gas Imports</b>	<b>28.0</b>	<b>35.2</b>	<b>42.2</b>	<b>50.2</b>	<b>64.2</b>	<b>76.2</b>

Source: Company data, Citi Research estimates

**Figure 7. PetroChina – LNG import terminal capacity**

In mtpa	2012	2013	2014E	2015E	2016E	2017E	Timing uncertain
Rudong, Jiangsu	3.5	3.5	3.5	3.5	6.5	6.5	
Dalian, Liaoning	3.0	3.0	6.0	6.0	6.0	6.0	
Tangshan, Hebei	-	3.5	3.5	3.5	3.5	3.5	3.0
Fuqing, Fujian	-	-	-	-	3.0	3.0	
Qinzhou, Guangxi	-	-	-	-	-	-	3.0
Weihai, Shandong	-	-	-	-	-	-	3.0
Jiangmen, Guangdong	-	-	-	-	-	-	6.0
Shenzhen, Guangdong	-	-	-	-	-	-	3.0
<b>Total (in mtpa)</b>	<b>6.5</b>	<b>10.0</b>	<b>13.0</b>	<b>13.0</b>	<b>19.0</b>	<b>19.0</b>	<b>18.0</b>
<b>Total (in bcm/yr)</b>	<b>9.1</b>	<b>14.0</b>	<b>18.2</b>	<b>18.2</b>	<b>26.6</b>	<b>26.6</b>	<b>25.2</b>

Source: Company data, Citi Research estimates

**Gas import losses should fall modestly in FY14/FY15** – We expect natural gas import losses to fall slightly in 2014 (by Rmb1.2bn to Rmb40.8bn) and modestly in 2015 (by Rmb3.9bn to Rmb36.8bn) (see Figure 8), driven by higher domestic gas prices but partly offset by rising gas import volume.

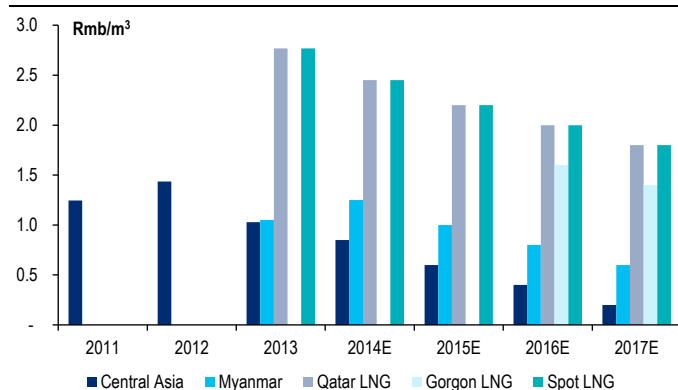
In 2014/15 we expect import volume to grow, led by the Central Asia pipeline (line C was completed in late 2013 increasing capacity to 55bcm/year) and the Myanmar pipeline, which started up in Oct 2013. In 2016/17 import volume should rise on the back of Gorgon LNG volume (see Figure 10). We expect per-unit losses to continue to come down as the government hikes domestic natural gas prices (see Figure 9). Our estimates factor in a Rmb0.25/m<sup>3</sup> increase in the company's average external sales price in each of 2014 and 2015 (see Figure 11). We expect the government to hike "legacy" gas prices by ~Rmb0.30/m<sup>3</sup> around the middle of this year.

**Figure 8. PetroChina – Natural gas import losses**

	2012	2013	2014E	2015E	2016E	2017E
<b>Unit loss (Rmb/m<sup>3</sup>)</b>						
Central Asia	1.4	1.0	0.9	0.6	0.4	0.2
Myanmar		1.1	1.3	1.0	0.8	0.6
<b>Total Piped Gas</b>	<b>1.4</b>	<b>1.0</b>	<b>0.9</b>	<b>0.7</b>	<b>0.5</b>	<b>0.3</b>
Qatar		2.8	2.5	2.2	2.0	1.8
Gorgon					1.6	1.4
Spot		2.8	2.5	2.2	2.0	1.8
<b>Total LNG</b>	<b>3.1</b>	<b>2.8</b>	<b>2.5</b>	<b>2.2</b>	<b>1.9</b>	<b>1.6</b>
<b>Total Gas Imports</b>	<b>1.7</b>	<b>1.4</b>	<b>1.1</b>	<b>0.9</b>	<b>0.7</b>	<b>0.5</b>
<b>Import loss (Rmb bn)</b>						
Central Asia	32.7	28.3	27.2	22.2	18.0	10.4
Myanmar		0.4	5.0	7.0	8.0	7.2
<b>Total Piped Gas</b>	<b>32.7</b>	<b>28.7</b>	<b>32.2</b>	<b>29.2</b>	<b>26.0</b>	<b>17.6</b>
Qatar		11.6	10.3	9.2	8.4	7.6
Gorgon					4.8	8.4
Spot	-	8.7	4.9	4.4	4.0	3.6
<b>Total LNG</b>	<b>16.0</b>	<b>20.3</b>	<b>15.2</b>	<b>13.6</b>	<b>17.2</b>	<b>19.6</b>
Total Gas Imports	48.6	49.0	47.4	42.8	43.2	37.2
VAT rebate	(6.7)	(7.1)	(6.6)	(6.0)	(6.0)	(5.2)
<b>Total net loss</b>	<b>41.9</b>	<b>41.9</b>	<b>40.8</b>	<b>36.8</b>	<b>37.2</b>	<b>32.0</b>

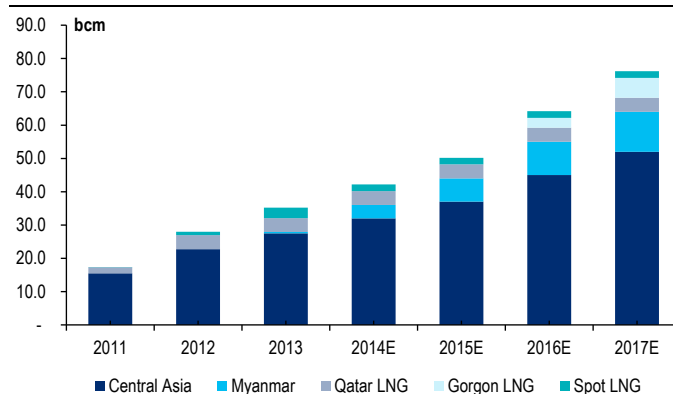
Source: Company data, Citi Research estimates

**Figure 9. PetroChina – Unit loss on gas imports (Rmb/m<sup>3</sup>)**



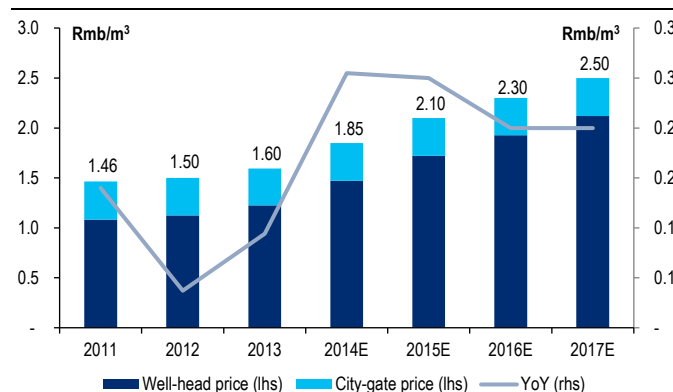
Source: Company data, Citi Research estimates

**Figure 10. PetroChina – Gas import volume (bcm)**



Source: Company data, Citi Research estimates

Figure 11. PetroChina – Wellhead and city-gate gas prices (Rmb/m<sup>3</sup>)



Source: Company data, Citi Research estimates

## Domestic Gas EBIT Growth Remains PetroChina's Most Positive Driver...

While lower losses on imported gas should have a small positive impact on PetroChina's earnings, we expect rising domestic gas earnings to be much more significant. We estimate domestic gas earnings (booked partly in the E&P division and partly in the Natural gas and Pipeline division) to rise Rmb19.8bn and Rmb22.2bn in 2014 and 2015 respectively, driving total gas earnings growth of Rmb21.0bn and Rmb26.1bn (see Figure 12). Most of the earnings growth in domestic gas is driven by the price impact from the government's expected gas price hikes, but rising production volume is also positive.

