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Rajkumar Choudhary, Analyst, holds a long position in the securities of Oil & Natural Gas.

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## VALUATION AND RISKS

Our Rs400 target price for IGL is based on our Mar-19E DCF value. We prefer to use DCF as it captures the value of the projects over their lifetime. In our DCF analysis, we use explicit forecasts till FY20E, an intermediate growth rate of 8% for FY21-22E, and a terminal growth rate thereafter. We use a WACC of 9.3%. This yields a core value of Rs290 for IGL's standalone operations in its existing areas. To this, we add Rs25 as the value of its 50% stakes in city gas companies MNGL and CUGL (valued at 20x P/E) and Rs85 as the value contribution from 4 new cities including Gurgaon, Faridabad, and Karnal based on our preliminary assessment of the potential of these markets (valued on DCF assuming long-term volume contribution of 3.5 mmscmd).

Key downside risks to our investment thesis on IGL are: (1) Inability to increase CNG/PNG prices leading to margin compression; (2) Lower-than-expected conversion of vehicles to CNG and/or penetration of PNG resulting in lower-than expected volume growth; (3) A change in gov't policy that reduces the company's allocation of cheaper domestic gas; (4) Adverse impact of GST; (5) Continued delay in resolution of the Gurgaon case. If any of these risk factors has a greater downside impact than we anticipate, the share price will likely have difficulty attaining our target price.

Our target price of Rs261 for IOC is based on an EV/EBITDA-based valuation methodology. We maintain our EBITDA based valuation methodology for all the three OMCs, as earnings visibility has materially improved for these companies following diesel deregulation and also as earnings gains, which have been so far largely limited to lower interest costs on the back of working capital improvement, have started benefiting operating profits too as diesel starts making money for the OMCs. We continue to use a 6.5x target EV/EBITDA on FY19E for the refining business, in-line with the regional-average 7.0x we ascribe to RIL's refining business earnings. We, however, accord a higher 8.0x target EV/EBITDA multiple for the marketing business, based on the improved visibility of earnings in the segment driven by auto fuel deregulation, continued lack of intervention from the gov't, robust fuel consumption trends in India, transition to daily fuel pricing, and the gov't's resolve to eliminate subsidies even on politically sensitive fuels (kerosene and LPG). After subtracting net debt, we arrive at a core equity value of Rs233/sh. To this, we add the value of investments, which includes IOC's stakes in various listed entities, adding up to Rs28/sh, yielding a target price of Rs261.

The key downside risks to our investment thesis on IOC are: 1) A sharp rise in crude prices which increases the overall losses for the OMCs; 2) OMCs bearing non-zero net under-recoveries; 3) Sharp rupee depreciation; 4) Intervention by the gov't in fixing retail prices of gasoline and diesel despite their deregulation; 5) Higher than expected impact of GST on overall profitability. If any of these risk factors has a greater downside impact than we anticipate, the share price will likely have difficulty attaining our target price.

Our target price for OIL of Rs222/sh comes from a business valued at a P/E of 10.0x Mar-19E, at slight discount to its bigger peer's target multiple given its single asset dependence and weaker production growth profile, despite its higher sensitivity to oil prices (our oil price assumptions are lower than the spot price). OIL could potentially become an acquisition target as part of the gov't's proposed oil SOE consolidation, though upside from such a transaction looks unlikely based on recent M&A. We also explicitly include the dividend income contribution from OIL's 8% effective stake in the Vankor asset (would contribute ~13% to consol EPS on our estimates).

The key upside risks to our investment thesis which could mean the shares continue to trade above our target price include: 1) A sharper-than-expected recovery in crude prices; 2) Domestic gas prices rising more sharply than we anticipate; 3) Any move by the gov't towards a long-term roadmap for market linked gas pricing; and 4) Acquisition of the gov't's stake in OIL by one of the other SOEs at a material premium as part of the gov't's proposed SOE consolidation.

Our target price of Rs207 is calculated on 10.5x FY19E P/E, slightly above ONGC's historical mean multiple of ~10x over the last few years given our lower oil price assumptions. With asymmetric leverage to oil prices and no sharp recovery in gas prices, we believe a further re-rating in multiples is unlikely. Our assumptions are based on the gov't bearing a fixed Rs12/ltr of kerosene subsidy, with the upstream companies bringing up the balance. This leads to nil subsidies and consequent net realisations of US\$54-57 over FY18-20E on our crude price assumptions, higher than ONGC's net realisations of \$41-56 in the preceding 10 years. We factor in gas prices of \$3.0/3.5 in FY18/19E.

The key downside risks that could push the stock below our target price include: 1) adverse gov't policy which could increase the company's subsidy burden and impact net realisations; 2) delays in new production coming on-stream; 3) risks of higher dry well write-offs as ONGC increases exploratory drilling, especially in offshore deep-waters; 4) a sharp decline in crude prices; 5) Higher than expected impact of GST on overall profitability. The key upside risks that could push the stock above our target price include: 1) a sharper-than-expected recovery in crude prices with subsidies remaining nil; 2) domestic gas prices recovering faster than we anticipate; 3) any move by the gov't towards a long-term roadmap for market-linked gas pricing even for production from legacy fields; and 4) a further reduction in cess.

