

Company Focus

2 September 2008 | 16 pages

GAIL (GAIL.BO)

Buy: Strong Defensive Appeal; New Target Price of Rs460

- Reiterate Buy; TP of Rs460 We like GAIL for its defensive nature; core gas utility business should drive long-term growth, while petchem and LPG provide strong support to near-term earnings. GAIL is a beneficiary of higher gas volumes (albeit less leveraged than GSPL) from RIL and others; capex of Rs250bn is planned on augmenting and building pipelines over 4-5 years.
- Valuation builds in new pipelines and any "regulatory downside" Based on average of: (i) Rs436 comprising DCF (Rs324) + investments (Rs113) and (ii) Rs484 comprising value of current business (Rs336) + value from new pipelines (Rs35) + investments.
- Regulatory downside on HBJ/DVPL? With uncertainty still surrounding the timing and impact of regulations governing gas pipeline tariffs, we estimate the downside on HBJ/DVPL EBIT at ~Rs5bn in the worst case, which we factor in into our DCF analysis.
- Earnings raised 8-36%; petchem driving near-term upside Buoyed by high absolute (crude-linked) prices, petchem drives ~20% of the 36% jump in our FY09E earnings and contributes ~40% to FY09E EBITDA. LPG segment (~20% contribution) benefits high crude as well as the new subsidy formula, which effectively caps upstream share. Rising gas volumes (82 to 155 mmscmd over FY08-12E) partly mitigate impact of lower petchem and LPG earnings, which we assume will trend down to mid-cycle levels over the medium-term.

We transfer coverage of GAIL to Saurabh Handa from Rahul Singh.

Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2007A	20,467	24.20	-11.4	16.5	3.0	19.2	2.5
2008A	26,015	30.76	27.1	13.0	2.6	21.3	2.5
2009E	37,059	43.82	42.5	9.1	2.2	26.1	3.5
2010E	32,893	38.90	-11.2	10.3	1.9	20.0	3.2
2011E	32,985	39.01	0.3	10.3	1.7	17.8	3.2

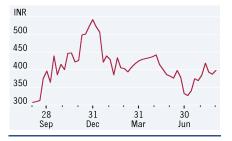
Source: Powered by dataCentral

See Appendix A-1 for Analyst Certification and important disclosures.

Target price change ☑ Estimate change ☑

Buy/Low Risk	1L
Price (02 Sep 08)	Rs400.50
Target price	Rs460.00
from Rs482.00	
Expected share price return	14.9%
Expected dividend yield	3.5%
Expected total return	18.4%
Market Cap	Rs338,683M
	US\$7,667M

Price Performance (RIC: GAIL.BO, BB: GAIL IN)



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Valuation Ratios P/E adjusted (x) 16.5 13.0 9.1 10.3 10.3 P/E adjusted (x) 10.6 8.3 5.3 5.9 6.5 P/BV (x) 2.5 2.5 3.5 3.2 3.2 Per Share Data (Rs) PPS adjusted 24.20 30.76 43.82 38.90 39.01 PS Share Data (Rs) 206.81 231.51 DPS 10.00 14.00 13.00 13.00 Profit ALoss (RsM) 244.25 289,816 376,213 Operating expenses -136,078 -146,236 -194,490 -246,503 -330,753 Profit ALoss (RsM) -241,22 33.365 49,766 43.314 45.460 Operating expenses -1.05,75 5.654 6.934 7,255 6.385 Pre-xa profit 28,520 33.32 5,727 49,464 49,231 Tax =8,100 -12,353 <th>Fiscal year end 31-Mar</th> <th>2007</th> <th>2008</th> <th>2009E</th> <th>2010E</th> <th>2011E</th>	Fiscal year end 31-Mar	2007	2008	2009E	2010E	2011E
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Total debt to capital 10.5 8.9 7.0 20.0 30.8						
	Total debt to capital	10.5	8.9	7.0	20.0	30.8

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Strong Defensive Appeal; New TP of Rs460

We reiterate our positive view on GAIL which we believe is set to benefit from the evolution of the hitherto undeveloped gas sector in India following the imminent commencement of production from RIL's KG block. GAIL has embarked on a significant expansion plan for its pipeline network, which will be linked to RIL's network following the MoU between the two companies, and plans to spend cRs250bn on the same. Increasing visibility of other discoveries on the East Coast would imply meaningful utilization of GAIL's planned pipeline expansions, albeit in the long term. In addition, GAIL is a direct beneficiary of high absolute petchem prices in the near-term driven by higher crude. Further, the government's new subsidy-sharing formula, which proposes a reduction in upstream share of under-recoveries from 33% to 18%, should also help improve GAIL's LPG realizations, especially as declines in crude prices reduces the uncertainty on this subsidy cap. We like GAIL for its defensive appeal and reasonable valuations, and reiterate Buy / Low Risk (1L) with a target of Rs460.

New target price of Rs460

We are changing our target price on GAIL to Rs460 from Rs482 earlier to factor in:

- Increasing our earnings estimates over FY09-10E 8-36% (see section titled "Revising earnings upwards")
- Adoption of a new methodology for valuing GAIL (see section titled "Valuing GAIL")

Revising estimates upwards

Figure 1 below captures the key changes in our earnings estimates over our forecast horizon.

Figure 1. GAIL – Earnings Revisions

Year to	Net Prof	it (Rs Mils.)	Diluted EPS (Rs)			Dividend I	Per Share (Rs)
31-Mar	Old	New	Old	New	% Chg	Old	New
2009E	27,271	37,059	32.25	43.82	35.9%	12.0	14.0
2010E	30,397	32,893	35.95	38.90	8.2%	13.0	13.0
2011E	-	32,985	-	39.01	-	-	13.0

Source: Citi Investment Research estimates

The 8-36% increase in FY09-10E earnings are driven by:

Higher petchem margins – international polymer prices have gone up sharply following the recent surge in crude (FY09 YTD PE prices are up ~20% vs. FY08). GAIL, because of its gas-based cracker, directly benefits from higher absolute crude prices which increase petchem prices and consequently margins, given the relative stickiness of GAIL's input gas prices. Petchem contributes nearly 20% of the 36% change in our FY09E earnings. However, beyond FY09E, we assume petchem prices to decline to mid-cycle levels for the purpose of our DCF valuations (15% off peak levels), as illustrated in Figure 2 below.

Petchem realizations to peak in FY09E and decline thereafter. Petchem contributes 20% of the 36% increase in our FY09E estimates.

Figure 2. Petchem – Key Assumptions

Year to 31-Mar	FY08	FY09E	FY10E	FY11E	FY12E
PE production ('000 MT)	386	430	440	450	465
International price (US\$/MT)	1,430	1,650	1,550	1,450	1,400
Average realization (Rs/kg)	74	89	82	76	71
Source, Company Paparts and Cit	i Investment Pee	aarah aatimataa			

Source: Company Reports and Citi Investment Research estimates

Better LPG realizations, lower subsidy burden – LPG prices have also risen sharply with higher crude. In addition, the new subsidy-sharing mechanism which proposes 18% of upstream contribution (33% earlier) results in lower subsidy burden for GAIL and is a significant positive. While lower crude hurts petchem and LPG realizations, lower resultant subsidy mitigates the impact, albeit to a very limited extent. We forecast net (post-subsidy) realizations of US\$439/MT in FY09 (in line with reported 1Q) declining to US\$405/MT by FY12E, in line with crude decline (US\$100/bbl LT forecast). Our key assumptions are as shown in Figure 3 below.

Figure 3. LPG – Key Assumptions

Year to 31-Mar	FY08	FY09E	FY10E	FY11E	FY12E
LPG sales ('000 MT)	1,039	1,052	1,110	1,169	1,169
LPG - gross realization (US\$/MT)	717	830	750	650	630
Subsidy (US\$/MT)	(316)	(391)	(342)	(241)	(225)
LPG - net realisation (US\$/MT)	401	439	408	409	405
LPG - net realisation (Rs/MT)	16,049	18,639	16,941	16,768	16,217
Subsidy (Rs m)	13,140	17,500	15,750	11,550	10,500
Source: Company Reports and Citi Inv	estment Researc	h estimates			

Changes to gas volume assumptions – we recently met GAIL management and got an update on their pipeline expansion plans. Based on our discussion as well as expected commissioning of RIL's volumes in 4QCY08 and Petronet LNG's expansion by 1QCY09, we have arrived at our volume assumptions, as shown in Figure 4 below. As can be seen, total transmission volumes will increase from 82 mmscmd in FY08 to 155 mmscmd by FY12E, in our view.

Figure 4. Gas Transmission and Sales - Volume Assumptions (mmscmd)

4

Year to 31-Mar	FY07	FY08	FY09E	FY10E	FY11E	FY12E	Comments
HBJ, GREP, DVPL	45.3	46.3	54.4	57.3	67.3	72.3	Driven by increase in PMT vols in FY09 (GAIL made the sole nominee); driven by KG vols in FY10 and beyond
PLNG - LT (HBJ, DVPL, GREP)	17.9	18.0	20.4	24.8	33.5	34.5	PLNG expansion from 6.5 to 10 MMTPA by 1QCY09; Pragati power plant vols from mid-FY10
Other LNG	-	2.5	3.0	5.7	6.7	7.6	Primarily Dabhol vols (through Dahej-Panvel-Dabhol pipeline)
Others	14.2	15.3	20.3	30.3	35.3	40.3	Flow of KG gas through smaller pipelines in Andhra Pradesh, Cauvery basin, etc.
Total gas transmission	77.3	82.1	98.0	118.0	142.7	154.7	
- Pure transmission	9.5	13.0	12.7	15.2	18.1	19.0	Portion of PLNG and other vols on which no marketing margin earned
- Internal consumption	5.6	5.3	5.9	6.4	6.8	7.1	For raw material (LPG, petchem) and power & fuel
Total gas sales	62.2	63.8	79.4	96.4	117.9	128.6	
Source: Company Reports and	Citi Investr	nent Resear	ch estimate	S			

LPG realizations expected to peak in FY09 as well

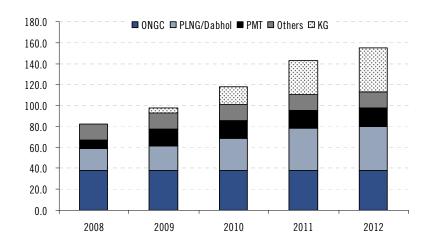


Figure 5. GAIL – Gas Supply Breakup (mmscmd)

Source: Company Reports and Citi Investment Research estimates

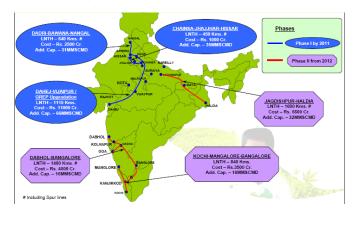
Capex revisions – GAIL plans to spend cRs250bn on building new pipelines and augmenting existing ones over the next 4-5 years, which will increase total gas transmission capacity by nearly 200 mmscmd. Figure 6 and Figure 7 below detail the capex plans on the various pipeline sections. Reliance's MoU with GAIL to interconnect the pipeline networks of the two companies provides good visibility to GAIL's plans. In addition, further discoveries on the East Coast by RIL, ONGC, and others should imply meaningful utilization of these pipelines in the long-term.

Total pipeline capex of cRs250bn over the next 4-5 years

Figure 6. GAIL's Pipeline and Capex Plans

	Length (kms)	Incr. in cap. (mmscmd)	Expected timeline	Capex Rs bn
New pipelines:				
Dadri – Bawana – Nangal	640	31	by 2011	22.0
Chainsa — Gurgaon — Jhajjhar — Hissar	450	35	by 2011	11.7
Jagdishpur — Haldia	1690	32	from 2012	44.9
Dabhol – Bangalore	1480	16	from 2012	40.1
Kochi – Kanjirkkod – Bangalore / Mangalore	840	16	from 2012	22.6
Existing capacity augmentation:				
Dahej — Vijaipur	610	66	by 2011	49.1
Vijaipur – Dadri (GREP)	505		by 2011	54.0
DPPL/DUPL			by 2011	5.5
Sub-total (pipelines)				249.9
Others (E&P, city gas, etc.)				42.0
TOTAL				291.9
Source: Company Reports an	d Citi Inve	stment Researc	h estimates	

Figure 7. GAIL's Upcoming Pipelines



Source: Company Reports

We explicitly build in regulatory downside (as detailed in a later section) but maintain stable tariffs

- Tariffs assumed to be stable, but some regulatory downside in HBJ/DVPL? GAIL's tariffs (on existing pipelines especially HBJ) will undoubtedly be examined by the regulator once final regulations are in place. However, the difficulty in being able to accurately forecast tariffs is driven by uncertainty on when exactly incremental volumes will commence, and is compounded by GAIL's expansion plans – especially the augmentation of existing pipelines like DVPL and GREP – which increase capital employed (draft regulations had recommended a fixed post-tax ROCE on capital employed), hence requiring higher tariffs for capital recovery. This uncertainty makes it beyond our scope to be able to determine future tariffs, and we consequently assume the key HBJ tariff to remain relatively stable over our forecast horizon. However, what we do is to explicitly factor in worst-case "regulatory downside" to HBJ EBIT into our DCF analysis (explained in more detail in the section titled "*Regulatory uncertainty* – *building in potential downside*").
- Price hike assumed for internal consumption GAIL uses rich gas (C2/C3 fractions) for internal consumption as raw material in its LPG and petchem plants and lean gas for power & fuel. The pricing for the rich gas does not differ from lean gas (pricing based on calorific value of the gas), though ONGC has been pushing for charging differential pricing. Though there has been no progress on this front, this remains a risk for GAIL's profitability, which we have tried to address to some extent by building in a US\$1/mmbtu increase in price of gas used for internal consumption from FY10E.

Segmental breakdown – petchem, LPG surge driving nearterm earnings

Figure 8 below illustrates GAIL's segmental EBITDA breakdown over FY08-11E. As can be seen, petchem contribution shows a steep rise in FY09E driven by high crude-linked international polymer prices and relatively stable raw material (gas) prices. However, we expect petchem profitability to start declining beyond FY09E driven by: (i) our cautious view on the petchem cycle beyond FY09E and (ii) crude price decline. LPG EBITDA, which is also expected to peak in FY09E, will likely follow a similar trajectory, in our view. The core gas transmission and sales business, which benefits from higher volumes over the next few years, makes up for the decline from the other two segments, but only partly so.

Figure 8. GAIL's Segmental EBITDA Breakdown (year to 31-Mar)

	FY08	FY09E	FY10E	FY11E	FY12E
EBITDA (Rs m)	40,270	56,185	51,318	54,083	52,401
- Gas sales and transmission	43%	38%	49%	58%	63%
- LPG & liquid hydrocarbons	21%	19%	11%	8%	5%
- Petchem	30%	39%	35%	29%	27%
- LPG transmission	6%	5%	5%	5%	5%
Source: Citi Investment Research es	stimates				

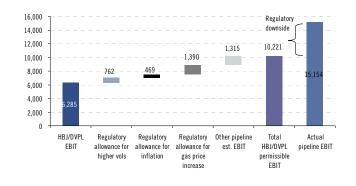
Regulatory uncertainty - building in potential downside

With transmission regulations suggesting a cap of 12% post-tax ROCE on existing pipelines (tariff regulations for existing pipelines are yet to be finalized), we have tried to estimate what could be the possible worst-case impact on GAIL's existing EBITDA from introduction of regulation. While not an easy task in itself given the number of moving parts and information gaps, we have used data from the Tariff Commission report (a 2005 report following which transmission tariffs for GAIL were last changed in line with the cost of service methodology) for our analysis.

Based on the volume and return assumptions underlying the Tariff Commission recommendations, we arrive at, what in our view is, a "permissible" EBIT for the HBJ/DVPL pipelines. This includes regulatory allowance for higher volumes (no change in tariffs for upto +/- 5% change in volumes), inflation (tariff linked to changes in WPI as per a defined formula), and gas prices (tariff linked to changes in gas prices as per a defined formula). Our key assumption on which the analysis is hinged is, of course, that the new regulations would yield a permissible return (and consequently tariff) per unit volume of gas transmitted that is not significantly different from the return/tariff derived from the cost of service methodology employed in the Tariff Commission recommendations.

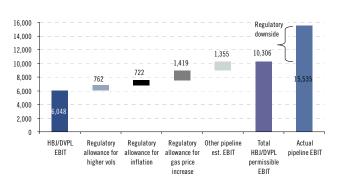
As can be seen in Figure 9 and Figure 10 below, the deviation of actual reported EBIT for FY07-08 vs. the forecasted ("permissible") EBIT for HBJ/DVPL works out to ~Rs5bn each year. This, in our view, is a reasonable estimate of the worst-case downside from regulatory intervention, which we explicitly build into our DCF valuation for GAIL, as explained in more detailed in the next section.

Figure 9. GAIL – Regulatory Downside to FY07 HBJ/DVPL EBIT (Rs m)



Source: Citi Investment Research estimates

Figure 10. GAIL - Regulatory Downside to FY08 HBJ/DVPL EBIT (Rs m)





Estimating worst-case downside of ~Rs5bn to gas transmission EBIT which we explicitly build into the DCF

Valuing GAIL

This brings us to the key question of our report - How does one value GAIL? While GAIL's expansion and capex plans are pretty much firmed up, it remains a challenge to accurately forecast gas volumes beyond the next 3-4 years (we have made explicit cash flow forecasts till FY12). This is primarily due to: (1) low visibility on volumes beyond the next 3-4 years, especially through the new pipelines viz. Haldia-Jagdishpur, Dabhol-Bangalore, and Kochi-Bangalore for which we assume capex, and (2) uncertainty on the regulatory environment and impact on existing pipeline tariffs. We have, however, tried to address these issues through a mix of two valuation methods and using an average of the two to arrive at our Rs460 price target.

Figure 11. Valuation Framework for GAIL (Rs/share)

Method I: DCF + Value of Investments		
DCF value	324	See Figure 13
Value of investments	113	See Figure 14
Total value per share – (1)	436	
Method II: Existing + New pipelines + Investments		
Equity value of current business	336	EV/E of 6.0x current business EBITDA of Rs41.9bn
Value of investments	113	See Figure 14
Value accretion from new pipelines	35	P/B of 1.5x of new investments net of equity contribution
Total value per share – (2)	484	
Target price = avg. of (1) and (2)	460	
Source: Citi Investment Research		

Valuation method I: DCF + Value of Investments

DCF at Rs324/share

We adopt a two-stage model for our DCF method. Our DCF valuation is as of Mar-09E.

1. Stage 1 (till FY12E) – Based on four years of explicit cash flows. Key assumptions for the same have been discussed earlier and are highlighted below.

Figure 12. GAIL – Key Assumptions

Year to 31-Mar	FY09E	FY10E	FY11E	FY12E
Total gas transmission vols (mmscmd)	98.0	118.0	142.7	154.7
Total gas sales (mmscmd)	79.4	96.4	117.9	128.6
PE production ('000 MT)	430	440	450	465
LPG production ('000 MT)	1,052	1,110	1,169	1,169
Capex (Rs bn)	24.5	63.9	86.9	52.2
INR/US\$	42.50	41.50	41.00	40.00

- 2. **Stage 2 (FY13-16E)** We assume a steady 12% annual growth in EBITDA. We arrive at this working backwards from our estimate for the terminal year (FY16E) EBITDA which, in turn, is based on:
 - mid-cycle earnings for the petchem and LPG businesses (45% lower than peak FY09E levels),
 - gas transmission EBITDA, calculated as existing (FY08) Transmission EBITDA + incremental EBITDA earned from the new pipelines (calculated as 12% post-tax ROCE on Rs250bn capex),
 - downside to HBJ/DVPL EBIT of Rs5bn per year, as explained in the preceding section, which we explicitly build into our DCF valuation (FY11E onwards) to be conservative on the risk that regulations could pose to GAIL's transmission EBITDA.

Figure 13. GAIL - DCF Valuation (Rs m)

Year to 31-Mar		S	tage I			St	age II	
	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E
EBITDA	56,494	51,658	54,458	52,813	59,415	66,841	75,197	84,596
Less: HBJ regulatory downside			(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
Less: Depreciation	(6,728)	(8,345)	(8,998)	(11,054)	(12,160)	(13,376)	(14,713)	(16,185)
EBIT	49,766	43,314	40,460	36,759	42,255	48,466	55,483	63,412
Less: Current tax	(18,390)	(16,323)	(14,769)	(12,627)	(14,515)	(16,648)	(19,059)	(21,782)
(Inc)/Dec. in working capital	27,546	(2,032)	(5,347)	(2,417)	(2,300)	(2,500)	(2,700)	(3,000)
Capital expenditure	(24,500)	(63,900)	(86,900)	(52,200)	(64,400)	(10,000)	(12,000)	(14,000)
Free cash flow to firm	41,150	(30,597)	(57,559)	(19,431)	(26,800)	32,693	36,438	40,814
WACC	11.1%							
Terminal growth rate	4.0%							
Terminal value	601,093							
Imputed terminal EV/EBITDA (x)	7.1							
NPV of terminal value	288,233							
NPV of cash flows	(67,248)							
Enterprise value	220,986							
Less: Net debt/(net cash)	(52,705)							
Equity value	273,691							
Value per share (Rs)	324							
Source: Citi Investment Research estir	nates							

Other key assumptions for our DCF are: WACC of 11.1%, terminal D/E of 1:1, risk-free rate of 9%, risk premium of 6%, beta of 0.8, cost of equity of 13.8%, terminal growth rate of 4%.

Value of investments at Rs113/share – This includes the value of GAIL's investments in ONGC, other gas companies (IGL, MGL, Petronet LNG), 8.5% interest (down from 10% earlier) in Myanmar gas find, etc., as shown in Figure 14 below.

Figure 14. Value of GAIL's Investments (Rs/share)

Stake in ONGC (2.4%)	61	At CMP
Stake in IGL (22.5%)	4	At CMP
Stake in Petronet LNG (12.5%)	7	At CMP
Stake in Mahanagar Gas (50%)	10	Assuming MGL = IGL mkt cap
Stake in China Gas Holdings Ltd.	2	At $CMP = HK$ \$1.8
Other investments (Dabhol, GSEG, Fayum Egypt, Shell CNG Egypt, etc.)	6	At book value
Myanmar gas (8.5% stake in A-1, A-3)	23	OGIP=10tcf, 70% recovery, EV/boe of US\$4.5
Total	113	
Source: Citi Investment Research estimates		

Valuation method II: Existing pipelines + New pipelines + Investments

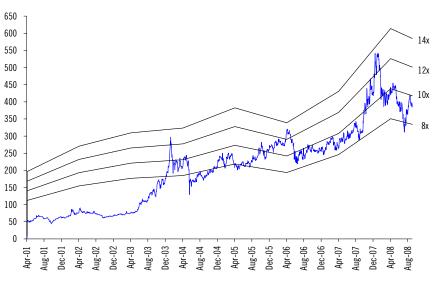
This is similar to our prior method for valuing GAIL and comprises:

- Value of existing business at Rs336/share We value GAIL's existing business at EV/EBITDA of 6.0x yielding Rs336/share value. The existing business does not include contribution from any of the new pipeline assets. The EBITDA of the existing business of Rs41.9bn is arrived at using: (i) FY08 EBITDA for the petchem and LPG segments (which consequently does not capture the upside from the recent surge in realizations for both segments and is hence reasonably conservative) and (ii) FY09E EBITDA for the gas transmission and sales segment (which captures the upside from increased volumes in FY09, primarily from PMT and partially from KG). The Rs336/share value imputes P/E of 10.9x FY08E and 7.7x FY09E and P/B of 2.2x FY08E and 1.8x FY09E.
- Value accretion from new pipelines at Rs35/share We value this at 1.5x GAIL's equity investment into these pipelines. Though the normative ROE is likely to be ~14%, we believe GAIL can earn an additional 100-200bps given the possibility of opex savings, etc. Given lower cost of equity for GAIL, the P/B of 1.5x can be justified. The value accretion from equity investments in new pipelines (50% of Rs250bn) is therefore calculated as 1.5x equity contribution less the equity contribution itself i.e. Rs125bn. The resultant value is discounted back by seven years, assuming reasonable pipeline utilization by FY16.
- Value of investments at Rs113/share As shown in Figure 14 above.

Target price of Rs460 imputes P/E of 11x Sep-09E

On our target price of Rs460, GAIL would trade at 11x 1-year forward i.e. mid-FY10E earnings. Mid-FY10E earnings are more appropriate to look at from a trading multiple perspective as FY10E captures the downturn in the petchem and LPG business segments. As seen in Figure 15 below, the 11x multiple is in the middle of GAIL's historical trading band of 8-13x 1-year forward earnings.

Figure 15. GAIL – P/E Band Chart



Source: Powered by dataCentral

Our previous target price of Rs482 was based on a similar methodology as the current "Method II" using our prior estimates.

GAIL

Company description

GAIL is the dominant gas transmission and distribution company in India. Its arterial HBJ pipeline is the country's largest. GAIL's other business divisions are LPG pipelines, LPG fractionation and petrochemicals.

Investment strategy

We have a Buy / Low Risk (1L) rating as we believe GAIL provides a unique investment opportunity as a dominant gas pipeline owner and transporter in India. Increasing gas supplies and the reduced potential for falling pipeline charges remain the key positives. GAIL is also building five new pipelines and upgrading three existing pipelines in order to gear up for the imminent increase in gas supplies from the East Coast. Assured ROE on pipeline investments reduces risks and provides visibility for value creation from the additional

investments of Rs250bn over next 4-5 years. GAIL has lower exposure to petroleum subsidies than its peers, and we expect the company's exposure to continue to be manageable. This should offset the adverse impact of a gas price hike on GAIL's internal consumption. The company's exposure to petrochemicals (ethylene chain) benefits from high prices of liquid feedstock as its feedstock prices are relatively stable and much lower than naphtha.

Valuation

Our target price for GAIL of Rs460 is based on an average of: (a) DCF method (Rs324) + value of investments (Rs113), which yields a value of Rs436/share and (b) existing business value (Rs336) + value accretion from new pipelines (Rs35) + the value of investments (Rs113), which yields a Rs484/share. For the first method, we employ a two-stage DCF which explicitly factors in regulatory downside to HBJ/DVPL profitability. We use a WACC of 11.1%, terminal D/E of 1:1, risk-free rate of 9%, risk premium of 6%, beta of 0.8, and terminal growth rate of 4%. For the second method, we value the existing business at 6x EV/EBITDA (imputes FY08 P/E of 10.9x and P/B of 2.2x) and the value accretion at 1.5x P/B of equity contribution. The value accretion from equity investments in new pipelines (50% of Rs250bn) is calculated as 1.5x equity contribution less the equity contribution itself i.e. Rs125bn. The resultant value is discounted back by seven years, assuming reasonable pipeline utilization by FY16.

Risks

We rate GAIL as Low Risk based on our quantitative risk-rating system, which tracks historical share price volatility. The main risks that could impede the stock from reaching our target price are as follows: (1) a further cut in transportation tariffs; (2) GAIL's petrochemical business is cyclical in nature; (3) changes in government policy for the oil & gas sector will likely remain a risk to earnings and stock sentiment; and (4) any change in pricing of C2/C3 fractions of the rich gas, which acts as feedstock for GAIL's petrochemical/LPG units, could impact earnings.

Appendix A-1

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GAIL (GAIL.BO) **Ratings and Target Price History - Fundamental Research** Closing Target Analyst: Rahul Singh (covered since October 6 2005) INR Ratino Price Price Date Oct 05 Oct 05 1: 5 *1L *329.00 275.95 27 237.85 *318.00 Chart 3: 12 Jan 06 1L *323.00 282.70 500 4: 22 Nov 07 *482.00 426 20 current *Indicates change. 400 as of 30 August 300 200 2008 100 SON D J FM AM J J A SON D J FM AM J J A SON D J FM AM J J A 2006 2007 2008 Covered Rating/target price changes above reflect Eastern Standard Time Not covered

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