Figure 12. PetroChina – Gas earnings

In Rmb m	2012	2013	2014E	2015E	2016E	2017E
<b>Domestic gas</b>						
Production volume (bcm)	72.5	79.4	88.9	99.6	107.5	116.1
EBIT margin (Rmb/m <sup>3</sup> )	0.67	0.74	0.89	1.02	1.10	1.18
EBIT (E&P and Pipeline)	48,428	59,059	78,886	101,062	118,190	136,573
Y/Y change		10,631	19,827	22,176	17,128	18,383
<b>Imported gas</b>						
Volume (bcm)	28.0	35.2	42.2	50.2	64.2	76.2
Margin (Rmb/m <sup>3</sup> )	(1.50)	(1.19)	(0.97)	(0.73)	(0.58)	(0.42)
EBIT (Pipeline div.)	(41,930)	(41,920)	(40,755)	(36,842)	(37,152)	(31,958)
Y/Y change		10	1,165	3,913	(310)	5,194
<b>Total Gas EBIT</b>	<b>6,498</b>	<b>17,139</b>	<b>38,130</b>	<b>64,219</b>	<b>81,038</b>	<b>104,615</b>
Y/Y change		10,641	20,992	26,089	16,819	23,577

Source: Company data, Citi Research estimates

## ...But Cost Growth in Oil May Offset Much of the Gas Growth

While we see gas earnings growth as the company's strongest earnings growth contributor in the coming years, we remain concerned that declining earnings on oil production could offset much of the gas growth. A US\$1/boe increase in controllable costs (all E&P costs excluding taxes and royalties) reduces PetroChina's EBIT by ~Rmb 8.6bn. Therefore a US\$2.4/boe increase in costs would offset the Rmb 21.0bn of gas earnings growth which we expect this year. Over the past three years the company's average increase in controllable costs was US\$3.7/boe per year (Figure 13).

Figure 13. PetroChina – E&P operations

In US\$/boe	2006	2007	2008	2009	2010	2011	2012	2013
<b>O&amp;G revenue</b>	<b>50.07</b>	<b>53.15</b>	<b>69.79</b>	<b>43.99</b>	<b>58.17</b>	<b>80.67</b>	<b>80.43</b>	<b>78.23</b>
Production costs	6.49	7.47	9.13	8.89	9.74	11.54	12.13	13.63
Exploration expense	2.23	2.44	2.67	2.38	2.76	2.88	2.83	2.94
DD&A	3.73	4.31	6.20	6.98	8.26	9.69	11.16	12.12
Taxes other than income tax	1.47	1.41	2.50	2.55	3.17	5.57	6.40	6.42
Windfall profits tax	3.42	5.28	10.40	2.45	6.28	12.34	9.35	8.45
Net others	6.70	7.77	9.61	7.88	9.46	12.22	13.17	12.62
<b>Operating profits</b>	<b>26.02</b>	<b>24.46</b>	<b>29.29</b>	<b>12.86</b>	<b>18.49</b>	<b>26.44</b>	<b>25.39</b>	<b>22.04</b>
Controllable costs	19.15	22.00	27.60	26.13	30.23	36.33	39.29	41.32
YoY	3.8	2.8	5.6	(1.5)	4.1	6.1	3.0	2.0
3yr avg increase	2.5	3.0	4.1	2.3	2.7	2.9	4.4	3.7
Brent (US\$/bbl)	65.4	72.7	97.7	62.0	79.7	111.1	111.9	108.8

Source: Company data, Citi Research



## Valuation – Still Expensive on Recurring Earnings

Our estimates factor in a non-recurring gain of Rmb40bn this year, up from Rmb24.8bn in FY13. Our recurring EPS estimate is Rmb0.57/ Rmb0.50 for FY14/ FY15, down from Rmb0.61 in FY13 (see Figure 14) based on our oil price forecasts of \$104/bbl/ \$95/bbl. To highlight the company's earnings trend excluding the impact of changing oil prices, Figure 14 also shows FY14 earnings on a flat Y/Y oil price assumption. Under this oil price scenario, we would expect recurring earnings to rise slightly (to Rmb0.63/share) driven by higher natural gas earnings and lower refining losses, but partly offset by cost growth.

While PetroChina trades at 10.2x FY14 reported earnings, we see the stock trading at 12.8x FY14 recurring earnings and 6.0x EV/DACF (see Figure 15), which we see as expensive compared to regional and global comps (see Figure 22 and Figure 23). Our HK\$7.0 target price remains based on 10.0x FY14E recurring earnings. Our DCF model values the company at HK\$7.8/share (see Figure 21).

Figure 14. PetroChina – Income statement

In Rmb m	2007	2008	2009	2010	2011	2012	2013	2014E Citi est	2014E Flat oil px	2015E
E&P	206,587	240,198	105,019	153,703	219,539	214,955	189,698	178,354	194,233	145,594
Refining	(31,490)	(90,952)	12,317	4,036	(60,087)	(33,672)	(4,708)	(290)	(209)	4,338
Chemicals	7,831	(2,877)	4,991	3,811	(1,779)	(9,839)	(19,684)	(15,842)	(15,842)	(12,439)
Marketing	10,810	7,982	13,265	15,956	20,653	16,391	7,562	8,035	8,035	8,748
Natural gas & pipeline	12,495	16,057	19,046	20,415	15,530	(2,110)	28,888	49,893	49,893	17,540
Other	(6,378)	(11,108)	(11,194)	(10,144)	(11,395)	(11,206)	(13,114)	(13,245)	(13,245)	(13,378)
<b>Operating profit</b>	<b>199,855</b>	<b>159,300</b>	<b>143,444</b>	<b>187,777</b>	<b>182,461</b>	<b>174,519</b>	<b>188,642</b>	<b>206,905</b>	<b>222,865</b>	<b>150,403</b>
Net exchange	(866)	(1,081)	(783)	(1,172)	(936)	131	52	-	-	-
Net financing	(1,605)	(689)	(3,813)	(4,338)	(8,212)	(16,101)	(20,859)	(21,919)	(21,919)	(23,287)
Equity affiliates	6,997	4,299	1,184	7,038	10,902	8,262	10,228	8,276	8,276	4,512
<b>Pre-tax profit</b>	<b>204,381</b>	<b>161,829</b>	<b>140,032</b>	<b>189,305</b>	<b>184,215</b>	<b>166,811</b>	<b>178,063</b>	<b>193,263</b>	<b>209,222</b>	<b>131,627</b>
Taxation	(49,152)	(35,178)	(33,473)	(38,513)	(38,256)	(36,191)	(35,789)	(42,518)	(45,904)	(30,274)
Minority Interests	(9,604)	(12,220)	(3,172)	(10,800)	(12,998)	(15,294)	(12,675)	(17,394)	(19,205)	(10,530)
<b>Net profit</b>	<b>145,625</b>	<b>114,431</b>	<b>103,387</b>	<b>139,992</b>	<b>132,961</b>	<b>115,326</b>	<b>129,599</b>	<b>133,351</b>	<b>144,113</b>	<b>90,823</b>
<b>EPS (Rmb)</b>	<b>0.81</b>	<b>0.63</b>	<b>0.57</b>	<b>0.77</b>	<b>0.73</b>	<b>0.63</b>	<b>0.71</b>	<b>0.73</b>	<b>0.79</b>	<b>0.50</b>
Pipeline disposal gain (Pre-tax)							24,822	40,000	40,000	
Rmb/share							0.10	0.16	0.16	
<b>Recurring EPS (Rmb)</b>							<b>0.61</b>	<b>0.57</b>	<b>0.63</b>	
Brent oil price (US\$/bbl)	72.9	97.3	62.0	79.7	111.1	112.0	108.8	104.0	108.8	95.0

Source: Company data, Citi Research estimates

Figure 15. PetroChina – Earnings and valuation sensitivity to oil price

Brent	EPS			DACF			P/E			EV/DACF		
US\$/bbl	FY14E*	FY14**	FY15	FY14E*	FY14**	FY15	FY14E*	FY14**	FY15	FY14E*	FY14**	FY15
129	1.035	0.871	0.946	374,442	374,442	415,188	7.0	8.3	7.6	5.1	5.1	4.6
124	0.974	0.810	0.880	362,518	362,518	402,952	7.4	8.9	8.2	5.2	5.2	4.7
119	0.912	0.748	0.813	350,594	350,594	390,717	7.9	9.6	8.9	5.4	5.4	4.9
114	0.851	0.687	0.747	338,667	338,667	378,481	8.5	10.5	9.7	5.6	5.6	5.0
109	0.790	0.626	0.680	326,740	326,740	366,245	9.1	11.5	10.6	5.8	5.8	5.2
104	0.729	0.565	0.614	314,810	314,810	354,010	9.9	12.8	11.8	6.0	6.0	5.4
99	0.667	0.503	0.547	302,877	302,877	341,774	10.8	14.3	13.2	6.3	6.3	5.5
94	0.606	0.442	0.481	290,942	290,942	329,538	11.9	16.3	15.0	6.5	6.5	5.8
89	0.545	0.381	0.414	279,002	279,002	317,303	13.2	18.9	17.4	6.8	6.8	6.0
84	0.484	0.320	0.347	267,055	267,055	305,067	14.9	22.6	20.8	7.1	7.1	6.2

\* On reported earnings. \*\* On recurring earnings.

