Theme Note

DOLAT CAPITAL

Strategic Assets

Airport or Seaport...???

India Research

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24 November, 2008

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Strategic Assets - *Airport or Seaport...???*

Airports and Seaports being strategic assets are gateways to a growing economy. While airports focus on passenger traffic, seaports drive physical goods movement. We believe that a seaport offers a better infrastructure play on economy than an airport. This piece is an attempt to compare these assets as an investment options – on the basis of their business models, in terms of their sustainability, economics & significance in overall economic development. We advocate long term investors who would like to play on infrastructure to invest in seaports over airports and recommend Mundra Port (MPSEZ).

The key parameters of distinction of both the Strategic Assets are as follows -

Business Model

An airport business model comprises of aeronautical and non aeronautical operations. Revenues from aeronautical operations are highly regulated and depend on factors like aircraft traffic, passenger traffic etc. whereas the non aeronautical operations are unregulated and depend on the level of economic activities, per capita income and spending habits in the respective region. In the case of airports on the global front, it is the Non aeronautical revenue (NAR) *(contributes 60-70% to the total revenues)* that determines the success *(with the real estate development coming into picture)* whereas in India the significance of NAR *(contributes 30-40% to the total revenues)* is bound to increase going forward.

A seaport derives its revenue from cargo related activities. The business model of a seaport is mainly dependant on India's seaport traffic which stands at 720.38 Mn tonnes as on FY08 *(25 % CAGR growth over the past 3 years).*The strategic location i.e.availability of deep draft & hinterland connectivity along with the turn around time (which is dependant on the level of mechanization in the seaport) are another important factors in the success of the seaport.

Sustainability

Airport revenues are more passengers driven than cargo; this makes them highly susceptible to volatile passenger traffic (Affordability of air fare, per capita income etc.), status of real estate cycle, growth of the service industry in the region etc.

On the contrary, fortunes of the seaport are linked to the flow of cargo traffic making it more sustainable with high revenue visibility as the contracts are long term in nature. The seaport traffic has grown by nearly 9.6*% (1.4 x -GDP growth*) over the past 5 years. Sea route is comparatively economical and convenient mode of transporting cargo internationally.

Economics

Being strategic assets by nature, both are high cost investments – with large upfront developmental commitments. As per our simulated revenue model, an airport has a payback period of 16 to 22 years depending upon the share of NAR in total revenue .The payback period goes as high as 23 years if NAR is at 40% of total revenue and the airport is working at 70% of the aero capacity. The payback period of a seaport ranges from 5 to 9 years depending upon the berth occupancy.

Significance in overall economic development

A seaport gives a fillip to industrial activities by nurturing heavy industries in the hinterland thereby contributing to the infrastructure growth while an airport attracts investments in hospitality, tourism and other services sectors.

Conclusion

We believe that a seaport offers a better infrastructure play on an economy than an airport. The business model of a seaport is more linked with the core activity cash flows vis-a-vis an airport which has a higher reliance on the parallel revenues streams. Further, seaports operate with relatively lesser operating overheads as percentage of capital costs than airports. We advocate long term investors who would like to play on infrastructure to invest in seaports over airports and recommend Mundra Port (MPSEZ).

Annexure I: Airport

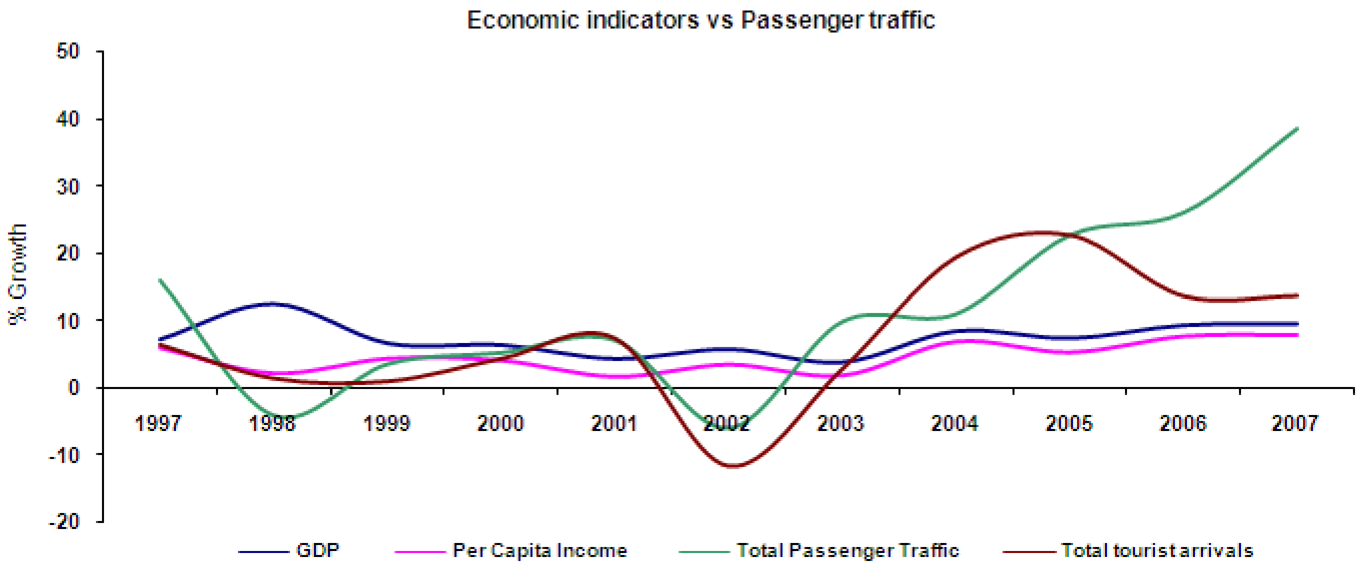
Annexure II: Seaport

Annexure I - Airport

Macro level scenario

In India, the aircraft traffic and passenger traffic have grown at CAGRs of 28% & 24% respectively over the past 5 years. In 2007, the total passenger traffic in India grew by 26.17% in 2006 and 38% in 2007. This is primarily due to a sharp rise in the domestic traffic which grew by 29.51% and 42.13% in 2006 & 2007 respectively. This growth at the domestic level is mainly due to the entry of low cost airlines and the rising per capita income.