We adopt EV/EBITDA (based on FY19E forecasts) as our primary valuation methodology, yielding a target price of Rs367. We value the cyclical LPG and petrochemicals businesses at 6.5x EV/EBITDA and 7.0x EV/EBITDA respectively, the more volatile gas marketing business at 5.0x EV/EBITDA, while we ascribe a higher 10.0x EV/EBITDA multiple for the more stable gas transmission and LPG transmission businesses. After subtracting net debt, we arrive at a core value per share of Rs260/sh. To this, we add Rs110/sh as value of GAIL's investments in various listed and unlisted companies and subtract Rs3/sh as NPV loss from GAIL's LNG contracts to arrive at a target price of Rs367.

The key upside risks to our target price include: 1) A sharper-than-expected recovery in crude prices and a sharp correction in US Henry Hub prices which bodes well for its LPG and petrochemical realisations and also lowers the risk on its US LNG contracts, 2) A higher-than-expected decline in domestic gas prices which would lower the feedstock cost for its LPG segment, 3) A higher-than-forecasted increase in pipeline tariffs in the company's gas transmission business, 4) A change in the domestic gas allocation policy which accords higher priority to users of higher fractions of gas (C2) such as petrochemical producers. The key downside risks to our target price include: 1) A sharp correction in crude prices which impacts LPG and petrochemical realisations and also increases the likelihood of losses on its contracted US LNG, 2) A revision in the domestic gas pricing formula which increases the feedstock cost for the LPG division, 3) A sharper-than-expected ethylene downturn which leads to downside to the company's petrochemical realisations.

Our Rs1,030 target price is based on a sum-of-the-parts methodology, which is derived by: 1) Valuing RIL's core refining & petrochemicals business on an EV/EBITDA of 7.0x FY19E (at the higher end of regional peer multiples given solid execution track record and superior operating performance) which yields a value of Rs617/sh; 2) Valuing domestic E&P assets (KG-D6, PMT, CBM) at Rs23/sh based on a combination of 5.0x EV/EBITDA and DCF (discount to regional peers given uncertainty on development of new discoveries, assuming US\$3-5/mmbtu gas price); 3) Valuing investments in the telecom business at Rs430/sh based on 1.0x the invested capital given reduced uncertainty on returns from the business; 4) Valuing investments in the organised retail business at Rs104/sh based on 1.5x EV/sales; 5) Valuing new projects (ROGC, petcoke gasifier) at 7.0x FY20E EV/EBITDA (discounted back by 1 year) yielding a value of Rs113/sh; 6) Valuing the shale gas business at 5.0x FY19E EV/EBITDA yielding a value of Rs19/sh; 7) Valuing investments in other businesses (pipeline, media, etc.) at Rs11/sh based on 25% discount to book value of investments; and 8) Subtracting consolidated net debt estimated as on FY19E of Rs1.7tr or Rs288/sh.

The key downside risks to our investment thesis on RIL, which could prevent the shares from reaching our target price, include: 1) A weakening in refining fundamentals; 2) Weakness in global petrochemical spreads driven by a poor global macroeconomic environment; 3) Further cash burn in the telecom operations; 4) Project execution risks leading to delays in the commissioning of its refining & petrochemical expansions; 5) Continued lack of clarity and delays in approvals for its producing E&P assets as well as its exploration portfolio; and 6) Concerns on use of future cash flows which could materialise in the form of further announcements on unrelated diversifications and/or increase in non-core capex.

Our target price of Rs1,060 is based on our Mar-19E DCF value. We prefer to use DCF, as it captures the value of the projects over their lifetime. In our DCF analysis, we use explicit forecasts till FY20E, an intermediate growth rate of 5% CAGR till FY24E, and a terminal growth rate of 4.5% thereafter. We use a WACC of 9.4%. On our target price, the stock would impute an FY19E EV/EBITDA of ~15x.

The key downside risks that could push the stock below our target price include: 1) A sharp decline in the price of alternative fuels, which could lead to customers switching to these fuels; 2) A spike in LNG prices could impact the profitability of GGAS's industrial segments; 3) A slowdown in India's overall industrial growth and macroeconomic outlook could impact the demand from industrial consumers; 4) A sharp depreciation in the INR could adversely impact GGAS's cost of gas since the domestic gas and LNG procured by them is US\$-denominated.

Our Rs264 target price for GSPL is based on: 1) Mar-19E DCF fair value of Rs152 for GSPL's standalone transmission business, and 2) Rs112/sh value contribution from its part-ownership (54.2%) of GGAS, based on a 20% hold co. discount to our target price of Rs1060. We use DCF given the utility nature of the business with steady cash flows and to capture the value of the business over the longer term. Our valuation is based on 8% CAGR of volumes over FY17-20E (FY20E transported volumes of 31 mmscmd), tariff hike of ~15% in FY19E, explicit forecasts to FY20E, and a terminal growth rate of 3.5% thereafter. We use a WACC of 9.6%.