Source: Citi Research estimates

Figure 16. PetroChina – Target price sensitivity to oil price and target multiple

Brent US\$/bbl	P/E			EV/DACF		
	-1 std dev 10.0x	average 11.5x	+1 std dev 13.0x	-1 std dev 5.2x	average 5.8x	+1 std dev 6.4x
129	HK\$10.8	HK\$12.5	HK\$14.1	HK\$9.3	HK\$10.9	HK\$12.4
124	HK\$10.1	HK\$11.6	HK\$13.1	HK\$8.9	HK\$10.4	HK\$11.9
119	HK\$9.3	HK\$10.7	HK\$12.1	HK\$8.5	HK\$9.9	HK\$11.4
114	HK\$8.6	HK\$9.8	HK\$11.1	HK\$8.1	HK\$9.5	HK\$10.8
109	HK\$7.8	HK\$9.0	HK\$10.1	HK\$7.6	HK\$9.0	HK\$10.3
104	HK\$7.0	HK\$8.1	HK\$9.1	HK\$7.2	HK\$8.5	HK\$9.8
99	HK\$6.3	HK\$7.2	HK\$8.2	HK\$6.8	HK\$8.0	HK\$9.3
94	HK\$5.5	HK\$6.3	HK\$7.2	HK\$6.4	HK\$7.6	HK\$8.8
89	HK\$4.7	HK\$5.5	HK\$6.2	HK\$6.0	HK\$7.1	HK\$8.2

Source: Citi Research estimates

Figure 17. PetroChina – FY14 reported EPS sensitivity to oil price and refining margin

Brent US\$/bbl	Refining margin						
	\$3.0/bbl	\$2.0/bbl	\$1.0/bbl	\$0.0/bbl	\$-1.0/bbl	\$-2.0/bbl	\$-3.0/bbl
129	1.12	1.09	1.06	1.03	1.01	0.98	0.95
124	1.06	1.03	1.00	0.97	0.95	0.92	0.89
119	0.99	0.97	0.94	0.91	0.89	0.86	0.83
114	0.93	0.91	0.88	0.85	0.82	0.80	0.77
109	0.87	0.84	0.82	0.79	0.76	0.74	0.71
104	0.81	0.78	0.76	0.73	0.70	0.67	0.65
99	0.75	0.72	0.69	0.67	0.64	0.61	0.59
94	0.69	0.66	0.63	0.61	0.58	0.55	0.52
89	0.63	0.60	0.57	0.54	0.52	0.49	0.46

Source: Citi Research estimates

Figure 18. PetroChina – FY14 PE sensitivity to oil price and refining margin

Brent US\$/bbl	Refining margin						
	\$3.0/bbl	\$2.0/bbl	\$1.0/bbl	\$0.0/bbl	\$-1.0/bbl	\$-2.0/bbl	\$-3.0/bbl
129	6.6	6.8	6.9	7.1	7.3	7.5	7.7
124	7.0	7.2	7.4	7.6	7.8	8.0	8.3
119	7.4	7.6	7.8	8.1	8.3	8.6	8.9
114	7.9	8.1	8.4	8.7	8.9	9.3	9.6
109	8.5	8.7	9.0	9.3	9.7	10.0	10.4
104	9.1	9.4	9.8	10.1	10.5	10.9	11.4
99	9.8	10.2	10.6	11.0	11.5	12.0	12.6
94	10.7	11.2	11.6	12.2	12.7	13.4	14.1
89	11.8	12.3	12.9	13.5	14.2	15.0	15.9

Source: Citi Research estimates

Figure 19. PetroChina – PE



Source: Bloomberg, Company data, Citi Research

Figure 20. PetroChina – PB



Source: Bloomberg, Company data, Citi Research

Figure 21. PetroChina – DCF valuation

Division	Rmb BB	HK\$/share	Brent	WACC					
			US\$/bbl	7.1%	8.1%	9.1%	10.1%	11.1%	
E&P	1,146	7.80	120	18.23	14.97	12.60	10.77	9.31	
R&C	83	0.57	110	16.28	13.21	11.00	9.30	7.95	
Marketing	209	1.42	100	14.33	11.45	9.40	7.83	6.59	
Pipelines	250	1.70	90	12.38	9.70	7.80	6.37	5.24	
Net debt/minorities/other	(543)	(3.69)	80	10.43	7.94	6.20	4.90	3.88	
<b>Total</b>	<b>1,146</b>	<b>7.80</b>	70	8.31	6.02	4.46	3.30	2.41	
			60	5.94	3.89	2.52	1.52	0.76	

