Initiating Coverage

GMR Infrastructure BUY

Now Boarding: A Horse with a Wing!

TP	Rs32
CMP	Rs18
Potential upside / downside	+78%

Key Stock Data

Bloomberg/Reuters	GMRI IN/GMRI.BO
Sector	Industrial
Shares o/s (mn)	6,036
Market cap. (Rsmn)	106,233
Market cap. (US$ mn)	1,636
3-m daily average value (Rsmn)	18
52-week high / low	Rs25 / 14
Sensex / Nifty	33,176 / 10,195

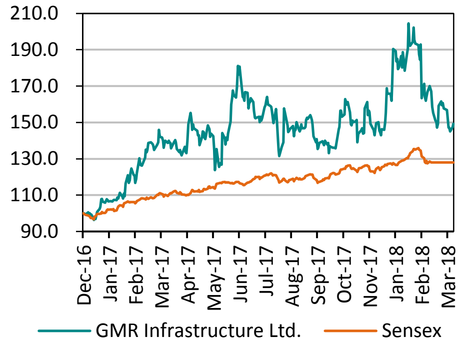
V/s Consensus

EPS (Rs)	FY19E	FY20E
IDBI Capital	(1.6)	0.5
Consensus	(1.1)	(1.8)
% difference	*45.5*	*NM*

Shareholding Pattern (%)

Promoters	61.7
FII	17.8
DII	7.9
Public	12.6

Relative to Sensex (%)



Price Performance (%)

	-1m	-3m	-12m
Absolute	(12.2)	3.2	10.7
Rel to Sensex	(10.9)	0.8	(6.3)

Summary

- **With a major presence across Indian airports, power plants and roads, GMRI stands as a testament to world-class conglomerate. Yet like many, the path to heights was blighted by systemic issues. Worse, saddled with debt, the financials were caught flat-footed. Not anymore.**
- **With stake sale to Tenaga, implying $1bn valuation for GMRI energy, the days are brighter ahead. Further, with TDSAT ruling due, the re-rating of airport assets—and subsequent value unlocking is on cards. Divestment of roads is a matter of time. Monetization of land bank is a sweetener.**
- **With this note, we initiate our coverage on GMRI with a BUY. In our pecking order of industrial stocks, GMRI stands as our top pick.**

Key Investment Highlights

- **The events are lined up:** For GMRI, the sum of the parts has always been greater than whole. Well, if not always, at-least a major part since its listing. Currently, the cash-cows and crown-jewels are smothered by loss making entities. That may not be the case in future for sure. Three events are lined up for the biggest re-rating: First, listing of airports arm; second, divestitures of roads, if required at a discount; and third, monetization of land banks—both DIAL/GHIAL and Special Investment region; they all signal the right capital allocation. Further, the incremental cash will chase hybrid /price monitoring model of airports and projects with scope of heavy engineering. Make no mistake: the past was bleak; the future is not.
- **And the re-rating is around the corner:**The restructuring opens up multiple possibilities. A carve out of GMR Energy and other energy vertical is the first step. With the stake sale to Tenaga, the Malaysian Utility, the GMR energy is an associate company. Notwithstanding the effective holding of GMR Energy, treatment of Airports, Highways and Other Energy is where the next re-rating drivers are, we find. And that is where the focus of the report is.
- **Outlook and Valuation:** We value the company using sum-of-the-parts. **We rate this company BUY with a target price of Rs32, implying 78% upside.**

Financial snapshot

(Rs mn)

Year	FY16	FY17	FY18E	FY19E	FY20E
Revenue	58,487	70,057	67,172	65,723	78,147
EBITDA	27,577	32,200	23,769	23,403	35,299
EBITDA (%)	47.2	46.0	35.4	35.6	45.2
Adj. PAT	(4,004)	(2,401)	(10,338)	(9,557)	3,119
EPS (Rs)	(0.7)	(0.4)	(1.7)	(1.6)	0.5
EPS Growth (%)	NM	NM	NM	NM	NM
PE (x)	NM	NM	NM	NM	35.7
Dividend Yield (%)	-	-	-	-	-
EV/EBITDA (x)	15.4	9.6	10.7	9.1	6.7
RoE (%)	NM	NM	NM	NM	8.2
RoCE (%)	3.9	3.4	2.9	2.9	5.6

Source: Company; IDBI Capital Research

Investment Rationale

At the CMP, the land bank could pare the proverbial debt and airports could be picked up for free.

TDSAT ruling is due. With that, airport sector could reset to an unchartered territory. We have factored TDSAT as bull-case and not the base-case.

- **Distressed valuation should entice the investors:** The capital allocation will tilt to Airports. Further, some portion of Power Segment, which has been a laggard, has turned an associate company. Thereby, the stress on financials is a tail wind. Remember, the 30% stake sale to Tenaga, the Malaysian conglomerate, has unlocked the potential of the subsidiary at $1bn. Now here is the catch: For the current enterprise value, the debt could be offset by land bank. And the airports, if theoretical slum-sale is anything to go by, could be picked up for free.
- **Restructuring is due:** If Operating profit/Capital employed is any metric to go by, poor performance of power and other cash guzzlers have dragged the overall performance. This, however, is history. Further, the reported financials are not the true reflector of the company's potential. The current holding structure, thereby, is about to reshape. Like any conglomerates, the portfolio is mixed up with high RoE stars and low RoE laggards. With energy carve out a split-up looms around. But then, there are more nuances to it.
- **Selling of Roads is on cards:** If GMR can sell off the Highwaysarm, the focus will be monetization of Special investment region and developing the Airports. Even within Other energy, GMRI has completed strategic debt restructuring for Rajamundry and Chattisgarh. Further, company has divested PTBSL.
- **The catalyst in airport cannot be written off:** The re-rating of GMRI is in Airports—and events around it; Further, with capital allocation focused on domestic and international airports, the fortune of the company is about to turn around. The regulatory flip-flops may lead to precipitous drop in FY18/FY19 Aero Revenues. We think, however, FY19 will be a function of regulatory rulings. Adding to these woes, the future potential of CPD Rentals has been equally a victim of legislative interpretations. We learn the AERA has started the consultation process for the third control period with DIAL. Note, the third control period will begin from April 2019 and will be valid for five years. There are no second thoughts that the previous two control periods — 2009-14 and 2014-19 — were blighted in controversies. Single-till does not induce competition and lower prices; also, dual-till may not be adverse for passenger. Conflicting views are hard to justify. Regulators may pick the safer side.
- **Dual-till, notwithstanding Hybrid, and possibilities around it:** We explore the possibility of dual-till. For instance, the policy of Government of India for developing Airport Infrastructure can be best achieved with Dual till regulation, a thought GMRI has once proposed. The policy of Government of India for developing commercial airport revenues will not be achieved under single-till regulation. Though NACP 2016 states Hybrid, the complexities in reading the legal interpretation will restrict the sector in the hands of chosen few.
- **Is additional capex low RoE?:** DIAL's saturation point is 119 mn passengers per annum, as per the master plan.

Thereby, additional throughput will entail terminal/Apron and some work on Landside addition. Yet that should not be a cause of concern: The additional capex, with Hybird-till model, opens up a 16%+RoE model—with a strong potential for Non Aero revenues.

With PPA in place, Kamalanga/Warora qualifies for full valuation. Though we have excluded Rajamundhari/Chattisgarh, we note the SDR is complete.

- **RSD and the color of equity:** Had GMRI/DIAL invested the proceeds in any other venture, the returns would be far higher than zero. Further, the consortiumwas underno obligation to monetize the land for achieving security deposits. Also, this was done in larger interests of ensuring requisite funds for timely completion of the project.
- **Energy is a cause of concern:**The power generation arm is blighted by systemic issues. Yet we think Kamalanga/Warora, with PPA in place, cannot be painted with the same brush.The stranded gas-based power plant is a laggard. For instance, GMRI runs two gas-based power plants: Kakinada and Vemagiri in Andhra Pradesh. The aggregate capacity runs in 623 MW. For the Kakinada Power Plant, GMRI received natural gas allocation from the MoPNG. The quantity was assured to fuel 75% of the power plant's capacity. The remaining fuel, the company was expected to source from with Krishna-Godavari Basin. Additionally, GVPGL, the subsidiary that operates the Vemagiri Power Plant, had entered into a fuel supply agreement. Here again, the arrangement should have addressed 90% of the power plant's capacity. However, with poor supply, the PLF is chugging below peak. Yet, with deconsolidation of this arm, we think the days are brighter ahead.
- **Special Investment region of 13800 acres is no small feat:** Company has (1) 10,500 acres in Kakinada special investment region; and (2) 3,300 acres in Krishnagiri , Tamil Nadu. In Kakinada, the Government has notified 5000 acres as SEZs. The approvals are in place. Further GMRI has signed anMoU to monetize 2700 acres. Interestingly, GAIL, HPCL and AP Government plans to set up a Rs400bn cracker unit in 2000 acres of land. In Krishnagiri, GMRI in JV with TIDCO will develop 275 acres. Further, 800 acres will be identified for their phase III & IV Industrial park. Company has leased out 20 acres to Toyota Boshuku for their manufacturing unit.

The upside is strong—with enough margin of safety.

- **Outlook and Valuation:** We value the company using sum-of-the-parts**. We rate this company BUY with a target price of Rs32, implying 78% upside.**

Ever since it's listing, the land-bank has been an alluring theme to play. What different now is the judicial interpretation of legislations.

If not land bank, there are road assets on block. Indonesian mines and Investment region of Kakinada and Krishnagiri too.

Table 1: Valuation

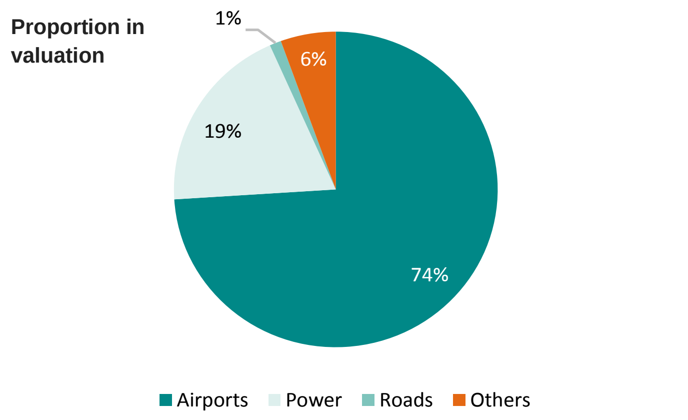
	Valuation of the arm	Stake	Contribution to GMR	Per Share	Rationale
Airports					
DIAL	99,795	64%	63,869	10.6	FCFE at 13% CoE
Delhi Land Bank	101,750	64%	65,120	10.8	Land Bank valuation at Rs550mn/acre
Hyderabad Airport	96,559	74%	71,454	11.8	FCFE at 13% CoE
Hyderabad Land Bank	28,000	74%	20,720	3.4	Land Bank valuation at Rs20mn/acre
Goa Airport	5,700	100%	5,700	0.9	Invested Value
CEBU	40,875	40%	16,350	2.7	EV/EBITDA
JVs			31,140	5.2	PE of 20x FY20E
Power					
Kamalanga	19,711	45%	8,870	1.5	FCFE at 14% CoE
Warora	14,166	52%	7,366	1.2	FCFE at 14% CoE
Kakinada	6,000	52%	3,120	0.5	Discount to invested value
Vemagiri	11,500	52%	5,980	1.0	Discount to invested value
Chattisgarh	-	48%	-	-	Discount to invested value
Rajamundhari	-	45%	-	-	Discount to invested value
Bajoli Holi	7,745	52%	4,027	0.7	Discount to invested value
Gujarat Solar Power	1,500	52%	780	0.1	Discount to invested value
PTGEMS		30%	8,856	1.5	EV/EBITDA of 7.5x
PTBSL	4290	100%	4,290	0.7	Transaction value
Roads				-	
Tuni - Anakapalli	306	100%	306	0.1	0.4x of Invested equity
Tambaram - Tindivanam	366	100%	366	0.1	0.4x of Invested equity
Pochanapalli	775	100%	775	0.1	0.4x of Invested equity
Ambala - Chandigarh	288	90%	260	0.0	0.4x of Invested equity
Chennai Outer Ring Road	559	100%	559	0.1	0.4x of Invested equity
Hyderabad - Vijaywada	1,935	90%	1,741	0.3	0.4x of Invested equity
Hungud-Hospet	149	36%	54	0.0	0.4x of Invested equity
Investment Region				-	
Kakinada	30,000	51%	15,300	2.5	Net proceeds from near term monetization
Krishnagiri	4,000	100%	4,000	0.7	Net proceeds from near term monetization
Corporate Debt/Liabilities			**(98,734)**	**(16.4)**	
Sum of the parts				40	
Conglomerate discount				**20%**	
Target Price				32	

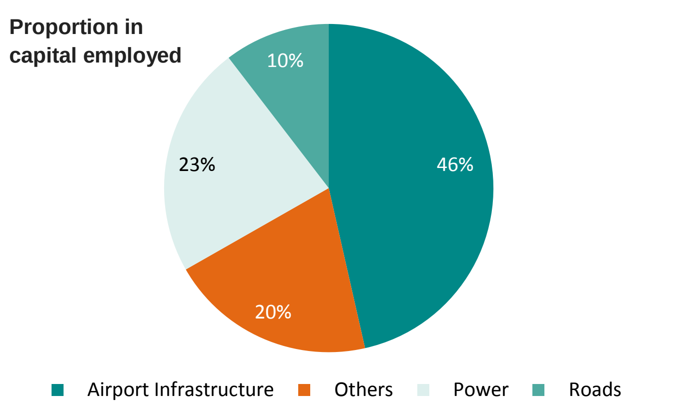
Source: Company; IDBI Capital Research

On Group Restructuring

Three-fourth of GMRI's valuation comes from 46% of assets: Airports. With increasing exposure to airports, the laggards will be out of place.

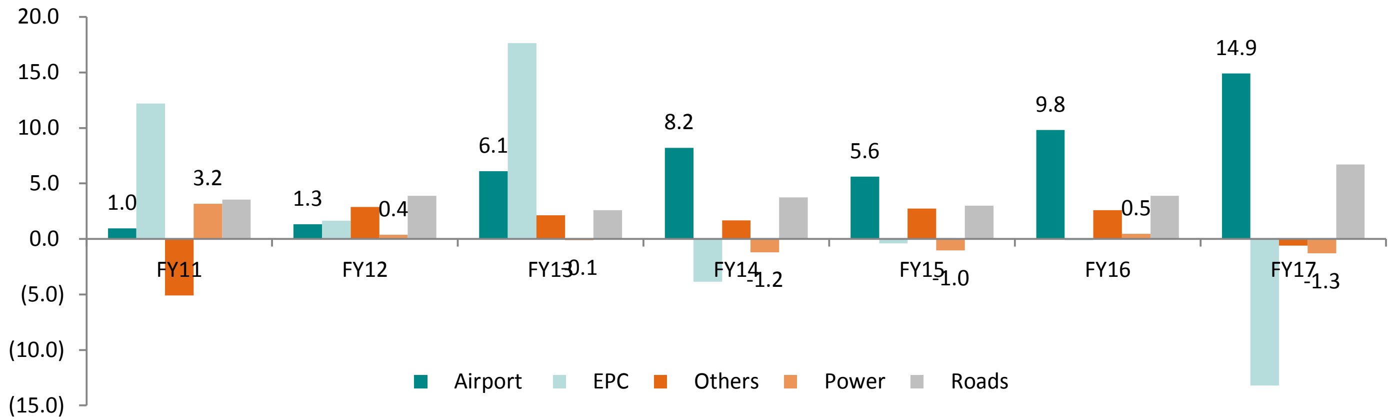
Chart 1: 74% of the valuation is from Airports. Note, this is out of 46% of the assets. With higher exposure to this high RoCE segment, the days are brighter ahead





Source: Company; IDBI Capital Research

Chart 2: If Operating profit/Capital employed is any metric to go by, poor performance of power and other cash guzzlers have dragged the overall performance. This, however, is history.

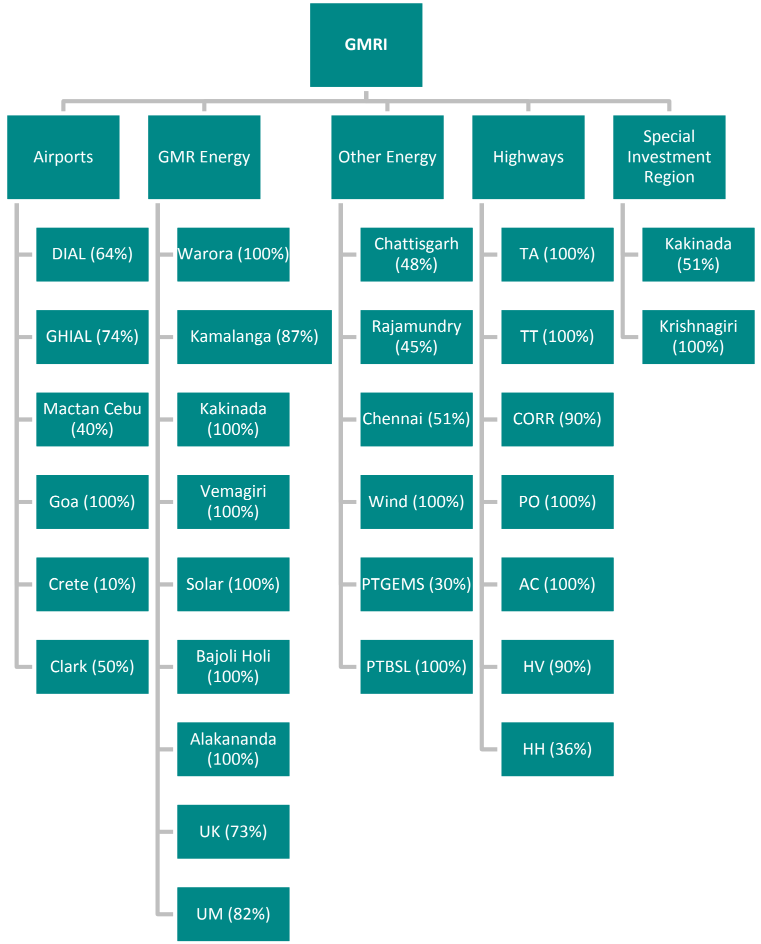


Source: Company; IDBI Capital Research

There is no denial that Energy and highways are in the reported structure. Plus, regulatory interpretations of legislations have subdued the airport arm.

The solution is simple: Restructuring.

Chart 3: The reported financials are not the true reflector of the company's potential. The current holding structure, thereby, is about to reshape. Like any conglomerates, the portfolio is mixed up with high RoE stars and low RoE laggards. With energy carve out a split-up looms around. But then, there are more nuances to it.

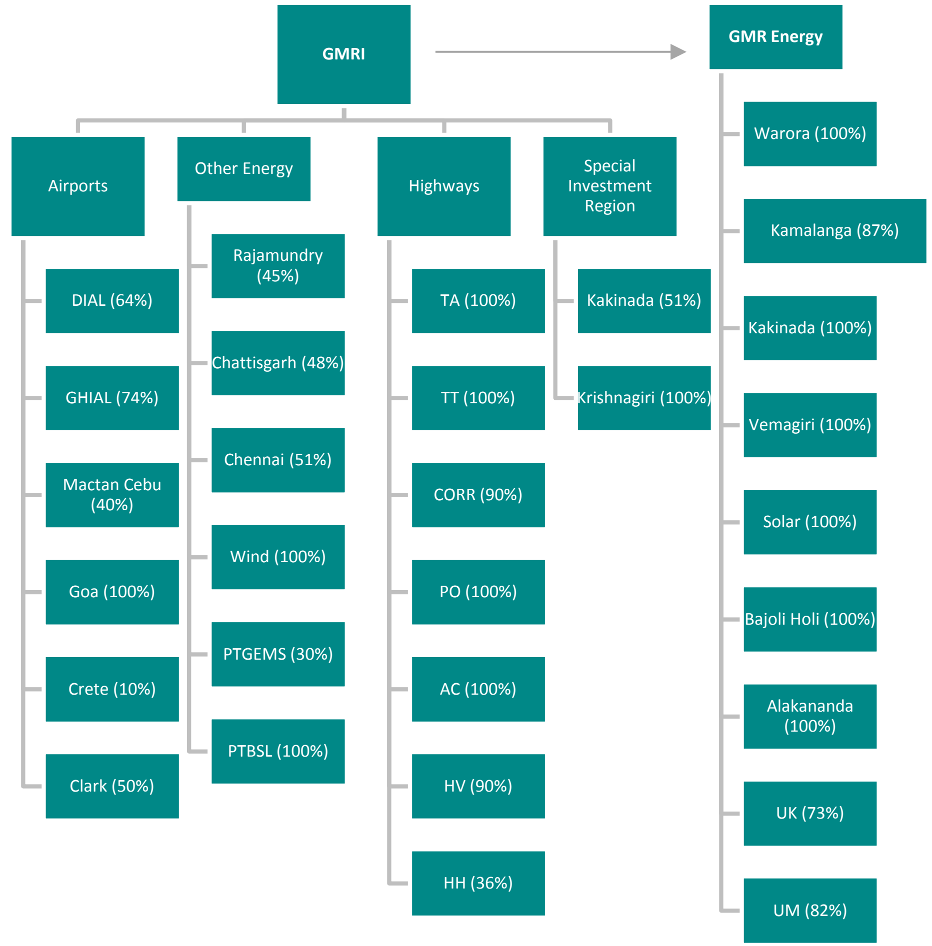


Source: IDBI Capital Research

GMR Energy will continue to be an associate company. If reference transaction is anything to go by, GMR Energy is $1bn.