The international passenger traffic grew by 14% in 2006 and nearly 25% in 2007. The airports of Mumbai and Delhi together contribute around 43% to the total traffic and occupy important positions on the aviation map.



Source: CSO & CMIE

Airports – A real estate play

We believe that airports and seaports are the gateways to economic growth but are having different sets of business model. While airports are focusing and catering to passenger traffic, seaports are contributing in a major way in transporting goods & cargo.

Airports mainly cater to the passenger traffic & to some extent the cargo traffic. Some airports are serving as an important & strategic destination on the aviation map and make good commercial sense for enterprises to undertake the operations of an airport.

An airport operator derives its revenue from two broad streams namely **Aeronautical Revenue (AR) & Non-aeronautical Revenue (NAR).** Globally, NARs contribute around 60-70% to the total revenues and are critical in financial success of any airport. In assessing the NAR, the passenger foot-fall (passenger traffic) and revenue generation per passenger are the critical factors whereas in-case of AR, the aircraft traffic and airlines tie ups are the critical factors.

Year	Aircraft Movement Growth (%)
2003	10.0
2004	10.7
2005	21.7
2006	23.8
2007	31.4
2008	21.2

Year	Airport	Non aero revenue per passenger (US$)
2007	Delhi	2.0
2007	Hong Kong	11.5
2006	Fraport	29.0

	Foreign Airports ($ Mn)						Indian Airports (Rs. Mn)			
	Auckland		Melbourne		Macquarie		Delhi International Airport Ltd (DIAL)		Airport Authority of India (AAI)	
Revenues	**2006**	**2007**	**2006**	**2007**	**2006**	**2007**	**2007**	**2008**	**2006**	**2007**
Aeronautical	145	153	136	147	325	332	2705	3221	22067	23872
Non Aeronautical	146	157	212	237	328	375	1605	2545	2477	4900
Percentage share in revenues										
Aeronautical	50%	49%	39%	38%	50%	47%	63%	56%	86%	83%
Non Aeronautical	50%	51%	61%	62%	50%	53%	37%	44%	14%	17%

Source: CMIE, GMR RHP

In the recent past, the concept of aerotropolis (Airport City) has evolved which led to the development of business clusters around the airport thereby developing a city itself. The operator not only benefits from the additional revenue generated from these diverse economic activities but also from the increase in passenger traffic and the resultant increase in aircraft traffic. *(The Dubai World Central International Airport benefits significantly by the Duty Free Shopping Festival, Duty Airport Free Zone (DAFZA) & the World Central City operations)*

Importance in driving economic growth

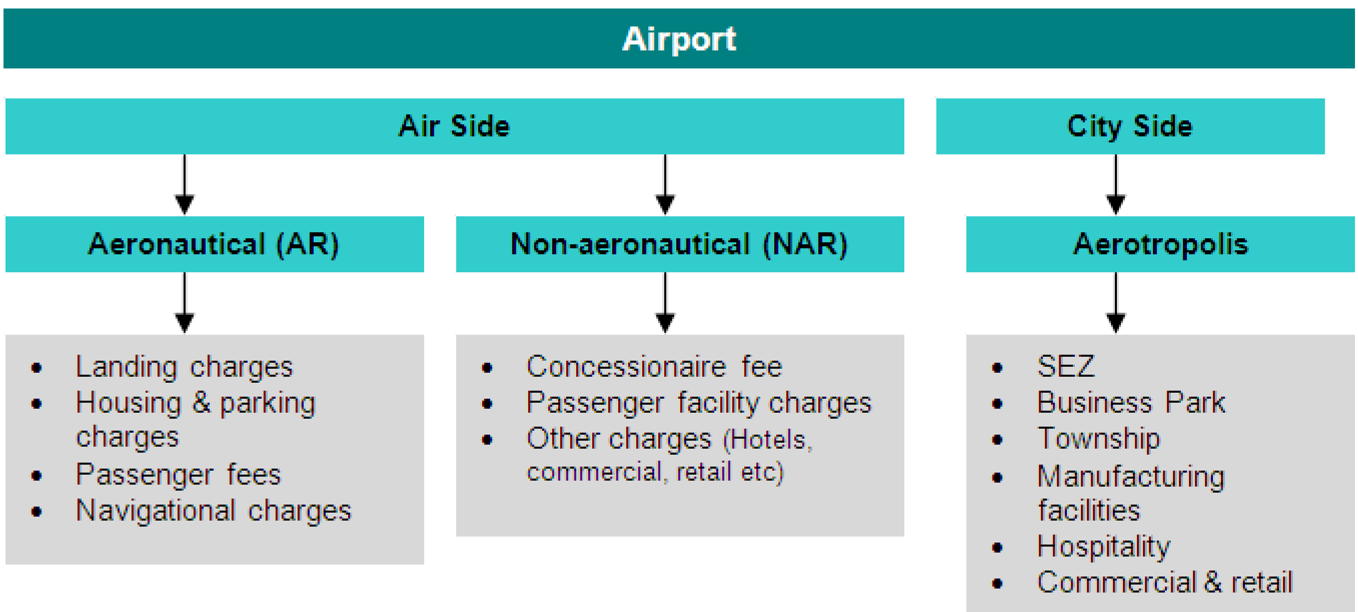
An airport being the symbol of the state of the economy is receiving significant attention from the Government. The air travel growth of an economy is usually twice the level of its GDP growth.(Source: BCG) India can sustainably achieve this level of growth, given the right regulatory conditions and product pricing, which leads to a significant potential for air travel.