Source: Citi Research estimates

Figure 22. Asian oil and gas valuation

	Name	Ric	Rating*	Marketcap (mm USD)	Price (LC) 13-May-14	Target Price	EPS (LC)			P/E(x)			EV/DACF (x)		P/BV (x)		ROE (%)	Debt/Eq (%)	Div Yield
							FY13E	FY14E	FY15E	FY13E	FY14E	FY15E	FY13E	FY14E	FY15E	FY13E	FY14E	FY14E	FY14E
Integrateds	PetroChina	0857.HK	3	212,258	8.99	7.00	0.71	0.73	0.50	10.2	9.9	14.6	5.3	5.5	5.3	1.2	11.5	34.8	4.5
	Sinopec	0386.HK	1	105,470	7.00	8.25	0.54	0.61	0.64	10.4	9.2	8.8	5.7	5.1	4.9	1.1	12.6	46.6	4.5
	ONGC	ONGC.BO	1	51,065	358	366	28.3	31.3	36.6	12.7	11.4	9.8	6.1	5.8	5.5	2.0	16.7	4.1	2.9
	Reliance Ind	RELI.BO	2	55,167	1,025	1,048	71.1	76.5	80.9	14.4	13.4	12.7	9.7	9.5	9.5	1.7	11.7	26.8	0.9
	PTT	PTT.BK	2	26,360	301	305	33.2	35.8	38.0	9.1	8.4	7.9	4.9	6.2	4.7	1.3	14.3	31.4	4.2
	Origin Energy	ORG.AX	1	15,610	15.1	16.8	0.7	0.6	0.8	21.8	24.0	19.5	12.3	9.6	12.2	1.3	3.5	60.5	3.3
	Impex	1605.T	1	20,449	1,430	1,570	125	112	121.2	11.4	12.7	11.8	1.6	2.7	4.3	0.8	6.4	4.4	1.3
	<b>Mkt Wghtd average</b>																		
	<b>Simple average</b>																		
E&P	CNOOC	0883.HK	1	74,646	13.0	14.2	1.26	1.18	1.15	8.3	8.8	9.1	3.1	4.0	3.5	1.4	14.6	4.9	3.7
	Kunlun Energy	0135.HK	3	12,601	12.1	9.40	0.85	0.85	0.86	14.3	14.3	14.0	7.0	7.3	6.9	1.9	12.9	26.7	2.0
	Cairn India	CAIL.BO	2	10,637	339	380	63.1	65.2	55.8	5.4	5.2	6.1	3.7	3.2	3.5	1.4	23.6	(3.1)	3.7
	Oil India	OIL.BO	1	5,070	507	564	59.7	56.7	59.3	8.5	8.9	8.5	4.3	4.4	5.0	1.6	17.1	(34.9)	5.6
	PTT E&P	PTTEP.BK	1	18,624	153	185	14.9	16.9	14.8	10.3	9.1	10.3	5.6	5.3	5.4	1.3	16.6	16.4	4.4
	Santos	STO.AX	1	12,918	14.2	16.7	0.52	0.62	0.79	27.2	22.8	18.0	10.1	11.4	8.7	1.3	5.8	69.0	2.8
	Woodside	WPL.AX	1	31,589	41.0	43.4	2.31	3.22	3.10	16.6	11.9	12.3	11.2	8.2	7.8	2.1	16.9	9.0	6.7
	Beach Energy	BPT.AX	3H	2,052	1.70	1.66	0.10	0.21	0.17	16.2	8.0	9.9	6.1	4.1	4.7	1.2	14.3	(11.7)	1.8
	AWE	AWE.AX	1H	810	1.66	2.23	0.04	0.04	0.03	42.7	44.5	51.7	6.3	6.5	4.1	1.0	8.7	(9.2)	-
	Oil Search Ltd	OSH.AX	3	12,651	9.03	8.24	0.15	0.27	0.52	55.4	31.5	16.2	27.8	20.3	10.9	3.3	9.5	85.1	0.5
	Karoo Gas	KAR.AX	1H	589	2.46	5.88	(6.30)	(35.48)	(5.71)	-	-	-	-	-	-	0.9	(13.8)	(17.3)	-
	JAPEX	1662.T	1	2,239	4,000	4,500	(15)	404.2	437	-	9.9	9.1	-	(0.2)	1.4	0.6	5.9	3.6	1.3
	<b>Mkt Wghtd average</b>																		
	<b>Simple average</b>																		
Refiners	SK Innovation	096770.KS	1H	9,882	109,500	150,000	7,850	9,686	13,368	13.9	11.3	8.2	8.5	8.8	7.4	0.6	5.5	41.1	2.9
	S Oil	010950.KS	3	6,362	57,900	50,000	2,481	3,875	3,708	23.3	14.9	15.6	14.5	11.3	11.8	1.2	8.0	47.9	3.5
	GS Hld	078930.KS	2H	4,049	44,650	54,000	3,824	4,830	4,907	11.7	9.2	9.1	0.8	0.8	0.5	0.6	6.7	43.6	3.0
	Formosa Petro	6505.TW	3	23,925	75.9	70.0	2.82	3.16	3.39	26.9	24.1	22.4	16.6	15.6	15.1	3.0	12.3	67.5	3.7
	Thai Oil	TOP.BK	2	3,174	50.8	55.0	4.87	5.09	4.54	10.4	10.0	11.2	5.5	6.2	6.1	1.1	11.1	11.3	4.5
	PTT Global Chem	PTTGC.BK	1	9,504	68.8	87.7	7.38	7.64	7.94	9.3	9.0	8.7	-	-	-	1.3	13.9	12.1	4.7
	SPC	0338.HK	2	2,550	1.83	2.15	0.19	0.12	0.19	7.7	12.3	7.6	-	-	-	0.9	7.2	24.6	3.4
	HPCL	HPCL.BO	2H	2,103	373	313	26.7	16.7	30.0	14.0	22.4	12.4	7.3	8.6	7.7	0.9	4.1	240.2	1.5
	BPCL	BPCL.BO	1	6,032	501	504	36.6	37.7	45.4	13.7	13.3	11.0	7.5	7.5	7.2	2.2	15.6	118.1	2.3
	Caltex Australia	CTX.AX	3	5,654	22.4	15.5	186	142	142	12.0	15.8	15.8	9.1	8.7	6.6	2.3	14.1	30.8	1.9
	Cosmo Oil	5007.T	2	1,559	188	210	(101.3)	3	36.6	-	56.9	5.1	-	19.2	10.4	0.7	1.2	273.1	1.1
	Idemitsu	5019.T	2	3,231	2,063	2,300	314	213	125	6.6	9.7	16.5	9.4	8.8	10.4	0.5	5.1	109.9	2.4
	JX Hld	5020.T	1	12,149	499	630	64.1	49.9	42.2	7.8	10.0	11.8	5.1	7.0	7.3	0.6	6.1	78.1	3.2
	Show a Shell	5002.T	2	3,802	1,031	1,000	160.09	80	82.3	6.4	12.9	12.5	5.4	7.9	7.3	1.3	9.7	61.1	3.5
	TonenGeneral	5012.T	1	3,432	962	1,050	63	22.0	30.2	15.3	43.8	31.9	8.5	17.5	14.9	1.2	2.8	113.2	4.0
	Fuji Oil	5017.T	1	244	324	430	(168.7)	(78)	33.7	-	-	9.6	7.4	31.4	12.7	0.3	(7.5)	168.2	1.9
	<b>Mkt Wghtd average</b>																		
	<b>Simple average</b>																		
Chemicals	Sinopec Shanghai Petchem	0338.HK	2	2,550	1.83	2.15	0.19	0.12	0.19	7.7	12.3	7.6	-	-	-	0.9	7.2	24.6	3.4
	China BlueChem	3983.HK	1	2,444	4.11	5.00	0.36	0.36	0.35	9.3	9.2	9.4	-	-	-	1.1	11.6	(20.7)	4.2
	Formosa Petro	6505.TW	3	23,925	75.9	70.0	2.82	3.16	3.39	26.9	24.1	22.4	16.6	15.6	15.1	3.0	12.3	67.5	3.7
	Nan Ya Plastics	1303.TW	1	17,085	65.1	72.0	3.19	3.76	4.48	20.4	17.3	14.5	-	-	-	1.8	10.3	26.8	4.0
	Formosa Plastics	1301.TW	1	16,220	77.0	84.0	3.25	4.21	4.53	23.7	18.3	17.0	-	-	-	1.9	9.9	9.0	3.8
	Formosa Chem Fib	1326.TW	2	13,712	70.7	72.0	4.25	3.42	4.13	16.6	20.7	17.1	-	-	-	1.5	7.4	18.3	3.4
	Oriental Union	1710.TW	1	873	29.8	35.0	1.45	1.35	2.05	20.6	22.0	14.5	-	-	-	1.5	6.9	30.5	4.0
	LG Chem	051910.KS	1	16,267	251,500	320,000	18,637	23,126	27,921	13.5	10.9	9.0	-	-	-	1.4	12.5	9.1	1.6
	Lotte Chemical	011170.KS	1	5,319	159,000	235,000	8,527	11,580	22,283	18.6	13.7	7.1	-	-	-	0.9	6.1	15.3	0.8
	Siam Cement	SCC.BK	1	15,379	418	532	30.1	32.5	40.2	13.9	12.8	10.4	-	-	-	3.1	22.8	73.9	3.6
	PTT Global Chem	PTTGC.BK	1	9,504	68.8	87.7	7.38	7.64	7.94	9.3	9.0	8.7	-	-	-	1.3	13.9	12.1	4.7
	Reliance Ind	RELI.BO	2	55,167	1,025	1,048	71.1	76.5	80.9	14.4	13.4	12.7	9.7	9.5	9.5	1.7	11.7	26.8	0.9
	PETRONAS CG	PCGB.KL	2	16,773	6.79	6.50	0.39	0.39	0.40	17.3	17.5	16.9	-	-	-	2.5	13.8	(37.1)	2.9
	<b>Mkt Wghtd average</b>																		
	<b>Simple average</b>																		
<b>Overall Mkt Wghtd average*</b>										<b>12.7</b>	<b>12.0</b>	<b>10.0</b>	<b>7.5</b>	<b>7.0</b>	<b>6.5</b>	<b>1.6</b>	<b>8.6</b>	<b>48.0</b>	<b>3.0</b>
<b>Overall Simple average*</b>										<b>15.3</b>	<b>16.3</b>	<b>13.4</b>	<b>8.0</b>	<b>8.7</b>	<b>7.4</b>	<b>1.3</b>	<b>9.3</b>	<b>53.3</b>	<b>2.9</b>

