

14 May 2014 | 23 pages

Integrated Oils  
CEEMEA | Russian Federation

## Gazprom (GAZP.MM)

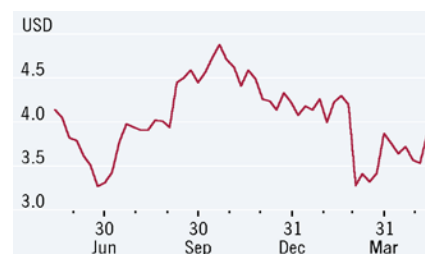
### Mr. Putin Goes to China – Valuing the Eastern Gas Program

Russian President Vladimir Putin makes an official visit to Beijing on May 20<sup>th</sup>, with a key goal of the visit to oversee the signing of a landmark gas contract between Gazprom and PetroChina. Although a final price is still to be agreed, momentum is nonetheless apparently building toward a deal. We analyze the most likely structure of the deal, concluding it will likely be positive for minorities, estimating a PV of dividend increases from the deal equal to c10% of today's stock price. See Citi's separate note for the contract's impact on [PetroChina](#).

- **Why China needs Russian gas, and why C. Asia isn't a direct competitor:** We think China needs to significantly increase the share of gas in its primary energy consumption, and has large scope to do so. While Central Asian gas can meet its share of China's increased gas imports, it is an imperfect substitute for Russian gas, which would come from a different direction, serve a different region of China, cross the border much closer to large population centers, and give China needed diversification of its imported gas sources. Also, Central Asian gas, contrary to popular opinion, is not a cheap option for China.
- **China contract likely be NPV neutral to positive:** We think pricing will likely be attractive, with a slope to oil prices of 10% or higher at the Sino-Russian border, or close to \$11/mcf in today's oil price environment, comparable to delivered, gross prices of Russian gas to Germany, and noticeably better at the Russian border given the lack of transit charges. At an assumed 10% slope and a \$95/bbl oil price (real, 2014), we estimate the deal would be NPV neutral, but would boost dividends to shareholders by \$0.14/ADR by 2024 and \$0.27/ADR by 2029.
- **Why the China contract should be positive for minorities:** For rational, historical reasons, equity markets assume Gazprom's CAPEX program is highly inefficient, generating no earnings growth. Therefore, even if NPV-neutral, the China deal would be positive for minorities, as it would preserve the value of c\$70bn of CAPEX that markets implicitly assume wasted. We estimate the PV of increased dividends from the deal would be worth \$0.80/ADR today, or c10% of the current stock price.

Buy	1
Price (13 May 14)	US\$3.90
Target price	US\$6.50
Expected share price return	66.9%
Expected dividend yield	5.3%
Expected total return	72.2%
Market Cap	US\$89,393M

Price Performance  
(RIC: GAZP.MM, BB: GAZP RM)



#### Gazprom (USD)

Year to 31 Dec	2012A	2013A	2014E	2015E	2016E
Sales (\$M)	153,481.7	164,726.5	148,788.4	146,595.0	153,156.0
Profit Before Tax (\$M)	50,129.6	46,576.4	36,774.4	35,644.5	36,156.7
Diluted EPS (\$)	1.72	1.55	1.24	1.20	1.22
Diluted EPS (Old) (\$)	1.72	1.55	1.24	1.20	1.22
PE (x)	2.3	2.5	3.1	3.2	3.2
EV/EBITDA (x)	2.1	2.0	2.5	2.5	2.4
DPS (\$)	0.19	0.20	0.21	0.29	0.30
Net Div Yield (%)	4.9	5.2	5.4	7.5	7.6

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

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GAZP.MM: Fiscal year end 31-Dec						Price: US\$3.90; TP: US\$6.50; Market Cap: US\$89,503m; Recomm: Buy					
Profit & Loss (US\$m)	2012	2013	2014E	2015E	2016E	Valuation ratios	2012	2013	2014E	2015E	2016E
Sales revenue	153,482	164,727	148,788	146,595	153,156	PE (x)	2.3	2.5	3.1	3.2	3.2
Cost of sales	-110,015	-114,981	-112,735	-112,421	-118,868	PB (x)	0.3	0.3	0.3	0.3	0.3
Gross profit	43,466	49,746	36,053	34,174	34,288	EV/EBITDA (x)	2.1	2.0	2.5	2.5	2.4
Gross Margin (%)	28.3	30.2	24.2	23.3	22.4	FCF yield (%)	-1.4	8.0	10.8	5.5	7.8
<b>EBITDA (Adj)</b>	<b>59,263</b>	<b>62,768</b>	<b>50,359</b>	<b>49,540</b>	<b>50,714</b>	Dividend yield (%)	4.9	5.2	5.4	7.5	7.6
EBITDA Margin (Adj) (%)	38.6	38.1	33.8	33.8	33.1	Payout ratio (%)	11	13	17	24	24
Depreciation	-11,125	-11,246	-12,376	-13,478	-14,509	ROE (%)	15.7	12.8	9.6	8.6	8.2
Amortisation	0	0	0	0	0	<b>Cashflow (US\$m)</b>	<b>2012</b>	<b>2013</b>	<b>2014E</b>	<b>2015E</b>	<b>2016E</b>
<b>EBIT (Adj)</b>	<b>43,466</b>	<b>49,746</b>	<b>36,053</b>	<b>34,174</b>	<b>34,288</b>	EBITDA	54,591	60,992	48,430	47,652	48,797
EBIT Margin (Adj) (%)	28.3	30.2	24.2	23.3	22.4	Working capital	-502	-3,794	7,592	1,664	126
Net interest	-335	-294	-841	-526	-441	Other	-5,598	-3,794	-6,869	-5,916	-5,972
Associates	4,672	1,776	1,929	1,888	1,917	<b>Operating cashflow</b>	<b>48,490</b>	<b>53,404</b>	<b>49,153</b>	<b>43,400</b>	<b>42,951</b>
Non-op/Except	2,326	-4,652	-367	109	393	Capex	-49,725	-46,234	-39,471	-38,496	-36,012
<b>Pre-tax profit</b>	<b>50,130</b>	<b>46,576</b>	<b>36,774</b>	<b>35,644</b>	<b>36,157</b>	Net acq/disposals	-1,838	-3,889	0	0	0
Tax	-9,826	-10,041	-7,355	-7,129	-7,231	Other	9,182	5,042	0	0	0
Extraord./Min.Int./Pref.div.	-838	-971	-971	-971	-971	<b>Investing cashflow</b>	<b>-42,381</b>	<b>-45,081</b>	<b>-39,471</b>	<b>-38,496</b>	<b>-36,012</b>
<b>Reported net profit</b>	<b>39,466</b>	<b>35,565</b>	<b>28,449</b>	<b>27,545</b>	<b>27,955</b>	Dividends paid	-6,487	-4,193	-5,208	-4,979	-6,886
Net Margin (%)	25.7	21.6	19.1	18.8	18.3	<b>Financing cashflow</b>	<b>-8,358</b>	<b>-928</b>	<b>-26,511</b>	<b>-3,681</b>	<b>-5,112</b>
Core NPAT	39,466	35,565	28,449	27,545	27,955	<b>Net change in cash</b>	<b>-2,603</b>	<b>8,048</b>	<b>-16,177</b>	<b>1,876</b>	<b>2,480</b>
<b>Per share data</b>	<b>2012</b>	<b>2013</b>	<b>2014E</b>	<b>2015E</b>	<b>2016E</b>	<b>Free cashflow to s/holders</b>	<b>-1,235</b>	<b>7,169</b>	<b>9,682</b>	<b>4,904</b>	<b>6,939</b>
Reported EPS (\$)	1.72	1.55	1.24	1.20	1.22						
Core EPS (\$)	1.72	1.55	1.24	1.20	1.22						
DPS (\$)	0.19	0.20	0.21	0.29	0.30						
CFPS (\$)	2.11	2.33	2.14	1.89	1.87						
FCFPS (\$)	-0.05	0.31	0.42	0.21	0.30						
BVPS (\$)	11.73	12.43	13.44	14.43	15.35						
Wtd avg ord shares (m)	22,950	22,950	22,950	22,950	22,950						
Wtd avg diluted shares (m)	22,950	22,950	22,950	22,950	22,950						
<b>Growth rates</b>	<b>2012</b>	<b>2013</b>	<b>2014E</b>	<b>2015E</b>	<b>2016E</b>						
Sales revenue (%)	-2.7	7.3	-9.7	-1.5	4.5						
EBIT (Adj) (%)	-22.8	14.4	-27.5	-5.2	0.3						
Core NPAT (%)	-11.0	-9.9	-20.0	-3.2	1.5						
Core EPS (%)	-11.0	-9.9	-20.0	-3.2	1.5						
<b>Balance Sheet (US\$m)</b>	<b>2012</b>	<b>2013</b>	<b>2014E</b>	<b>2015E</b>	<b>2016E</b>						
Cash & cash equiv.	14,017	21,056	4,879	6,754	9,235						
Accounts receivables	30,973	31,532	29,758	29,319	30,631						
Inventory	15,236	17,407	12,652	12,219	12,509						
Net fixed & other tangibles	296,151	306,267	333,362	358,380	379,884						
Goodwill & intangibles	0	0	0	0	0						
Financial & other assets	37,294	34,265	32,672	32,344	33,007						
<b>Total assets</b>	<b>393,671</b>	<b>410,527</b>	<b>413,323</b>	<b>439,018</b>	<b>465,266</b>						
Accounts payable	34,208	27,367	26,936	27,466	29,663						
Short-term debt	10,622	10,142	7,439	7,330	7,658						
Long-term debt	38,783	44,914	25,995	27,085	28,214						
Provisions & other liab	30,597	33,197	33,832	34,481	35,035						
<b>Total liabilities</b>	<b>114,211</b>	<b>115,619</b>	<b>94,203</b>	<b>96,361</b>	<b>100,570</b>						
Shareholders' equity	269,279	285,291	308,532	331,098	352,168						
Minority interests	10,181	9,617	10,588	11,558	12,529						
<b>Total equity</b>	<b>279,459</b>	<b>294,908</b>	<b>319,120</b>	<b>342,657</b>	<b>364,697</b>						
<b>Net debt</b>	<b>35,389</b>	<b>34,000</b>	<b>28,556</b>	<b>27,660</b>	<b>26,637</b>						
Net debt to equity (%)	12.7	11.5	8.9	8.1	7.3						