Airport – Evolved from State Ownership to Public Private Partnership

An airport model has evolved to a great extent from being a state owned entity to a public private partnership (PPP) wherein an airport operator shares part of its revenue with the Government by entering in a long term Concession Agreement.

Revenue Model – New model tilted towards NAR and City Side Development

For an airport operator, the NAR contribution to the total revenue is the key determinant for the economic viability of the airport. Airports are also able to generate significant revenue from the economic activities around the it on the land owned by them or leased to them.



Source: Industry

The non aeronautical factor…. oopps!! actually the realty factor

Airports are characterized by heavy capital expenditure on construction, expansion, constant up gradation & maintenance. It requires professionally trained skilled manpower (as an airport is a service oriented institution with a strong focus on customer experience). AR on itself is unable to support the huge investment requirement as they are capped using regulated returns by the Airport Authority of India. Besides this, margins from Aeronautical operations are low. So the airport operator finds it economically unviable to run the business based only on an AR.

So the crux of airport operations lies in leveraging on the passenger traffic that an airport operator gets. The viability of the airport business model revolves around Non-aeronautical operations of the airport. NARs occupy the centre stage in the airport business across the globe. Operators generate as high as 70% of the revenue from the Non-aeronautical business. The Non- aeronautical activities are primarily real estate activities as the main source of revenue is from the fee paid to or revenue shared with the operator by the concessionaires operating hotels, malls, entertainment facilities etc. and the passenger facility charges.

Duty free shops generally form a significant component (35-40%) of the total NARs. The airport of Copenhagen *(also known as "an airport in a mall")* and the Dubai International Airport *(famous for the Dubai duty free retail malls which generated $537 mn revenue in H1 FY 08)* generated majority of their non aeronautical revenue from their retail operations.(Source: Dubai Airport Website.)

On the financial front, NARs increase the overall margins of the operator, reduces the entire project payback period, lower the break even period, generate quick and hefty cash flows. The return on equity (ROE) of Indian airport operators is lower mainly on account of low share of ~30% non aeronautical revenue – (Source KPMG report). Return on assets (ROA) is generally lower in initial phase of operations but picks up once capacity utilization improves and NAR increases.

Fortunes closely linked with passenger traffic and their spending habits (Factor critical to NAR)

In assessing the NAR, passenger foot-fall (passenger traffic) and revenue generation per passenger are the critical factors whereas in-case of AR, aircraft traffic and airline tie ups are the critical factors. From the Aerotropolis point of view, the number of tenants and the level of economic activities are the key factors.

The key initiatives to be taken by an operator to increase NAR are

- To enhance the overall customer experience
- To increase the no. of duty free shops, malls, restaurant, business centers etc.

The key initiatives to be taken by an operator to increase AR are

- To increase tie up with airlines.
- To enhance ground handling facilities.

The key initiatives to be taken by an operator to increase the revenue from the operations carried out in the aerotropolitan area are

- To increase tie ups with corporates as tenants (generally this area becomes the commercial hub and ideal for regional headquarters of corporate).
- To create a well networked transport system and rapid connectivity of the aerotropolitan area with the airport (this is done generally by developing expressways, rail connectivity & rapid transport systems with high frequencies)

The Concept of Aerotropolis (*Real estate development on the City Side*)

- Aerotropolis is an urban development emerging around the airport. These are business clusters around the airport (stretching up to 25 kms) which includes retail and commercial complexes, hospitality, high value and time sensitive manufacturing facilities. This enhances the economic value of the airport project substantially.
- Along with the above mentioned developments, we have observed a new trend of SEZs, business parks and townships being developed by airport developers.
- Like any typical metropolis, an aerotropolis comprises of airport city core connected with outlying corridors and business clusters.

Hyderabad International Airport (HIAL)

GMR (the developer and operator of HIAL) is planning to develop a city around the airport.

The company proposed a 1000 acres commercial development along with 2 SEZs of 250 acres each.

Hong Kong International Airport (HKIA)

Hong Kong International Airport clocked passenger traffic of 47.8 mn in 2007. The Non- aeronautical activities comprise of over 260 retail shops, 65 restaurants, entertainment facilities & 2 hotels. The airport has a strong multi modal transportation connecting HKIA with 70 cities and towns thereby forming an economic powerhouse around itself.

Source: www.aerotropolis.com

Efficiency of Airports

There are various parameters to measure efficiency and productivity of an airport. Few of them are Work Load Units per employee (WLU - Work Load Units per Airport Employee is a labour productivity measure indicating the capability of an airport to allocate labour to productive work processes), share of total cost covered by AR, AR Vs NAR per WLU etc.

Also, airport profitability is clearly related to size. Small airports operate at a relatively high level of losses (per WLU). For many airports, the revenues aren't even sufficient to cover staff cost.Develop a sustainable base for Non-aeronautical activities and revenue around the airport.

Studies have shown that airports with a diversified business focus and larger share of NAR also operate more profitable. Thus, one should establish a market development department if possible (depending on size of airport and the potential) to boost revenues.

Developing activities around the airport is not only about searching for new opportunities. It may also strengthen the commitment of the region to its airport. Reservation of available space round the airport is essential.

An airport needs a handling volume of about 650 thousand WLU to reach profitability.

Try to develop long-term deals with the airlines

Long-term deals make the airlines more committed to the airport. The deals could include start up discounts, marketing support, access to facilities etc. Commitment of too large sums in advance should be avoided.

(Source - http://www.seaplane-project.net/activities/activity_2.html)

Payback period of airport – NRA is a crucial factor

An airport needs heavy upfront investment and its AR are regulated with limited ROA. The cap on AR which is dependent on air traffic flow is subsidized in nature. This is compensated by unlimited growth opportunities in NAR which includes city side development as well.