Source: Bloomberg, Company data, Citi Research estimates

Figure 23. Global integrated oils valuation

	Name	Ric	Rating*	Marketcap (mm USD)	Price (LC) 13-May-14	Target Price	EPS (LC)			P/E (x)			EV/DACF (x)			P/BV (x)		ROE (%)	Debt/Eq (%)	Div Yield
							FY13E	FY14E	FY15E	FY13E	FY14E	FY15E	FY13E	FY14E	FY15E	FY13E	FY14E	FY14E	FY14E	
Asia	PetroChina	0857.HK	3	212,258	8.99	7.00	0.71	0.73	0.50	10.2	9.9	14.6	5.3	5.5	5.3	1.2	11.5	34.8	4.5	
	Sinopec	0386.HK	1	105,470	7.00	8.25	0.54	0.61	0.64	10.4	9.2	8.8	5.7	5.1	4.9	1.1	12.6	46.6	4.5	
	ONGC	ONGC.BO	1	51,065	358	366	28.3	31.3	36.6	12.7	11.4	9.8	6.1	5.8	5.5	2.0	16.7	4.1	2.9	
	Reliance Ind	RELI.BO	2	55,167	1,025	1,048	71.1	76.5	80.9	14.4	13.4	12.7	9.7	9.5	9.5	1.7	11.7	26.8	0.9	
	PTT	PTT.BK	2	26,360	301	305	33.2	35.8	38.0	9.1	8.4	7.9	4.9	6.2	4.7	1.3	14.3	31.4	4.2	
	Origin Energy	ORG.AX	1	15,610	15.1	16.8	0.7	0.6	0.8	21.8	24.0	19.5	12.3	9.6	12.2	1.3	3.5	60.5	3.3	
	Inpex	1605.T	1	20,449	1,430	1,570	125	112	121.2	11.4	12.7	11.8	1.6	2.7	4.3	0.8	6.4	4.4	1.3	
	Mkt Wghtd average										11.3	10.8	12.3	6.0	6.0	5.9	1.3	12.0	32.6	3.8
Simple average										12.9	12.7	12.1	6.5	6.4	6.6	1.3	11.0	29.8	3.1	
Europe	BP	BP.L	2	155,946	5.01	4.80	70.6	82.8	78.2	12.0	10.2	10.8	6.2	5.0	5.3	1.2	11.8	21.0	4.6	
	RD Shell Clas	RDSA.L	2	262,872	23.7	23.5	3.10	3.53	3.17	12.9	11.3	12.6	6.7	5.6	6.0	1.4	10.5	17.1	4.7	
	Eni	ENI.MI	2	94,991	19.0	17.8	1.22	1.35	1.31	15.5	14.0	14.5	8.7	6.2	6.0	1.2	8.4	25.2	5.9	
	Total	TOTF.PA	1	171,268	52.4	57.0	4.73	4.74	4.58	11.1	11.1	11.4	6.6	6.1	5.9	1.6	14.2	27.5	4.7	
	Statoil	STL.OL	2	99,381	185	180	14.3	16.0	14.8	12.9	11.5	12.5	6.7	4.9	5.5	1.7	16.3	17.3	3.9	
	Norsk Hydro	NHY.OL	2	11,492	32.9	32.0	0.65	0.83	1.40	50.6	39.8	23.4	-	-	-	1.0	2.2	5.8	2.3	
	BG	BG.L	1	72,767	12.7	14.0	128	109	126	16.7	19.6	17.0	10.8	11.9	10.2	2.3	10.9	44.7	1.5	
	Repsol	REP.MC	1	36,115	19.8	23.0	0.98	1.29	1.24	20.3	15.3	16.0	6.4	7.9	6.9	0.9	6.2	33.5	4.9	
	Galp Energia	GALP.LS	1	13,755	13.0	14.6	0.37	0.37	0.50	34.7	34.9	26.2	15.6	13.2	11.5	2.1	5.3	45.6	2.6	
	OMV	OMV.VI	2	14,632	32.5	35.0	3.39	3.64	3.63	9.6	8.9	9.0	4.1	4.1	4.2	0.9	9.9	37.3	4.0	
	Mkt Wghtd average										14.0	12.8	13.0	7.1	6.2	6.1	1.5	11.5	23.9	4.4
	Simple average										19.6	17.7	15.3	8.0	7.2	6.8	1.4	9.6	27.5	3.9
North America	ExxonMobil	XOM.N	2	439,014	102.2	108.0	7.37	7.77	7.63	13.9	13.2	13.4	8.3	7.9	8.0	3.1	18.6	11.8	2.6	
	Chevron	CVX.N	1	238,415	125	141	11.2	9.9	9.8	11.2	12.6	12.7	5.6	6.0	5.9	1.6	12.3	8.5	3.3	
	Occidental	OXY.N	1	75,749	96.4	111.0	7.01	7.86	6.66	13.8	12.3	14.5	6.4	6.6	7.3	1.8	14.1	4.3	3.0	
	Hess	HES.N	2	27,757	88.3	88.0	5.61	5.22	5.93	15.7	16.9	14.9	6.1	6.1	5.4	1.2	6.0	13.2	1.1	
	Mkt Wghtd average										13.1	13.0	13.4	7.2	7.1	7.2	2.4	15.8	10.1	2.8
Simple average										13.6	13.7	13.9	6.6	6.7	6.6	1.9	12.8	9.5	2.5	
CEEMEA	Petrobras	PBR.N	2	102,759	15.4	13.4	1.70	1.41	1.80	9.0	10.9	8.5	5.9	6.7	6.6	0.7	6.4	81.6	2.7	
	Rosneft	ROSN.MM	1	69,464	6.55	11.3	1.57	0.75	0.98	4.2	8.7	6.7	4.3	5.1	5.3	0.7	8.1	89.4	2.9	
	Lukoil	LKOH.MM	1	43,130	55.7	90.2	10.4	13.1	10.0	5.4	4.2	5.5	2.5	2.8	3.3	0.5	11.7	14.2	5.5	
	Mkt Wghtd average										5.5	7.2	6.1	4.0	4.6	4.7	0.6	8.4	52.9	4.0
Simple average										5.3	6.7	6.0	3.7	4.3	4.5	0.6	8.9	48.8	4.2	
Overall Mkt Wghtd average										12.2	11.8	12.1	6.6	6.3	6.2	1.6	12.6	24.8	3.7	
Overall Simple average										14.5	13.9	12.7	6.6	6.4	6.4	1.3	10.4	28.7	3.5	

Source: Bloomberg, Company data, Citi Research estimates

## PetroChina

### Company description

PetroChina, China's largest oil & gas company, is engaged in a broad range of activities related to petroleum and natural gas, including: 1) Exploration, development and production of crude oil and natural gas; 2) Refining, transportation, storage and marketing, including imports and exports, of crude oil and petroleum products; 3) Production and sale of chemical products; and 4) Transmission, marketing and sale of natural gas.

### Investment strategy

We rate PetroChina shares Sell with a target price of HK\$7.0 as PetroChina's recurring earnings were weak in 2013 with E&P, marketing and chemicals all down. The natural gas pipeline segment was boosted by one-off gains from the disposal of pipelines and a change in the depreciation policy. We believe expectations for high earnings growth from gas have supported PetroChina's premium valuation but as these expectations become more realistic and the market increasingly focuses on deteriorating earnings in other parts of the business, we are concerned that PetroChina's valuation could de-rate.

### Valuation

Our HK\$7.0 target price for PetroChina is based on a target P/E of 10.0x FY14E recurring earnings (5-year mean -1sd due to deteriorating earnings). Our DCF-based sum-of-the-parts analysis values the stock at HK\$7.8/share assuming a long-term Brent oil price of US\$90/bbl and a WACC of 9.1%. We think a multiples-based approach is more reflective of where the stock would trade on a 6-12-month view.

### Risks

Key upside risks that could keep the shares above our target price include: 1) Higher-than-expected oil prices combined with government action to raise domestic gasoline and diesel prices; 2) Lower-than-expected cost of capital for Chinese companies may drive PetroChina's stock to higher valuation multiples than we expect; 3) The company may make a large unexpected discovery of new reserves that could raise its value; and 4) The company may control costs better than we expect.