The key downside risks to our investment thesis on GSPL are: 1) Further decline in domestic gas availability and/or delay in ramp up of new gas supplies; 2) Lower LNG offtake by RIL after the commencement of its petcoke gasifiers; 3) Worsening of economics of LNG; 4) Project risk, as GSPL's pipeline network expansion is subject to time/cost over-runs that could impact earnings; and 5) Lower-than-expected revision/further delay in revision of tariffs. If any of these risk factors has a greater downside impact than we anticipate, the share price will likely have difficulty attaining our target price.

Our target price of Rs548 for BPCL is based on an SOTP valuation methodology. We maintain our EBITDA-based valuation methodology for all the three OMCs' core operations, as earnings visibility has materially improved for these companies following diesel deregulation and also as earnings gains, which were earlier largely limited to lower interest costs on the back of working capital improvement, have started benefiting operating profits too as diesel has started making money for the OMCs. We continue to use a 6.5x target EV/EBITDA on FY19E for the refining business, in-line with the regional-average 6.5x we ascribe to peer refining business earnings. We, however, accord a higher 8.0x target EV/EBITDA multiple for the marketing business, based on the improved visibility of earnings in the segment driven by auto fuel deregulation, continued lack of intervention from the gov't, robust fuel consumption trends in India, transition to daily fuel pricing, and the gov't's resolve to eliminate subsidies even on politically sensitive fuels (kerosene and LPG). After adjusting for net debt, we arrive at a core equity value of Rs443/sh. To this, we add the value of investments, which include BPCL's stakes in its E&P business, as well as stakes in other companies, adding up to Rs105/sh, yielding a target price of Rs548 (we apply a 15% holding company discount to our TPs for listed subsidiaries and associates). Our E&P value of Rs21/sh factors in material delays in Mozambique and other risks related to the development of this asset, which is valued at \$5bn for Area 1.

The key downside risks to our investment thesis on BPCL include: 1) A sharp rise in crude prices which increases the overall losses for the OMCs; 2) OMCs bearing non-zero net under-recoveries; 3) Sharp rupee depreciation; 4) Further delay in monetisation of E&P reserves; 5) Higher than expected impact of GST on overall profitability. If any of these risk factors has a greater downside impact than we anticipate, the share price will likely have difficulty attaining our target price.

Our target price for PLNG of Rs310 is based on our DCF-based fair value estimate for Mar-19E. We use a DCF-based valuation, as we think it captures the value of the projects over their lifetime, especially given that PLNG's near-term cash flow is affected by its expansion. In our DCF analysis, we use explicit forecasts for five years (till FY22E), two more annual 5% hikes in Dahej regas tariff, long-term volumes of 19.0 MMTPA (17.0 MMT at Dahej, 2.0 MMT at Kochi), a terminal growth rate of 4.0%, and a WACC of 9.5%. Our valuation includes contribution from the successive 5 MMTPA & 2.5 MMTPA Dahej brownfield expansions but does not include any contribution from the east coast greenfield terminal which is still on hold.

Key downside risks that could mean the PLNG stock does not reach our target price include: 1) No more Dahej tariff hikes; 2) Delay in Kochi pipeline commissioning; 3) An increase in domestic gas production in India which leads to substitution of LNG; 4) Meaningful progress on imports via transnational pipelines (IPI, TAPI, etc.); 5) Take-or-pay issues arising from the Gorgon contract, which commenced in Jan'17, and/or from off-takers like GAIL, etc. refusing to honour their use-or-pay commitments if demand for LNG in India disappoints.

Our target price of Rs548 for HPCL is based on an EV/EBITDA-based valuation methodology. We maintain our EBITDA-based valuation methodology for all the three OMCs' core operations, as earnings visibility has materially improved for these companies following diesel deregulation and also as earnings gains, which were earlier largely limited to lower interest costs on the back of working capital improvement, have started benefiting operating profits too as diesel has started making money for the OMCs. We continue to use a 6.5x target EV/EBITDA on FY19E for the refining business, in-line with the regional-average 6.5x we ascribe to peer refining business earnings. We, however, accord a higher 8.0x target EV/EBITDA multiple for the marketing business, based on the improved visibility of earnings in the segment driven by auto fuel deregulation, continued lack of intervention from the gov't, robust fuel consumption trends in India, transition to daily fuel pricing, and the gov't's resolve to eliminate subsidies even on politically sensitive fuels (kerosene and LPG). After subtracting net debt, we arrive at a core equity value of Rs457/sh. To this, we add the value of investments, which includes HPCL's stakes in MRPL, Oil India, and the Bhatinda refinery, adding up to Rs90/sh, yielding a target price of Rs548.

The key downside risks to our investment thesis on HPCL include: 1) A sharp rise in crude prices which increases the overall losses for the OMCs; 2) OMCs bearing non-zero net under-recoveries; 3) Sharp rupee depreciation; 4) Plans to go ahead with the highly capex intensive Rajasthan and/or west coast greenfield refineries; 5) Higher than expected impact of GST on overall profitability. If any of these risk factors has a greater downside impact than we anticipate, the share price will likely have difficulty attaining our target price.

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