We have modeled a case of setting up an airstrip and a terminal. The cost of setting it up is around Rs.100 billion. We have derived a range of payback periods by reducing the NAR compositions from 65% to 40% and also reducing the aero efficiency levels from 100% to 70%. By reducing the NAR composition from 65% to 40% the payback period increases from 16 years to 22 years and by reducing the aero efficiency from 100% to 70% the payback period increases from 16 years to 18 years.

Airport Project Model (An Airstrip, Terminal and related facilities)

Sr No.	Particular	Case I At full aero capacity from day 1 & with non aero revenue of 65% of total revenue (Rs Mn)	Case II At full aero capacity from day 1 non aero revenue of 40% of total revenue (Rs. Mn)
1	Estimated Cost	100980	100980
2	Total Revenue	**20922**	**12205**
	Aeronautical	7323	7323
	Non Aeronautical	13600	4882
3	Depreciation	3138	3138
4	PAT	3191	1513
5	Cash profit	6329	4652
6	Payback Period (Yrs)	16	22

Sr No.	Particular	Case III At 70% aero capacity from day 1 & with non aero revenue at 15% haircut (Rs. Mn)	Case IV At 70% aero capacity from day 1 & with non aero revenue at 15% haircut (Rs. Mn)
1	Estimated Cost	100980	100980
2	Total Revenue	**16686**	**9276**
	Aeronautical	5126	5126
	Non Aeronautical	11560	4150
3	Depreciation	3138	3138
4	PAT	2580	1177
5	Cash profit	5719	4315
6	Payback Period (Yrs)	18	23

Source: Dolat Research

Conclusion – The payback period is influenced by the revenue mix (AR - NAR) and aero efficiency with which the airport operates. We have observed in the above case that contribution of NAR to airport revenues plays a more dominant role in improving payback period for the developer. Payback period is increasing by 6 years if NAR drops to 40% from 65% but payback period increases by only by 2 years if the aero efficiency is reduced by 30%.

Assumptions:

1). Estimated cost is taken from GMR Phase 1 development of Delhi Airport which consists of an airstrip, a terminal and other allied facilities. This will be funded by debt and equity. Debt would be 86% and rest 14% would be equity and internal accruals.

2). Aero-revenue is recorded for 306 flights in a day i.e. total daily flight movement of 612. International flights are 74% and domestic flights are 26%. We have taken Airport Authority of India tariff rates for the calculation. We have calculated revenue of ~ Rs 1.59 lakh per international flight and ~ Rs 32947 per domestic flight.

We have not factored any increase in tariffs charged by AAI as we assume that it can be compensated for by the ever increasing non aeronautical revenues.

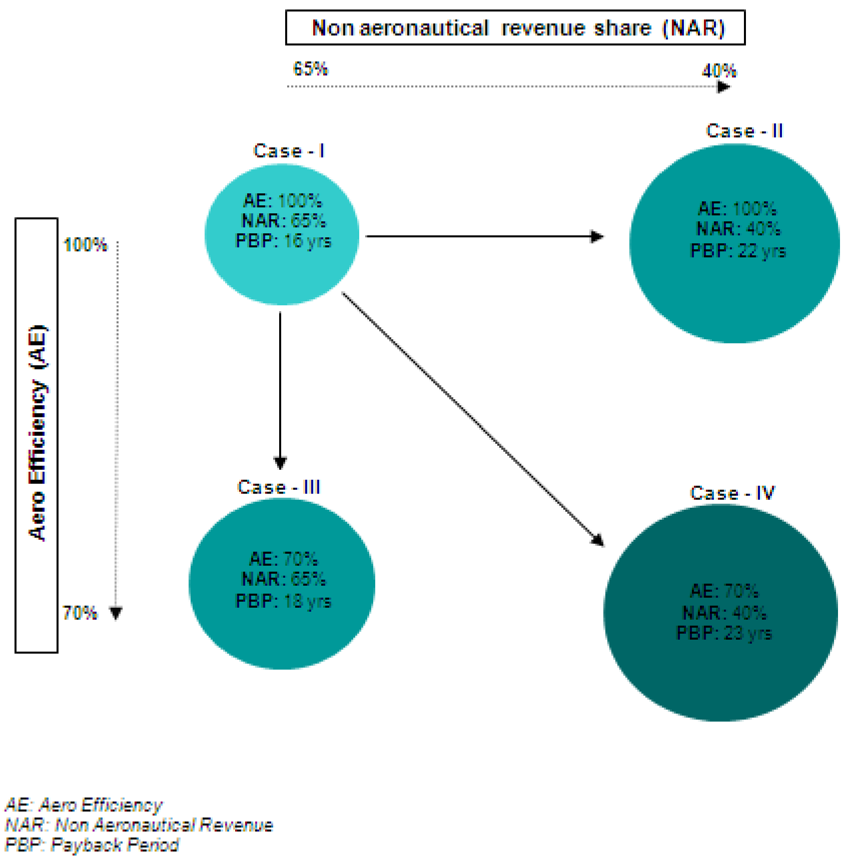
We have reduced NAR for case III & IV by 15% as compared to Case I &II respectively. As there is no high co relation between AR & NAR so we cannot reduce NAR in the same proportion as AR.

We have not taken into consideration the UDF (User development fees) charged by airports on departing passengers.

3). We have assumed depreciation as percentage of sales at 15% for Case I. For AAI it is 12 to 13%. Globally it is ~13%. Our assumption is on higher side as company will follow conservative approach.

4). We have assumed blended PAT margin which is lower because of higher leverage & lower Non aero revenue. AAI is enjoying 20%+ margins and globally net margins are at 25% to 50%. Here we have assumed Aero-revenue margin of 12% and non aero margin of 17% in the case I and III. For Case II and IV Aero revenue margin will be 10% and Non aero margin will be 16%. As absolute depriciation figure is same for all cases, margins on net level will be impacted in the case II and IV.

5). PAT+ Depreciation will give us cash profit. We have used it as proxy to cash flow.



Source: Dolat Research

We have plotted the 4 cases of payback period, based on the aero revenue efficiency and contribution of NAR in total revenue. We observe that, with the efficiency of 70% and the NAR share of 40%, the payback period for the operator would be 23 years whereas with full (100%) efficiency and NAR share of as high as 65%, the payback period for the operator would as low as 16 years. From the above diagram, we also confirm the fact that, the share of NAR is the crux in the airport business (The Payback period reduces drastically from 23 to 18 years when the NAR share increases from 40% to 65%).

Annexure II – Seaport

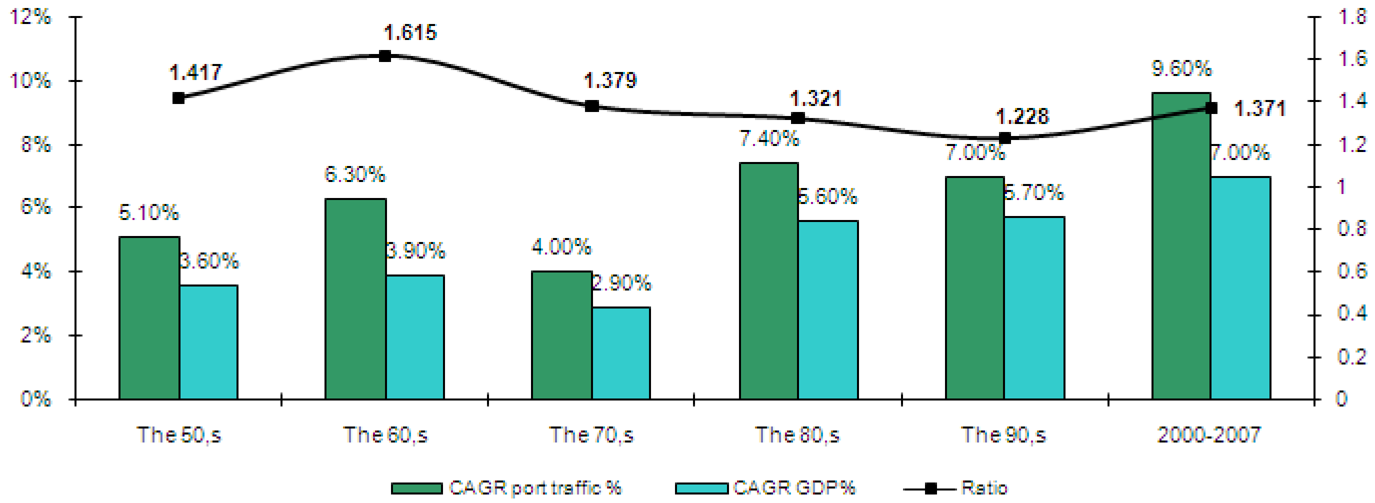
Seaport sector in India, an eminent supporter of economic growth, is on a growth trajectory. The seaport traffic & GDP growth are positively correlated and with the impending growth in India's economy we feel that a strong potential for growth is due to accrue in the Seaport sector. The key constituents of seaport traffic such as, Petroleum products, coal, iron-ore & containers are witnessing huge demand on account of increased capacities & expansion plans. A seaport's revenue model makes it a secure business proposition due to complementary revenue streams & a healthy return on equity. This is supplemented by huge investments in the sector by GOI. The NMDP (National Maritime Development Programme) has envisaged an outlay of Rs.558.04bn in the 11th plan for the development of capacity expansion plans. This includes 276 projects for expansion of seaports, improvement in hinterland connectivity and deepening of seaports to improve the overall seaport infrastructure & its efficiency.

We feel that India has a good blend of all the factors determining success of seaports which ensures a faster turnaround of cargo. A well linked railway & road connectivity along with strategic location of the seaports allows smooth movement of the goods. Besides that, a supportive Government policy encourages the development.

Future growth in seaport traffic to be higher due to rising GDP

Considering the current GDP growth and its correlation with growth in seaport traffic, we feel that the seaport traffic has a strong growth potential.

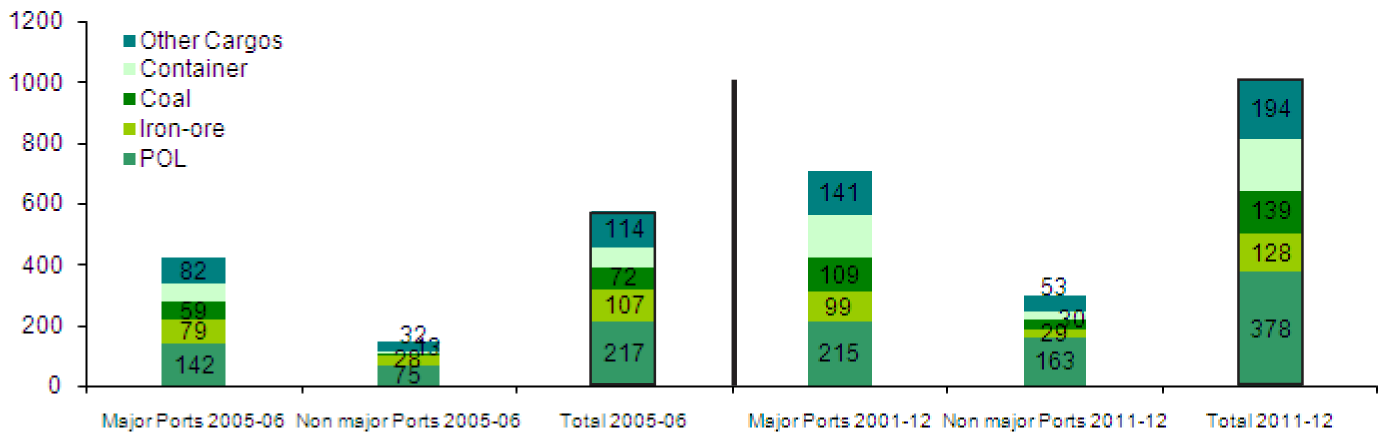
GDP growth V/s Seaport traffic growth



Source:Industry,IPA

The India seaport traffic (for major as well as minor seaports) is projected to grow at 10-12% per annum over the next 5 years from the current 588.63 mn tns to1008.95 mn tns by 2012.The rise in traffic would be fuelled by growth in merchandising exports driven by increase import of oil and coal.

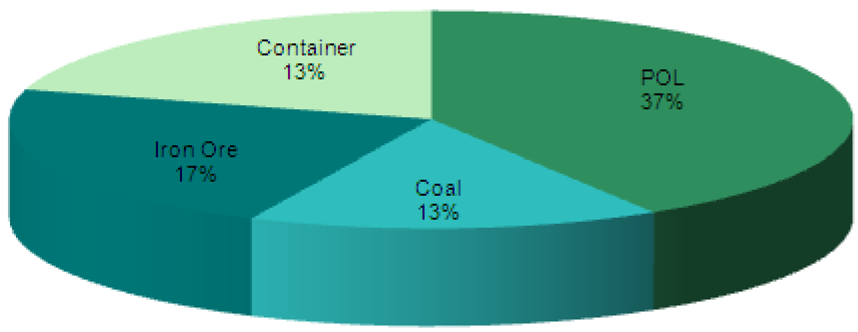
Breakup of Commodities Handled by Major Seaports (mn/MT)



Source: Indian Port Association, Ministry of shipping

Key growth drivers of Seaport Traffic

Seaport traffic mainly consists of petroleum products, coal, iron ore, containers and other commodities such as fertilizers. Some of this traffic is driven by imports and some by exports.



Source : Indian Port Association, Ministry of Shipping

Commodity	Composition	Type of traffic	Remarks
POL	Petroleum products and Crude oil	Export as well as imports	The present refining capacity in India is about 140mmt.There are various projects under implementation to expand the capacity of the existing refineries and to add new refineries. If all these projects fructify, the total refining capacity of India would be about 220mmt by 2012.Considering the expected refining capacity, India would emerge as a major refining base and a major hub for the petroleum products globally.
Coal Iron ore	Thermal and Coking coal	Imports Exports	With the increasing demand from steel makers and power producers (due to setting up UMPP), coal import requirement of India are set to grow significantly. 69% of all power plants use coal, whose demand in India is a direct function of thermal power capacity. The fact that India's power production cannot meet the current demand is well known and as the GDP increases, the power consumption is only bound to increase further leading to significant rise in coal requirement in the years to come.
Container	Different products	Export as well as imports	Containers occupy 13% of the total traffic at seaports in terms of tonnage. However, globally and in India, rising containerisation means that the growth in containerised cargo has outpaced the normal cargo traffic growth. Historically, India's foreign trade has grown by 2.5x the GDP and the cargo traffic through seaports by 0.5x the foreign trade. Though containerisation at ~25% is well below the global average of 60-70%. In built cost advantages of rail haulage over road (2-3x rail) have also helped rail container traffic's overall growth at 2-4x GDP
Others	Fertilisers, Food grains, Steel etc	Mainly imports	

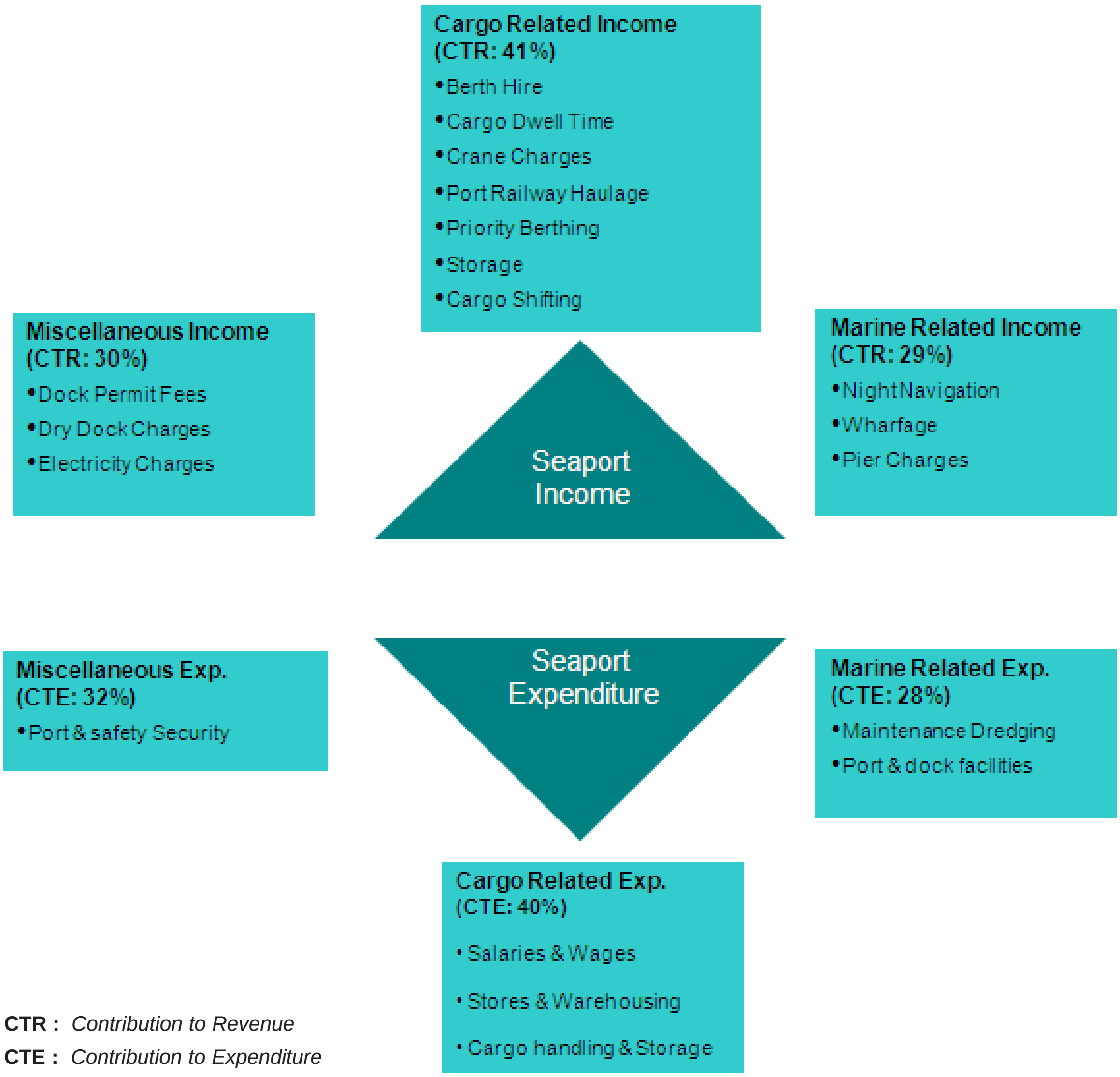
Source: Indian Port Association, Ministry of shipping

Seaport Revenue Model – Ensuring multiple stream of revenues

The revenue model for seaports builds up from multiple revenue streams. A seaport operator collects vessel related charges from the shipping lines which includes pilotage, towage, berth hire charges and seaport dues. At major seaports these vessel related charges accounted for ~28.7% of revenues in 2007-08.

However, the highest share of revenues for the seaport operator accrues from cargo related charges, including income from loading and unloading of cargo, stevedoring revenues, wharfage handling and storage. These charges accounted for 47% of revenues in 2007-08 for all the major seaports collectively.

With the increasing private sector participation, revenues from concession fees & lease for the major seaports are also likely to increase



Source: Industry

Since the major Indian seaports come under the purview of the central government, their employee related cost are high and total operating cost account for 61% of revenue in 2007-08.These cost are, however expected to gradually decrease in view of increased automation. Running cost which forms 30% of the total cost primary include dredging cost incurred by major seaports.

Healthy returns on projects (Table).

Seaports generate revenue on fixed price per tonne plus price per tonne for clearance, transportation, clearing and forwarding in all seaports related projects. The payback period is 5-9 years depending on the concession period of 20 or 30 years.

Particulars	Case I (Indian Seaport) Base Case (Rs. Mn)	Case I (Indian Seaport) Assume 10% drop in realisation and 5% in volume (Rs. Mn)	Case II (International Seaport) Base Case (Rs. Mn)	Case II (International Seaport) Assume 10% drop in realisation and 5% drop in volume (Rs. Mn)
Estimated cost for one Berth	3720	3720	3518	3518
Total Revenue	1792	1532	3631	3104
Cargo Related	735	628	2178	1863
Marine Related	520	444	1452	1242
Other sources	538	460	0	0
Dep	233	233	545	545
PAT	251	181	145	45
Cash profit	484	414	690	590
Payback Period (Yrs)	8	9	5	6

Source: Dolat Research

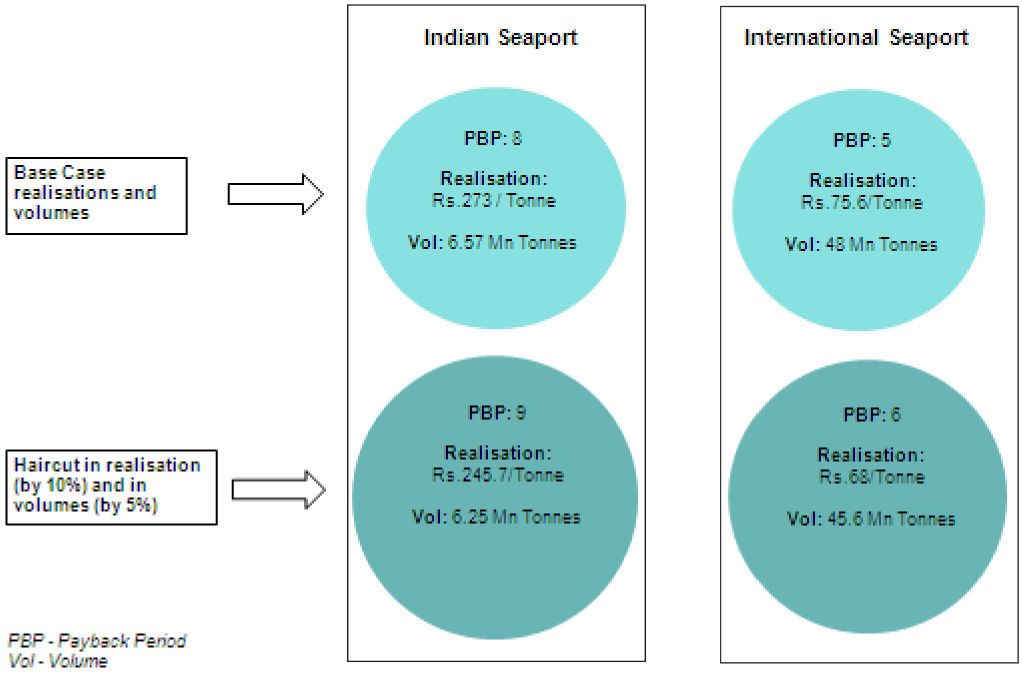
Assumptions

Indian Seaport

- The cost of setting up a berth is Rs.3720 Mn.(Source: Industry reports)
- One jetty can handle 2 panamax vessels with a DWT of 60000 each.
- Utilisation rate is 75%.
- We assume one berth can handle 6.57 mn tonnes in base case with a blended realization of Rs 273/tonne.
- Assume Discharge rate is 3 days.

International Seaport

- The cost of setting up a berth is Rs.3518 Mn.(Source: Industry reports)
- One jetty can handle 2 panamax vessels with a DWT of 60000 each.
- Utilisation rate is 75%.
- We assume one berth can handle 48 mn tonne in base case with a blended realization of Rs 75.64/ tonne.
- Assume Discharge rate is 12 hours.



Source : Dolat Research

We have plotted the 4 cases of payback period, based on the realizations/ volumes and Occupancies. We observe that, a reduction in realizations (90%), volumes(95%) and a low berth occupancy the payback period for the operator would be 9 years whereas with full realization , volumes (100%) and a high berth occupancy, the payback period reduces to 5 years.

Huge investment by GOI in seaport sector

In order to keep pace with the growing potential of cargo traffic, the Government of India has undertaken an ambitious capacity expansion plan under the Maritime Development Programme. The NMDP (National Maritime Development Programme) has envisaged an outlay of 558.04bn in 11th plan for the development of capacity expansion plans. Under this programme, 276 projects have been outlined for all the seaports put together, including expansion of seaports, improvement in hinterland connectivity and deepening of seaports. Around 60% of this expenditure would be for berth construction.

Projects (Rs. Bn)	No. of Projects	Budgetary Support	Internal Resources	Private Investment	Others	Total
Deepening of channels/ berth	25	27.3	33.4	1.9	0.5	63.1
Construction or Reconstruction of Berths	76	5.6	38.7	280.8	0.5	325.6
Procurement of Equipment	52	0	14.3	10.8	1.3	26.4
Rail & Road connectivity works	45	0.9	22.3	0	36.3	59.5
Others related schemes	78	2.3	29	51.6	0.6	83.5
Total	**276**	**36.1**	**137.7**	**345.1**	**39.2**	**558.1**

Source: NMDP

Due to the growing potential of the seaport sector in India, a number of global and Indian private companies are expressing interest in the development of new seaports on public private partnership basis across the country. These seaport projects are to be implemented through different modes of private sector participation such as Build-Own-Transfer (BOT), Build Own Operate Transfer (BOOT) and Built Own Operate Share Transfer model to facilitate the development of additional capacity.

This has resulted in the entry of international players such as DP world, Maersk, PSA etc. in the Indian seaport sector. On the other hand, private sector investments in minor seaports have also increased with successful participation in seaports like Mundra, Pipavav, Hazira, Gangavaram Krishnapatnam Dhamra, Gopalpur etc. Leading private seaports like Mundra and Pipavav have also developed ambitious expansion plans.

India - A perfect blend of factors crucial for the success of a seaport.

We feel that India has a good blend of all the factors determining success of seaports which ensures faster turnaround of cargo. The well linked railway & road connectivity as well as strategic location of the seaport allows smooth movement of the goods. Besides that, a supportive Government policy encourages the development further.

- **Strategic location**

  India is strategically located with close proximity to world shipping routes both on the western as well as eastern coast. Most of the major ships carrying cargo between America & East Asia, East Asia & Africa, and Europe & East Asia pass via Indian territorial waters. India has the natural advantage of being located close to international trading routes, which provide strong potential for setting up trans-shipment seaports. Further, some of the southern seaports also enjoy the advantage of having deep draft that can accommodate large vessels.

  Setting up of a trans-shipment hub seaport will considerably boost seaport traffic. Further, it will also considerably reduce India's dependence on other seaports for its own containerized cargo. Currently, two international trans-shipment terminals are being developed.

- **Connectivity**

  Indian seaports have a strong inherent advantage being in the vicinity of a vast cargo hinterland, which generates large volumes of export and import cargo for the seaport, forming real backbone of support. The economies of scale that gets generated in terms of cargo traffic volumes go a long way in resizing the seaport infrastructure to match the expected growth in traffic volumes. Coupled with strong inland connectivity between the seaport and its hinterland, the competitive position of the seaport is further strengthened.

- **Well linked Railway network**

  The railways constitute one of the principal modes of domestic transportation of goods and commodities in country, including the movement of export-import cargo to various seaports. Railways play a major role in the movement of key bulk commodities like coal, iron ore, pig iron and finished steel, cement, food grains, fertilizer and petroleum products across the country, including the movement in and out of seaport locations.

- **Government Policy**

  India has an encouraging government policy for seaports development which supports the major expansion plans planned & underway:

  - 100% FDI under the automatic route is permitted for seaport development projects.
  - 100% income tax exemption for a period of 10 years.
  - Tariff Authority of Major Ports (TAMP) regulates the ceiling for tariffs charged by major seaports / seaport operators (not applicable to minor seaports)
  - A comprehensive National Maritime Development Policy has been formulated to facilitate private investment, improve service quality and promote competitiveness

We feel that Mundra Port is best placed to derive the maximum benefit from the healthy development in seaport sector in India. It would be the key beneficiary being the largest private seaport in India with roughly 60mt capacity. Alongside the seaport, Mundra Port is developing a multi-product SEZ over 15,665 acres. Given its deep draft which allows it to accommodate large ships (Key positive) and with good rail, road connectivity we expect strong long term traffic growth for Mundra Port. In the long term, traffic for the seaport is also likely to be driven by the SEZ. The combination of seaport and SEZ could create a virtuous beneficiary cycle for MPSEZ's overall business.

The ratings are based on the absolute upside of our target price from the current price.

Upside	Ratings
> 25 %	Buy
15% - 25%	Accumulate
0% - 15%	Reduce
< 0 %	Sell

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