## Appendix A-1

### Analyst Certification

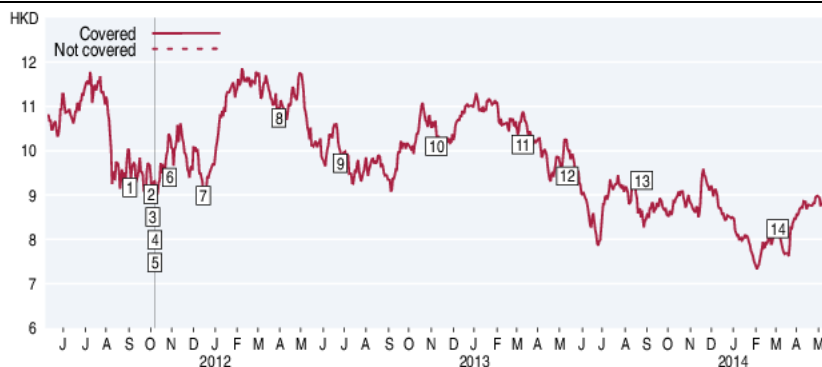
The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

## IMPORTANT DISCLOSURES

### PetroChina (0857.HK)

#### Ratings and Target Price History Fundamental Research

Analyst: Graham Cunningham



	Date	Rating	Target Price	Closing Price
1	2-Sep-11	2L	*11.00	9.67
2	3-Oct-11	2L	*10.20	9.43
3	5-Oct-11	2L	*9.90	9.04
4	7-Oct-11	Stock rating system changed		
5	7-Oct-11	*2	9.90	9.31

\* Indicates change

	Date	Rating	Target Price	Closing Price
6	28-Oct-11	2	*10.30	10.34
7	15-Dec-11	*1	*11.80	9.04
8	30-Mar-12	1	*12.40	10.98
9	26-Jun-12	*2	*10.70	9.99
10	8-Nov-12	2	*10.90	10.36

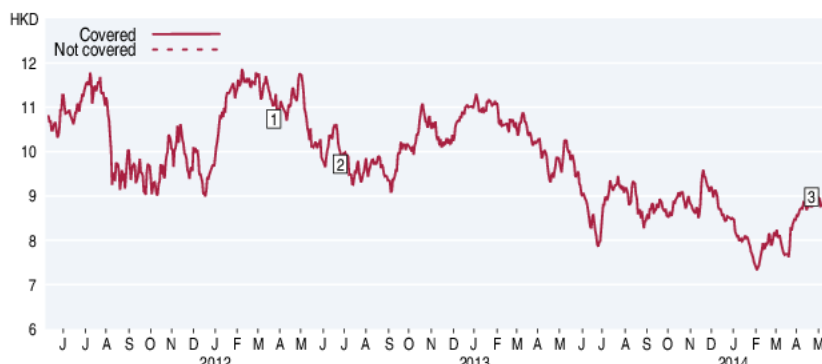
	Date	Rating	Target Price	Closing Price
11	11-Mar-13	2	*11.20	10.88
12	13-May-13	2	*10.50	10.06
13	26-Aug-13	*3	*7.40	8.65
14	5-Mar-14	3	*6.90	8.06

Rating/target price changes above reflect Eastern Standard Time

### PetroChina (0857.HK)

#### Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Graham Cunningham



	Date	Rating	Target Price	Closing Price
1	23-Mar-12	*REM LP	-	11.04

\* Indicates change

	Date	Rating	Target Price	Closing Price
2	26-Jun-12	*ADD LP	-	9.99

	Date	Rating	Target Price	Closing Price
3	22-Apr-14	*REM LP	-	8.76

Rating/target price changes above reflect Eastern Standard Time

Citigroup Global Markets Inc. owns a position of 1 million USD or more in the debt securities of Occidental Petroleum Corp

Citi is acting as financial advisor to China Petroleum & Chemical Corp and ENN Energy Holdings in the proposed takeover of China Gas Holdings.

Citigroup Global Markets Limited has provided certain financial advisory services to Repsol SA.

Citigroup Global Markets Inc. owns a position of 1 million USD or more in the debt securities of Hess Corp

Thelma M Bardouille, Research Assistant, holds a long position in the shares of Chevron Corp. Citigroup Global Markets Inc. owns a position of 1 million USD or more in the debt securities of Chevron Corp

Citi is currently mandated as Financial Advisor to LG Chem, Ltd on the announced and pending acquisition of NanoH2O, Inc.

Citigroup Global Markets Inc. owns a position of 1 million USD or more in the debt securities of Exxon Mobil Corp

Citigroup Global Markets Inc. owns a position of 1 million USD or more in the debt securities of Statoil ASA

Within the past 12 months, Citigroup Global Markets Inc. or its affiliates has acted as manager or co-manager of an offering of securities of CNOOC, Kunlun Energy, Oil India, Origin Energy Ltd, Sinopec Shanghai Petrochemical, Sinopec, SK Innovation, Repsol, China BlueChemical, Petrobras, Cairn India, PetroChina, Karoon Gas Australia Limited, Chevron, Exxon Mobil Corp, GS Holdings, Total, BP, Hindustan Petroleum.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from CNOOC, Lotte Chemical, Kunlun Energy, Formosa Plastics, PETRONAS Chemicals Group, Oil India, Origin Energy Ltd, Occidental Petroleum Corp, Sinopec Shanghai Petrochemical, PTT, Sinopec, TonenGeneral Sekiyu, Idemitsu Kosan, Norsk Hydro ASA, JX Holdings, Gazprom, BG Group, SK Innovation, Rosneft, Repsol, PTT E&P, China BlueChemical, Petrobras, Showa Shell Sekiyu, Lukoil, Hess Corp, Thai Oil, Woodside Petroleum Ltd, Cairn India, PetroChina, Cosmo Oil, Karoon Gas Australia Limited, Chevron, LG Chem, Reliance Industries, Exxon Mobil Corp, Bharat Petroleum, PTT Global Chemical, Total, Siam Cement, Eni, BP, OMV AG, Oil & Natural Gas, Statoil, Royal Dutch Shell, Hindustan Petroleum.

Citigroup Global Markets Inc. or its affiliates expects to receive or intends to seek, within the next three months, compensation for investment banking services from CNOOC, Kunlun Energy, PETRONAS Chemicals Group, Oil India, Sinopec Shanghai Petrochemical, PTT, Sinopec, Gazprom, Caltex