Even within the "Other Energy", there are SDR assets: Rajamundry and Chattisgarh. Further, Highways is on its way to be monetized.

Chart 4: The restructuring opens up multiple possibilities. A carve out of GMR Energy and other energy vertical is the first step. With the stake sale to Tenaga, the Malaysian Utility, the GMR energy is an associate company. Notwithstanding the effective holding of GMR Energy, treatment of Airports, Highways and Other Energy is where the next re-rating drivers are, we find. And that is where the focus of report is.



Source: IDBI Capital Research

Monetization proceeds from Special Investment region, Indonesian mines and highways will help the company repay its corporate debt.

The possibility of a company with sustainable debt exists.

Chart 5: If GMR can sell off the highways, the focus will be monetization of Special investment region and developing the Airports arm. Even within other energy, GMRI has completed strategic debt restructuring for Rajamundry and Chattisgarh. Further, company has divested PTBSL.

Source: IDBI Capital Research

Reckless squandering was a thing of past; the future is bright, we insist. GMRI, in short, should be seen with a different pair of lens.

Chart 6: Systemic issues blighted the company; the focus now is cash flow stabilization. From listing of airports to selling of cash guzzlers, the options are many. And they are around the corner.

Growth Phase
- Focus on attaining scale and rapid growth
- Bidding for new projects and commencing construction

Managing Turbulence
- Raising of equity capital
- Focus on execution

Consolidation
- Operationalise under construction projects
- Focus on operational efficiency & cash flows
- Recycling of capital through divestments

Cash Flow Stabilisation
- All projects in fully operational
- No major investments required
- Assets stabilization would lead to positive cash flows

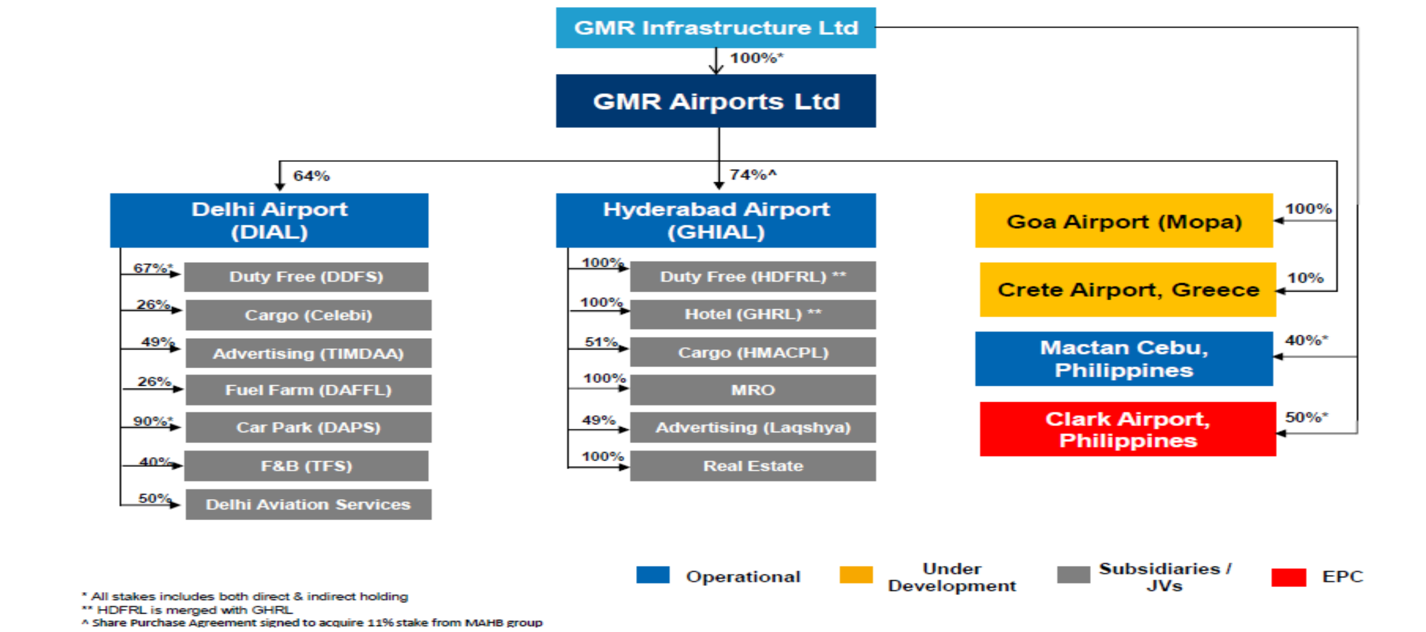
	1996 - 97	2006 - 08	2009 - 11	2012 - 14	> 2015
Group		• IPO successfully completed • Raised ~USD 1 bn via QIP	• Raised ~USD 315 mn via QIP		• Raised INR 14.8bn via QIP, INR 14.0bn via Rights Issue & INR 20bn via FCCB from KIA
Airports	• Forayed into airports with award of Hyderabad airport	• Started operations of Hyderabad airport • Awarded for Delhi Airport	• Raised USD 330mn in GMR Airports from PE Investors • Completed Terminal 3 of DIAL in record 37 months • Sabiha Gokcen (Istanbul airport) inaugurated	• Divested stake in Island Power, Istanbul Airport, Jadcherla & Ulundurpet road projects • Won concession for Cebu Airport in Philippines	• Raised international bonds - DIAL (USD 289mn and USD 523mn) and GHIAL (USD 350mn) • Received compensation of USD 271mn for Male Airport • Won new Airports – Mopa Airport, Goa in Aug'16 and Crete Airport, Greece in Jun'17
Energy	• Started operations of Chennai power plant	• Acquired 50% stake in Intergen Power	• Raised USD 300mn in GMR Energy from PE Investors • Divested stake in Intergen Power for USD 1.2 bn • Acquired coal mines in Indonesia • Operationalised 5 power plants	• Divested stake in Island Power, GMR Jadcherla and GMR Ulundurpet • Commenced operations of Warora & Kamalanga power projects	• Raised USD 300mn from Tenaga for a 30% stake in GMR Energy • Divested 2 Transmission assets and PT BSL coal mine (Indonesia) • Adopted SDR for Rajahmundry (768MW) & Chhattisgarh (1,370MW) power plants
Urban Infra & Highways	• Started operations of two highways	• Started operations of Ambala Chandigarh road	• Operationalised 3 road projects	• Commenced operations of Hyderabad Vijayawada, Hungund Hospet & Chennai ORR	• Divested 3 Highway projects • Won EPC project of INR 51bn on eastern DFCC

Source: IDBI Capital Research

On Airports:

Airport value unlocking—either through an IPO or a corporate action is due. Further, regulatory actions will help the company achieve a valuation reset.

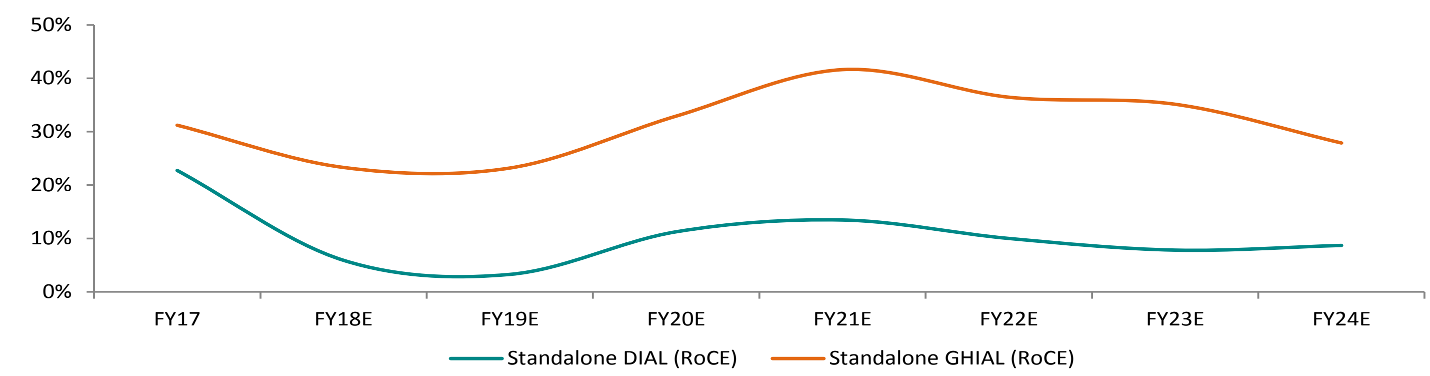
Chart 7: The company has plans to add up more airports; Capacity expansion in Hyderabad and Delhi will flip the revenues



Source: Company; IDBI Capital Research

The RoCE gap between DIAL and GHIAL:

Chart 8: Even within Airports, the days ahead are rich with events that can narrow the gap between DIAL RoCE and GHIAL RoCE.



Source: Company; IDBI Capital Research

TDSAT could shape the course of CPD and other deposits in WACC; thereby, making a scope of higher aero revenues. Plus, land monetization should push the numbers. We have not plugged the additional CPD rentals, if any.

Table 2: Take DIAL for instance. The regulatory flip-flops may lead to precipitous drop in FY18/FY19 Aero Revenues. We think FY19 will be a function of regulatory rulings. Adding to these woes, the future potential of CPD Rentals has been equally a victim of legislative interpretations

DIAL	I-GAAP						Ind AS					
INR mn	FY 11	FY12	FY13	FY14	FY15	FY16	FY16	FY17	FY18E	FY19E	FY20E	FY21E
Gross Revenues	**11,045**	**13,632**	**32,402**	**39,227**	**41,955**	**48,590**	**51,520**	**56,242**	**37,366**	**33,821**	**42,406**	**48,489**
Aero Revenues	4,648	4,829	21,270	28,064	29,509	34,076	34,076	39,315	17,300	10,000	14,093	14,798
Non-Aero Revenues	6,397	8,803	10,251	10,233	11,463	13,573	15,795	15,285	18,342	22,010	26,412	31,695
CPD Rentals			881	930	982	941	1,649	1,642	1,724	1,810	1,901	1,996
Revenue Share to AAI	5,773	7,041	15,314	18,381	19,678	23,042	23,042	26,348	17,188	15,558	19,507	22,305
Net Revenue post Revenue Share	**5,272**	**6,591**	**17,088**	**20,846**	**22,277**	**25,548**	**28,479**	**29,894**	**20,178**	**18,263**	**22,899**	**26,184**
Employee Cost	1,393	1,426	1,237	1,227	1,321	1,253	1,255	1,295				
Operational Expenses	4,227	4,862	5,348	7,120	6,975	7,002	9,231	8,344	10,024	10,424	10,841	11,275
EBITDA	**(348)**	**303**	**10,503**	**12,500**	**13,981**	**17,293**	**17,993**	**20,256**	**10,154**	**7,839**	**12,058**	**14,909**
EBITDA margin	*-7%*	*5%*	*61%*	*60%*	*63%*	*68%*	*63%*	*68%*	*50%*	*43%*	*53%*	*57%*
Other Income	137	383	809	817	844	1,544	1,614	3,070	4,000	3,000	1,000	1,000
Interest Cost	3,252	6,810	6,575	5,648	5,562	5,712	6,322	5,273	5,203	5,907	7,897	9,642
Depreciation	2,684	4,265	4,142	4,364	6,243	6,470	7,036	6,380	6,754	7,452	8,353	9,223
Profit After Tax	**(5,871)**	**(12,148)**	**725**	**4,108**	**2,279**	**5,062**	**5,043**	**5,860**	**(1,229)**	**(3,817)**	**(95)**	**1,312**

Source: Company, IDBI Capital Research

The Next Event for DIAL:

We learn the AERA has started the consultation process for the third control period with DIAL. Note, the third control period will begin from April 2019 and will be valid for five years. There are no second thoughts that the previous two control periods — 2009-14 and 2014-19 — were blighted in controversies.

Table 3: The sticking point for TDSAT ruling for Equity/CPD Deposit. We have plugged in the base-case.

WACC assumptions (Cost)	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Equity	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
CPD and Other Deposits	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
Debt - Existing	10.50%	10.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
Debt - Capex	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

Source: Company, IDBI Capital Research

Table 4: If TDSAT ruling is favorable, the Return on Equity (RoE) will reset the valuation to a different level.

WACC assumptions (Cost)	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Equity	24.00%	24.00%	24.00%	24.00%	24.00%	24.00%	24.00%	24.00%
CPD and Other Deposits	24.00%	24.00%	24.00%	24.00%	24.00%	24.00%	24.00%	24.00%
Debt - Existing	10.50%	10.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
Debt - Capex	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

Source: Company, IDBI Capital Research

Can Regulated Return on Equity inch up to 24% from 16% now?

The influential voices have proposed a regulated RoE in excess of 16%.

Chart 9: What leading authorities on airport have proposed in the past?

S.No.	Stakeholder	ROE Proposed
1	APAO	20%-25%
2	ACI	In Greece a 15% RoE is assured to te private investors despite a mere 2.4% inflation currently. The difference of approximately 7% in inflation, as compared to 9.3% inflation in India, should be adequately factored while arriving at the fair RoE.
3	DIAL	24%
4	Fraport	Reasonable return on investment for viable operations
5	AOC	Below 14%
6	APAI	16% as proposed by Authority
7	BAR(I)	Below 14%
8	Cathay Pacific	As estimated by NIPFP, in the range of 12.70% to 14.06% is reasonable
9	IATA	10.3% to 11.7% - 5-year period with full 5-year risk exposure (prices are set in advance for 5 years); 9.0% to 10.3% - 5-year period with only 2-year risk exposure (prices are set in advance for two years, as with the current determination)
10	ASSOCHAM	20% plus
11	FICCI	AERA may review proposed 16% ROE to make returns commensurate with risks faced by DIAL
12	CII	Revise the proposed 16% ROE upwards
13	VOICE	Even 16% unwarranted
14	MoCA- SBI Caps Report	18.5% to 20.5% as per the report of financial advisor (SBI Capital Market Ltd, appointed by AAI), has been forwarded for consideration in taking decisions
15	Harry Bush, LeighFisher, Martin Cave and Jayant R Vernma	Have commented on the on the various incongruities in the NIPFP report; Risk Free rate, selection of Betas; Equity Risk Premium, Gearing etc

Source: Industry, IDBI Capital Research

We think the arithmetic mean is an appropriate approach. Returns, in every year, are independent; contrary to the approach implied in geometric mean.

What AERA wants? (Emphasis ours)

- *"[T]he rate of return on equity is calculated according to the CAPM model. The private financial consultants engaged by the private airport operators have generally estimated the different components of CAPM in a certain manner. The Authority has relied on the estimates of National Institute of Public Finance and Policy (NIPFP) for this purpose. There has been a variation in the methodology adopted by the private financial consultants and NIPFP in respect to the choice of comparator set, risk free rate as well as equity risk premium. The private financial consultants have been taking the airports only from the developing regions as comparable whereas NIPFP has felt that a more robust estimate will be obtained by taking the comparative sets from both developing and developed regions. In respect of Hyderabad airport, for example, the financial consultants have also taken comparative set of airports both from developing and developed regions."*
- *"…There has also been a difference in methodology adopted to calculate equity risk premium (sometimes also called Market Risk Premium) (which is an important component of the CAPM), between the private financial consultants and NIPFP. <u>In order that these different approaches leading to different estimates and variability in expected rate of return is eliminated, the Authority proposes to adopt a rate of return at 16% as fair rate of return on equity</u>. The Authority has also found that by and large and keeping into account the totality of the circumstances obtaining at different airports, a 16% return on equity is fair and reasonable."*

What DIAL has to say?

The Risk Premium should be geometric and not arithmetic mean(Emphasis ours):

- *"…In theory, the EMRP should reflect the average difference between returns on the (risky) market as a whole and the risk free rate. It should be forward-looking and reflect the reasonable expectations of investors, i.e. the anticipations that have led investors to accept the higher risk of investing in equity. In practice, equity returns are volatile, meaning that reasonable expectations are based on average performance over a substantial period. In the case of India this should at least cover the period of financial liberalisation in 1991. In other countries EMRP averages over substantially longer periods."*
- *"…AERA summarises a number of recent estimates of the Indian EMRP in its Consultation Paper. Of these, we consider the estimation by Varma and Barua to be the most reliable as it examines equity market returns over a reasonably long period of 25 years. Varma and Barua calculate an EMRP of 8.75% on a geometric basis, and 12.5% on an arithmetic basis."*
- *"…There has been a substantial academic debate over whether arithmetic or geometric averages should be used<u>. If returns in each year are regarded as independent and certain other conditions are met it can be shown that an arithmetic average is appropriate</u>. Most commentators have made clear, on the other hand that a geometric average would understate the underlying position. It should be noted that Mr Doug Andrew, the former Director of Economic Regulation for UK CAA, in a recent conference in India strongly supported an arithmetic average approach."*

What Asset Beta AERA suggests?

Chart 10: AERA proposed Asset Beta by benchmarking international airports

Airport	Equity beta	Gearing	Asset beta
Macquarie Airports	0.71	0.52	0.39
Auckland	1.15	0.26	0.88
Copenhagen	0.22	0.18	0.20
Fraport	0.50	0.04	0.48
Vienna	0.58	0.11	0.53
Zurich	0.39	0.49	0.25
Florence	0.35	0.00	0.35
Average	0.56	0.23	0.44
Median	0.50	0.18	0.39

Source: CC analysis based on Thomson Financials
Note: For simplicity, the asset beta calculation uses a constant debt beta of 0.1, which may lead to the asset beta estimates being slightly overstated.

Source: CC analysis based on Thomson Financials;
Note: For simplicity, the asset beta calculation uses a constant debt beta of 0.1, which may lead to the asset beta estimates being slightly overstated.

We think the Asset Beta should be higher. We agree with DIAL that air travel is discretionary and highly sensitive to economic indicators.

What DIAL argues for?

"…AERA correctly notes that for a traded airport, the observed equity beta is the starting point, calculated as the covariance of movements of the company share price with movements in a suitable market index over a substantial period.

In the case of untraded companies, such as the Indian airports, regulators have typically used comparable traded companies as a benchmark, making adjustments where necessary for known differences. As such, the best benchmarks for Indian airports are internationally traded airports. It should be noted that using utilities is not appropriate, as their risk characteristics tend to be far lower than those of airports:

If Government plans to revive PPP in airports is anything to go by, a 24% RoE serves the right approach.

- Air travel is a discretionary rather than an essential product.
- Usage levels of airports are closely linked to the performance of the economy as a whole.
- Airports have a limited number of highly influential customers (airlines) with a strong tradition of coordinated resistance to price increases.
- Airports are exposed to the financial health and management decisions of their key airline customers.
- Airports compete with other airports, other destinations and other modes of transport for at least some of their customers.

- Airports are vulnerable to a wide range of operational risks including terrorist attacks, fuel cost raises, new safety or environmental legislation and political decision in planning and other areas.

As mentioned in our previous submission, the UK's Competition Commission has calculated relative benchmarks for airport asset betas, showing that asset betas for utilities are up to -0.14 lower than the base asset base for international airports.

In our view, considering betas of international airport companies, asset betas of 0.7- 0.8 should be the benchmark."

To Summarize DIAL's view on cost of equity:

"…We support AERA's proposal to use CAPM to calculate the cost of equity. However, it will be crucial for investors that the components used to calculate the cost of equity reflect the risks faced by airport investors. Airport investors typically look at equity returns of more than 24% on post-tax basis, as was the feedback given to AERA during interactions."

We have plugged in 16% as cost of equity for modeling. Even ignoring this upside, the valuation is cheap.

Why DIAL's Land bank monetization never took off at the pace of Airports?

The History:

- Article 2.2.4 of OMDA permits DIAL to utilize 5 per cent of the total land area of 4799 acres of demised premises for commercial exploitation. If the math is right, this would work out to ~240acres.
- The total land area of IGIA is 5106 acres. Here, AAI initially leased out 4608.9 acres for re-development. With additional 190.19 acres of land leased to DIAL, the demised premises add up to 4799.09 acres. Interestingly, the demised premises were leased out at one hundred rupees annually. And that has earned criticism from some quarters.

DIAL has started monetizing the land bank. Yet, as recent as 2016, the NCAP restricted DIAL's ability to reap the benefits of land bank.

- As per a letter to the Joint Secretary, Ministry of Civil Aviation, the projected earning capacity in terms of license fee over the concession period of 58 years is Rs6.8bn per acre. Thus, for the entire area of 239.95 acres, the potential earning amounts to Rs1.6trn, opines anaudit report. And all this has happened when the entire area has been handed over to DIAL at the lease rent of Rs100 per annum.
- Though DIAL has started monetizing the land bank, as recent as 2016, the NCAP restricted DIAL's ability to reap the benefits of land bank.

Chart 11: It is unclear if the National Civil Aviation Policy 2016 was aimed at capping the commercial use of DIAL's land bank

d) There are restrictions on the use of land allocated for commercial use of airport. MoCA will explore ways to unlock the potential of the same by liberalising the end-use restrictions for existing (excluding PPP) and future greenfield and brownfield airports of AAI and future greenfield and brownfield airport projects under PPP.

The carefully crafted words "excluding PPP" landed DIAL in trouble.

Source: Industry; IDBI Capital Research

DIAL argued "excluding PPP" is ultra vires of Article 14 of the Constitution of India.

Chart 12: Yet with this policy, DIAL knocks the Delhi High Court doors.

"(A) Issue a Writ of Certiorari or any other Writ, Order or direction of a similar nature quashing and/or striking down the words "(excluding PPP)" in Clause 12(d) of the National Civil Aviation Policy as being ultra vires of Article 14 of the Constitution of India and Section 40 of the Airports Authority of India Act, 1994 and in the alternative if any provision of the Airports Authority of India Act, 1994 permits the said Policy then the relevant provision of the AAI Act may be declared ultra vires Article 14 of the Constitution;

(B) In the alternative, declare that the impugned words "(excluding PPP)" in Clause 12(d) of the NCAP Policy do not apply to the Airport Projects operated by the Petitioner as it is an Airport in which AAI is a partner and consequently, issue a direction to the Respondents to act in accordance with the law declared by this Honble Court in the present Writ Petition; (C) Issue a Writ of Certiorari or any other Writ, Order or direction of similar nature quashing the letter dated 10.10.2016 issued by the Respondent No.1 to the Petitioner No.1 with all consequential reliefs;

(D) Pass any other or further Order(s) as this Honble Court may deem fit in the facts and circumstances of the case."

Source: Industry; IDBI Capital Research

On hearing the arguments, the Delhi High Court concluded the clause 12 (d) of NCAP 2016 as Ultra Vires.

Chart 13: Eventually, Delhi High Court concludes clause 12(d) of NCAP 2016 as Ultra Vires

58. For the aforesaid reasons, we hold that Clause 12(d) of NCAP, 2016 to the extent of excluding "existing PPP airports" is ultra vires Article 14 of the Constitution of India.

59. Accordingly, the letter dated 10.10.2016 of the Respondent No.1 is hereby set aside and there shall be a direction to the Respondents to take the necessary further steps in terms of the findings recorded by us in this order and to extend the benefit of liberalized use of airport land under clause 12(d) of NCAP, 2016 to the Petitioner in respect of IGI Airport on par with the existing and future airports of AAI as well as future projects under PPP.

60. Writ Petition is accordingly disposed of.

Source: Industry; IDBI Capital Research

What happened further?

The government challenged this in the Supreme Court. After a short hearing, the Supreme Court bench dismissed the Government plea. This should pave the way for seamless land monetization, we insist.

With Supreme Court upholding the Delhi High Court judgment, the land monetization should happen on war-footing front.

Chart 14: With this, using Article 2.2.4 of Operation, Management and Development Agreement (OMDA), signed in 2006, DIAL can utilize the land for commercial exploitation

Source: Company; IDBI Capital Research

Can reference transactions be any indicator?

- India's largest listed real estate firm DLF Limited bid Rs14.9bn to win, in an auction, 11.76 acres of prime land in Gurgaon, making it one of the most valuable land deals in the Delhi satellite.
- The Haryana State Industrial Infrastructure Development Corporation auctioned the land with a reserve price of Rs6.8bn. There were three other bidders in the fray.

Table 5: If DLF Transaction is anything to go by, our assumptions are bear-case

	Acre	EV/Acre (Rs mn)	EV of DIAL Land arm	Stake of GMR	Value attributable to GMR	Valuation per Share
DIAL Land Bank	185	550	101,750	64%	65,120	10.8
DLF recent transaction	12	1267	14,900			
DIAL Land Bank using DLF Transaction	185	1267	234,395	64%	150,013	25

Source: Industry; IDBI Capital Research

Can Refundable security deposit (RSD) be treated as equity?

This is a critical question indeed. The legal interpretation will set a precedent for future source of airport funding, and in-turn the progress of PPP model in India. Currently, the AERA proposes zero cost of RSD while calculating the WACC. Here are the arguments for higher cost of RSD.

- APAO have stated that while the Authority has not provided returns on capitalized airport asset funded through RSD by considering it as zero cost funds, it is evident that there is an opportunity cost associated with RSD in terms of the foregone lease rentals. A contrasting view: IATA has supported the AERA's conclusions on disallowing any return on the interest free deposit. Here, IATA is of the view that DIAL does incur expenses. As there is no cost involved, it is unreasonable to ask users to pay any amount above.

There is a strong argument for treating RSD as equity. From a valuation perspective, the impact is de-minimis. However, in the short-run, the impact on reported earnings is starker.

- APAO continued: Lenders have treated the RSD funding as part of promoter's contribution, a quasi-equity to be precise. RSD utilised to fund the capex will mimic the risk of common equity. After all, there are examples from other infrastructure sectors where regulators provide a pre-specified return on the capital employed by the concessionaire and do not consider the sources and associated costs of capital while calculating tariff. If this view is anything to go by, APAO have requested that the Authority should consider providing returns on RSD commensurate with the return on equity.
- In another view, ACI opines that the airport operator was under no compulsion to invest the money received from deposits. Instead of funding the airport infrastructure, the money could have been parked somewhere else. Yet GMRI chose to fund the project with the proceeds. Thereby, these funds are akin to equity infusion. And hence, they should attract similar rates of return as equity.
- Fraport AG, the German Equity partner in DIAL, stated that the agreed SSA provides for a reasonable return on any investment made in the project. For instance, they have stated,

  "*…The first estimates* of *sources* of *funding were made. The JVC had to resort to this means* of *funding due to constraints in raising further equity or debt. In March 2008,* we *were made to sign an undertaking from the lenders that any shortfall in the deposits will be made up by infusing additional equity, there cannot be stronger proof* of *the fact that these deposits are akin to equity. It is important to mention here that the equity partners are nowhere obliged to reinvest the returns/funds accrued from non-transfer assets into the airport project itself. The JVC could have utilized the same funds in other ventures or to pay-out dividends to the consortium members, who in turn could have used it for different investment opportunities. It is only fair that the opportunity cost* of *the productive deployment* of *these funds elsewhere should be provided and hence, in our view, should be treated as Quasi Equity*

Even if the money were to park with fixed deposits, the returns could be higher than zero.

eligible for a Return on Equity (RoE). Giving zero returns in fact is sending signals that in future RSDs should not be used for funding future Capex and rather relies upon debt or equity. This itself will be counterproductive."

- ASSOCHAM gives a different perspective. They opine the long term security deposits taken are of 30 years in duration. And deposits with such long terms should be treated as equity. Taking upfront deposits also have a significant bearing on the rental charged, which have been pegged lower due to the deposit monies received. Further they have added,

  "…From an opportunity cost perspective, it should be noted that DIAL was not obliged to reinvest the deposit monies back in the business as a means of *project funding. Having done so, this source* of *finance should be treated as equity and a return equal to the return on equity determined should be allowed."*

  ASSOCHAM went on to highlight the commercial terms.

  "Commercial: In setting up the price cap, AERA [ought to] regard the need for the JVC to generate sufficient revenue to cover efficient operating costs, obtain the return of capital over its economic life and achieve a reasonable return on investment commensurate with the risk involved. The SSA mandates the Regulator to provide a reasonable return on any investment made in the project by the concessionaire. The refundable security deposits are treated in the books of the concessionaire and are in its custody. The utilization of the same would also be dependent on the decision taken by the concessionaire. If the concessionaire has chosen to invest the same in this project, such amount should earn a reasonable return on investment. Considering the above argument, the Regulator should provide at least the cost of debt in rupee terms for this investment made by the Concessionaire. Providing any return less than the cost of debt in rupee terms would be against the spirit and principles laid down by the SSA.

ASSOCHAM argues for a number at-least equal to the return of debt.

What does Ministry of Civil Aviation (MoCA) opine?

- The MoCA, in their letter dated 12.03.2012, have forwarded a study conducted by AAI. Here, the MoCA in this letter state that,

  "…On the Quasi Equity for the airport sector, the study has concluded that the rate of return would depend on the type and features of the instrument being used for such form of finance. The report further states that in case of Quasi Equity, the risk/return profile lies above that of debt and below that of Equity."

  Note, however, it is unclear if the decision makers of MoCA of 2012 exist in 2018.

Even ministry, back then, argued for a return between debt and equity.

Are OMDA and SSA clear for interpretation?

- DIAL claims that the Authority has accepted the approach as outlined in the OMDA and SSA. In respect to the revenue, however, which is currently treated as lease rentals, the authority wants Non Transfer Assets (NTA) to be kept outside the regulatory purview of tariff determination. Yet the upfront deposits generated from the same lease agreements, used for part financing the project cost, have not been allowed any return whatsoever. This policy disregards the economic significance and their intrinsic cost. Thereby, in effect, it tantamount to a 100% cross subsidy in the tariff determination.

What about the counterfactual?

- DIAL argues had they invested the proceeds in any other venture, it would have earned a return far higher than zero. Further, they are not under any compulsion to structure the land monetization to receive large security deposits. Also, it did in the larger interests of ensuring requisite funds to ensure timely completion of the expansion and modernization project.

There is no evidence to conclude dual till will be detrimental to passenger welfare.

On the contrary, the aim of single till looks counter-productive.

Will the final hearing of TDSAT push for Dual till?

We don't know. As of now, India follows NCAP 2016. And if that is anything to go by, Indian airports will continue with Hybrid till.

The charging controls applied to each of the airports in the sample were examined, and the airports divided into one of five categories:-

1. **Price-controlled single till;**
2. **Price-controlled dual till;**
3. **Price-controlled hybrid;**
4. **Indeterminate including:**
    - Price-controlled but not systematically cost based, or
    - System-based (and therefore not related to the costs of the airport concerned); or
    - Not clear what criteria are applied (typically based on annual approvals of proposed charges by Government departments).
5. **Not price-controlled / light-handed regulation, including situations where:**

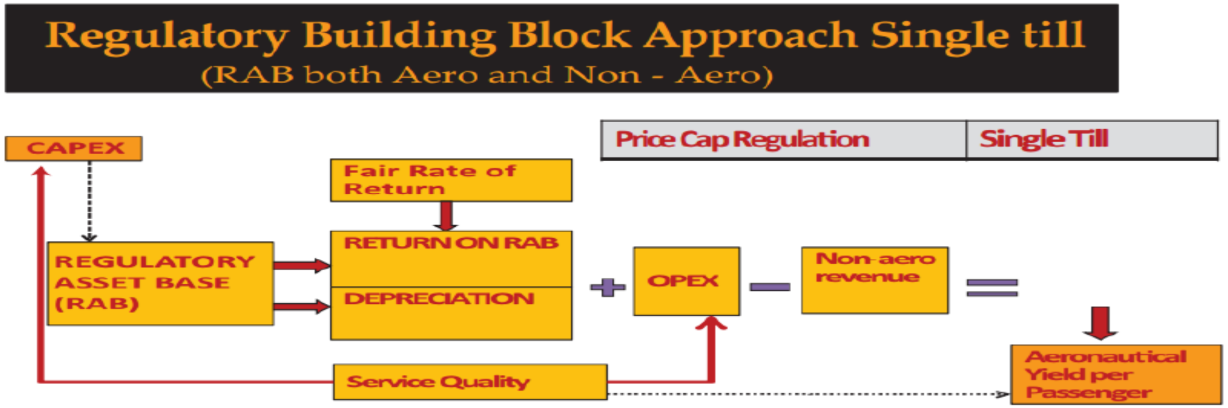
    A clear framework was established;

    The regulator was involved in the process and approved the final prices;

    The regulator would intervene to set prices in the event of deadlock.

Cross subsidization of single-till is harmful for asset owners.

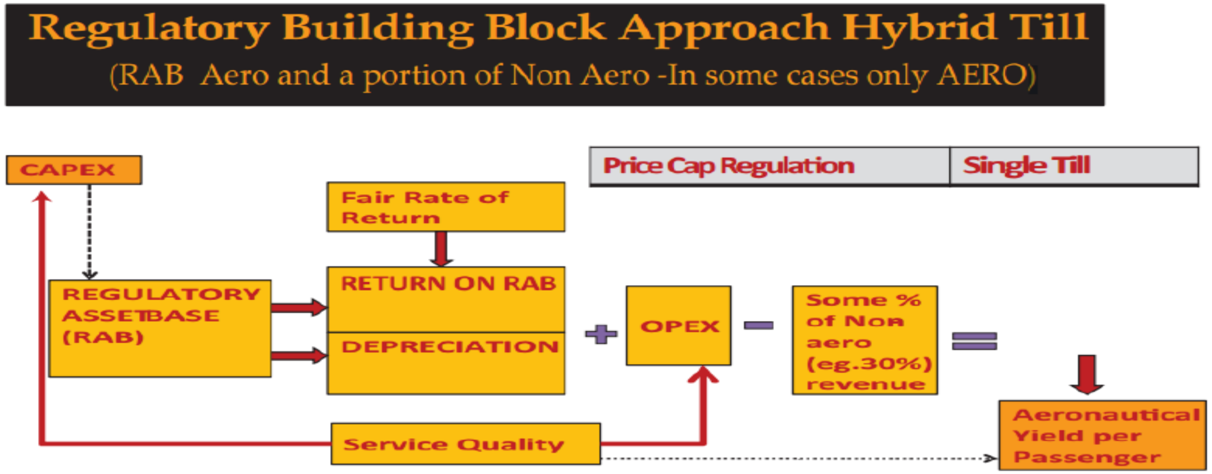
Chart 15: Single Till is detrimental for Asset Developers. The definition of Non-Aero revenues could put the valuations of assets on tenterhooks



Source: Industry, IDBI Capital Research

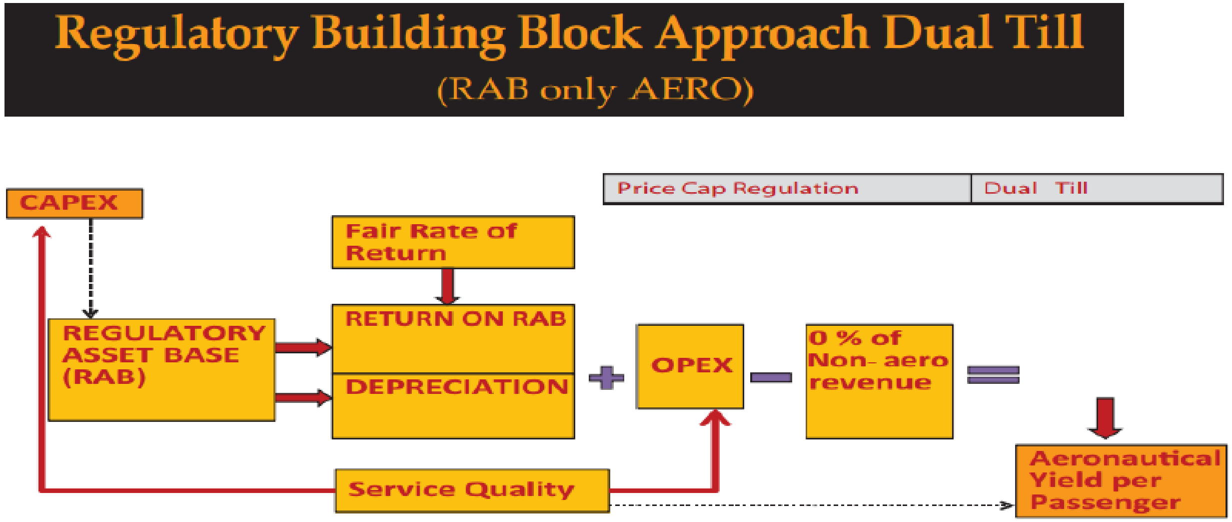
We think Hybrid model is here to stay. Of course, a switch to dual-till will open up the sector in a big way.

Chart 16: Like many countries, the regulators have chosen Hybrid model. Even within this, the legal interpretation varies. The beauty, as they say, lies in the eye of beholder



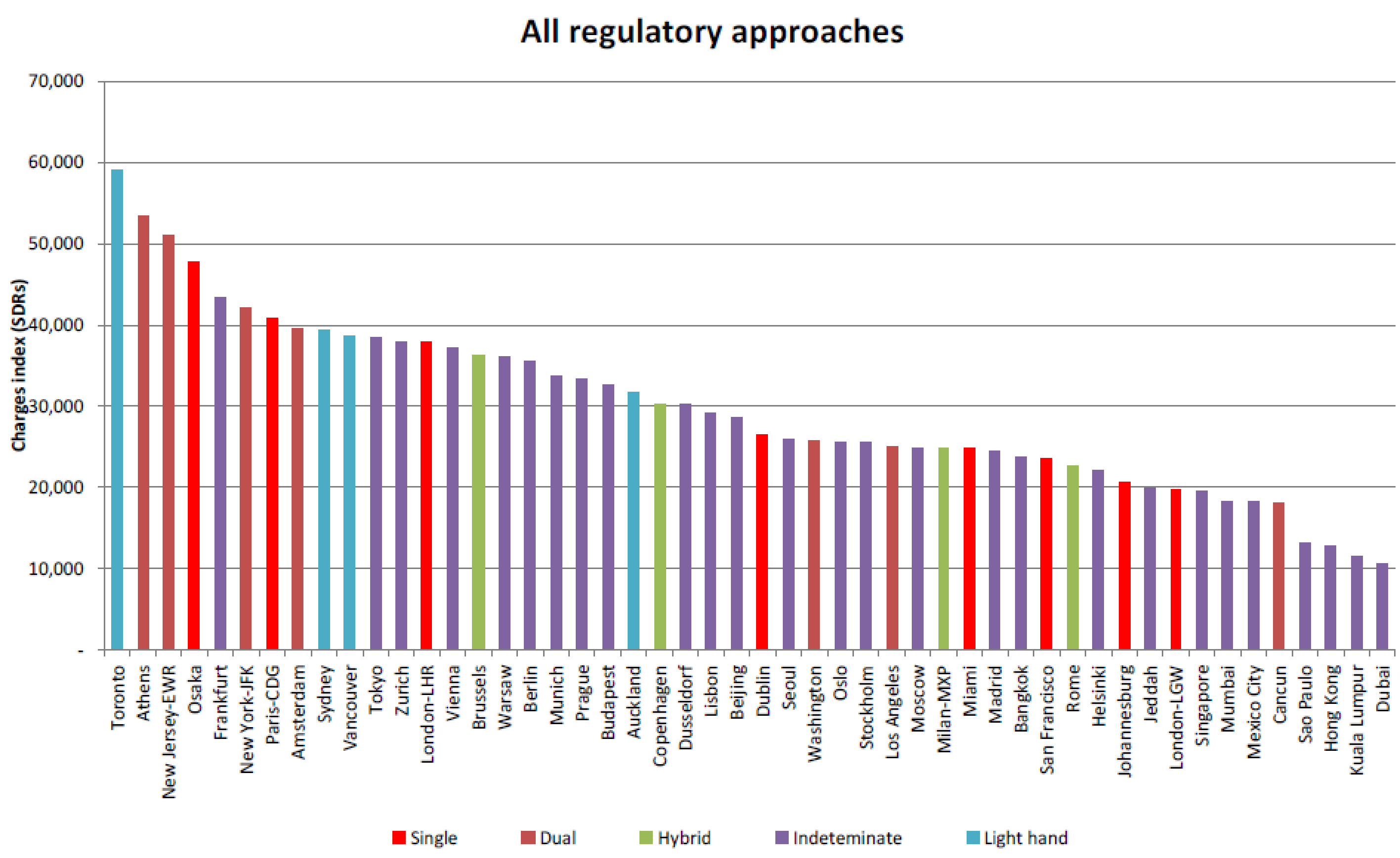
Source: Industry, IDBI Capital Research

Chart 17: The best model that can unlock the biggest value for GMRI



Source: Industry, IDBI Capital Research

Chart 18: Single till does not induce competition and lower prices; also, dual till may not be adverse for passenger. Conflicting views are hard to justify. Regulators move for the safer side.



Source: Industry, IDBI Capital Research

If single till led to lower long-term prices, the policy should have been dominant. Yet on the right hand of the exhibit, a lower price is nowhere to be seen.

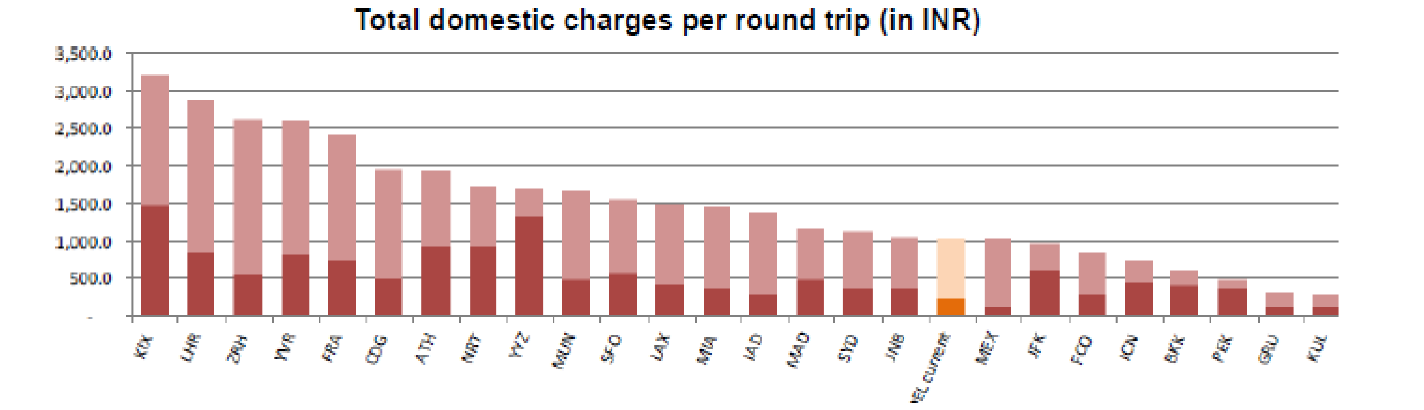
What does the graph mean?

- GMRI argues if single till led to lower long-term prices, the policy should have been dominant. Yet on the right hand of the above exhibit, a lower price is nowhere to be seen.
- True, the graph makes the conclusion more complex. The components that lead to wider conundrum: The cost structures of the airports and the activities they undertake shift the cost cycle.

- To conclude, in practice, prices are determined by the characteristics of the airport, their ownership structure and the way it is managed rather than the charging methodology and one should not conclude that single till leads to lower tariffs, GMRI has protested. And we could not agree more.

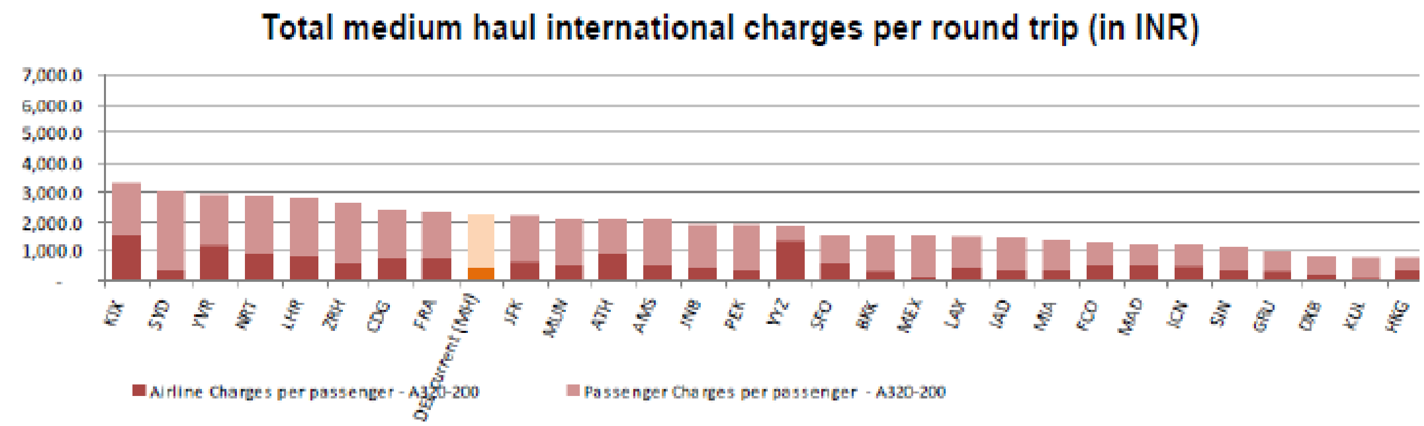
If the domestic charges round trip are on lower range, the odds are unlikely for a policy change.

Chart 19: Post privatization, the domestic charges per round trip are still in the lower range



Source: Industry, IDBI Capital Research

Chart 20: Total Medium Haul international charges are in the middle range of spectrum



Source: Industry, IDBI Capital Research

The Conclusion: Will there be a switch to Dual or Single? Or will it continue to be Hybrid?

- Single till Airports do not necessarily have lower charges. In long run, prices are determined by the characteristics of the airport, their ownership structure and the way it is managed rather than the charging methodology.
- World over, in the matured regulatory regimes, airports are moving towards dual or hybrid till to encourage better infrastructure and maintain efficient level of service. We agree with DIAL that AERA should investigate other regulatory regimes like USA and Australia where a shift has happened to dual till rather than being limited by the UK model, where a shift has been attempted but restricted due to extraneous reasons.
- Of course, we conclude that in general airports under Dual/hybrid till have better quality rating than airports under single till.

The proof of the pudding is in eating: The quality of airports is better in Dual/Hybrid till.

- For the systemic sound bites for a massive airport sector overhaul, we think Dual-till is the best. In fact, the policy of Government of India for developing Airport Infrastructure can be best achieved with Dual till regulation, even GMRI has once proposed. On the contrary, the policy of Government of India for developing commercial airport revenueswill not be achieved under single till regulation.
- Developing commercial revenues is in the overall economic interest as it leads to employment generation, growth and higher GDP. There is a very important correlation between privatization and Dual/Hybrid till. There is no major airport privatization under single till. An exception though: BAA, which was kept under Single till under extraneous reasons.
- This conclusion is extremely important considering the need of private capital in developing airport infrastructure in India. The jury is out. We hope the TDSAT hearing will iron the wrinklesby the end of 2018.

As of now, what is the *de-facto* template for the Indian Government?

As of now, though, Hybrid till is the order of the day.

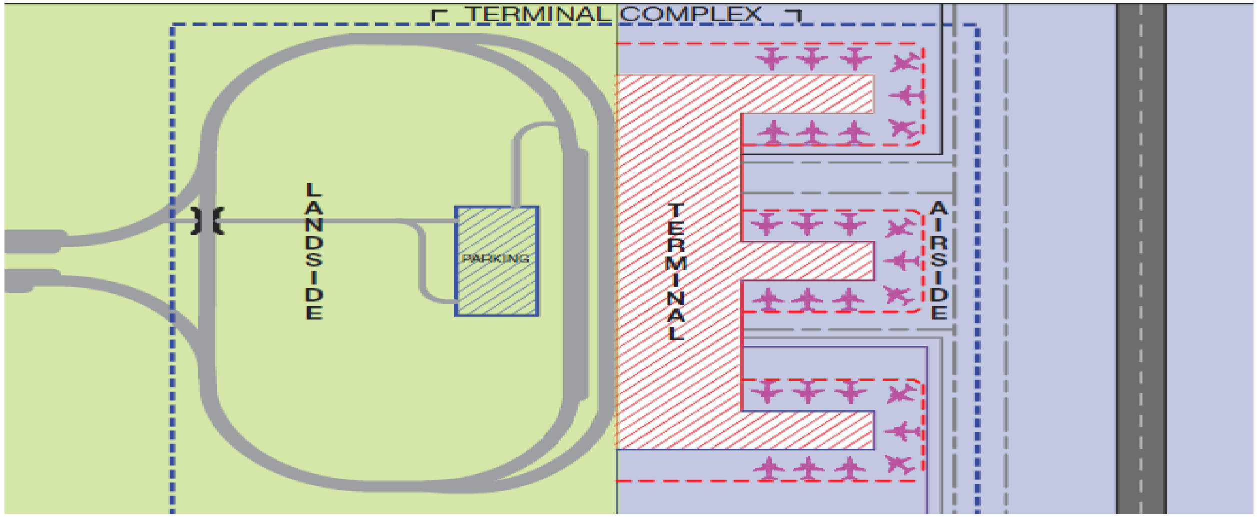
- **The Indian National Civil Aviation Policy 2016 states (emphasis ours),**

  "…To ensure uniformity and level playing field across various operators, <u>future tariffs at all airports will be calculated on a 'hybrid till' basis</u>, unless otherwise specified for any project being bid out in future. 30% of non-aeronautical revenue will be used to cross-subsidise aeronautical charges. In case the tariff in one particular year or contractual period turns out to be excessive, the airport operator and regulator will explore ways to keep the tariff reasonable, and spread the excess amount over the future."

Is the airline traffic saturated?

There are three parts for an airport capex: Landside, Terminal and Airside. Depending on land, the terminal capacity and airside can be expanded at minimal cost. Yet in a regulated model, this should hardly a matter of concern.

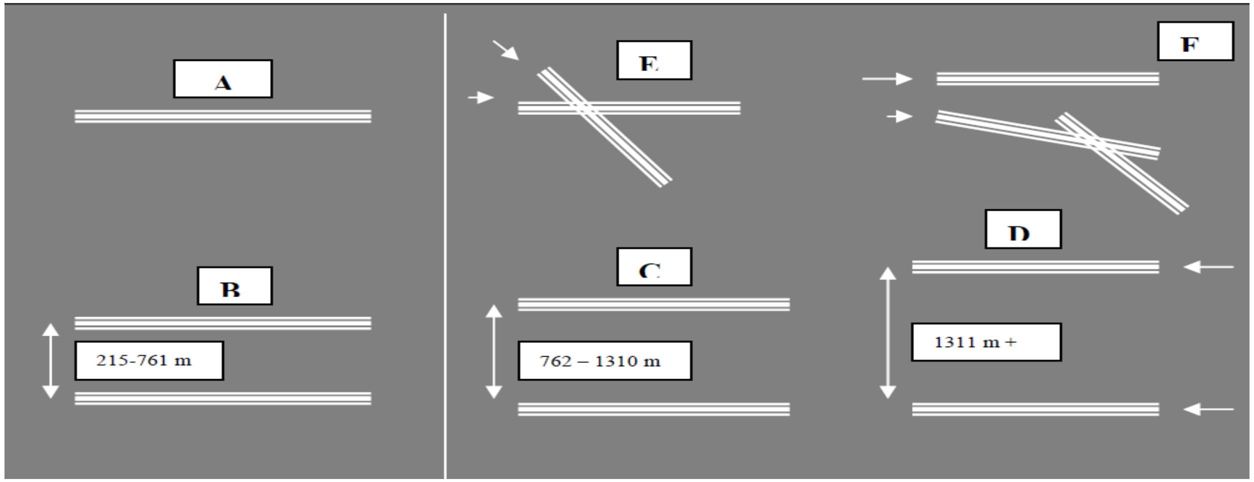
Chart 21: A sample layout of Airport explains Terminal capacity and Airside capacity could differ



Source: Industry, IDBI Capital Research

No two-airports run on a similar model. From pattern of runways to terminal design, airport assets are idiosyncratic.

Chart 22: And even within airside, the pattern of runways would lead to different outcomes.



Source: ICAO Manual

Though there are limitations to aircrafts landed per hour, one can argue for peak congestion; yet DIAL/GHIAL are far from it.

Table 6: Finally, the range of throughput depends on lower to higher band of aircrafts per hour flown

	Visual Flight Rules Conditions		Instrumental Flight Rules Conditions	
Type of Runway classification	Lower Band of aircrafts per hour	Higher Band of aircrafts per hour	Lower Band of aircrafts per hour	Higher Band of aircrafts per hour
A	51	98	50	59
B	94	197	56	60
C	103	197	62	75
D	103	197	99	119
E	72	98	56	60
F	73	150	56	60

Source: ICAO Manual

If the above study is applicable to DIAL/GHIAL, what should be the capacity utilization? Even considering the DGCA restriction of 68 flights per hour, DIAL/GHIAL represents the best scalable opportunity to play fast growing Indian civil Aviation business.

We don't think peak is near. The sweat ratio is 1.2-1.3x the proposed capacity. And even that number is far away. Unless the flights moved are 65 throughout 24 hours and 365 days, the plans will revisit the drawing board.

Table7: Scenario analysis for peak throughput; we took DIAL as an example.This, however, is a wrong approach.

	Scenario 1	Scenario 2	Scenario 3
Runways	3	3	3
Flights per runway per hour	45	55	65
Total flights per hour	135	165	195
Passengers per flights	100	150	150
Throughput per day	13,500	24,750	29,250
Throughput per year (mn)	89	163	192
Terminal handling capacity	62	62	62
Capacity Utilization	143%	Addition to terminal	Addition to terminal

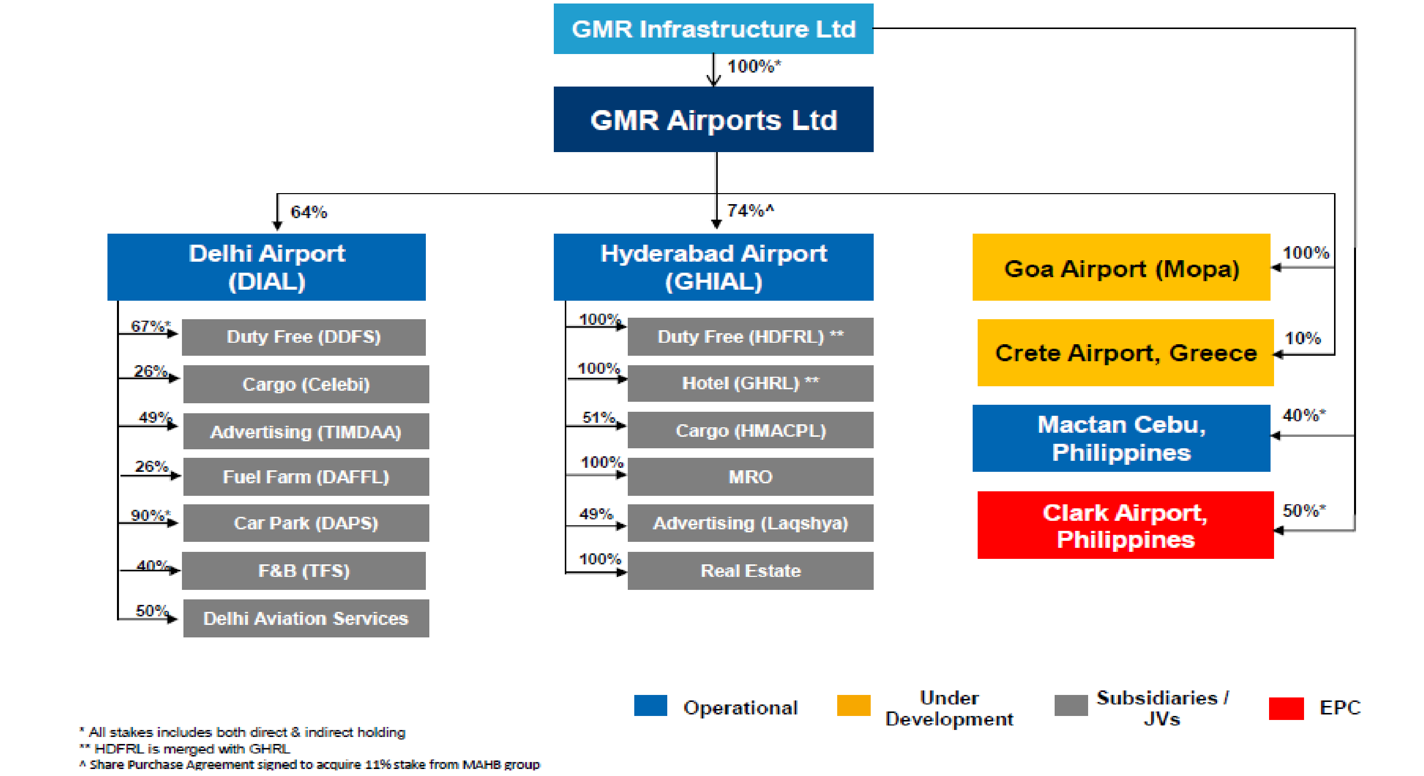
Source: Industry; IDBI Capital Research

However, a word of caution: DIAL/GHIAL's saturation point is 119/98mn passengers per annum, as per the master plan. Thereby, additional throughput will entail terminal/Apron and some work on Landside addition. Yet that should not be a cause of concern: The additional capex, with Hybird till model, opens up a 16%+RoE model—with a strong potential for Non Aero revenues.

Summary of Airport Operations

Even within the existing Airport operations, the company has multiple models.

Chart 23: The company has plans to add up more airports; Capacity expansion in Hyderabad and Delhi will flip the revenues



Source: Company; IDBI Capital Research

Chart 24: The domestic airports could be a proxy for rising trend in aviation traffic

Project	Delhi International Airport (DIAL)	Hyderabad International Airport (GHIAL)	Goa International Airport (GGIAL)
Status	Operational	Operational	Greenfield Development
Shareholding	GMR - 64% Fraport - 10% AAI - 26%	GMR - 74% ^ GoAP - 13% AAI - 13%	GMR - 100%
Annual Passenger Capacity	64 mn	12 mn	7.7 mn **
Concession Terms	• Started from April 2006 • 30 + 30 years • 46% revenue share	• Started from March 2008 • 30 + 30 years • 4% revenue share	• Started from September 2017 • 40 + 20 years • 37% revenue share
Revenue Structure	• **Aero Revenues** - Return on Capital • **Non-Aero Revenues** - Duty Free, Retail, F&B, Advertising, Car Park, etc. • **Commercial Property Development** (CPD)		
Commercial Property Development	• 230 acres ○ 1st Phase - 45 acres completed ○ 2nd Phase - 23 acres awarded to Bharti Realty	• 1,500 acres ○ ~120 acres already monetized	• 232 acres
Traffic – FY17	57.7 mn pax (▲ 19%)	15.2 mn Pax (▲ 22%)	N.A.

Source: Company; IDBI Capital Research

Chart 25: Asset light model is yet another aspect in airport that is unexplored. With high RoE, the promises a brighter outlook

Project	Mactan - Cebu International Airport, Philippines	Crete International Airport, Greece
Status	Brownfield Development	Greenfield Development
Shareholding	GMR - 40% Megawide - 60%	GMR - 10% TERNA S.A. - 44% Govt. of Greece - 46%
Annual Passenger Capacity	16 mn ^^ (Existing : 5 mn)	15 mn (Post construction)
Concession Terms	• 25 years (from April 2014) • Project cost of USD 750mn incl. upfront fees of USD 320mn + VAT	• 35 years (incl construction period of 5 years) • Project cost of Euro 530mn • GMR would be the Airport Operator
Revenue Structure	• **Aero revenue** based on pre-determined Passenger Service Fee • **Non-Aero revenue** from allied activities	• **Aero revenue** determined based on Dual Till methodology ○ Inflationary increase post 3 years
Traffic – FY17	8.9 mn Pax (▲ 12%)	6.9 mn Pax (▲ 13%)

Source: Company; IDBI Capital Research

We value DIAL using DCF with a 13% CoE. We have ignored the land bank monetization, the possibility of RoE reset after TDSAT judgment.

Table 8: DIAL

	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY66
Capacity	64	64	64	64	64	64	64	92	92	92	102	119
Capacity Utilisation	58%	64%	76%	90%	100%	114%	127%	96%	105%	111%	102%	111%
Aero Revenue	28,064	29,509	34,076	39,315	16,512	10,000	15,483	16,257	17,070	17,924	18,820	26,491
Non Aero Revenue	10,226	11,441	15,795	15,285	18,342	22,010	26,412	31,695	38,034	45,641	54,769	927,793
CPD	930	982	1,649	1,642	1,724	1,810	1,901	1,996	2,096	2,200	2,310	17,933
Gross Revenue	39,220	41,932	51,520	56,242	36,578	33,821	43,796	49,948	57,200	65,765	75,899	972,217
Net Revenue	20,839	22,254	28,479	29,894	19,752	18,263	23,650	26,972	30,032	33,502	37,441	377,066
Opex	-8,347	-8,296	-10,485	-9,638	-10024	-10424	-10841	-11275	-11726	-12195	-12682	-65859
EBITDA	12,492	13,958	17,994	20,256	9,729	7,839	12,809	15,697	18,306	21,307	24,758	311,206
EBITDA margin	*60%*	*63%*	*63%*	*68%*	*49%*	*43%*	*54%*	*58%*	*61%*	*64%*	*66%*	*83%*
Depreciation	-4,364	-6,243	-7,036	-6,380	-6,530	-6,658	-6,754	-7,452	-8,353	-9,223	-10,131	-13,388
Interest & Finance Charges	-5,648	-5,562	-6,322	-5,273	-5,203	-5,203	-5,203	-5,203	-9,486	-9,486	-11,090	0
PAT					**-1,116**	**-3,099**	**1,387**	**3,832**	**1,498**	**2,228**	**2,996**	**237,253**
FCFE					2,734	1,041	5,521	-67,630	49,859	-34,299	25,830	126,810
Net Present Value of DIAL, excluding land bank					**99,795**							

Source: Company; IDBI Capital Research

We value GHIAL using DCF with a 13% CoE. Here again, we have ignored the land bank monetization, the possibility of RoE reset after TDSAT judgment.

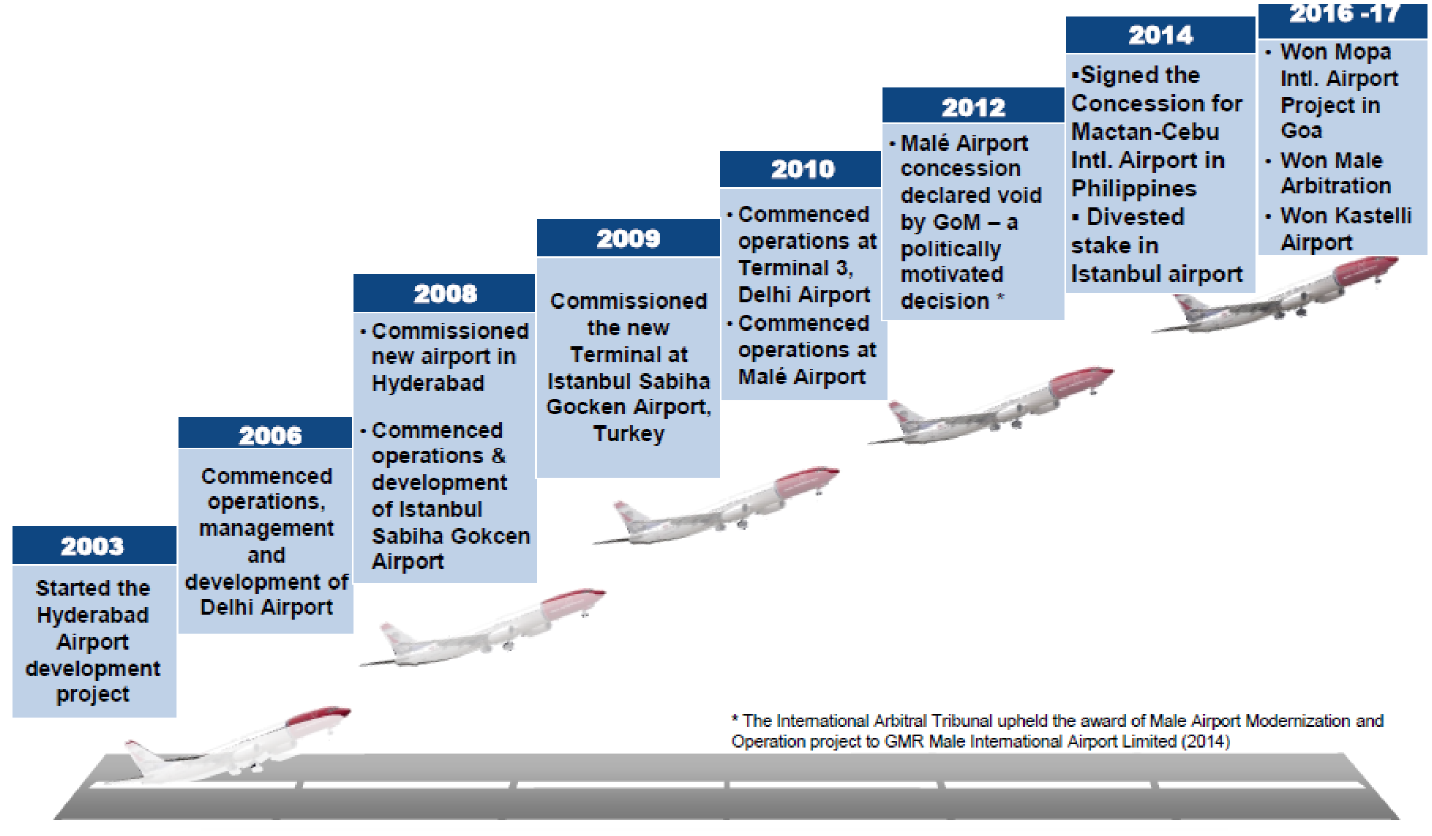
Table 9: GHIAL

	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY68
Capacity	12	12	12	12	20	26	26	26	26	26	80
Capacity Utilisation	127%	149%	175%	199%	134%	112%	122%	131%	140%	149%	121%
Aero Revenue	7,083	7,957	7,902	9,005	10,058	6,383	6,922	7,432	7,941	8,442	-
Non Aero Revenue	3,971	4,368	5,504	6,935	7,975	9,969	11,763	13,881	15,269	16,795	287,296
Gross Revenue	11,054	12,325	13,406	15,940	18,033	16,352	18,685	21,312	23,209	25,237	287,296
Less: Revenue Share	-462	-493	-536	-638	-721	-654	-747	-852	-928	-1,009	-11,492
Opex	-2,570	-2,673	-2,780	-2,891	-3,007	-3,127	-3,252	-3,382	-3,517	-3,658	-18,995
EBITDA	8,022	9,159	10,090	12,412	14,306	12,571	14,686	17,078	18,764	20,570	256,810
EBITDA margin	76%	74%	75%	78%	79%	77%	79%	80%	81%	82%	89%
Depreciation	-2,038	-2,192	-2,225	-2,257	-2,868	-3,944	-3,992	-6,741	-6,818	-4,900	-10,378
PAT		**4,276**	**5,068**	**6,785**	**6,793**	**3,949**	**5,499**	**5,231**	**6,438**	**9,231**	**185,124**
FCFE		5,987	6,831	456	7,245	17,047	-29,138	10,922	12,163	12,995	30,705
Net Present Value of GHIAL, excluding land bank		**96,559**									

Source: Company; IDBI Capital Research

GMR's accomplishment in airports space is understated.

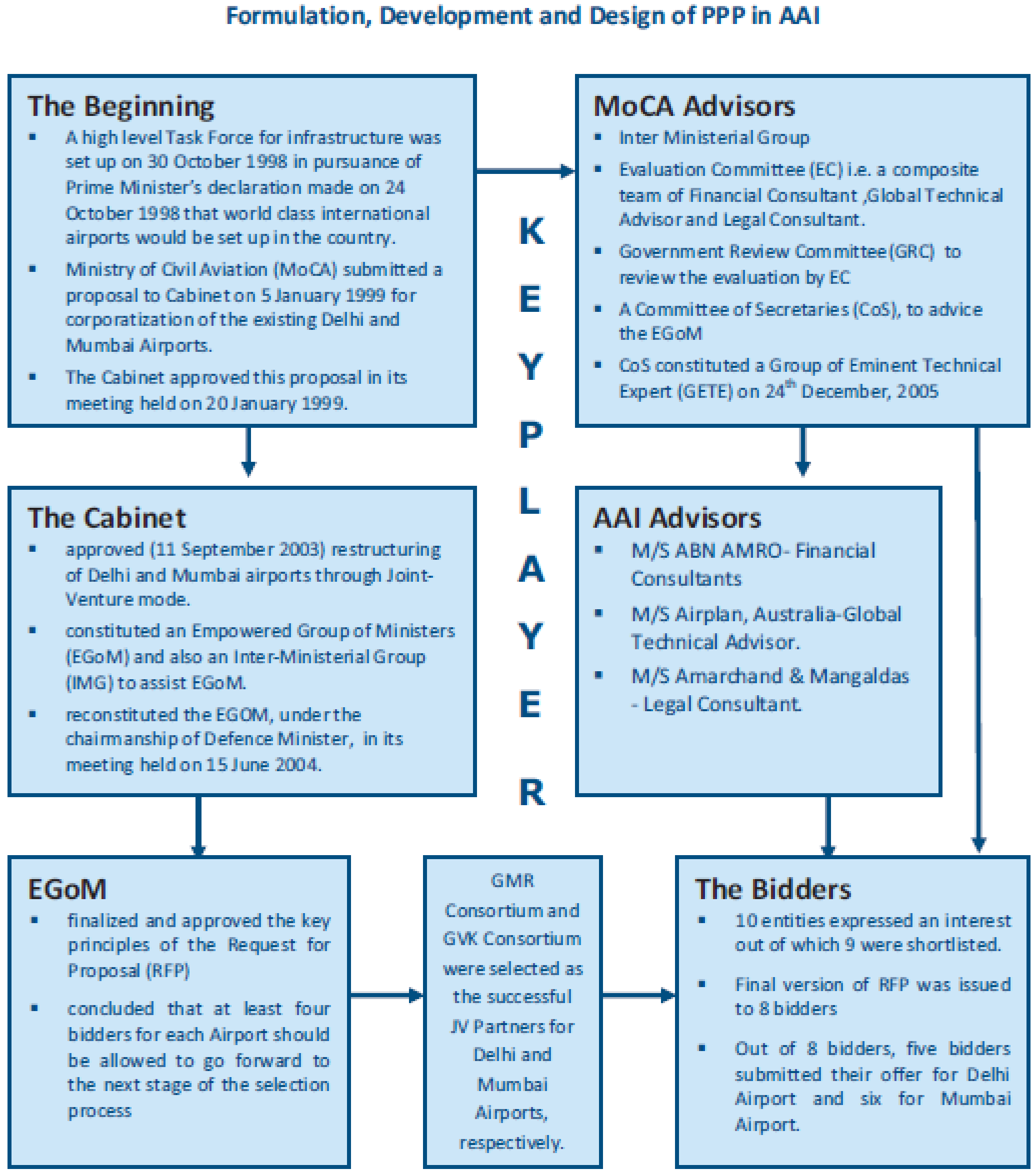
Chart 26: Does GMR enjoy a competitive advantage? We think yes



Source: Company; IDBI Capital Research

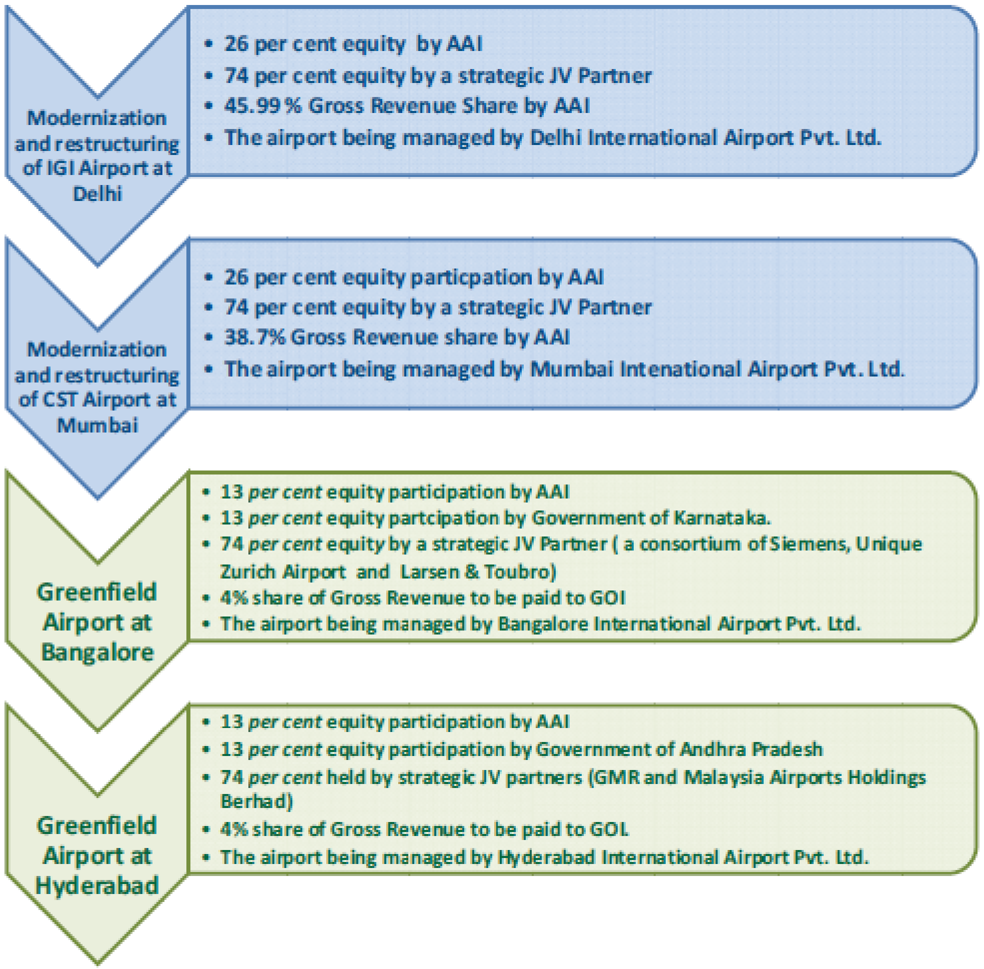
The Competitive intensity is relatively lower in Airport space. Yet the number of bidders shortlisted for RFP was higher than seven.

Chart 27: The Formulation, development and design of PPP in AAI shows the nature of competitive bidding



Source: Industry; IDBI Capital Research

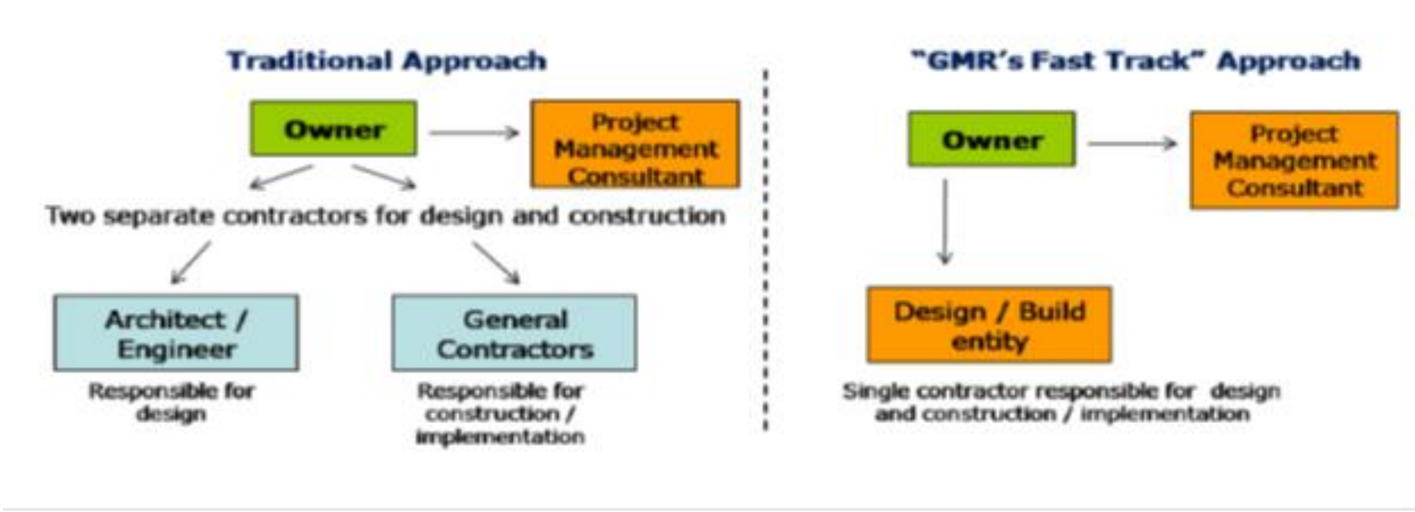
Chart 28: And eventual awarding of PPP Projects



Source: Industry; IDBI Capital Research

As they say, the proof of the pudding is in eating, GMRI walks the talks.

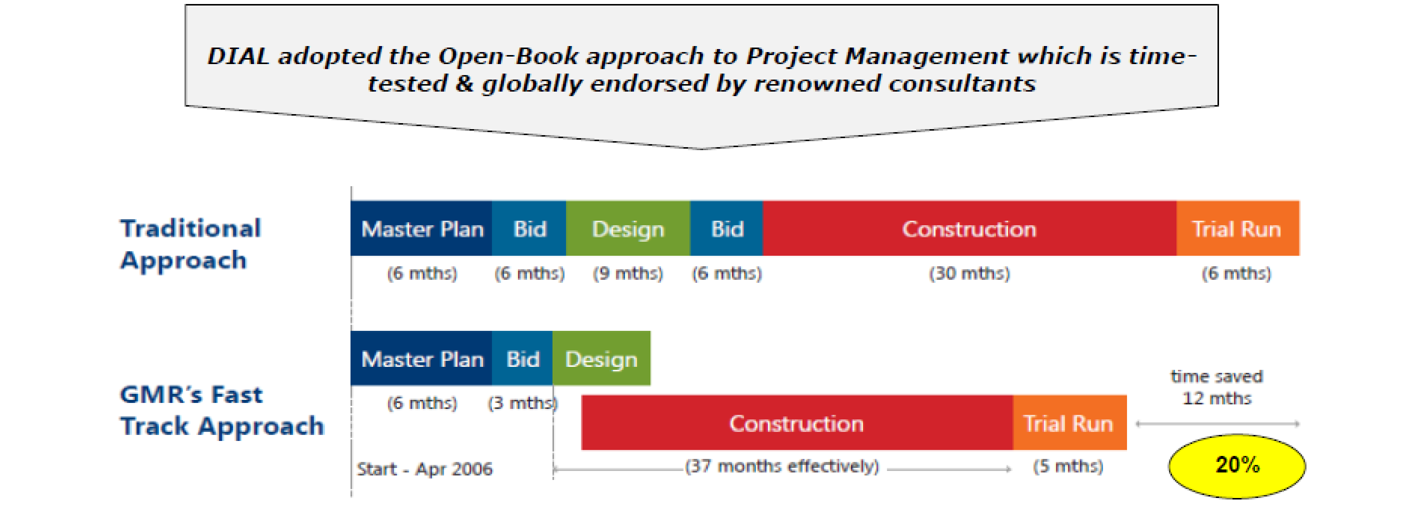
Chart 29: GMRI's fast track approach with single contractor yields results



Source: Company; IDBI Capital Research

In DIAL, the fast track approach helped company achieve time savings.

Chart 30: Open Book approach and intrinsic competitive advantage led to compression of timelines



Source: Company; IDBI Capital Research

Chart 31: Timeline for GMRI's first project in Delhi

Source: Company; IDBI Capital Research

Table 10: DIAL's concession terms

Start Date	Apr-06
Construction Completion Date	Phase 1 completed in March 2010 (Airport capacity of 62mpax against FY17 traffic of c. 57.7m pax) Saturation Phase –2036 (Airport capacity of 109mpax annually as per master
Concession Period	30 years + 30 years (extension at the option of DIAL at existing concession terms, subject to non-occurrence of a default)
Phase 1 Development Cost	US$2.6bn
Revenue share & Fee	One-time upfront fee of Rs1.5bn(~USD 35 mn) to 45.99% revenue share with AAI Projected revenue sharing shall be payable in 12 equal monthly installments
Right of First Refusal (ROFR)	Until 2036, for a second airport within 150 kms of the existing airport Right to match the most competitive bid received, if DIAL's initial bid is within 10% of such bid
Commercial Property Development	~230 acres available for commercial development
Tariff Structure	Regulatory structure is a "Hybrid Till" model with 30% cross subsidization from Non-Aeronautical revenues (excluding revenues from CPD()

Source: Company; IDBI Capital Research

Table 11: More than 50 Government Departments were involved, besides other stake holders

Multiple stakeholders posed challenges	GMR adopted a strong Project Management strategy
•Strong Project Management: Regular and accurate tracking of progress with continuous reporting to top management for decision making	•Strong Project Management: Regular and accurate tracking of progress with continuous reporting to top management for decision making
•Progress Reports: Reports shared with related government / regulatory agencies to ensure speedy approvals and avoid bottlenecks	•Progress Reports: Reports shared with related government / regulatory agencies to ensure speedy approvals and avoid bottlenecks
•Visit Invitations: Invitations to bureaucrats and politicians to visit the project site to take stock of progress	•Visit Invitations: Invitations to bureaucrats and politicians to visit the project site to take stock of progress
•Detailed Audits: Audits were done on the Project Cost, Project management process etc. by reputed consultants	•Detailed Audits: Audits were done on the Project Cost, Project management process etc. by reputed consultants

Source: Company; IDBI Capital Research

Table 12: GMR achieved a gargantuan feet

The Challenges faced	GMR adopted a multi-pronged strategy
•Nascent sector in India; hence there was a talent crunch. Building global expertise to create a world-class infrastructure project	Global talent: Brought in global leaders in airports sector as part of its team (manpower from ~ 25 countries) •Training: Focused training programs in India, Germany and Malaysia for skill enhancement with our partner Fraport
•Complex and diverse skill requirement for airport projects. Significant competition from other relevant and emerging sectorslike real estate for the limited talent.	•Best in class consultants: Built a team of world-renowned consultants
•Managing 2,160 existing AAI employees with legacy productivity and talent issues	•Partnership approach: Worked with all contractors to ensure complete talent availability –more than 30,000 workers were engaged for T3 project
•22,000 workers including 1,000 skilled workers supervised by 1,665 personnel working round the clock	•Seamless transition: Operational readiness & Transfer (ORAT) team from Munich was deployed for the transfer from old facility to new

Source: Company; IDBI Capital Research

Table 13: And the multi-pronged strategy was innovatively financed

The Challenges faced	GMR adopted innovative project financing approach
•Largest single location capital project in India ever - over USD 2.6 Billion	•Equity and Internal Accrualswere utilized
•Due to aggressive timelines, the project cost was not fixedand was susceptible to commodity price rises	•Maximum possible Term Loanswere raised
•Price of key commodities soared between 2008-09 (steel & cement prices increased by over 35%)	•Combination of Rupee Term Loan & External Commercial Borro challenges
•In fact, many other companies had postponed projects	•Refundable Security Depositswere raised through monetization
•High level of regulatory uncertainty on the expected returns and treatment of project cost	•Airport Development Fees (ADF)was sought and obtained

Source: Company; IDBI Capital Research

A world-class airport at record time and low cost: a metric, investors fail to appreciate.

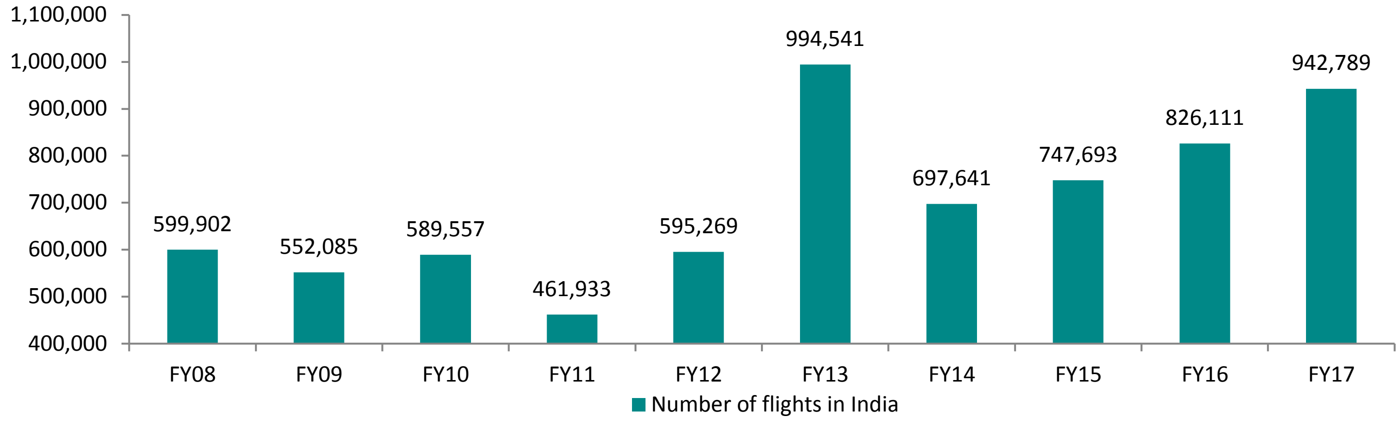
Table 14: With the result, Delhi T3 was made at a record time and low cost!

Airport	Capacity, mppa	Floor, sqm	Construction months	Cost per square mt ($)
London Heathrow (T5)	28	353,000	72	11,614
Madrid (T4)	42	757,000	70	3,895
Bangkok (Suvarnabhumi)	45	563,000	60	4,973
Kuala Lumpur (T1)	25	479,000	54	3,337
Beijing (T3)	43	900,000	52	4,222
Delhi (T3)	**34**	**502,000**	**37**	**3,306**

Source: Industry; IDBI Capital Research

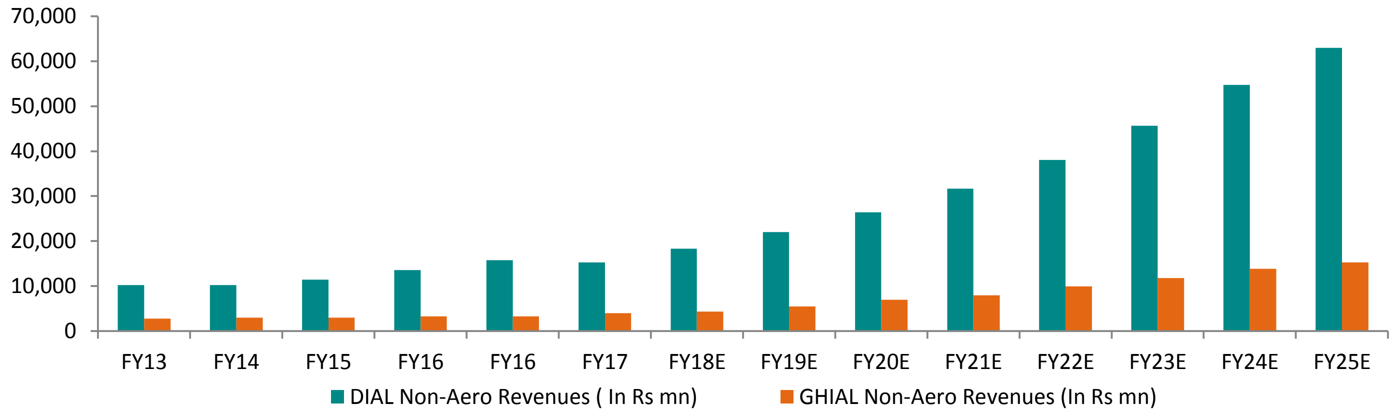
The Scope of Higher Non-Aero Revenues is eminent in DIAL/GHIAL:

Chart 32: Number of flights in India has doubled. And yet, the addressable market size is multi-fold. Given regulated base, however, this metric has little impact on Aeronautical revenues. Non-Aeronautical revenues, with more passengers in terminal, thereby, could go up. This is a big revenue driver for DIAL



Source: Industry; IDBI Capital Research

Chart 33: With growth in passengers, the scope of higher non-aero revenue exists.



Source: Industry; IDBI Capital Research

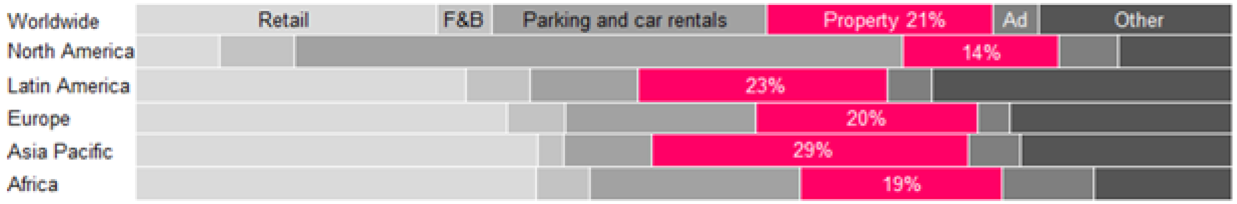
Table 15: The proportion of Non-Aero revenues to Aero Revenues ranges from 32% in Africa to 50% in Asia Pacific.

Region	Total Income	Aeronautical Income	Non-Aero Income*	% non-aero
Africa	2,800	1,900	900	32.14%
Asia-Pacific	31,600	15,800	15,800	50.00%
Europe	44,300	26,100	18,200	41.08%
Latin America-Caribbean	6,500	4,200	2,300	35.38%
North America	25,300	14,300	11,000	43.48%
Middle East	6,500	3,500	3,000	46.15%
World	117,000	65,800	51,200	43.76%

*Non-Aeronautical Income includes Non-Operating Income of USD 5.1 billion worldwide

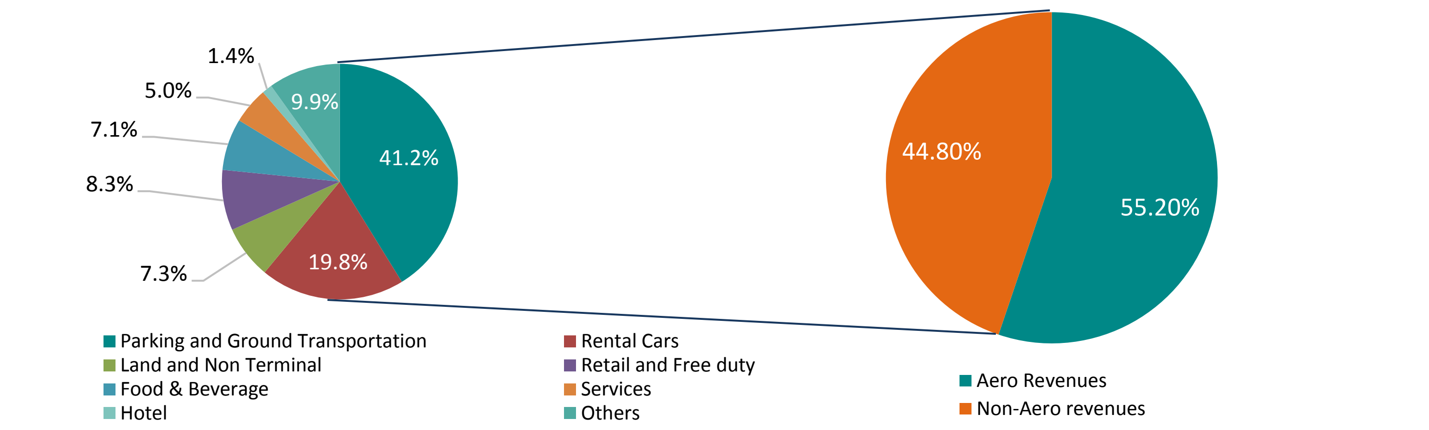
Source: Industry; IDBI Capital Research

Chart 34: Even within the non-aero revenues, the distribution of Non-Aero revenues varies from region to region



Source: Industry; IDBI Capital Research

Chart 35: The normalized Non-Aera revenues across the globe:



Source: Industry; IDBI Capital Research

The risks in projecting Non-Aero Revenues:

- Volatility in the passenger traffic impacts non-aeronautical revenues.
- In most of the major airports, large terminal areas have been newly built and have not been populated by non-aeronautical services and concessionaires. The trend of how they would be so populated is, therefore, at the moment, unclear.
- As per AERA reports, airports like Delhi have mature non-aero activities. However, terminal expansion can jostle the earnings to another level.

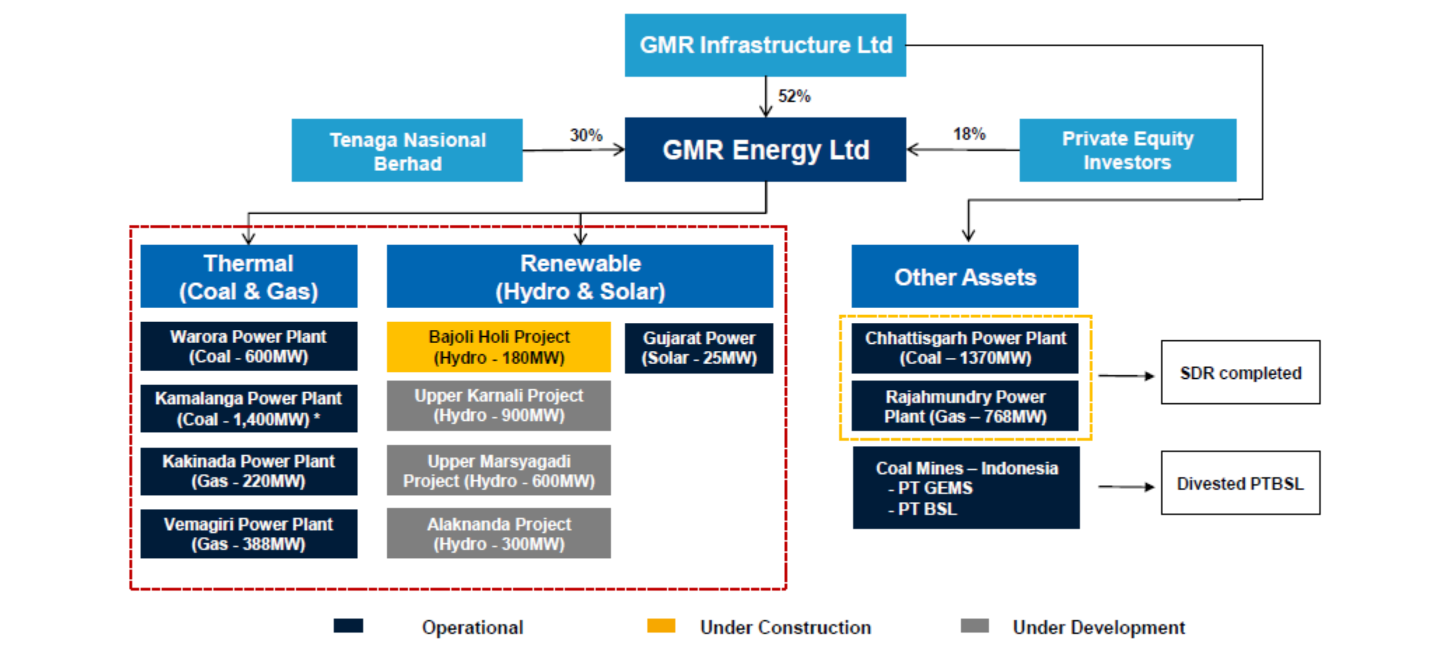
Does Heuristic metric work?

- The rate of GDP to that of passengers is empirically at 1.5x. Civil aviation experts use GDP elasticity of 1.5 for domestic passengers and 3.1x of global income elasticity for international passengers.
- This ratio, however, is applicable for 10-15 years. Thereby, in a shorter term of 5 years, say, the ratio is of no use. Further, at any rate, the passenger growth primarily drives the NAR growth in the terminal building.

On Energy:

> *With de-consolidation of GMR Energy, one of the low RoE laggard, the financials should be brighter ahead.*

Chart 36: If reference transaction is anything to go by, GMR Energy is $1bn



Source: Company; IDBI Capital Research

Chart 37: Currently, Warora and Kamalanga are operational; Moreover, with PPA, the earnings is protected.

Project	Warora (Maharashtra)	Kamalanga (Orissa)	Vemagiri (Andhra Pradesh)	Kakinada – Barge Plant (Andhra Pradesh)	Bajoli Holi (Himachal Pradesh)
Fuel	Coal	Coal	Gas	Gas	Hydro
Ownership	100%	87%	100%	100%	100%
Capacity	600 MW	1,050 MW	388 MW	220 MW	180 MW
Project Cost	INR 40 bn	INR 65 bn	INR 11.5 bn	INR 6 bn	INR 22 bn
CoD	September 2013	March 2014	January 2008	June 2010	Expected in FY20
Power Off-take	• Fully contracted long term PPA	• 85% of power contracted through long term PPA	• 100% Regulated Tariff • 23 years PPA with Andhra Pradesh & Telangana	-	• Entering into long term PPA
Fuel Linkage	• Confirmed linkage from Coal India Ltd.	• Confirmed linkage from Coal India Ltd.	• Gas not available since FY13 • Plant operated under eRLNG scheme during FY16 & FY17	-	• Run of the river facility
PLF	• 70% in FY17 • 69% in 9MFY18	• 65% in FY17 • 59% in 9MFY18	• Operated till FY12 • 9% in FY17	• Operated till FY12	• Under Construction : ~65% complete by Dec'17
Recent Updates	• Refinancing of project loan completed in Feb'15 • Interest rate reduced by 110bps, moratorium of 18 months and 15 years repayment period	• Refinancing of the project loan completed in Jun'15 • Interest rate reduced by 100bps, moratorium of 30 months with 16.5 years repayment period	• Debt-free plant	• Debt-free plant	• Financial Closure done in Apr'13 • NTP issued for civil works

Source: Company; IDBI Capital Research

We have not factored the valuations from SDR assets.

Chart 38: We have ignored SDR assets

Project	Raikheda (Chhattisgarh)	Rajahmundry (Andhra Pradesh)
Fuel	Coal	Gas
Ownership	48%	45%
Capacity	1,370 MW	768 MW
Project Cost	INR 124 bn	INR 49.4 bn
CoD	• November 2015 (Unit - 1) • March 2016 (Unit – 2)	• October 2015
Power Off-take	• Long term PPA with Chhattisgarh TransCo for 5% of gross capacity	• To enter into long term PPA based on sustainable gas supply
Fuel Linkage	• Have Talabira and Ganeshpur coal mine • Coal mining at Talabira started from Aug'15	• No long term gas supply contract in place • Secured gas supply under e-RLNG scheme from Oct'15 to Sept'16
Strategic Debt Restructuring (SDR)	• **Reason** : Absence of long term Power Purchase Agreements ○ Debt of INR 30 bn converted into equity - consortium lenders acquired 52% shareholding ○ Debt (post SDR) – INR 58 bn	• **Reason** : Absence of long term Fuel Supply Agreement and Power Purchase Agreements ○ Debt of INR 14 bn converted into equity - consortium lenders acquired 55% shareholding ○ Debt (post SDR) – INR 24 bn

Source: Company; IDBI Capital Research

Further, with adequate power supply…

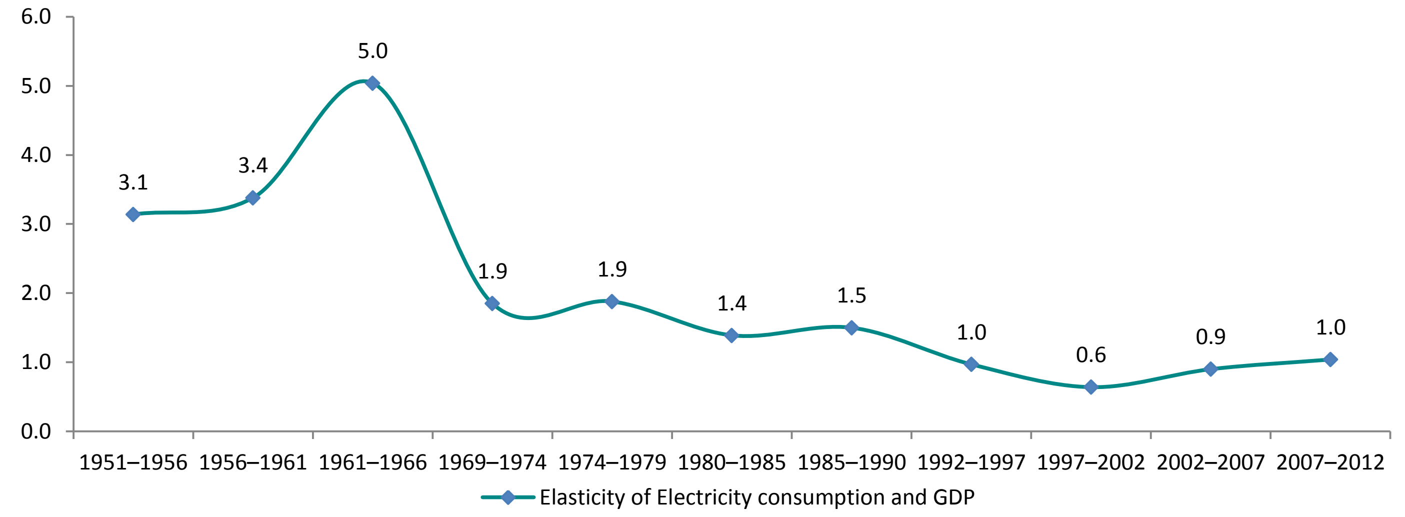
Table 16: A case of power over supply till 2022 cannot be ruled out

		2017	2022
1	Installed GW	330	523
2	Hours	24	24
3	Days	365	365
4	Availability factor	85%	85%
5	Plant load factor	55%	55%
6=1*2*3*4*5	GWH including aux	1.3mn	2.1mn
	Growth in supply		9.65%

Source: Industry; IDBI Capital Research

…and poor elasticity, the surplus situation in power should be a cause of concern.

Chart 39: Until and unless elasticity of electricity consumption inches up above 3



Source: Industry; IDBI Capital Research

Until and unless, Real GDP and consumption elasticity increases, this is a sector that will be under stress.

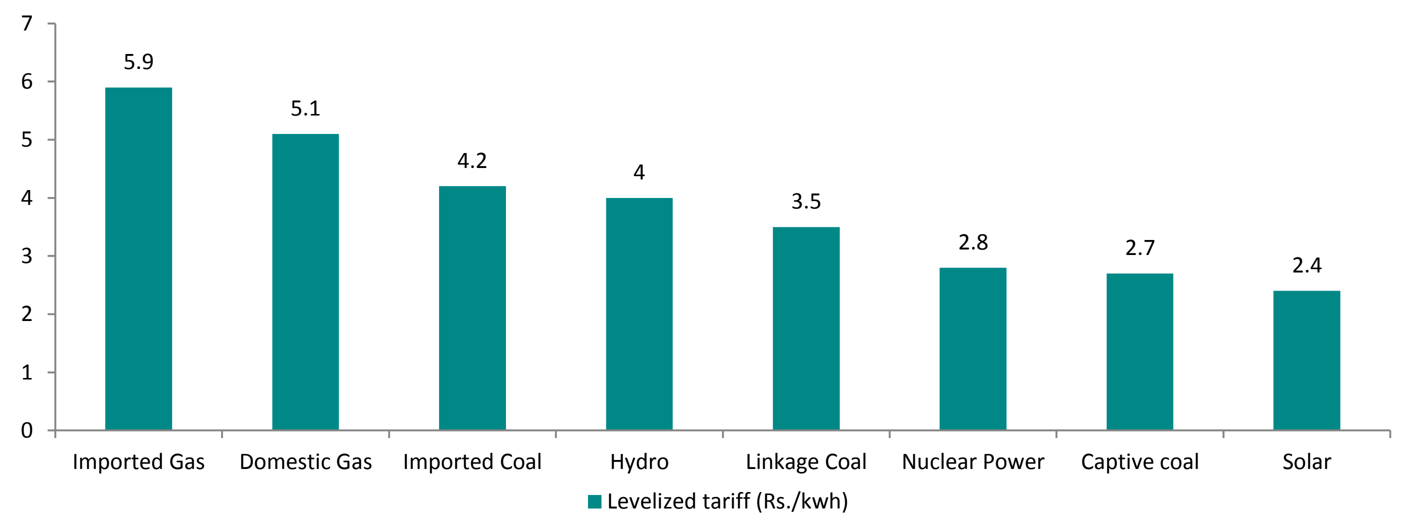
Table 17: The elasticity for electricity consumption with Real GDP growth rate

		Real GDP growth rate over next five years						
		4%	5%	6%	7%	8%	9%	10%
Electricity consumption elasticity	0.7	3%	4%	4%	5%	6%	6%	7%
	1.0	4%	5%	6%	7%	8%	9%	10%
	1.5	6%	8%	9%	11%	12%	14%	15%
	2.0	8%	10%	12%	14%	16%	18%	20%
	2.5	10%	13%	15%	18%	20%	23%	25%
	3.0	12%	15%	18%	21%	24%	27%	30%

Source: Industry; IDBI Capital Research

Further, the threat of renewables is serious.

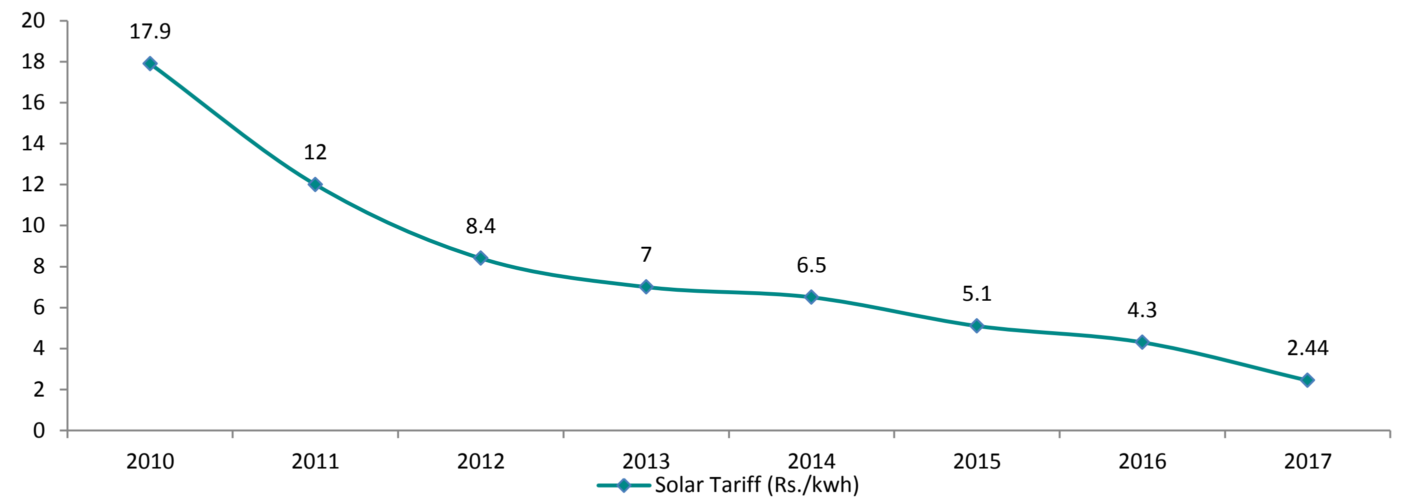
Chart 40: Adding to the existing PLF woes, the competition is from Solar



Source: Industry; IDBI Capital Research

And with falling solar tariffs…

Chart 41: Solar Tariff moving downs opens up new threat to conventional power demand



Source: Industry; IDBI Capital Research

…and increasing capacity…

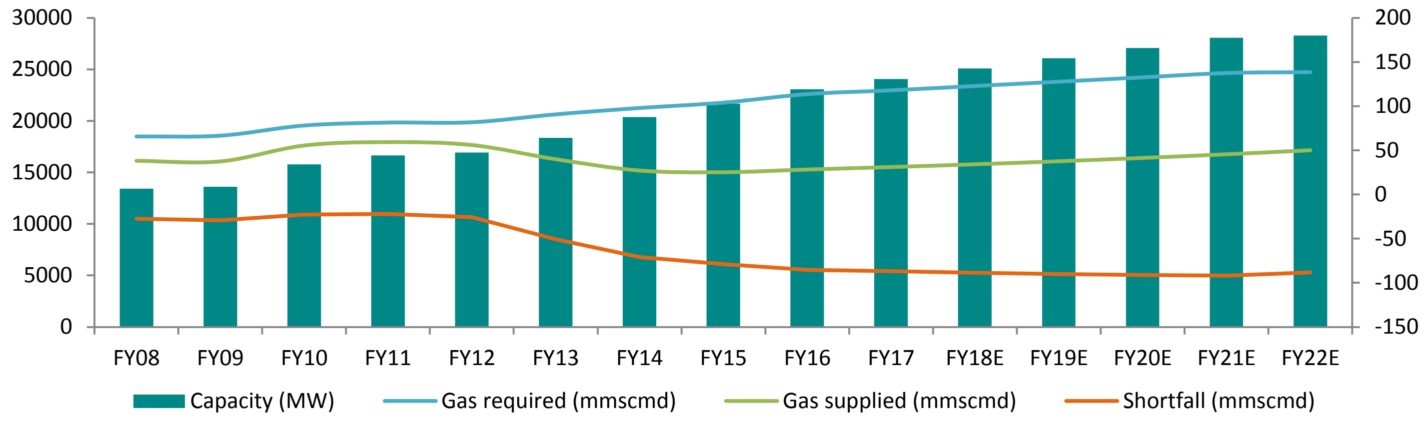
Table 18: And they are happening on a bigger scale

In MW	Rooftop	Utility Scale	Total
2016	200	1,800	2,000
2017	4,800	7,200	12,000
2018E	5,000	10,000	15,000
2019E	6,000	10,000	16,000
2020E	7,000	10,000	17,000
2021E	8,000	9,500	17,500
2022E	9,000	8,500	17,500
			97,000

Source: Industry; IDBI Capital Research

…coupled with gas deficit, the sector looks bleak.

Chart 42: With gas deficit projected till some more time, things looks bleak



Source: Industry; IDBI Capital Research

We have valued Kamalanga with 14% CoE. The earnings are protected with PPA.

Table 19: Kamalanga Energy

Assumptions	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY41	FY42
MW	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050
PLF	60%	75%	80%	85%	85%	85%	85%	85%	85%
Generation in mn kwh	5,519	6,899	7,358	7,818	7,818	7,818	7,818	7,818	7,818
Realization per unit	3.50	3.61	3.71	3.82	3.94	4.06	4.18	6.91	7.11
Net Revenue	19,316	24,869	27,323	29,901	30,798	31,722	32,674	54,005	55,625
Fuel Costs	9,020	11,614	12,760	13,964	14,383	14,814	15,259	25,220	25,977
O&M Expenses	4,249	4,725	5,331	5,835	6,010	6,190	6,376	10,538	10,854
EBITDA	6,046	8,530	9,232	10,103	10,406	10,718	11,040	18,247	18,794
Interest	7,284	7,284	7,284	6,476	5,757	5,117	4,547	575	505
Depreciation	3,006	2,859	2,719	2,586	2,459	2,338	2,224	947	900
PAT	(3,688)	(1,342)	(486)	1,339	2,501	3,585	4,602	17,187	17,855
FCFE	(681)	1,517	(5,788)	(3,206)	(1,379)	289	1,819	17,500	18,199
Net Present Value at 14% CoE	19,711								

Source: Company; IDBI Capital Research

We have valued Warora with 14% CoE; Here again, we believe the earnings in SPV is protected with PPA.

Table 20: Warora Energy

Assumptions	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY39
MW	600	600	600	600	600	600	600	600	600	600
PLF	70%	80%	85%	85%	85%	85%	85%	85%	85%	85%
Generation in mn kwh	3,679	4,205	4,468	4,468	4,468	4,468	4,468	4,468	4,468	4,468
Realization per unit	4.40	4.53	4.67	4.81	4.95	5.10	5.25	5.41	5.57	8.19
Net Revenue	16,188	19,056	20,855	21,480	22,125	22,788	23,472	24,176	24,901	36,569
Fuel Costs	7,560	8,899	9,739	10,031	10,332	10,642	10,961	11,290	11,629	17,078
O&M Expenses	3,769	3,718	4,069	4,191	4,317	4,447	4,580	4,717	4,859	7,135
EBITDA	4,859	6,439	7,046	7,258	7,475	7,700	7,931	8,169	8,414	12,356
EBITDA (%)	30%	34%	34%	34%	34%	34%	34%	34%	34%	34%
Interest	3,813	4,027	4,059	4,008	3,909	3,759	3,551	3,276	2,928	-
Depreciation	1,490	1,423	1,359	1,298	1,239	1,184	1,130	1,079	1,031	-
PAT	-355	791	1,302	1,562	1,861	2,205	2,600	3,050	3,563	9,884
Capex										
Debt repayment		2,606	2,571	2,513	2,438	2,334	2,197	2,895	3,585	-
FCFE	1,135	-392	90	346	662	1,055	1,533	1,235	1,009	9,884
Net Present Value at 14% CoE	14,166									

Source: Company; IDBI Capital Research

We have factored in the non-operational power plants at discount to invested value.

GMR may be unable to ensure uninterrupted supply of natural gas to our natural gas-based power plants, which may have an adverse effect on our business, results of operation, cash flows and financial condition.

In Kakinada and Vemagiri in Andhra Pradesh, GMR runs two natural-gas based power plant. The aggregate capacity runs in 623 MW. For the Kakinada Power Plant, GMR received natural gas allocation from the MoPNG. The quantity was assured to fuel 75% of the power plant's capacity. The remaining fuel, the company was expected to source from with Krishna-Godavari Basin.

Additionally, GVPGL, the subsidiary that operates the Vemagiri Power Plant, had entered into a fuel supply agreement with Reliance, Niko and BP, which expired in March 2014. Here again, the arrangement should have addressed 90% of the power plant's capacity. Reliance sources natural gas from the Krishna-Godavari Basin. However, Reliance's obligations under the fuel supply agreements are subject to the availability of natural gas from the Krishna-Godavari Basin. Adding to that, the allocation of natural gas by Reliance from Krishna-Godavari Basin has a priority ranking.

Chart 43: Company has exited PTBSL

Project	PT GEMS	PT BSL
Mine Location	Indonesia	Indonesia
Ownership	30%	100%
Resources	1.77 Bn Tons	404 Mn Tons
Reserves	640 Mn Tons	142 Mn Tons
Production – FY17	9.5 mn tons (▲ 9%)	-
Production – 9MFY18	10.1 mn tons (▲ 46%)	-
Current Status	Improvement in international coal prices resulted in improved realisations & profitability	Share Purchase Agreement signed to divest 100% stake

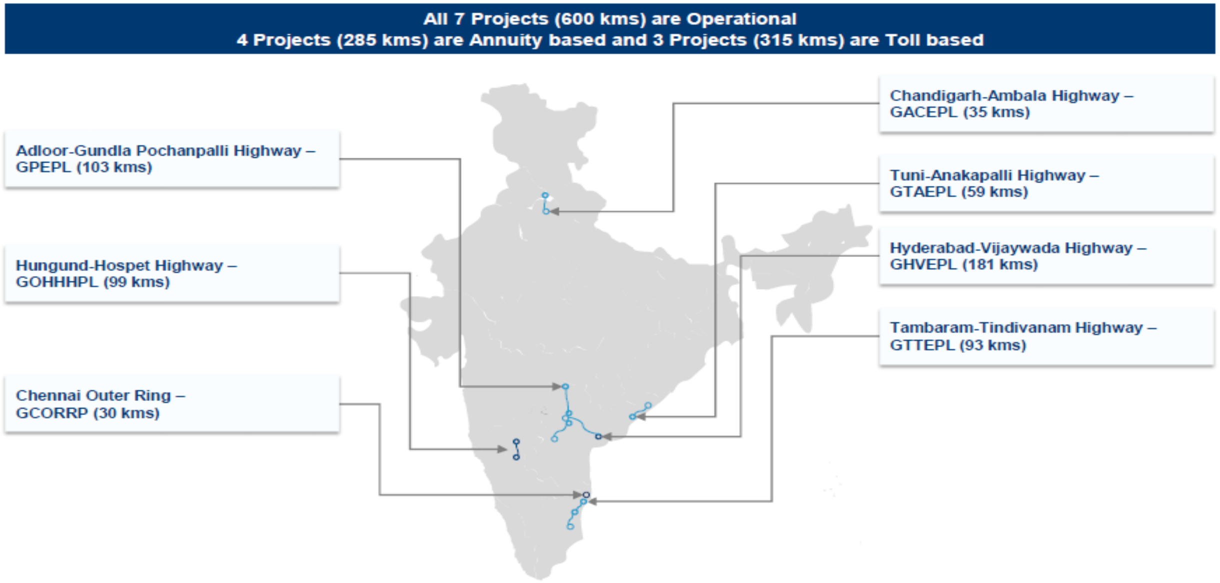
Project	Talabira mine	Ganeshpur mine
Mine Location	Sambalpur, Odisha	Latehar, Jharkhand
Upfront payment	INR 540 mn	INR 1,090 mn
Extractable Reserve	9 Mn Tons	92 Mn Tons
Current Status	Operational mine; Mining commenced from Aug'15	Under development stage Would take 2-3 years to become operational

Source: Company; IDBI Capital Research

On Roads:

The company has diversified spread of road assets. However, they earn sub-par RoE.

Chart 44: Company has a diversified spread of road assets



Source: Company; IDBI Capital Research

Table 21: Roads, however, will no longer be the area of focus.

Project Name	Annuity Based Road Projects (285 kms)				Toll Based Road Projects (315 kms)		
	GTAEPL	TTTEPL	GPEPL	GCORRPL	GACEPL	GHVEPL	GOHHPL
Location	Tuni-Anakapalli	Tambaram-Tindivanam	Pochampalli	Chennai ORR	Ambala-Chandigarh	Hyderabad-Vijayawada	Hungund-Hospet
Shareholding	100%	100%	100%	90%	100%	90%	36%
Road Length *(kms)*	59	93	103	30	35	181	99
CoD	Dec-04	Oct-04	Mar-09	Jun-13	Nov-08	Dec-12	Nov-12/May -14
Concession Period	17.5 yrs from May-02	17.5 yrs from May-02	20 Yrs from Sep-06	20 Yrs from Jun-10	20 Yrs from May-06	25 Yrs from Apr-10	19 Yrs from Sep-10

Source: Company; IDBI Capital Research

Table 22: GTAEPL

INR mn	FY 11	FY12	FY13	FY14	FY15	FY16	FY16	FY17	FY18	FY19	FY20
Gross Revenues	810	812	812	814	816	817	627	539	540	540	315
Expenses	200	199	348	364	364	412	351	411			
EBITDA	610	613	464	450	452	405	276	128	180	180	105
EBITDA margin (%)	*75*	*76*	*57*	*55*	*55*	*50*	*44*	*24*	33	33	33
Other Income	136	143	161	244	221	221	317	347	208	125	75
Interest Cost	292	275	254	244	216	197	231	222	190	120	60
Exceptional Item	-	-	-	-	-	-	-	-			
Depreciation	252	253	253	253	253	253	1	0			
Tax	41	50	26	43	44	39	24	32	39.90	25.20	12.60
Profit After Tax	161	178	93	155	160	138	338	221	150	95	47

Source: Company; IDBI Capital Research

Table 23: GPAEPL

INR mn	FY 11	FY12	FY13	FY14	FY15	FY16	FY16	FY17	FY18	FY19	FY20
Gross Revenues	590	590	589	590	590	590	398	430	390	360	210
Expenses	122	122	191	227	268	215	193	213			
EBITDA	468	468	399	363	322	375	206	217	180	130	50
EBITDA margin (%)	*79*	*79*	*68*	*62*	*55*	*64*	*52*	*51*			
Other Income	52	81	87	92	113	100	175	181	150	100	70
Interest Cost	227	212	203	186	161	147	174	160	140	90	45
Exceptional Item	-	-	-	-	-	-	-	-			
Depreciation	199	199	199	199	199	199	0	0	-	-	-
Tax	20	31	19	22	15	28	33	36	38	28	15
Profit After Tax	74	107	65	48	59	101	173	202	152	112	60

Source: Company; IDBI Capital Research

Table 24: GPEPL

INR mn	FY 11	FY12	FY13	FY14	FY15	FY16	FY16	FY17	FY18	FY19	FY20
Gross Revenues	1,084	1,084	1,084	1,084	1,084	1,084	820	809	809	809	809
Expenses	91	76	82	171	977	353	269	301			
EBITDA	993	1,008	1,002	913	106	731	551	508	510	510	510
EBITDA margin (%)	*92*	*93*	*92*	*84*	*10*	*67*	*67*	*63*	0.63	0.63	0.63
Other Income	93	133	163	183	195	174	177	190	190	190	190
Interest Cost	621	561	537	514	486	455	484	484	459	437	415
Exceptional Item	-	-	-	-	-	-	-	-			
Depreciation	402	404	403	405	407	407	1	1	0.84	0.84	0.84
Tax	13	35	45	37	(0)	-	-	38	71.80	78.69	85.24
Profit After Tax	50	141	180	140	(591)	42	243	175	168	184	199

Source: Company; IDBI Capital Research

Table 25: CORR

INR mn	FY14	FY15	FY16	FY16	FY17	FY18	FY19	FY20
Gross Revenues	936	1,179	1,183	1,050	1,073	950	900	850
Expenses	676	107	115	153	271			
EBITDA	260	1,073	1,068	897	801	808	585	553
EBITDA margin (%)	*28*	*91*	*90*	*85*	*75*	0.85	0.65	0.65
Other Income	7	14	14	14	17	17	17	17
Interest Cost	54	816	783	846	878	834	792	753
Exceptional Items	-	-	-	-	-			
Depreciation	383	484	485	1	1			
Tax	-	-	-	-	49			
Profit After Tax	(171)	(213)	(187)	65	(109)	(9)	(190)	(183)

Source: Company; IDBI Capital Research

Table 26: GACEPL

INR mn	FY 11	FY12	FY13	FY14	FY15	FY16	FY16	FY17	FY18	FY19	FY20
Gross Revenues	217	246	286	325	369	408	410	415	480	528	581
Expenses	58	48	92	116	317	114	153	144			
EBITDA	159	198	194	210	52	293	257	271	408	449	494
EBITDA margin (%)	*73*	*80*	*68*	*64*	*14*	*72*	*63*	*65*	0.85	0.85	0.85
Exceptional Income		231									
Other Income	3	2	3	6	7	7	6	6	6.00	6.00	6.00
Interest Cost	289	309	308	299	310	344	468	443	421	400	380
Depreciation	145	105	121	214	228	241	241	263	263	263	263
Profit After Tax	(272)	17	(231)	(297)	(479)	(285)	(446)	(428)	(269)	(207)	(143)

Source: Company; IDBI Capital Research

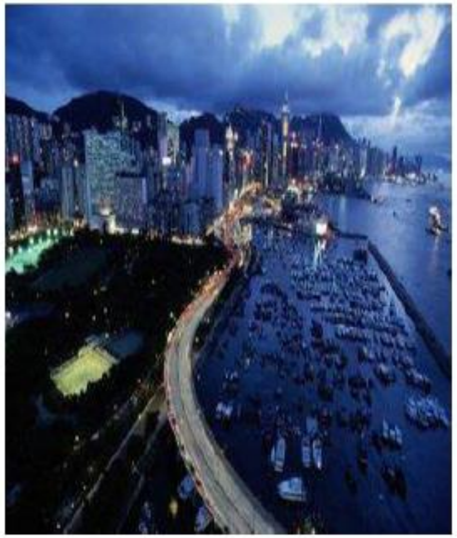
Table 27: HV

INR mn	FY14	FY15	FY16	FY16	FY17	FY18	FY19	FY20
Gross Revenues	2163	2316	2338	2361	2270	2,600	2,860	3,146
Revenue share to concessionaire NHAI	721	793	824	824	819	0.37	0.38	0.39
Net Revenues	1,442	1,523	1,515	1,538	1,451	1,638	1,773	1,919
Expenses	272	233	259	539	525	525	525	525
EBITDA	1,170	1,289	1,255	999	926	1,113	1,248	1,394
EBITDA margin (%)	*81*	*85*	*83*	*65*	*64*	70	75	75
Other Income	12	9	8	8	7	7	7	7
Interest Cost	1,962	1,962	2,039	2,362	2,330	2,213	2,103	1,998
Exceptional Items	-	-	-	-	-			
Depreciation	156	260	319	319	348	348	348	348
Profit After Tax	(936)	(923)	(1,095)	(1,674)	(1,745)	(1,442)	(1,196)	(945)

Source: Company; IDBI Capital Research

On Special Investment Region:

Chart 45: Monetization of Special Investment Region to help in further deleveraging.



Kakinada SIR (Andhra Pradesh) – 10,500 acres

- Port-based SIR, located in the Krishna-Godavari basin, to include an all weather multi-purpose deep-water port, a logistics park, a petrochemicals cluster and an eco-industrial park
- Land of ~5,000 acre have been notified as SEZs
- Obtained necessary approvals on the utility/environmental from the state government
- MoU signed for monetization of 2,700 acres
  - GAIL, HPCL and AP Govt. to set up a cracker unit with a proposed investment of INR 400 bn in 2,000 acres of land
- Operational Pal Plush toy manufacturing unit and Rural BPO centre in association with TATA Business Support Services

Krishnagiri SIR (Tamil Nadu) – 3,300 acres

- Being developed in phases in joint venture with TIDCO - first phase of 275 acre
- ~800 acre identified by SIPCOT for their Phase III & IV Industrial park
- Leased out 20 acre to M/s Toyota Boshuku for their manufacturing unit

Source: Industry; IDBI Capital Research

At the CMP, the land bank can offset debt, and airports could be picked up for free. A restructuring will help the value unlocking.

True, for a wider horizon of history, the sum-of-the-parts has always been higher the market price. It is events that are lined up. And that matters more.

Table 28: Valuation

	Valuation of the arm	Stake	Contribution to GMR	Per Share	Rationale
Airports					
DIAL	99,795	64%	63,869	10.6	FCFE at 13% CoE
Delhi Land Bank	101,750	64%	65,120	10.8	Land Bank valuation at Rs550mn/acre
Hyderabad Airport	96,559	74%	71,454	11.8	FCFE at 13% CoE
Hyderabad Land Bank	28,000	74%	20,720	3.4	Land Bank valuation at Rs20mn/acre
Goa Airport	5,700	100%	5,700	0.9	Invested Value
CEBU	40,875	40%	16,350	2.7	EV/EBITDA
JVs			31,140	5.2	PE of 20x FY20E
Power					
Kamalanga	19,711	45%	8,870	1.5	FCFE at 14% CoE
Warora	14,166	52%	7,366	1.2	FCFE at 14% CoE
Kakinada	6,000	52%	3,120	0.5	Discount to invested value
Vemagiri	11,500	52%	5,980	1.0	Discount to invested value
Chattisgarh	-	48%	-	-	Discount to invested value
Rajamundhari	-	45%	-	-	Discount to invested value
Bajoli Holi	7,745	52%	4,027	0.7	Discount to invested value
Gujarat Solar Power	1,500	52%	780	0.1	Discount to invested value
PTGEMS		30%	8,856	1.5	EV/EBITDA of 7.5x
PTBSL	4290	100%	4,290	0.7	Transaction value
Roads				-	
Tuni - Anakapalli	306	100%	306	0.1	0.4x of Invested equity
Tambaram - Tindivanam	366	100%	366	0.1	0.4x of Invested equity
Pochanapalli	775	100%	775	0.1	0.4x of Invested equity
Ambala - Chandigarh	288	90%	260	0.0	0.4x of Invested equity
Chennai Outer Ring Road	559	100%	559	0.1	0.4x of Invested equity
Hyderabad - Vijaywada	1,935	90%	1,741	0.3	0.4x of Invested equity
Hungud-Hospet	149	36%	54	0.0	0.4x of Invested equity
Investment Region				-	
Kakinada	30,000	51%	15,300	2.5	Net proceeds from near term monetization
Krishnagiri	4,000	100%	4,000	0.7	Net proceeds from near term monetization
Corporate Debt/Liabilities			**(98,734)**	**(16.4)**	
Sum of the parts				40	
Conglomerate discount				**20%**	
Target Price				32	

Source: Company; IDBI Capital Research

Table 29: About the Board of Directors

Name	Role	Profile
GM Rao	Executive Chairman	G M Rao is the founder and Chairman of the GMR Group. He is a graduate in mechanical engineering from Andhra University, India. He was conferred with the honorary Doctor of Laws by York University, Toronto, Canada in 2011, the honorary Doctor of Letters by the Andhra University, India in 2010 and again honorary Doctor of Letters by the Jawaharlal Nehru Technological University, Hyderabad, India in 2005. He was a director on the Board of Vysya Bank for several years and also served as a non-executive chairman of ING Vysya Bank between October 2002 and January 2006. He has recently been nominated on the Central Board of Directors of Reserve Bank of India.
Grandhi Kiran Kumar	Managing Director	Managing Director, a Graduate in Commerce, is the younger son of Mr. G.M. Rao and has been on the Company's Board since 1999. He has successfully spearheaded the setting up of the greenfield Hyderabad International Airport and the development and modernization of Delhi International Airport, a major public-private partnership project. Earlier he headed the GMR Group's Finance function and the Shared Services. Subsequently led Highways, Construction, SEZs and allied businesses (excluding Airports SEZ) and Sports. Currently he is overseeing Group Finance and Corporate Strategic Planning Department (CSPD) functions in addition to leading Sports business.
SrinivasBommidala	Group Director	One of the first directors of the Group and has been a member of the Board since 1996, SrinivasBommidala entered his family tobacco export business in 1982 and led the diversification into new businesses such as Aerated water bottling plants, etc. He was also in charge of international marketing and management of the organization.Subsequently, he led the team as the Managing Director of GMR Power Corporation Limited for setting up the first Independent Power Project.
G.B.S. Raju	Group Director	Group Director, is the elder son of Mr. G.M. Rao and has been on the Company's Board since 1999. He completed his bachelor's degree in commerce from Vivekananda College, University of Madras, Chennai, in 1995. He began his career as the Managing Director of GMR Energy Limited and was responsible for setting up the 220 MW barge-mounted power plant.
B.V.N. Rao	Group Director	Group Director, has been associated with the Group since 1989 and is one of the first Directors of the Company. He is a graduate in Electrical Engineering from Andhra University. During his tenure with Andhra Bank before joining the Group, he gained extensive experience in the Banking Sector with specific focus in Industrial Finance. He was also on the board of Vysya Bank (now known as ING Vysya Bank Limited) for eight years. He has held various senior responsibilities in the GMR Group. He is also a Director on the GMR Group Holding Board. Currently as a Business Chairman, he heads Transportation & Urban Infrastructure covering Transportation, SEZ, EPC and Corporate Services covering Legal, Procurement, Corporate Affairs and GMR Varalakshmi Foundation. He is a Director on the Board of several subsidiaries of the GMR Group.
C.R. Muralidharan	Independent Director	C. R. Muralidharan is an Independent Director. He has a career spanning nearly four decades in supervision and regulation of the Indian banking and insurance sectors. He has experience in both operational and executive capacities. He has served as an executive at senior levels in the RBI and headed the department of Banking Operations and Development. Later he joined at the board level in the IRDA and served as a whole time member for almost four and a half years between 2005 and

		2009
N.C. Sarabeswaran	Independent Director	N.C. Sarabeswaran is an Independent Director. He is a chartered accountant and the founding partner of Jagannathan&Sarabeswaran, Chartered Accountants, an audit firm . He has experience in the areas of banking and finance. He was nominee director of the RBI and later professional and independent director on the board of Vysya Bank Limited. Previously, he was chairman of the audit committee and a member of the management and joint venture committees and held the position of president of Indo-Australian chamber of commerce.
R.S.S.L.N. Bhaskarudu	Independent Director	R.S.S.L.N. Bhaskarudu is an Independent Director. He is a graduate from Andhra University with a degree in electrical engineering and has over 48 years of experience in management and leadership positions. He worked for more than 19 years at Bharat Heavy Electricals Limited and was involved in the development and production of turbine generator sets. He was also the managing director of MarutiUdyog Limited, where he worked for 16 years and was a member / chairman of the Public Enterprises Selection Board of the Government.
S. Sandilya	Independent Director	S. Sandilya is an Independent Director. He is a commerce graduate from Chennai University and has a post graduate diploma in business administration from the Indian Institute of Management, Ahmedabad. He is the immediate past president of Society of Indian Automobile Manufacturers. He has experience in the areas of management and leadership. He is also the immediate past president of the International Motorcycle Manufacturers Association, Geneva. In addition, he is also the chairman of the Lean Management Institute of India and a member of the board of Lean Global Network, United States. He is also currently the president of SOS Children's Villages of India, a not-for-profit organisation involved in caring for children in need
S. Rajagopal	Independent Director	S Rajagopal is an Independent Director. He holds bachelor degrees in Commerce and Law, master’s degree in Economics from Gujarat University and a professional qualification from the Indian Institute of Banking and Finance. Having been on the boards of various corporates and development funds in India and abroad, he has knowledge of commerce, industry, finance and insurance. He was previously chairman and managing director of Bank of India, chairman and managing director of Indian Bank and chairman of Banking Service Recruitment Board. He has 38 years of experience in the field of banking. He is also closely associated with academics. He was a member of the Court of Banaras Hindu University and a member of the board of governors of Madras School of Economics. He is also an advocate with specialization in company matters.
Vissa Siva Kameswari	Independent Director	Vissa Siva Kameswari is an Independent Director. She is a qualified chartered accountant from the Institute of Chartered Accountants of India. She has 24 years of experience in management consultancy and industry experience. She has worked with RPG Enterprises, Mercer Consulting (India) Private Limited, KPMG Advisory Service Private Limited, Ashok Leyland Limited, The AmropHever Group and A. F. Fergusons & Co.

Source: Industry; IDBI Capital Research

Financial Summary

Profit & Loss Account (Rs mn)

Year-end: March	FY17	FY18E	FY19E	FY20E
Net sales	**70,057**	**67,172**	**65,723**	**78,147**
Growth (%)	*19.8*	*(4.1)*	*(2.2)*	*18.9*
Operating expenses	(37,857)	(43,403)	(42,320)	(42,848)
EBITDA	**32,200**	**23,769**	**23,403**	**35,299**
Growth (%)	*16.8*	*-26.2*	*-1.5*	*50.8*
Depreciation	(10,599)	(11,127)	(10,653)	(10,361)
EBIT	**21,601**	**12,642**	**12,750**	**24,938**
Interest paid	(21,285)	(20,799)	(20,127)	(19,653)
Other income	4,654	1,978	1,845	1,765
Pre-tax profit	**1,113**	**(6,178)**	**(5,531)**	**7,050**
Tax	(7,370)	(4,160)	(4,025)	(3,931)
Effective tax rate (%)	*662.4*	*(67.3)*	*(72.8)*	*55.8*
Minority Interest	-	-	-	-
Net profit	**(6,258)**	**(10,338)**	**(9,557)**	**3,119**
Exceptional items	(3,857)	-	-	-
Adjusted net profit	**(2,401)**	**(10,338)**	**(9,557)**	**3,119**
Growth (%)	*(40.1)*	*330.6*	*(7.6)*	*(132.6)*
Shares o/s (mnnos)	*6,036*	*6,036*	*6,036*	*6,036*

Cash Flow Statement (Rs mn)

Year-end: March	FY17	FY18E	FY19E	FY20E
Pre-tax profit	1,113	(6,178)	(5,531)	7,050
Tax paid	(7,370)	(4,160)	(4,025)	(3,931)
Chg in working capital	(93,004)	(48,536)	(6,500)	7,542
Cash flow from operations (a)	**45,655**	**(58,873)**	**(16,057)**	**21,023**
Capital expenditure	203,503	36,891	(42,500)	(42,500)
Chg in investments	172,120	-	-	-
Other investing activities	(357,696)	-	-	-
Cash flow from investing (b)	**17,927**	**36,891**	**(42,500)**	**(42,500)**
Equity raised/(repaid)	-	-	-	-
Debt raised/(repaid)	(134,806)	(54,295)	(39,816)	(36,498)
Dividend (incl. tax)	-	-	-	-
Chg in minorities	4,541	-	-	-
Other financing activities	72,477	-	-	-
Cash flow from financing (c)	**(57,789)**	**(54,295)**	**(39,816)**	**(36,498)**
Net chg in cash (a+b+c)	**5,793**	**(76,278)**	**(98,373)**	**(57,976)**

Balance Sheet

(Rs mn)

Year-end: March	FY17	FY18E	FY19E	FY20E
Net fixed assets	163,179	126,288	170,333	152,773
Investments	289,599	289,599	289,599	289,599
Other non-curr assets	-	-	-	-
Current assets	**90,582**	**17,619**	**22,906**	**11,011**
Inventories	1,292	5,758	7,203	2,141
Sundry Debtors	17,367	3,263	5,402	214
Cash and Bank	4,679	5,719	5,800	6,515
Loans and advances	1,555	2,879	4,502	2,141
Total assets	**543,359**	**433,506**	**482,838**	**453,383**
Shareholders' funds	**56,475**	**46,137**	**36,580**	**39,700**
Share capital	6,036	6,036	6,036	6,036
Reserves & surplus	50,439	40,101	30,544	33,664
Total Debt	**203,607**	**149,312**	**109,495**	**72,997**
Secured loans	203,607	149,312	109,495	72,997
Unsecured loans	-	-	-	-
Other liabilities	188,370	200,000	300,000	300,000
CurrLiab & prov	**77,771**	**20,921**	**19,627**	**23,551**
Current liabilities	76,565	19,002	17,826	21,410
Provisions	1,207	1,919	1,801	2,141
Total liabilities	**469,748**	**370,233**	**429,122**	**396,548**
Total equity & liabilities	**543,359**	**433,506**	**482,838**	**453,383**
Book Value (Rs)	**9**	**8**	**6**	**7**

Source: Company; IDBI Capital Research

Financial Ratios

Year-end: March	FY17	FY18E	FY19E	FY20E
Adj EPS (Rs)	(0.4)	(1.7)	(1.6)	0.5
Adj EPS growth (%)	*NM*	*NM*	*NM*	*NM*
EBITDA margin (%)	*46.0*	*35.4*	*35.6*	*45.2*
Pre-tax margin (%)	*1.6*	*(9.2)*	*(8.4)*	*9.0*
ROE (%)	*NM*	*NM*	*NM*	*8.2*
ROCE (%)	*3.4*	*2.9*	*2.9*	*5.6*
Turnover & Leverage ratios (x)				
Asset turnover (x)	0.1	0.1	0.1	0.2
Leverage factor (x)	14.3	9.5	11.1	12.3
Net margin (%)	*(3.4)*	*(15.4)*	*(14.5)*	*4.0*
Net Debt / Equity (x)	3.5	3.1	2.8	3.1
Working Capital & Liquidity ratio				
Inventory days	7	31	40	20
Receivable days	90	18	30	12
Payable days	738	160	154	181

Valuation

Year-end: March	FY17	FY18E	FY19E	FY20E
P/E (x)	NM	NM	NM	35.7
Price / Book value (x)	2.0	2.4	3.0	2.8
PCE (x)	NM	NM	NM	8.3
EV / Net sales (x)	4.4	3.8	3.2	3.0
EV / EBITDA (x)	9.6	10.7	9.1	6.7

Notes

Dealing	(91-22) 6637 1150	dealing@idbicapital.com

Key to Ratings Stocks:

BUY: Absolute return of 15% and above; **ACCUMULATE:** 5% to 15%; **HOLD:** Upto ±5%; **REDUCE:** -5% to -15%; **SELL:** -15% and below.

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