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

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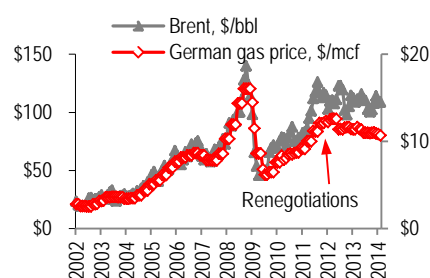
## A Sino-Russian gas deal may be imminent

Recent newspaper reports in Russia<sup>1</sup> indicate that the chances for the long-anticipated Sino-Russian gas contract to be signed in the near future are high. Indeed, the gas contract may well serve as the headline achievement during Russian President Vladimir Putin's upcoming trip to Beijing next week on May 20<sup>th</sup>.

### It's (almost) all about the price

Unnamed sources inside Gazprom have told Vedomosti that the price range is now down to the \$360-\$400/mcm range delivered at the Russian-Chinese border (\$10.2-\$11.3/mcf). Assuming that price range is based upon recent oil prices of c\$108/bbl (Brent), the implied slopes<sup>2</sup> are 9.5% to 10.6%, comparable to both the inferred slope on China's Turkmen gas price of c10.3%<sup>3</sup> per our calculations and to the recent slope for Gazprom's contract deliveries at the German border (Figure 2) of c10.4% following price renegotiations in 2010.<sup>4</sup>

Figure 1. Russian gas at German border



Source: Bloomberg, Citi Research

Keep in mind that the German price is not strictly comparable, as it costs Gazprom c\$90/mcm (c\$2.5/mcf) to transit its gas through Eastern European countries to the German border, and so the netback to the company at the Russian/Chinese border under these conditions would be significantly *higher* than it would be for Gazprom's average European price at the Russian/Ukrainian or Russian/Belorussian borders.

## Why a China-Russian gas contract is likely

### 1) China needs gas...and a lot of it

We are of the opinion that China's economy needs to continue to grow at a relatively rapid pace for political reasons, but that at this stage of development the country cannot grow without requiring significant increases in energy usage, including electricity. However, with 80% of its electricity produced by coal, China is facing a severe pollution problem,<sup>5,6</sup> implying that natural gas has to increase its weight in the country's primary energy mix, even as its economy demands ever more electricity as it grows.

Chinese gas demand has been rising strongly and steadily for years (Figure 3), rising from 25bcm in 2000 to some 168bcm in 2013, and will likely continue to grow at a rapid clip as the government pushes an anti-pollution program.<sup>7</sup> In spite of that growth, gas still only made up c5.3% of China's energy mix in 2013, we estimate (Figure 4), barely showing up on a chart of all primary energy sources (Figure 5).

So how much might China's gas consumption grow? Significantly, we think, but how much depends upon political decisions to a large extent, and is therefore difficult to forecast with much precision. Rather, we can lay out some ranges within which growth seems reasonable.

First, regarding gas' penetration into China's primary energy mix, there seems to be significant upside. While gas makes up only c5% of China's energy mix, it makes up c9% for India, c19% for the Asia Pacific region ex-China, c39% for Japan (despite no domestic production), c17% for South Korea, and c24% for the EU, just to throw out a few comparisons (Figure 6). Even for China to reach the average 14% of the

### Russia-China contract in context of Chinese gas demand

<sup>1</sup> Vedomosti, others

<sup>2</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>3</sup> 90-day smoothing of oil prices, 9-month lag

<sup>4</sup> 90-day smoothing of oil prices, 6-month lag.

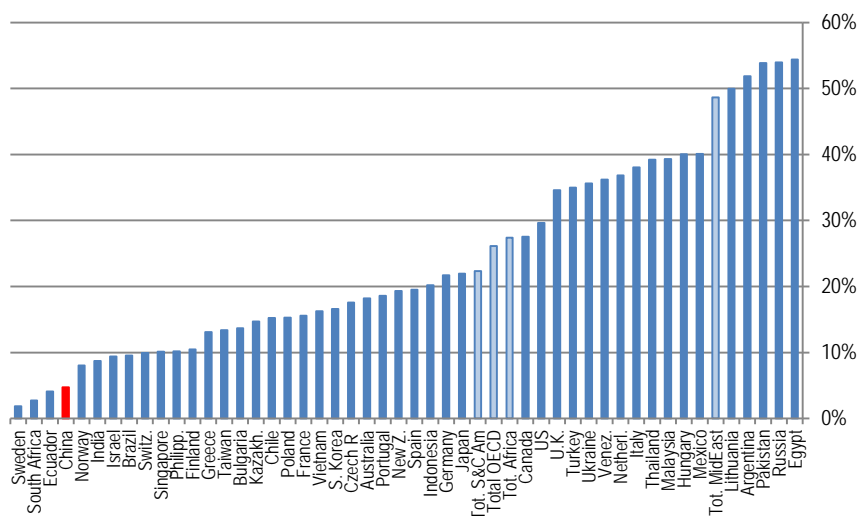
<sup>5</sup> We suggest running a Google search for "images of china air pollution" to get an idea of the severity of the problem the country is facing

<sup>6</sup> <http://aqicn.org/city/beijing/>

<sup>7</sup> What steps is China taking to address the challenge of coal? - See more at: <http://www.chinafaqs.org/issue/coal-electricity#sthash.K8FQK2fO.dpuf>

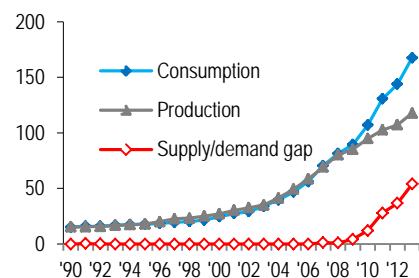
2<sup>nd</sup>-lowest quintile in the chart below would require it to increase its gas consumption by 160% or almost 250bcm even without assuming any economic growth in the interim.

Figure 2. Gas in primary energy mix, % of total



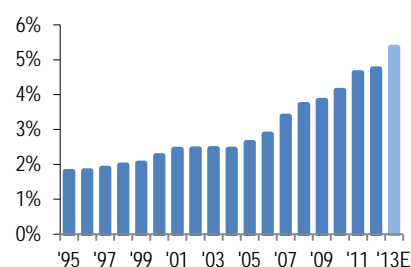
Source: BP Statistical Review of World Energy, Citi Research

Figure 3. China's gas supply & demand, bcm



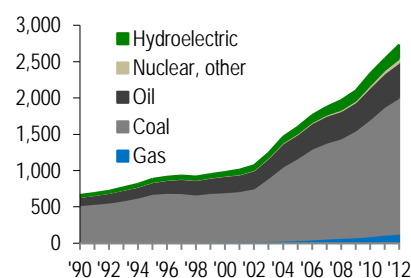
Source: BP Statistical Review of World Energy, Citi Research

Figure 4. Gas as part of China's energy mix



Source BP Statistical Review of World Energy, Citi Research

Figure 5. China's primary energy mix, mmtoe



Source: BP Statistical Review of World Energy, Citi Research

**Demand sensitivity to increasing gas' share of China's primary energy balance: 1% = 31bcm, so initial China contract volumes of 38bcm equal 1.2 percentage points**

**China's gas demand growing 17bcm/a over the last 5 years, so initial Russian contract volumes equal c2 years of demand growth**

Increasing the gas penetration into China's energy balance by 1 percentage point on 2013 demand levels would add c31bcm to China's gas demand, even assuming no overall increase in energy usage. That 31bcm by itself would account for the bulk of the initial 38bcm of Russian supply under negotiation. Adding two percentage points would completely cover the full 60bcm volume we anticipate from the proposed Eastern Route of Gazprom's Eastern Gas Program (EGP), and almost fully account for the plateau capacity of the two anchor super-giant fields for the contract of Chayandinskoye (25bcm) and Kovykta (40bcm).

In another light, over the last 5 years China's gas demand has grown an average of 17bcm/a each year (Figure 3 again), meaning that the initial Russian contract volumes would cover only 2 years of such demand increases. In reality, we think Chinese gas demand has been constrained by available supply of gas, and growth could have been faster had the gas to consume been available. In other words, we think China will have no problem finding a use for any reasonable amount of gas it

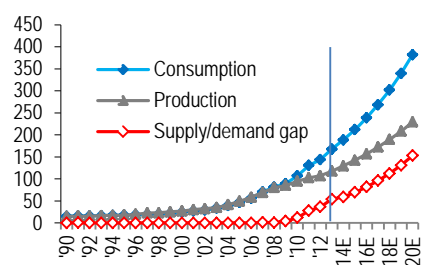
might contract for deliver, especially given what will probably be a 5-year lag between contract signing and first delivery.

The upside for Chinese consumption is potentially very large. Below we run a few quick forecasts for Chinese gas consumption through 2020, using some recent growth rates as starting assumptions.

#### Starting assumptions

- Chinese gas production grows at 10%, above the 2009-2013 average rate of 8%.
- Chinese gas consumption grows at 12.5%, below the 15.5% seen since 2008.
- China's total energy use grows at 6%pa, below the 7.8% average over the last 5 years.

Figure 6. China's gas supply & demand, bcm



Source: BP Statistical review 2013, Citi Research

**Results 1:** By 2020 (Figure 6), Chinese gas demand has risen to 382bcm and production up to 229bcm, leaving a 153bcm gap to be filled by imports, 99bcm ahead of 2013 levels and 2.6x the 38bcm Russian volumes, which will just be starting to flow at that time. Alternatively, this would be the equivalent of an additional 70mtpa of (expensive) LNG. Gas rises from the current c5% of total energy usage to 7.9% in 2020, which sounds reasonable.

**Results 2:** If we hold all assumptions constant except gas demand growth, which we raise to the 15% rate seen in the last few years, then 2020 consumption spikes c445bcm, requiring 216bcm of imports, or 119mtpa equivalent, and gas accounts for 9.2% of Chinese consumption, still no stretch by international standards.

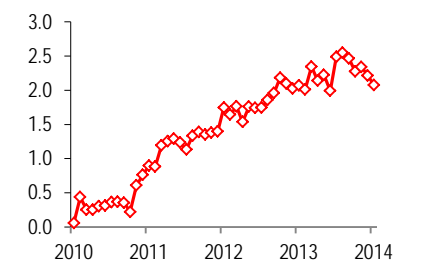
#### Regarding the availability of LNG

To put these numbers into context, WoodMac expects worldwide LNG capacity to grow strongly over the next 6 years, reaching c400mtpa by 2020 or up c120mtpa on current levels. In other words, Chinese demand increases by themselves could account for the bulk of this additional production if the country neither accelerates its own production gains nor contracts additional sources of pipeline supply.

## 2) Russia and C. Asia not competing head-to-head

We are of the opinion that gas from Russia and gas from Central Asia, contrary to the opinions we've heard expressed by many observers, are not perfect substitutes for one another. Indeed, it seems to us that, as its gas demand grows, China needs both Central Asian and Russian gas in order to diversify its gas supplies away from expensive, and strategically vulnerable, LNG supplies. Therefore, the price Russia negotiates doesn't have to be lower than that paid by China for its deliveries from Turkmenistan, Uzbekistan, et al. Indeed, we believe those Central Asian prices, contrary to popular opinion, are by no means cheap.

Figure 7. China's C. Asian gas imports, bcm



Source: Bloomberg, Citi Research

China has been ramping up its imports of Central Asian gas significantly in recent years (Figure 7), from zero in early 2010 to an annual run-rate of 26bcm of late, with almost all of that gas coming from Turkmenistan. In late 2013 China and Turkmenistan agreed to expand the volumes to be delivered to 65bcm per annum by 2020, with China's 30<sup>th</sup> West-East pipeline, currently under construction, intended to carry the additional volumes. As Turkmenistan's Galkynysh field is the world's 2<sup>nd</sup>-largest, with reserves estimated to be between 13tcm and 21tcm, further production increases are almost certainly technically feasible.

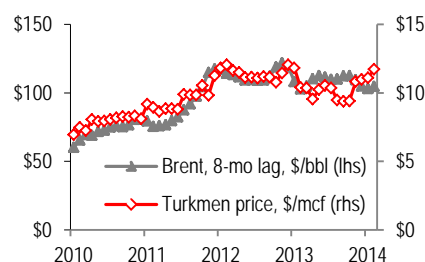
So, why are we optimistic that Russia will be able to negotiate an attractive price for its exports to China?

### a) Central Asian gas price not cheap

Ever since China began taking delivery of Central Asian gas in 2010 we have heard and seen commentary to the effect that Gazprom will be forced to agree to low prices for gas due to heavy competition from Central Asian gas. However, while substantial and growing volumes are coming from Central Asia, they are apparently not coming cheaply.

China's Turkmen prices were reported from the start as being oil linked, with the Oil & Gas Journal<sup>8</sup> stating that the linkage would result in a price for Turkmenistan of \$5.5/mcf at an oil price of \$90/bbl (a 6.1% slope) which, after adding a transit charge of \$2.4/mcf, would result in delivered price at the China-Kazakh border of c\$7.9/mcf (a total of an 8.8% slope).

Figure 8. China's Turkmen gas price vs. oil



Source: Bloomberg, Citi Research

However, that reported relationship doesn't square with observed prices as they appear in China's official statistics (Figure 8), with the error, we think, coming from the unusually long time lag between gas prices and the reference oil price apparently built into the contract. While gas prices at the border in April of 2010 were \$7.2/mcf and oil prices were c\$80/bbl – seemingly in-line with the price relationship reported – in reality the proper oil reference price appears to be the prevailing prices the previous August of c\$70/bbl, or a total of a 10.2% slope, a ratio which does a very good job of predicting gas prices, as seen in Figure 8.

In other words, the delivered price for China of Central Asian gas is by no means a cheap one. In this light, the \$360-\$400/mcm range delivered at the Russian-Chinese border (\$10.2-\$11.3/mcf) speculated in the Russian press, given current oil prices, is very much in-line with what we think is reasonable.

### b) Distance and direction

Having stated that the competing price from Central Asia is actually relatively robust, in reality we don't think Central Asian gas and Russian gas are really competing head-to-head on price alone – although price is certainly a factor. Instead, from the Chinese point of view Russian and Central Asian gas should act as compliments to one another, given that the gas flows will be coming from two substantially different directions (Figure 11), and can therefore satisfy different population centers. Additionally, to the extent they are competing for some of the same Chinese customers in the center of the country's heavily populated regions, Russian supply is significantly closer – and therefore cheaper to deliver – from the border to key population centers than is Central Asia.

Indeed, as we show in Figure 11, Central Asia is much further away from the populated regions of China than is the proposed crossing point between Russia and

<sup>8</sup> Oil & Gas Journal, April 26, 2010



China of Blagoveschensk. For example, the distance from the Kazakh-Sino border where the West East pipelines I and II begin, not far from Almaty, to where Chinese population densities begin to pick around up around Lanzhou, is 2,300km. By comparison, Russian gas, which comes in from the north, begins to hit similarly built-up areas around Harbin within 500km.<sup>9</sup>

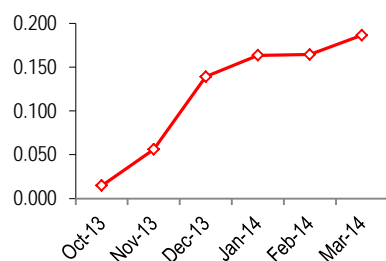
The implication of this is twofold – First, if comparing the two routes for gas to a common demand point (Beijing, say), the Russian gas has a distinct advantage vis-à-vis the amount of capital China would have to dedicate to a pipeline to transport the gas from the border. As we show in Figure 12, even at a relatively efficient \$133,000/bcmpa/km, China would have to dedicate an additional c\$12bn to pipeline construction to get 40bcm to Beijing from Central Asia relative to Russia's Eastern Route.

Second, if we are looking at a delivery point closer to the Russian border – and the population density of the northeast of China is quite high – then the competitive advantage of Russian gas over Central Asian gas rises rapidly. Indeed, we think a better comparison for Russian prices could be the (high) cost of landing LNG at China's Dalian and Tangshan regas facilities.

### 3) China needs strategic diversity of supply

Arguments of pricing, total supply needed, and proximity to key demand aside, we think China has a motivation to include Russian gas in its supply mix for strategic diversification reasons. In 2013 China imported around 54bcm<sup>10</sup> (Figure 6 again), up almost 50% y-o-y. Of that, 27bcm or half came via pipeline from Central Asia, while another 25bcm came via LNG. Negligible amounts came via the Myanmar-China pipeline completed late in the year, although that route should contribute a noticeably larger amount in 2014 as flows ramp up (Figure 9). Russian pipeline gas could help to materially reduce the risk China would otherwise face from an interruption of supplies from one source or the other.

Figure 9. Myanmar-China gas exports, bcm



Source: Bloomberg, Citi Research

**Myanmar (Burma) – 12bcm:** The 2,500km, 12bcm China-Myanmar gas pipeline was completed in late 2013. Deliveries started in October of last year at relatively low levels. In March the line delivered 187mn cubic meters, or a 2.2bcm run-rate, although flows are ramping up (Figure 9), and presumably will eventually use the capacity of the line.

**Central Asia – 80bcm:** The A, B, and C lines of the Central Asia-China gas pipeline will have 65bcm of capacity when the 25bcm C line comes on-line later this year, with deliveries agreed between China and Ashgabat to hit that level by 2020.<sup>11</sup> Construction of the so-called D line with Tajikistan was agreed to this past March, and should add another 25bcm of capacity by 2020, bringing the total to 90bcm. According to CNPC, total deliveries from the region should hit or exceed 80bcm by that year.

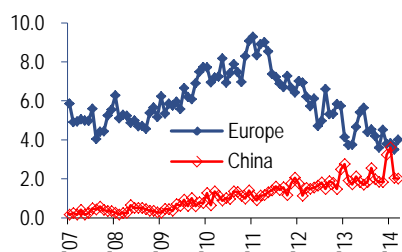
Figure 10. LNG imports, bcm/mo

<sup>9</sup> We suggest going to [http://www.lib.utexas.edu/maps/middle\\_east\\_and\\_asia/china\\_population\\_83.jpg](http://www.lib.utexas.edu/maps/middle_east_and_asia/china_population_83.jpg) for a good population density map of China

<sup>10</sup> Interfax

<sup>11</sup> Platts, 10 Mar 2014





Source: Bloomberg, Citi Research

**LNG – 25bcm and rising:** China imported 25bcm of LNG in 2013, up 27% y-o-y and with imports rising late in the year with the completion of new regas facilities. In January of this year, China even briefly caught up with Europe (Figure 10), and will likely expand its share of LNG trade going forward. Although LNG is produced globally, there are strategic risks for China in relying too heavily on imports of the fuel: In 2013 45% of the country's LNG was sourced in countries to the west of the Malacca straits (Qatar, Egypt, and Yemen), the shipping chokepoint at Singapore. Rising Australian production in the coming years will help reduce that risk of a flow interruption, but it will remain real as long as significant flows of gas come to Asia in general via those straits.

Figure 11. China's pipeline gas options – Central Asia vs. Russia



Source: CIA, CNPC, Interfax, Citi Research

Figure 12. Comparison of Russian, Central Asian gas from the Chinese point of view – Pipeline lengths, costs

		Distance, km	\$k/bcmpa /km	Capacity, bcm	Capital cost, \$bn
C Asia to initial high population density	Lanzhou	2,300	\$133	40	\$12.2
C Asia to core population	Beijing	3,200	\$133	40	\$17.0
Russia to initial high population density	Harbin	515	\$133	40	\$2.7
Russia to core population	Beijing	1,000	\$133	40	\$5.3

Source: Press reports, Google maps for distances, Citi Research

### History of the West-East pipelines

The construction of China's first West–East Gas Pipeline began in 2002, with commercial supply of natural gas starting in January of 2005. Supply is domestic production rather than imported gas, and is used for electricity production in the Yangtze River Delta area, supporting a plan to replace coal with gas in Shanghai. At its initial capacity of 12bcmpa, the 4,000km pipeline cost \$5.7bn, or an efficient \$118,000/km/bcm. That capacity was later raised to 17bcm by adding compressors, which should have been relatively efficient on a capital per unit of capacity basis, although we don't have data on the cost of that upgrade.

Construction of the 2nd West–East Gas pipeline began in 2008, with the 4,840km (excluding 8 sub-lines), 30bcmpa primary line costing an estimated \$30bn, or \$133,000/km/bcm. Gas supply mainly comes from Central Asia.

The 3rd West-East pipeline was begun in late 2012 and is expected to be completed by 2015. The total length of the trunk line is 5,200km, with an additional 2,200km of branch lines. The broader project also includes three gas storage facilities and an LNG plant. With a capacity of 30bcm, the \$20bn price tag implies a cost of \$128,000/km/bcm. However, as with the 2nd line, this likely overstates the cost somewhat, as it excludes the smaller, branch lines from the length. Gas supply is to come both from Central Asia, domestic supply from the Tarim basin, and coalbed methane from fields in Xinjiang.

## Why the China contract should be good for minority investors

**China contract, first and foremost, should serve to demonstrably save the value of at least \$60bn of capital expenditure**

Frankly, we think the largest single obstacle to a revaluation of Gazprom's stock is the extreme skepticism with which the investment community views the company's investment program. In particular, we think the market makes the implicit assumption that the \$30-\$50bn of CAPEX the company spends each year achieves nothing more than maintaining its existing base of business – in other words, the market assumes that no growth will be generated by this massive investment.

Without getting into the full depths of that argument, which is beyond the scope of this note, we think the Street has been too harsh in its judgment of the efficacy of Gazprom's investment program, especially given that a huge amount of CAPEX since 2007 has gone into the initial development of the 4.9tcm Bovanenko field on the Yamal peninsula and the associated pipeline infrastructure. This is a very large bit of maintenance investment necessary to meet the company's long-term supply commitments, given that production capacity from its ageing, Soviet-era core fields in West Siberia has been sliding for years. The Yamal peninsula will become the new production center for the company over the coming years, and the initial infrastructure investment will serve the company for decades.

Still, that being said, the investment community's criticism is by no means baseless, either, and we think the company could have been much more efficient in, and transparent about, its investment program to date.

Regardless, what is most important for our purposes is this imbedded assumption that Gazprom wastes all of its CAPEX. That low hurdle, if demonstrably cleared by a large, NPV-neutral or better project like China, opens up opportunities for a stock revaluation.

How does that work?

**Additional dividends, or CAPEX that actually achieves growth, is “free”, as there is no implied opportunity cost**

Let's illustrate how that works by looking at dividends: We view rising dividends at Gazprom as very positive – even profound – as a change in policy would directly address this core criticism of Gazprom management, the perceived profligate wastage of reinvested capital. That is, any increase in dividends reduces the cash available to be poorly invested. The more pessimistic an investor's opinion of the efficacy of Gazprom's investment program, the most positively he or she should treat higher dividends. Indeed, if an investor thinks that most of the reinvested cash is completely wasted, then *from his/her point of view the extra dividend is effectively free*. That is, as the marginal bit of investment is assumed to generate no growth, an increase in dividends does not carry a cost of lower earnings growth down the road.

Applying that logic to Eastern Gas Program, the Chinese contract, if and when finally concluded, will effectively "save" tens of billions of dollars of capital from being wasted. Rather than going into opaque projects of uncertain value, the China contract will unambiguously result in growth in volumes and earnings for Gazprom.

With significant cash flows to be generated once gas starts to flow toward the end of the decade, it would have positive and significant present value. Whether or not the project will have a positive *net* present value depends upon the amount of capital the company will have commit in order to produce and export those volumes, but is of less importance than many assume, we think.

Our best analysis of the economics of the most-likely version of the project (see our full analysis beginning on pg 13) indicates that the China contract would be roughly NPV-neutral at a real oil price of \$95/bbl and a gas price slope of 10%, with undiscounted CAPEX coming in at c\$69bn. Even if we move down our assumed base oil price to \$80/bbl and the contract slope to 9% – a quite pessimistic set of assumptions, in our view, especially regarding that slope assumption – the PV of the cash flows of the project by our reckoning will be c\$60bn, implying Gazprom would destroy c\$9bn of value with the China project.

For most stocks, that would be a negative outcome, but not so for Gazprom shareholders, as we argue that, at the stock's current valuations (2.3x EV/EBITDA, 3.1x P/E), the market is already assuming zero growth going forward, and that the \$69bn of investment will therefore be almost completely wasted. In that light, the Chinese contract will have "saved" the \$69bn of CAPEX required for the project.

**Chinese exports will boost dividends, the NPV of which is \$0.80/ADR by our model, or 10% of the current stock price.**

Another way to look at this is that Chinese exports will unambiguously increase dividends to investors once gas begins to flow toward the end of the decade. Gazprom's current dividend policy is to pay out 25% of RAS net income. In our analysis of the likely economics of the Chinese contract, we calculate that once gas flows achieve the initial contract level of 38bcm, Gazprom's earnings will be boosted by c\$6.4bn. This is a significant amount – on average 20% - of the \$25bn to \$44bn of net income the company has reported per IFRS over the last 4 years. It is a much

**No dividend policy change required for the dividend increase, either**

more significant 33% of the \$20bn the company reported under RAS in 2013 and vs. a range of \$7bn to \$30bn since 2007 (Figure 13).

Note that the key issue with Gazprom's RAS accounts is that they consolidate only the gas business, leaving out JVs and the liquids business (Gazpromneft). Therefore, Chinese exports should be consolidated under RAS, meaning that shareholders should receive 25% of the net income boost from Chinese exports even if Gazprom doesn't move its dividend policy – as expected – from 25% of RAS net income to 25% of IFRS (i.e., fully consolidated) net income.

When 25% of that is returned to investors, it should boost overall dividends by \$0.14/ADR in 2024 when that 38bcm level is achieved, and \$0.27 in 2029 when 60bcm (per our assumptions) is achieved (Figure 14).

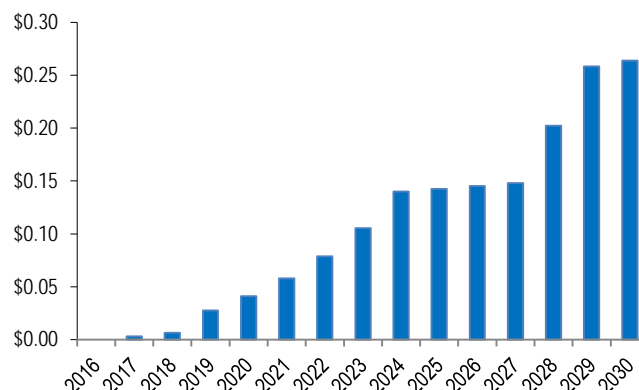
On an NPV basis, the flow of dividends shown in Figure 14 is worth \$0.80/ADR (\$0.40/share), or 10% of the current stock price using our recently-raised 12.7% Gazprom cost of equity ([Russian Oil & Gas – Raising discount rates...](#)).

Figure 13. Earnings impact of China contract



Source: Company Reports, Citi Research

Figure 14. Estimated dividend add from China contract



Source: Citi Research

**Finally, the China project would lower risk due to diversification of cash flows**

As a final thought, note that establishing China as a significant export customer would lower Gazprom's risk by diluting its reliance on Europe for its earnings. Gazprom currently earns c60% of its EBITDA from European exports alone, we calculate. The relative dependence runs both ways, as Europe gets c30% of its gas supplies from Gazprom, which has European politicians openly looking for ways to reduce its reliance on Russian gas, including recent proposals to demand that Gazprom negotiate with all European customers as a group to increase their bargaining power. This had added an element of risk around those earnings, which we think is one of the key reasons Gazprom de-rated relative to the Russian market in late 2009, when the emergence of the (now expired) LNG glut drove down spot prices in Europe and gave European customers alternatives to Russian gas and gave them a pretext to reopen price negotiations<sup>12</sup> and extract price discounts and some spot price linkages from Gazprom.

While China cannot replace Europe as a customer, it can dilute its influence and reduce overall risk to the company's earnings profile. By our model, the Chinese contract will add almost \$10bn to EBITDA beginning in 2024 when we assume deliveries achieve 38bcm, or c18% of the typical \$55bn of EBITDA Gazprom has

<sup>12</sup> Which is allowed by either side once every three years per the typical Gazprom export contract



generated in recent years. By 2029, when the 60bcm level should be achieved, the EBITDA contribution is projected to rise to almost \$17bn, or 30% of current levels.

## Possible economics of the China contract

We estimate that the full, 60bcmpa Eastern Gas Program (EGP) will cost Gazprom some \$69bn in CAPEX over the next 15 years. Assuming a 10.0% price slope to oil, a \$95/bbl real (2014) oil price, and 2.2% inflation, we estimate the project will be NPV-neutral given Gazprom's 12.7% cost of equity.

In this section we lay out a reasonably likely form the Eastern Gas Program (EGP) could take assuming a successful conclusion of the contract with CNPC. This scenario sees two main legs of pipeline being built – a 45bcmpa line from Kovykta to Chayandinskoye, and a 65bcmpa line from Chayandinskoye to the border town of Blagoveshchensk on the Russian-Chinese border – and three giant to super-giant gas fields – 1.2tcm Chayandinskoye, 1.5tcm Kovykta, and a 800mmcm<sup>13</sup> Khandinsky – being developed and brought on-line over time.

A caveat – Note that there are a number of ways the Eastern Gas Program could be designed, with differing plateau production levels, different staging, and different pipeline destinations that could all materially affect CAPEX numbers and returns.

A key assumption we make is that, the initial contract negotiations are for 38bcmpa of deliveries via the so-called Eastern Route, we think the final level of deliveries to China will not stop at that level, but rather will be expanded to at least 60bcm in the medium term. Because of that, we think Gazprom's initial CAPEX numbers will exceed the investment needed simply to deliver 38bcmpa for 30 years, with the extra spend covering field development and transport infrastructure to allow higher delivery levels later.

An aside – Gazprom by law will be required to accept the associated gas from local oil fields, primarily Rosneft's Verkhnechonskoye (1bcm in 2013) and SurgutNG's Talakanskoye (700mmcm). While that production is minimal at the moment, it may be that production could be stepped up significantly if a market were available for the gas. Rosneft management in particular is reported to be negotiating heavily to be given direct access to the Chinese export market, but a more likely outcome seems to be finding a workable price at which Gazprom will purchase the gas at the wellhead.

## Field development – \$39bn for three core fields

### Chayandinskoye, the opening bid – c\$13bn

Gazprom's Chayandinskoye field in Yakutia (East Siberia) is one of two – and maybe three, including the recently acquired Khandinsky – super-giant<sup>14</sup> gas fields in East Siberia earmarked to supply the Strength of Siberia pipeline and, therefore, supply the proposed gas contract with China's CNPC. In addition to 1.2tcm of C1+C2 gas reserves, Chayandinskoye contains significant oil and gas condensate reserves of 79mt, or c7.8bn boe in total, as well as a significant fraction of helium. Plateau production is projected by Gazprom to be 25bcmpa.

Due to the need to begin liquids production before meaningful gas production, Gazprom has long been moving to develop Chayandinskoye, and plans to begin oil production in a test mode already in 2014 (the liquids have to be developed at the

<sup>13</sup> C1+C2 reserves at Khandinsky are reported to be 1tcm, but we give them a 20% haircut in this note.

<sup>14</sup> Commonly referred to as fields with greater than 30tcf of reserves, or over 850bcm.

field before significant gas production begins, else they will be trapped in the formation). Exploration drilling has been going on actively for several years – by late 2012 a number of wells had already been drilled, with c24 planned to follow in the next 3 years. At the time better than half of the 1.2tcm of C1+C2 gas reserves at the field had been proven up, and we would expect that number has advanced since the last report with additional drilling.

We take two approaches to estimating the development costs of Chayandinskoye, both based on comparisons to the development of another far-flung gas field, the super-giant Bovanenko field on the Yamal peninsula.

First, we estimate Gazprom will spend about \$5.9/mmcm or c\$1/boe to develop Bovanenko, and assume it will cost the company c1.75x\* more to develop a boe of Chayandinskoye reserves, yielding an estimate of \$14.8bn. Second, we take another cut at the numbers, which shows that bringing Bovanenko to a production capacity of 115bcmpa will run Gazprom \$250 per mmcm of annual capacity. Using Chayandinskoye's planned plateau production rate of 25bcmpa, this gives us a \$10.9bn CAPEX estimate. Averaging the two numbers gets us our official \$13bn estimate of the cost of developing Chayandinskoye.

Why will Gazprom face higher costs in developing Chayandinskoye than Bovanenko? First, the field is substantially further away from the company's core production region in West Siberia (although Bovanenko is by no means 'nearby'). Second, Gazprom will need to deal with 3 development issues of the field itself: 1) a significant oil rim, which must be produced first; 2) a significant concentration of helium – some 1.4bcm or c1.1% of total reserves – which cannot be flared per Russian law (indeed it has significant value on the world market, but more on that later); and 3) Chayandinskoye's low gas pressure.

\*The 1.75x multiple was backed out in order to come close to development costs estimated by Gazprom which, as reported in the Russian press,<sup>15</sup> will cost Gazprom \$13.7bn. While our Chayandinskoye estimate is admittedly at least partly reverse-engineered, the process we use allows us to make a better estimate of the development costs of Kovykta, for which we do not have a cost estimate from Gazprom.

### **Kovykta, the linchpin supergiant – \$17bn**

Kovykta is the largest of Gazprom's East Siberian fields, showing 1.5tcm of gas reserves and 115mt (840mn bbl) of liquids. Plateau production is projected by Gazprom to be 35bcmpa.

As with Chayandinskoye, Kovykta's gas reserves contain a bit over 1% helium, or maybe 2.3bcm by some estimates. However, indications are that Kovykta's liquids reserves are mostly gas condensate and other NGLs, not crude oil, making its development more straightforward than Chayandinskoye's.

Using the comparison-based approach used for Chayandinskoye, we estimate that the development of Kovykta will run Gazprom about \$17bn, an average of an \$18.5bn reserves-based estimate and a \$15.3bn production-based estimate. This number could be a bit high, given the apparent lack of an oil rim to complicate development.

<sup>15</sup> <http://siberiantimes.com/business/investment/news/gazprom-unveils-major-38-billion-siberian-gas-development-in-asian-export-drive/>

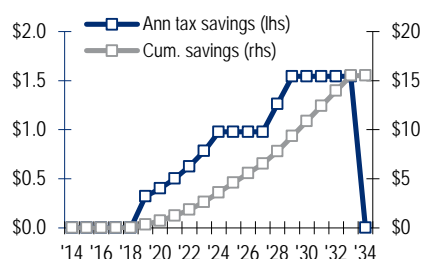
### Khandinsky, the new (potential) giant – \$9bn

Khandinsky is a new addition to Gazprom's portfolio of fields in the region, with the company receiving the license to the block only at the end of April. C1+C2 reserves are reported to be c1tcm, with c70% of that being in the lower-quality C2 category. Per Gazprom, the field is located in the immediate vicinity of Kovykta, and has similar geology. Beyond that, there is very little public information available about the field.

For our purposes we assume that Khandinsky is developed as a follow-on field to maintain plateau production for years to come, not to increase the 60bcm/a sales level we assume will be eventually reached, and for which we have budgeted in our pipeline estimates. While we use the same approach to estimating development costs as we did with Chayandinskoye and Kovykta, because Gazprom will have gone up a significant learning curve by the time field development starts in the middle of the next decade (a Citi assumption), and as Gazprom will have an established base of operations at the Kovykta field, we think Khandinsky will be cheaper on a unit basis than either Kovykta or Chayandinskoye, and we use a 1.4x multiple to Bovanenko costs rather than the 1.7x used for the other two East Siberian fields.

Assuming a 19bcm peak production capacity and 800bcm of reserves,<sup>16</sup> we estimate the development costs of Khandinsky will be c\$9bn.

Figure 15. Gas tax regime for E. Siberia, \$bn



Source: Russian government for tax regime, Citi Research for project estimates

### Tax regime – Breaks offset c10% of CAPEX

Under Russia's new gas tax law – which was finalized and passed in 2H13 – gas production in the Irkutsk region and Russia's Far East will receive breaks of 90% on the base mineral extraction tax through the end of 2033. As we calculate that base rate will be cRUB1,000/mcm (\$28/mcm at today's rates), that break is worth about \$26mn in savings for every bcm of gas produced, or \$1bn per annum once the project hits its initial contract level of 38bcm (Figure 15).

Through the end of 2033, we calculate those breaks are worth about \$4bn on a PV basis in 2014, but will save Gazprom a cumulative \$16bn by YE2033.

On a gross basis, therefore, the tax breaks offset c22% of the gross \$69bn of CAPEX for the EGP (Eastern Gas Project). However, given the different timings of the cash flows for CAPEX and taxes, on a present value basis the breaks offset a smaller 10% of the PV10 of project CAPEX of c\$40.

### An aside on helium

Helium prices have been rising rapidly as US production – c30% of global production comes from a single field in Texas – has slid even as demand has risen. Per Bloomberg, helium prices are currently c\$85/mcf, or c\$3,000/mcm. Even assuming Gazprom could net only half of that at the wellhead, the company would add c\$1bn per annum in additional revenues from the sale of helium if production is a proportional 1% of that of natural gas. However, we are not including any such estimate in our model as, beyond general field development costs, we have included no CAPEX for processing and shipping liquid helium.

In February of 2013, Gazprom Export signed an MOU with Linde AG whereby the latter will become a contract buyer of significant amounts of helium to be produced from facilities to be constructed near the town of Blagoveshensk.

<sup>16</sup> We give the 1tcm estimate a 20% haircut given our lack of knowledge of the field, while the 19bcm plateau production level is estimated based on the proportional production and reserve numbers from Kovykta.



## Pipelines – \$31bn (but a large range of \$23bn to \$76bn)

The pipeline part of the EGP is where we have the most uncertainty on CAPEX. Per our best estimates, c\$31bn or roughly half of the Eastern Gas Program's CAPEX, will be spent on the pipeline infrastructure necessary to transport the gas to the Chinese-Russian border. However, with the very wide range of pipeline costs exhibited by Gazprom's projects, the actual number could be substantially higher or substantially lower.

**Leg 1: Chayandinskoye-Blagoveshensk, \$24bn (\$18bn to \$59bn):** This is a 2,000km, 65bcmpa<sup>17</sup> capacity line running from Chayandinskoye to the Chinese-Russian border at Blagoveshensk, where Gazprom is planning to build chemical facilities (partly to process the aforementioned helium). If the two sides were to agree to have the line cross the border at Skovorodina, where the ESPO oil pipeline delivers crude to the Chinese pipeline system, then c500km and c\$10bn would be knocked off of our estimates.

**Leg 2: Kovykta-Chayandinskoye:** Chayandinskoye by itself will only be able to deliver 25bcmpa, well below the initial headline contract volume of 38bcmpa. Therefore, Kovykta will have to be brought on-line in relatively short order and hooked into the pipeline system. To that end, we assume an 800km, 45bcmpa pipeline running from Kovykta to Chayandinskoye is built for c\$7bn.

Our estimates of both pipeline costs are based on Gazprom's own historical construction costs for comparable pipelines on a cost per unit of delivery per kilometer basis (Figure 16), using Gazprom's \$184,000/bcmpa/km cost to build the Gryazovets-Vyborg pipeline as a reasonable mid-point. This is somewhat above Bovanenko-Ukhta (\$147,000/bcmpa/km) line and far below the cost of Gazprom's Sakhalin-Khabarovsk-Vladivostok pipeline (\$455,000/bcmpa/km).

This is obviously a wide range, implying that construction costs could actually range anywhere from \$23bn to \$76bn for the full line running from Kovykta to Blagoveshensk. That being said, we think the enormous price for Sakhalin-Khabarovsk-Vladivostok line is unlikely to be repeated, and that the larger Sila Siberii project will be cheaper to construct for a few reasons:

- First, all Sakhalin projects appear to run dear at least partly due to the need to take extraordinary steps to protect the local ecology as they cut through virgin territory, including hundreds of stream and river crossings.
- Second, Sakhalin-Khabarovsk-Vladivostok was a project with what we see as a somewhat artificially constrained timeline, with construction pushed to be completed in time to provide gas-fired power to Vladivostok for the 2012 APEC Summit. We think Gazprom may be able to construct the Sila Siberii pipeline in a more deliberate and cost-efficient manner.
- Third, the Sila Siberii pipeline will be a much larger project, which should give efficiencies of scale. Note that the 2,200km Bovanenko-Ukhta pipeline was Gazprom's most ambitious pipeline project in recent years, where only two lines will have the capacity to carry 115bcm per annum and which, when finished, will have been constructed at a cost of a relatively-efficient c\$133,000/bcmpa/km. We put the Sila Siberii lines in that same class.<sup>18</sup>

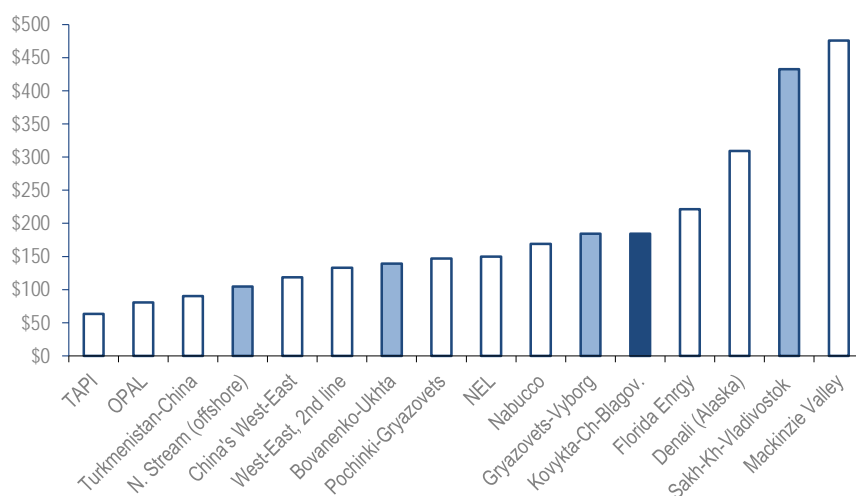
<sup>17</sup> Our assumption, which allows a 60bcmpa contract to be met while running at less than 95% of capacity.

<sup>18</sup> i.e., both pipeline use heavy, special pipes running at very high pressure, such that each line can carry c60bcm. In the case of Bovanenko-Ukhta, Gazprom has built two such lines to bring the total capacity to c115bcmpa. Such lines can be built to take lower volumes initially, but be expanded to handle higher volumes by the addition of

- Fourth, and finally, Sila Siberii will be run down the existing right-of-way blazed by Transneft's ESPO oil pipeline for much of its route, making logistics significantly easier (if not necessarily 'easy') and therefore, presumably, cheaper.

Supporting our cost calculations is an estimate we saw in the Russian press<sup>19</sup> which put the cost of a 61bcm line from Chayandinskoye to Vladivostok via Khabarovsk at \$24.5bn. With a length of 3,200km, at this price that line would cost Gazprom \$125,000/bcmpa/km, even a bit less than the Bovanenko-Ukhta line and substantially less than the \$184,000/bcmpa/km we are using.

Figure 16. Pipeline construction costs, \$/bcmpa/km



Source: Press sources, Citi Research

Note that some of these costs were only proposed, and the Mackinzie Valley line in Canada, for example, was never built

Figure 17. Kovykta – Chayandinskoye – Blagoveshensk pipeline cost estimates

	Cost,\$bn	Length	Capacity	\$mn/km	\$k/bcmpa /km	Comparison lines
<b>Chayandinskoye - Blagoveshchensk</b>						
Average	\$24	2,000	65.0	\$12.0	\$184	Gryazovets-Vyborg
Min	\$18	2,000	65.0	\$9.0	\$139	Bovanenko-Ukhta
Max	\$59	2,000	65.0	\$29.6	\$455	Sakhalin-Kh-Vladivostok
<b>Kovykta - Chayandinskoye</b>						
Average	\$7	800	45.0	\$8.3	\$184	Gryazovets-Vyborg
Min	\$5	800	45.0	\$6.3	\$139	Bovanenko-Ukhta
Max	\$16	800	45.0	\$20.5	\$455	Sakhalin-Kh-Vladivostok
<b>Total</b>						
Average	\$31	2,800		\$10.9		
Min	\$23	2,800		\$8.2		
Max	\$76	2,800		\$27.0		

Source: Gazprom, press reports, Citi Research

compressors at later stages. This brings down costs on a per-unit basis by limiting the number of lines that need to be built in extremely remote areas.

<sup>19</sup> <http://www.hydrocarbons-technology.com/projects/chayandinskoye-field-yakutia-russia/>

## Gazprom

### Company description

Gazprom is the world's largest gas company, with a core business producing, transporting and selling natural gas. Gazprom is the world leader by gas reserves, gas production and the size of its high-pressure gas transport system. The company is majority owned by the Russian government.

### Investment strategy

We rate Gazprom's stock 1-Buy. Having resolved gas taxation issues, the key issues facing the company are contract pricing negotiations with Ukraine, general unrest in that country (which is simultaneously a large customer and a transit corridor for c50% of Gazprom's European exports), and the European supply/demand balance. We still expect Ukrainian prices to be sharply cut in the near future to bring them in line with European netback parity, although the negotiations will depend upon resolution of the broader issues surrounding the Ukrainian-Russian relationship.

### Valuation

We derive our Gazprom target price of \$6.5 based on: 1) a DCF valuation of \$7.4, using a WACC of 11.2% and terminal growth of 3.0% (50% weight); 2) EV/EBITDA target price of \$5.6 based on a target multiple of 3.1x (25%); and 3) P/E target price of \$5.7 based on a target multiple of 4.7x (25%). The target multiples used reflect historical average multiples this stock has traded at on the Russian market, less a discount for recently increased sovereign rates, and use an average of 2014E and 2015E expected earnings.

### Risks

Among the downside risks which could impede the shares from achieving our target price, we highlight potentially lower European gas export prices, faster-than-expected market share losses domestically as independent producers gain traction; and a potential (if unlikely) disruption of European exports via Ukraine.

## Appendix A-1

### Analyst Certification

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### Gazprom (GAZP.MM)

#### Ratings and Target Price History Fundamental Research

Analyst: Ronald Paul Smith  
Covered since June 16 2011



	Date	Rating	Target Price	Closing Price
1	16-Jun-11	1M	*11.00	7.28
2	6-Sep-11	1M	*10.30	5.66
3	7-Oct-11	Stock rating system changed		
4	7-Oct-11	*1	10.30	4.70
5	9-Feb-12	1	*8.00	6.26

\* Indicates change

	Date	Rating	Target Price	Closing Price
6	20-Mar-12	*2	*6.50	6.36
7	30-Apr-12	*1	*7.50	5.76
8	22-May-12	1	*7.20	4.59
9	30-May-13	1	*6.80	3.78
10	18-Jul-13	1	*7.00	4.01

	Date	Rating	Target Price	Closing Price
11	16-Sep-13	1	*7.50	4.50
12	22-Oct-13	1	*7.80	4.86
13	20-Feb-14	1	*7.50	4.20
14	13-May-14	1	*6.50	3.88

Rating/target price changes above reflect Eastern Standard Time

### Gazprom (GAZP.MM)

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

Analyst: Ronald Paul Smith  
Covered since June 16 2011



	Date	Rating	Target Price	Closing Price
1	13-Jul-11	*ADD MP	-	7.24
2	17-Oct-11	*REM MP	-	5.18

\* Indicates change

	Date	Rating	Target Price	Closing Price
3	17-Jul-13	*ADD MP	-	4.06
4	20-Jan-14	*REM MP	-	4.29

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