Australia, BG Group, Rosneft, Repsol, PTT E&P, China BlueChemical, Petrobras, Lukoil, Thai Oil, Woodside Petroleum Ltd, PetroChina, Karoon Gas Australia Limited, Bharat Petroleum, PTT Global Chemical, Eni, Oil & Natural Gas, Hindustan Petroleum.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from CNOOC, Fuji Oil, Lotte Chemical, Galp Energia, Oil Search Ltd, Kunlun Energy, Formosa Plastics, PETRONAS Chemicals Group, Oil India, Origin Energy Ltd, Occidental Petroleum Corp, Sinopec Shanghai Petrochemical, Formosa Chemicals & Fiber, PTT, Sinopec, TonenGeneral Sekiyu, Idemitsu Kosan, Norsk Hydro ASA, JX Holdings, Inpex, Gazprom, Caltex Australia, BG Group, SK Innovation, Rosneft, Repsol, PTT E&P, China BlueChemical, Petrobras, Showa Shell Sekiyu, Lukoil, Hess Corp, Thai Oil, Oriental Union Chemical, Woodside Petroleum Ltd, Cairn India, PetroChina, Santos Ltd, Cosmo Oil, Karoon Gas Australia Limited, Chevron, LG Chem, Reliance Industries, Exxon Mobil Corp, Bharat Petroleum, Beach Energy Limited, PTT Global Chemical, GS Holdings, Total, Siam Cement, Eni, Formosa Petrochemical, AWE Limited, Nan Ya Plastics, BP, OMV AG, Oil & Natural Gas, Statoil, Royal Dutch Shell, S-Oil, Hindustan Petroleum in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as investment banking client(s): CNOOC, Sinopec, Oil India, Lotte Chemical, Kunlun Energy, Formosa Plastics, PETRONAS Chemicals Group, Origin Energy Ltd, Occidental Petroleum Corp, Sinopec Shanghai Petrochemical, PTT, TonenGeneral Sekiyu, Idemitsu Kosan, Norsk Hydro ASA, JX Holdings, Gazprom, Caltex Australia, BG Group, SK Innovation, Rosneft, Repsol, PTT E&P, China BlueChemical, Petrobras, Showa Shell Sekiyu, Lukoil, Hess Corp, Thai Oil, Woodside Petroleum Ltd, Cairn India, PetroChina, Cosmo Oil, Karoon Gas Australia Limited, Chevron, LG Chem, Reliance Industries, Exxon Mobil Corp, Bharat Petroleum, PTT Global Chemical, Total, Siam Cement, Eni, BP, OMV AG, Oil & Natural Gas, Statoil, Royal Dutch Shell, Hindustan Petroleum.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, securities-related: CNOOC, Lotte Chemical, Galp Energia, Oil Search Ltd, Kunlun Energy, Formosa Plastics, PETRONAS Chemicals Group, Oil India, Origin Energy Ltd, Occidental Petroleum Corp, Sinopec Shanghai Petrochemical, Formosa Chemicals & Fiber, PTT, Sinopec, TonenGeneral Sekiyu, Idemitsu Kosan, Norsk Hydro ASA, JX Holdings, Inpex, Gazprom, Caltex Australia, BG Group, SK Innovation, Rosneft, Repsol, PTT E&P, China BlueChemical, Petrobras, Showa Shell Sekiyu, Lukoil, Hess Corp, Thai Oil, Woodside Petroleum Ltd, Cairn India, PetroChina, Santos Ltd, Cosmo Oil, Karoon Gas Australia Limited, Chevron, LG Chem, Japan Petroleum Exploration, Reliance Industries, Exxon Mobil Corp, Bharat Petroleum, Beach Energy Limited, GS Holdings, Total, Siam Cement, Eni, Formosa Petrochemical, AWE Limited, Nan Ya Plastics, BP, OMV AG, Oil & Natural Gas, Statoil, Royal Dutch Shell, S-Oil, Hindustan Petroleum.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, non-securities-related: CNOOC, Fuji Oil, Lotte Chemical, Galp Energia, Oil Search Ltd, Kunlun Energy, Formosa Plastics, PETRONAS Chemicals Group, Oil India, Origin Energy Ltd, Occidental Petroleum Corp, Sinopec Shanghai Petrochemical, Formosa Chemicals & Fiber, PTT, Sinopec, TonenGeneral Sekiyu, Idemitsu Kosan, Norsk Hydro ASA, JX Holdings, Inpex, Gazprom, Caltex Australia, BG Group, SK Innovation, Rosneft, Repsol, PTT E&P, China BlueChemical, Petrobras, Showa Shell Sekiyu, Lukoil, Hess Corp, Thai Oil, Oriental Union Chemical, Woodside Petroleum Ltd, Cairn India, PetroChina, Santos Ltd, Cosmo Oil, Chevron, LG Chem, Reliance Industries, Exxon Mobil Corp, Bharat Petroleum, Beach Energy Limited, PTT Global Chemical, GS Holdings, Total, Siam Cement, Eni, Formosa Petrochemical, AWE Limited, Nan Ya Plastics, BP, OMV AG, Oil & Natural Gas, Statoil, Royal Dutch Shell, S-Oil, Hindustan Petroleum.

Citigroup Global Markets Inc. or an affiliate received compensation in the past 12 months from CNOOC, Sinopec.

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability which includes investment banking revenues.

The Firm is a market maker in the publicly traded equity securities of CNOOC, Sinopec Shanghai Petrochemical, Sinopec, Norsk Hydro ASA, Gazprom, BG Group, Repsol, Lukoil, Woodside Petroleum Ltd, PetroChina, Statoil.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Research product ("the Product"), please contact Citi Research, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance [E6WYB6412478]. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at [https://www.citivelocity.com/cvr/eppublic/citi\\_research\\_disclosures](https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures). Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

#### Citi Research Equity Ratings Distribution

Data current as of 31 Mar 2014

	12 Month Rating			Relative Rating		
	Buy	Hold	Sell	Buy	Hold	Sell
Citi Research Global Fundamental Coverage	49%	40%	12%	1%	98%	1%
% of companies in each rating category that are investment banking clients	55%	53%	45%	58%	53%	42%

#### Guide to Citi Research Fundamental Research Investment Ratings:

Citi Research stock recommendations include an investment rating and an optional risk rating to highlight high risk stocks.

**Risk rating** takes into account both price volatility and fundamental criteria. Stocks will either have no risk rating or a High risk rating assigned.

**Investment Ratings:** Citi Research investment ratings are Buy, Neutral and Sell. Our ratings are a function of analyst expectations of expected total return ("ETR") and risk. ETR is the sum of the forecast price appreciation (or depreciation) plus the dividend yield for a stock within the next 12 months. The Investment rating definitions are: Buy (1) ETR of 15% or more or 25% or more for High risk stocks; and Sell (3) for negative ETR. Any covered stock not assigned a Buy or a Sell is a Neutral (2). For stocks rated Neutral (2), if an analyst believes that there are insufficient valuation drivers and/or investment catalysts to derive a positive or negative investment view, they may elect with the approval of Citi Research management not to assign a target price and, thus, not derive an ETR. Analysts may place covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and / or trading in the company's securities (e.g. trading suspension). As soon as practically possible, the analyst will publish a note re-establishing a rating and investment thesis. To satisfy regulatory requirements, we correspond Under Review and Neutral to Hold in our ratings distribution table for our 12-month fundamental rating system. However, we reiterate that we do not consider Under Review to be a recommendation.



**Relative three-month ratings:** Citi Research may also assign a three-month relative call (or rating) to a stock to highlight expected out-performance (most preferred) or under-performance (least preferred) versus the geographic and industry sector over a 3 month period. The relative call may highlight a specific near-term catalyst or event impacting the company or the market that is anticipated to have a short-term price impact on the equity securities of the company. Absent any specific catalyst the analyst(s) will indicate the most and least preferred stocks in the universe of stocks under consideration, explaining the basis for this short-term view. This three-month view may be different from and does not affect a stock's fundamental equity rating, which reflects a longer-term total absolute return expectation. For purposes of NASD/NYSE ratings-distribution-disclosure rules, most preferred calls correspond to a buy recommendation and least preferred calls correspond to a sell recommendation. Any stock not assigned to a most preferred or least preferred call is considered non-relative-rated (NRR). For purposes of NASD/NYSE ratings-distribution-disclosure rules we correspond NRR to Hold in our ratings distribution table for our 3-month relative rating system. However, we reiterate that we do not consider NRR to be a recommendation.

Prior to October 8, 2011, the firm's stock recommendation system included a risk rating and an investment rating. **Risk ratings**, which took into account both price volatility and fundamental criteria, were: Low (L), Medium (M), High (H), and Speculative (S). **Investment Ratings** of Buy, Hold and Sell were a function of the Citi Research expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating. Additionally, analysts could have placed covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and/or trading in the company's securities (e.g. trading suspension). Stocks placed "Under Review" were monitored daily by management and as practically possible, the analyst published a note re-establishing a rating and investment thesis. For securities in developed markets (US, UK, Europe, Japan, and Australia/New Zealand), investment ratings were: Buy (1) (expected total return of 10% or more for Low-Risk stocks, 15% or more for Medium-Risk stocks, 20% or more for High-Risk stocks, and 35% or more for Speculative stocks); Hold (2) (0%-10% for Low-Risk stocks, 0%-15% for Medium-Risk stocks, 0%-20% for High-Risk stocks, and 0%-35% for Speculative stocks); and Sell (3) (negative total return). For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings were: Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

#### NON-US RESEARCH ANALYST DISCLOSURES

Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

Citigroup Global Markets Asia	Graham Cunningham; Danny Huang; Oscar Yee; Horace Chan
Citigroup Global Markets Japan Inc.	Takashi Miyazaki
Citigroup Global Markets Australia Pty Limited	Dale Koenders
Citigroup Global Markets Ltd	Michael J Alsford; Alastair R Syme; Jatinder Goel, CFA; Mukhtar Garadaghi
Citigroup Global Markets India Private Limited	Saurabh Handa
Citigroup Global Markets Inc	Faisel Khan, CFA
ZAO Citibank	Ronald Paul Smith
Citigroup Global Markets Brazil	Pedro Medeiros
Citicorp Securities (Thailand) Ltd.	Amornrat Cheevavichawalkul, CFA

#### OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 13 May 2014 04:10 PM on the issuer's primary market.

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Lotte Chemical, Galp Energia, Oil India, Origin Energy Ltd, Occidental Petroleum Corp, Norsk Hydro ASA, Gazprom, Caltex Australia, Repsol, Hess Corp, Chevron, Reliance Industries, Exxon Mobil Corp, Bharat Petroleum, Total, Eni, Nan Ya Plastics, OMV AG, Statoil, Hindustan Petroleum. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at [www.citiVelocity.com](http://www.citiVelocity.com).)

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the issuer(s) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had

discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citi Research to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

**Important Disclosures for Bell Potter Customers:** Bell Potter is making this Product available to its clients pursuant to an agreement with Citigroup Global Markets Australia Pty Limited. Neither Citigroup Global Markets Australia Pty Limited nor any of its affiliates has made any determination as to the suitability of the information provided herein and clients should consult with their Bell Potter financial advisor before making any investment decision.

**The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by.** The Product is made available in **Australia** through Citigroup Global Markets Australia Pty Limited. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in **Brazil** by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of **Canada** by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. This product is available in **Chile** through Banchile Corredores de Bolsa S.A., an indirect subsidiary of Citigroup Inc., which is regulated by the Superintendencia de Valores y Seguros. Agustinas 975, piso 2, Santiago, Chile. The Product is distributed in **Germany** by Citigroup Global Markets Deutschland AG ("CGMD"), which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). CGMD, Reuterweg 16, 60323 Frankfurt am Main. Research which relates to "securities" (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) is issued in **Hong Kong** by, or on behalf of, Citigroup Global Markets Asia Limited which takes full responsibility for its content. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Research is made available through Citibank, N.A., Hong Kong Branch, for its clients in Citi Private Bank, it is made available by Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citibank N.A. is regulated by the Hong Kong Monetary Authority. Please contact your Private Banker in Citibank N.A., Hong Kong, Branch if you have any queries on or any matters arising from or in connection with this document. The Product is made available in **India** by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in **Indonesia** through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. The Product is made available in **Israel** through Citibank NA, regulated by the Bank of Israel and the Israeli Securities Authority. Citibank, N.A., Platinum Building, 21 Ha'arba'ah St, Tel Aviv, Israel. The Product is made available in **Italy** by Citigroup Global Markets Limited, which is authorised by the PRA and regulated by the FCA and the PRA. Via dei Mercanti, 12, Milan, 20121, Italy. The Product is made available in **Japan** by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. If the Product was distributed by SMBC Nikko Securities Inc. it is being so distributed under license. In the event that an error is found in an CGMJ research report, a revised version will be posted on the Firm's Citi Velocity website. If you have questions regarding Citi Velocity, please call (81 3) 6270-3019 for help. The Product is made available in **Korea** by Citigroup Global Markets Korea Securities Ltd., which is regulated by the Financial Services Commission, the Financial Supervisory Service and the Korea Financial Investment Association (KOFIA). Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. KOFIA makes available registration information of research analysts on its website. Please visit the following website if you wish to find KOFIA registration information on research analysts of Citigroup Global Markets Korea Securities Ltd. <http://dis.kofia.or.kr/fs/dis2/fundMgr/DISFundMgrAnalystPop.jsp?companyCd2=A03030&pageDiv=02>. The Product is made available in Korea by Citibank Korea Inc., which is regulated by the Financial Services Commission and the Financial Supervisory Service. Address is Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. The Product is made available in **Malaysia** by Citigroup Global Markets Malaysia Sdn Bhd (Company No. 460819-D) ("CGMM") to its clients and CGMM takes responsibility for its contents. CGMM is regulated by the Securities Commission of Malaysia. Please contact CGMM at Level 43 Menara Citibank, 165 Jalan Ampang, 50450 Kuala Lumpur, Malaysia in respect of any matters arising from, or

in connection with, the Product. The Product is made available in **Mexico** by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, Integrante del Grupo Financiero Banamex ("Accival") which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comisión Nacional Bancaria y de Valores. Reforma 398, Col. Juárez, 06600 Mexico, D.F. In **New Zealand** the Product is made available to 'wholesale clients' only as defined by s5C(1) of the Financial Advisers Act 2008 ('FAA') through Citigroup Global Markets Australia Pty Ltd (ABN 64 003 114 832 and AFSL No. 240992), an overseas financial adviser as defined by the FAA, participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in **Pakistan** by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in the **Philippines** through Citicorp Financial Services and Insurance Brokerage Philippines, Inc., which is regulated by the Philippines Securities and Exchange Commission. 20th Floor Citibank Square Bldg. The Product is made available in the Philippines through Citibank NA Philippines branch, Citibank Tower, 8741 Paseo De Roxas, Makati City, Manila. Citibank NA Philippines NA is regulated by The Bangko Sentral ng Pilipinas. The Product is made available in **Poland** by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul.Senatorska 16, 00-923 Warszawa. The Product is made available in the **Russian Federation** through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in **Singapore** through Citigroup Global Markets Singapore Pte. Ltd. ("CGMSPL"), a capital markets services license holder, and regulated by Monetary Authority of Singapore. Please contact CGMSPL at 8 Marina View, 21st Floor Asia Square Tower 1, Singapore 018960, in respect of any matters arising from, or in connection with, the analysis of this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore Branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Please contact your Private Banker in Citibank N.A., Singapore Branch if you have any queries on or any matters arising from or in connection with this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). This report is distributed in Singapore by Citibank Singapore Ltd ("CSL") to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this report. Please contact your Citigold/Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this report. This report is intended for recipients who are accredited investors as defined under the Securities and Futures Act (Cap. 289). Citigroup Global Markets (Pty) Ltd. is incorporated in the **Republic of South Africa** (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in the **Republic of China** through Citigroup Global Markets Taiwan Securities Company Ltd. ("CGMTS"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan and/or through Citibank Securities (Taiwan) Company Limited ("CSTL"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan, subject to the respective license scope of each entity and the applicable laws and regulations in the Republic of China. CGMTS and CSTL are both regulated by the Securities and Futures Bureau of the Financial Supervisory Commission of Taiwan, the Republic of China. No portion of the Product may be reproduced or quoted in the Republic of China by the press or any third parties [without the written authorization of CGMTS and CSTL]. If the Product covers securities which are not allowed to be offered or traded in the Republic of China, neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities in the Republic of China. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security or financial products. Any decision to purchase securities or financial products mentioned in the Product must take into account existing public information on such security or the financial products or any registered prospectus. The Product is made available in **Thailand** through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in **Turkey** through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Büyükdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the **U.A.E.**, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different Citi Research ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. The Product is made available in **United Kingdom** by Citigroup Global Markets Limited, which is authorised by the Prudential Regulation Authority ("PRA") and regulated by the Financial Conduct Authority ("FCA") and the PRA. This material may relate to investments or services of a person outside of the UK or to other matters which are not authorised by the PRA nor regulated by the FCA and the PRA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in **United States** by Citigroup Global Markets Inc, which is a member of FINRA and registered with the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is authorised by the PRA and regulated by the FCA and the PRA.

Pursuant to Comissão de Valores Mobiliários Rule 483, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citi Research's Products can be found at [https://www.citivelocity.com/cvr/eppublic/citi\\_research\\_disclosures](https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures).

Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations.

The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted.

Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get

back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product. Citi Research generally disseminates its research to the Firm's global institutional and retail clients via both proprietary (e.g., Citi Velocity and Citi Personal Wealth Management) and non-proprietary electronic distribution platforms. Certain research may be disseminated only via Citi's proprietary distribution platforms; however such research will not contain changes to earnings forecasts, target price, investment or risk rating or investment thesis or be otherwise inconsistent with the author's previously published research. Certain research is made available only to institutional investors to satisfy regulatory requirements. Individual Citi Research analysts may also opt to circulate published research to one or more clients by email; such email distribution is discretionary and is done only after the research has been disseminated.

The level and types of services provided by Citi Research analysts to clients may vary depending on various factors such as the client's individual preferences as to the frequency and manner of receiving communications from analysts, the client's risk profile and investment focus and perspective (e.g. market-wide, sector specific, long term, short-term etc.), the size and scope of the overall client relationship with Citi and legal and regulatory constraints. Citi Research product may source data from dataCentral. dataCentral is a Citi Research proprietary database, which includes Citi estimates, data from company reports and feeds from Thomson Reuters.

© 2014 Citigroup Global Markets Inc. Citi Research is a division of Citigroup Global Markets Inc. Citi and Citi with Arc Design are trademarks and service marks of Citigroup Inc. and its affiliates and are used and registered throughout the world. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure of this report (the "Product"), including, but not limited to, redistribution of the Product by electronic mail, posting of the Product on a website or page, and/or providing to a third party a link to the Product, is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient to any third party. Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, redisseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST