

India

Neutral (no change)

Highlighted Companies

Adani Ports & Special Economic Zone Ltd

HOLD, TP Rs753, Rs736 close

For APSEZ, ex-Gangavaram port, we estimate volume to grow 27% over FY22-24F vs. our estimate of 15% growth for the ports sector and 22% growth for private ports. This implies a volume CAGR of 9% for APSEZ (ex-acquisitions) over FY20-24F.

Gujarat Pipavav Port Ltd ADD, TP Rs140, Rs78 close

We believe the commissioning of the dedicated freight corridor (DFC) in 2HFY22 will boost GPPV over FY23F-24F, while JNPT could be connected in FY24F.

Summary Valuation Metrics

P/E (x)	Mar22-F	Mar23-F	Mar24-F
Adani Ports & Special Economic Zone Ltd	29.56	20.84	17.13
Gujarat Pipavav Port Ltd	16.35	11.81	9.17
P/BV (x)	Mar22-F	Mar23-F	Mar24-F
P/BV (x) Adani Ports & Special Economic Zone Ltd	Mar22-F 3.92	Mar23-F 3.41	Mar24-F 2.9

Ports

Transport Infrastructure | India | June 11, 2022

Coal and POL to ignite growth in port cargo

- While port cargo grew just 1% in FY20-22, we expect 15% growth over FY22-24F. This implies a 3.9% CAGR over FY20-24F, same as that in FY18-20.
- Historic resilience of crude oil cargo to price volatility provides comfort. We expect a 16% rise in POL cargo over FY22-24F.
- We expect a sharp 28% rise in coal cargo over FY22-24F as there may be just a 4% rise in domestic coal dispatch over FY22-24F vs. a 16% rise in FY20-22.
- We have Hold rating on Adani Ports (APSEZ; TP: Rs753) and Add rating on Gujarat Pipavav Port (GPPV; TP: Rs140).

We expect 15% growth in FY22-24F (vs. just 1% growth over FY20-22)

In the ports sector, over FY20-22, coal cargo declined 8%, petroleum oil and lubricants (POL) cargo fell 5% while container cargo rose 14%. Our volume growth estimate (15% over FY22-24F) may seem aggressive, but the implied CAGR over FY20-24F is 3.9%, which is the same as FY18-20 CAGR. FY21-22 was impacted by extraordinary events like the Covid-19 pandemic, shipping logjam and a sharp rise in the prices of commodities like crude oil and coal. We expect a yoy growth in private ports to outpace major ports (MPs) by 510bp, like the relative outperformance by private ports (vs. MPs) over FY18-20 (560bp).

Historic resilience of crude oil cargo to price volatility is comforting

Over FY10-20, crude oil import cargo posted a 3.6% CAGR. Over FY10-12, despite a 63% rise in prices, crude oil imports rose 8%. It is encouraging that despite Apr 2022 crude oil prices being at the highest level in the last 14 years, crude oil import volume rose 14% yoy, 6% higher than in Apr 2019 (pre-Covid). We expect ports' POL cargo to rise 10% over FY20-24F and 16% over FY22-24F. Please note 4QFY22 ports' POL cargo was 4% higher vs. 4QFY20.

Fall in coal imports over FY20-22 not structural

We believe the fall in coal imports (16% over FY20-22) is not a structural trend. This is due to the 120-150% rise in the prices of imported coal (Mar 2021-22) and extraordinary steps taken in India. Domestic coal dispatch in FY22 (818MT) was 5% more than the output (777MT) while average dispatch/output was 99% (FY16-21). If coal dispatch in FY22 was equal to production (777MT), it would have created an extra shortfall of 41MT of domestic coal, requiring an extra 26MT of coal imports. This would imply a 6% decline in coal imports over FY20-22 vs. 16% actual decline. Over FY22-24F, for thermal coal, we expect demand and domestic output to rise in tandem (11%/9%). Despite the same, we expect thermal coal imports to rise 35% as we feel domestic coal dispatch will rise by just 4%.

Container cargo growth unscathed; seen rising 14% over FY22-24F

We estimate a 14% rise in container cargo volume over FY22-24F. Going ahead, connectivity to the dedicated freight corridor (DFC) is likely to boost Pipavav and Mundra ports in FY23F-24F, while JNPT could be connected in 1.5-2 years. Of the three main ports on India's west coast (JNPT, Mundra, GPPV or Pipavav), GPPV registered the highest proportion of container cargo using rail (54%) vs. JNPT (18%) and Mundra (32%) in FY22.

Maintain Add rating on Gujarat Pipavav, Hold rating on Adani Ports

For APSEZ ex. Gangavaram Port or GPL, we estimate volume to grow 27% over FY22-24F vs. our estimate of 15% growth for the ports sector and 22% growth for private ports. We maintain Hold rating on APSEZ with a revised target price of Rs753 (from Rs742 earlier). We believe the commissioning of the dedicated freight corridor (DFC) in 2HFY22 will boost GPPV over FY23F-24F, while JNPT could be connected in FY24F. We maintain Add rating on GPPV with a target price of Rs140.

	Target Price	Rating	EBITDA (R	s bn)	EV/ EBITD	A (x)
	(Rs)	_	FY23F	FY24F	FY23F	FY24F
Adani Ports	753	Hold	123.4	144.7	14.1	11.5
Gujarat Pipavav	140	Add	5.3	6.5	5.8	4.7

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Coal and POL to ignite growth in port cargo

Glacial growth in port volume in FY20-22 – topsy turvy time of Covid-19, global port logjam and volatile commodity prices ➤

Total India port cargo in FY22 (1,162MT; major ports [MPs] and main privatelyowned ports) grew 1% (FY20-22). This is significantly below the growth witnessed in FY18-20 of 8%.

In FY22, the 12 government-owned MPs handled 720MT of cargo (62% of overall). In FY20-22, MPs and main private ports had similar volume growth (2%/ -1% for MPs/ main private ports, respectively). This was a departure from FY18-20 when MPs grew 3.5% while private ports grew at a faster pace of 15%.

Ports on west coast of India handled 58% of the total cargo in FY22. On west coast, MPs handled 52% of the volume, while on east coast MPs handled 75% of the volume.

Note: To calculate total volume, we considered the 12 MPs and the main privatelyowned ports (Mundra, Dhamra, Hazira, Dahej, Katupalli, Sikka, Pipavav (GPPV), Krishnapatnam, Gangavaram and other APSEZ ports).

				CAGE	R %					CAGE	र %
(MT)	FY18	FY20	FY22	FY18-20	FY20-22	(MT)	FY18	FY20	FY22	FY18-20	FY20-22
Total - Major Ports	679	704	720	1.8	1.1	Total - Major Ports	679	704	720	1.8	1.1
Kolkata	58	64	58	5	(4)	Major Ports - East	342	364	365	3.1	0.2
Paradip	102	113	116	5	2	Major Ports - West	337	341	355	0.5	2.1
Vizag	64	73	69	7	(3)	Total - Main private ports	387	447	442	7.4	(0.6)
Ennore	30	32	39	2	10	Main private ports - East	103	132	120	13.1	(4.6)
Chennai	52	47	49	(5)	2	Main private ports - West	284	315	322	5.3	1.1
Tuticorin	37	36	34	(1)	(3)	Grand Total	1,067	1,151	1,162	3.9	0.5
Cochin	29	34	35	8	1	East Coast	446	496	485	5.5	(1.1)
New Mangalore	42	39	39	(3)	0	West Coast	621	655	677	2.7	1.6
Mormugao	27	16	18	(23)	7						
Mumbai	63	61	60	(2)	(1)						
JNPT	66	68	76	2	5						
Kandla	110	122	127	5	2						
Total - Main private ports	387	447	442	7.4	(0.6)						
Mundra	122	139	150	7	4						
Dhamra	22	30	33	18	6						
Hazira	17	22	25	13	7						
Dahej	7	6	8	(4)	12						
Katupalli	8	11	7	20	(18)						
Sikka (Reliance)	122	124	115	1	(4)						
Gujarat Pipavav	13	16	14	10	(5)						
Krishnapatnam	45	49	40	4	(10)						
Gangavaram	26	35	30	16	(7)						
Other APSEZ ports	6	15	18	54	10						
Grand Total	1,067	1,151	1,162	3.9	0.5						

Commodity-wise break-up: Of the overall FY22 port cargo, petroleum, oil & lubricants (POL) comprised 31%, coal comprised 22%, containers formed 25%, iron ore comprised 4% & fertilizers and others comprised the balance 18%.

				CAGR %			
(MT)	FY18	FY20	FY22	FY18-20	FY20-22		
POL	357	384	364	3.6	(2.6		
Coal	250	274	252	4.7	(4.1		
Container	225	260	296	7.4	6.7		
Iron Ore	49	55	51	6.4	(3.8		
Fertiliser and others	186	178	199	(2.0)	5.6		
Total	1,067	1,151	1,162	3.9	0.5		



Tracking port volume over last eight quarters: 1QFY21 cargo declined 22% yoy due to the start of Covid-19 pandemic and the resultant nationwide lockdown. POL/coal/container cargo declined 16%/ 36%/ 27%, respectively, yoy. The sector witnessed a turnaround in 3-4QFY21 with the cargo traffic growing 8% yoy.

(MT)	1QFY21	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22
Major Ports + APSEZ ex KPCL	183	213	246	261	244	225	242	252
CAGR from FY20 %	(22)	(5)	6	9	2	0	2	3
POL	52	55	62	66	61	60	67	68
CAGR from FY20 %	(16)	(17)	(9)	2	(1)	(5)	(1)	2
Coal	40	43	58	59	57	47	49	53
CAGR from FY20 %	(36)	(8)	10	(1)	(4)	0	(3)	(6
Container	44	60	68	75	70	70	71	72
CAGR from FY20 %	(27)	(0)	18	23	8	8	12	ç
Others	47	56	58	60	55	49	54	59
CAGR from FY20 %	(4)	7	9	13	6	(3)	1	ę

Shipping logjam led to an unprecedented rise in shipping freight rates during 2-3QFY22: The Shanghai Containerized Freight Index increased from ~800 (Apr 2020) to ~4,500 (Oct 2021: 2.5x the earlier peak in 2005); Baltic Dry Index increased from ~600 (Mar 2020) to ~4,600 (Oct 2021).

Thus, in 2-3QFY22, ports' cargo grew at just 2% vs. 2-3QFY20. POL/coal cargo declined 6%/3% vs. 2-3QFY20 levels, respectively. Container cargo remained unscathed, growing 20% vs. 2-3QFY20. We believe this was because the cargo in containers is more expensive than dry bulk cargo and freight cost constitutes a smaller portion of its landed cost.

While the current Baltic dry index has halved from its peak (7 Oct 2021), it is still 2-2.2x of the levels in FY18-21.

Period		Baltic dry Index	As a % of Peal
FY17	average	820	15
FY18	average	1,205	21
FY19	average	1,257	22
FY20	average	1,298	23
FY21	average	1,357	24
Peak 7 Oct 21		5,650	100
2-3QFY22	average	3,619	64
FY22	average	3,020	53
Latest		2,633	47



POL (31% of total port cargo in FY22): Historic resilience of crude oil import volume to price volatility provides comfort – We forecast 16% volume growth over FY22-24F ➤

POL cargo at ports (FY22) was 364MT, 5% lower than in FY20. In FY22, MPs handled 222MT (61% of overall POL cargo). In FY20-22, POL cargo at MPs declined 7%, while POL cargo at private ports fell 3%.

Ports on west coast handled 79% of the total POL cargo in FY22. On west coast, MPs handled 51% of the volume, while on east coast MPs handled 100% of the volume.

Figure 7: Break-up of PC)L cargo	handle	d by po	rts		Figure 8: Break-up of PO major ports and the main					-owned
				CAG	२ %					CAG	R %
(MT)	FY18	FY20	FY22	FY18-20	FY20-22	(MT)	FY18	FY20	FY22	FY18-20	FY20-22
Total - Major Ports	214	237	222	5.2	(3.3)	Total - Major Ports	214	237	222	5.2	(3.3)
Kandla	50	63	59	13	(3)	Major Ports - East	77	86	77	5.3	(5.1)
Paradip	34	37	35	5	(3)	Major Ports - West	137	152	145	5.2	(2.3)
Mumbai	38	38	37	1	(2)	Total - Main private ports	143	147	142	1.3	(1.5)
Cochin	20	23	22	9	(2)	Main private ports - East	-	-	-	na	na
New Mangalore	25	23	24	(4)	2	Main private ports - West	143	147	142	1.3	(1.5)
Vizag	16	19	14	9	(13)	Grand Total	357	384	364	3.6	(2.6)
Kolkata	9	10	11	8	1	East Coast	77	86	77	5.3	(5.1)
Chennai	14	13	12	(0)	(6)	West Coast	280	298	287	3.2	(1.9)
Other major ports	10	10	9	(0)	(8)						
Total - main private ports	143	147	142	1.3	(1.5)						
Sikka (Reliance)	122	124	115	1	(4)						
Mundra	20	22	26	5	10						
Gujarat Pipavav	1	1	1	(10)	10						
Grand Total	357	384	364	3.6	(2.6)						
SOURCES: INCRED RESE	ARCH, COM	PANY REP	ORTS, INE	IA PORTS AS	SOCIATION	SOURCES: INCRED RESE	ARCH, COM	MPANY REF	PORTS, INI	DIA PORTS AS	SOCIATIO

The major components of ports' POL cargo comprised import of crude oil, import of petroleum products, export of petroleum products and import of LNG. These comprised 58%/ 11%/ 17%/ 7% of ports' POL cargo, respectively, in FY22.

Tracking port volume over last eight quarters: Ports' POL cargo declined 10% yoy in FY21 as Covid-19 led to a 17% yoy decline in 1HFY21. Volume recovery was slow in 9MFY22 as POL cargo was 5% below 9MFY20, despite benign crude oil price (US\$73/bbl). We believe this was partly due to the shipping logjam. It is encouraging that 4QFY22 cargo was 4% higher than in 4QFY20. Further, in Apr-May 2022, POL cargo at ports rose 15% yoy.

(MT)	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
Crude oil import	189	203	214	220	226	227	196	21
% yoy growth		7	5	3	3	0	(13)	;
Import - petroleum products	21	29	36	35	33	44	43	4
% yoy growth		38	23	(2)	(6)	31	(1)	(6
Export - petroleum products	64	61	66	67	61	66	57	6
% yoy growth		(5)	8	2	(9)	8	(14)	1
LNG Import	14	16	19	21	22	26	25	2
% yoy growth		15	16	10	5	18	(3)	(3
Total	289	309	334	343	343	362	321	34
% yoy growth		7	8	3	(0)	6	(11)	(

Over FY10-20, crude oil import volume posted a 3.6% CAGR. Historically, crude oil import volume has been resilient to price fluctuations. Over FY10-12, despite a 63% rise in prices, crude oil imports rose 8%. On the other hand, over FY14-16, despite a 58% decline in prices, crude oil imports rose by just 7%. It is encouraging that despite Apr 2022 crude oil prices being at the highest level in the last 14 years, crude oil import volume rose 14% yoy and was 6% higher than in Apr 2019 (pre-Covid).



	Crude Oil import (MT)	yoy growth %	Crude Oil price (USD/bbl)	yoy growth %
FY09	133	9	79	4
FY10	159	20	68	(14)
FY11	164	3	83	22
FY12	172	5	111	33
FY13	185	8	107	(4)
FY14	189	2	103	(3)
FY15	189	0	81	(21)
FY16	203	7	43	(47)
FY17	214	5	45	4
FY18	220	3	54	21
FY19	226	3	67	24
FY20	227	0	61	(10)
FY21	196	(13)	43	(29)
FY22	212	8	77	79
Apr 22	21	14	106	66

Crude oil imports/ POL imports/ POL exports/ LNG imports grew 12%/ 49%/ 9%/ 58% over FY16-20 and declined 7%/ 7%/ 5%/ 6%, respectively, over FY20-22. Over FY20-24F, we expect crude oil imports/ POL imports/ POL exports/ LNG imports to grow 10%/ 11%/ 9%/ -6%, implying a growth of 18%/ 20%/ 14%/ 0%, respectively, over FY22-24F. As a result, we expect ports' POL cargo to rise 10% over FY20-24F and 16% over FY22-24F. Please note that 4QFY22 ports' POL cargo was 4% higher than in 4QFY20.

Coal (22% of total port cargo in FY22): Sharp growth of 28% expected over FY22-24F \rightarrow

Coal cargo at ports (FY22) was 252MT, declining 8%, over FY20-22. In FY22, MPs handled 148MT (59% of overall coal cargo). In FY20-22, coal cargo volume at MPs declined 1%, while the volume at private ports dipped 17%.

Ports on west coast handled 30% of the total coal cargo in FY22. On west coast, MPs handled 52% of the volume, while on east coast MPs handled 62% of the volume.

				CAGE	R %					CAGE	R %
(MT)	FY18	FY20	FY22	FY18-20	FY20-22	(MT)	FY18	FY20	FY22	FY18-20	FY20-22
Total - Major Ports	146	149	148	1.1	(0.4)	Total - Major Ports	146	149	148	1.1	(0.4
Paradip	42	39	45	(4)	7	Major Ports - East	109	110	109	0.9	(0.6
Ennore	23	20	21	(6)	3	Major Ports - West	37	39	39	2.0	0.
Kolkata	16	20	16	13	(10)	Total - Main private ports	104	125	104	9.6	(8.7
Kandla	14	18	20	14	7	Main private ports - East	61	74	68	10.3	(3.7
Vizag	15	18	14	9	(10)	Main private ports - West	43	51	36	8.5	(16.4
Tuticorin	12	13	12	3	(4)	Grand Total	250	274	252	4.7	(4.1
Mormugao	11	9	9	(5)	(1)	East Coast	169	184	177	4.3	(1.9
Other major ports	13	12	9	(6)	(10)	West Coast	81	90	75	5.6	(8.9
Total - main private ports	104	125	104	9.6	(8.7)						
Mundra	30	35	18	8	(28)						
Krishnapatnam	28	32	27	7	(9)						
Gangavaram	16	21	18	14	(8)						
Dhamra	14	15	19	4	12						
Hazira	5	6	7	3	9						
Dahej	6	5	5	(9)	8						
Pipavav	1	1	1	(7)	35						
APSEZ others	5	11	10	55	(7)						
Grand Total	250	274	252	4.7	(4.1)						

Tracking port volume over last eight quarters: Ports' coal cargo was flat yoy in 2-4QFY21, post 36% yoy decline in 1QFY21 (national lockdown at onset of Covid-19) but in FY22 it declined 8% vs. FY20. India's FY22 coal imports were 16% lower than in FY20 (sharper decline than in ports' coal cargo). Please note that during Apr-May 2022, coal cargo at MPs rose 3% yoy.



				CAG	۲ %		CAGR %
	FY18	FY20	FY22	FY18-20	FY20-22	FY24F	FY22-24F
Coal production - domestic	675	731	777	4.0	3.1	849	4.5
Coal despatch - domestic	690	707	818	1.2	7.6	849	1.9
Imports - non coking coal	161	197	152	10.5	(12.2)	209	17.4
Coal consumption equivalent							
domestic - Thermal	943	1,016	1,057	3.8	2.0	1,177	5.6

We believe the decline in coal imports is not a structural trend. This is due to an extraordinary rise in the prices of imported coal (up 120-150% over Mar 2021 to Mar 2022) and some extraordinary measures taken in India. Domestic coal dispatch in FY22 (818MT) was 5% more than production (777MT), while average dispatch/ production was 99% over FY16-21. If coal dispatch in FY22 was equal to production (777MT), it would have created an extra shortfall of 41 MT domestic coal, requiring an additional 26MT of coal imports. This implies a 6% decline in coal imports over FY20-22, while the actual decline was 16%.

Over FY22-24F, for thermal coal, we expect demand and domestic production to rise in tandem (11%/9%). Despite the same, we expect thermal coal imports to rise 35% as we expect dispatch from domestic sources to rise by just 4%.

				CAGI	र %		CAGR %
(MT)	FY18	FY20	FY22	FY18-20	FY20-22	FY24F	FY22-24
Coking coal imports	52	55	60	3	4	76	13
Non-coking coal imports (ex-Power)	105	127	125	10	(1)	146	8
Coal for Import-based power plants	39	45	19	7	(36)	45	54
Coal imports: domestic coal power	17	24	8	18	(42)	18	50
Total coal imports	213	251	211	9	(8)	285	16
Coastal coal (derived)	37	23	41	(22)	34	41	(
Coal at Ports	250	274	252	5	(4)	326	14

Import of coking coal (28% of coal imports in FY22) may continue as India has limited reserves of coking coal. We expect a 40% volume growth over FY20-24F, vs. a 20% rise over FY17-20. This implies a 25% volume growth over FY22-24F.

Non-coking coal imports (excl. for power) comprised 59% of coal imports in FY22. We expect a 16% volume growth over FY20-24F, lower than the 10% CAGR over FY18-20. This implies a 18% volume growth over FY22-24F. Please note that 94% (162MT) of India's incremental coal dispatch over FY17-22 (172 MT) was supplied to the power sector. We believe that bulk of the incremental requirement of non-coking coal (excl. for power) would have to be met via imports.

Coal imports for imported coal-based power generation (9% of coal imports in FY22) plummeted from 45MT in FY20 to 19MT in FY22 due to soaring prices of imported coal. We factor in a recovery to 45MT in FY24F, contingent on a significant fall in the prices of imported coal. Even if blended with domestic coal, we believe this should not impact coal at ports as most plants are located near the coast and will use coal transported by sea.



Figure 15: List of dedicated imported coal-based power plants; almost all power plants are near the coast, and will use sea transport even if they use some domestic coal

Company	Location	State	Region	Capacity (GW)
Gujarat State Electricity	Sikka	Gujarat	West	0.5
Adani Power	Mundra	Gujarat	West	4.6
Tata Power	Mundra	Gujarat	West	4.0
Essar	Salaya	Gujarat	West	1.2
JSW Energy	Ratnagiri	Maharashtra	West	1.2
Tata Power	Trombay	Maharashtra	West	0.8
Simhapuri	Thamminapatnam	Andhra Pradesh	South	0.6
Meenakshi Energy	Thamminapatnam	Andhra Pradesh	South	0.3
JSW Energy (not coastal)	Torangallu	Karnataka	South	0.9
Adani Power	Udupi	Karnataka	South	1.2
IL&FS	Cuddalore	Tamil Nadu	South	1.2
Coastal Energen	Muthiara	Tamil Nadu	South	1.2
Total				17.6

Coal imports for domestic coal-based power generation (4% of coal imports in FY22): We project a 120% volume growth over FY22-24F. Our assumptions are:

- 5% rise in coal consumption for power generation (FY22-24F), lower than the 8% growth in coal-based power generation, due to increase in the proportion of higher gross calorific value imported coal.
- Zero growth in domestic coal supply for power generation (FY22-24F). We expect domestic coal supply for power generation/total domestic coal production to decline to 79% vs.86% in FY22, in line with the trend over FY17-21.

			_	CAG	R %		CAGR %
(MT)	FY18	FY20	FY22	FY18-20	FY20-22	FY24F	FY22-24F
Coal-based power generation (BU)	952	961	1,041	0.5	4	1,124	3.9
Coal consumed for Power	608	622	697	1.2	6	734	2.6
Domestic coal used for power	552	553	670	0.1	10	670	-
Coal imports for power	56	69	27	10.8	(38)	63	53
Coal imports for domestic coal based							
power plants	17	24	8	18.1	(42)	18	50
India coal production	675	731	777	4.0	3	849	4
India coal despatch	690	707	818	1.2	8	849	2
India coal despatch/ production %	102	97	105			100	
Domestic Coal used for power/ India							
coal production %	82	76	86			79	

Figure 16: Coal consumed by power sector, domestic coal supply for power and coal imports for power

SOURCES: INCRED RESEARCH, COMPANY REPORTS, CENTRAL ELECTRICITY AUTHORITY (CEA), MINISTRY OF COAL

Coastal coal (domestic coal transported by sea): We estimate that coastal coal cargo at ports in India stood at 41MT in FY22. We expect coastal coal cargo to be flat over FY22-24F, in line with our estimate of zero growth in domestic coal supply for power. Note that 22% of India's coal power capacity is in South India, which may source some of its coal requirements via sea transport.

We believe imported coal replaced by domestic coal (which is transported via sea) could boost ports' volume as 1) two Indian ports are used, i.e. origin and destination, and 2) lower quality domestic coal requires higher volume (1t imported coal = 1.4t of domestic coal in equivalent calorific value).

Container (25% of total port cargo in FY22): We estimate 14% rise in volume over FY22-24F ➤

Container cargo at ports (FY22) was 296MT, rising 13% over FY20-22. In FY22, MPs handled 167MT (56% of overall coal cargo). In FY20-22, container volume at MPs and private ports rose 13% each.

Ports on west coast handled 70% of the total coal cargo in FY22. On west coast, MPs handled 44% of the volume, while on east coast MPs handled 86% of the volume.



InCred Equities

Figure 17: Break-up of container cargo handled by ports

Figure 18: Break-up of container cargo handled by MPs and private ports

				CAGE	R %	
(MT)	FY18	FY20	FY22	FY18-20	FY20-22	(MT)
Total - Major Ports	134	147	167	4.8	6.7	Total - Major Port
JNPT	58	61	69	3	7	Major Ports - East
Chennai	30	27	31	(6)	8	Major Ports - West
Tuticorin	14	16	15	8	(3)	Total - Main priva
Kolkata	12	13	12	1	(4)	Main private ports -
Cochin	8	9	10	6	9	Main private ports -
Vizag	7	9	9	12	(0)	Grand Total
Kandla	2	7	9	95	11	East Coast
Ennore	0	3	9	593	93	West Coast
Other major ports	3	3	3	7	(5)	
Total - Main private ports	92	113	129	11.2	6.8	
Mundra	57	70	95	11	16	
Hazira	7	9	9	11	1	
Katupalli	8	11	6	20	(24)	
Gujarat Pipavav	10	13	9	11	(15)	
Krishnapatnam	8	9	2	10	(49)	
Other APSEZ ports	2	1	7	(16)	133	
Grand Total	225	260	296	7.4	6.7	

				CAGE	र %
(MT)	FY18	FY20	FY22	FY18-20	FY20-22
Total - Major Ports	134	147	167	4.8	6.7
Major Ports - East	64	67	76	2.9	6.4
Major Ports - West	70	80	91	6.5	6.8
Total - Main private ports	92	113	129	11.2	6.8
Main private ports - East	16	21	12	13.6	(22.9)
Main private ports - West	76	93	117	10.6	12.4
Grand Total	225	260	296	7.4	6.7
East Coast	79	88	88	5.2	0.3
West Coast	146	172	208	8.7	9.9
SOURCES: INCRED RESE	ARCH. CON	IPANY REF	PORTS. INE	DIA PORTS AS	SOCIATION

Tracking port volume over last eight quarters: Ports' container cargo grew 14% yoy in 2-4QFY21, after a 27% yoy decline in 1QFY21 (national lockdown at onset of Covid-19). In FY22, it rose 19% vs. FY20. Please note that during Apr-May 2022, container cargo at MPs rose 3% yoy.

Over FY20-22, container cargo at JNPT/ Mundra/ Pipavav ports grew 13%/ 35%/ -28%, respectively. The sharp volume decline for Pipavav was due to the following: (a) Operations were halted (17 May-1 Jun 2021) due to a cyclone and Pipavav commenced full operations from 10 Jul 2021. (b) Reduction in the proportion of low-margin coastal and trans-shipment cargo.

	1QFY21	2QFY21	3QFY21	4QFY21	1QFY22	2QFY22	3QFY22	4QFY22
JNPT	848	1,077	1,297	1,453	1,364	1,340	1,474	1,507
CAGR from FY20 %	(35)	(15)	8	16	2	3	11	10
Mundra	973	1,327	1,589	1,768	1,606	1,620	1,671	1,619
CAGR from FY20 %	18	(16)	38	41	40	1	20	14
Pipavav	186	168	199	195	150	157	157	163
CAGR from FY20 %	(16)	(25)	(14)	(1)	(18)	(16)	(18)	(9
Total	2,007	2,572	3,085	3,416	3,120	3,117	3,302	3,289
CAGR from FY20 %	(15)	(16)	19	26	15	1	13	10

EBITDA growth of Mundra and Pipavav ports over FY20-22 was similar: Over FY20-22, Pipavav's volume growth (12%/ 28% decline in total/ container cargo, respectively) lagged behind Mundra port (8%/ 35% rise in total/ container cargo, respectively). Despite the divergence in volume growth, the growth in EBITDA of Pipavav and Mundra ports was almost similar. Mundra's port EBITDA declined 10%, while Pipavav's EBITDA fell 6%.

	FY20	FY21	FY22	CAGR (FY20-22) %
Mundra				
Total volume (MT)	139	144	150	4
Container volume (MT)	70	83	95	16
EBITDA ex SEZ (Rs bn)	29.2	28.9	26.4	(
GPPV				
Total volume (MT)	15.9	14.8	14.2	(
Container volume (MT)	12.7	10.9	9.2	(1
EBITDA (Rs bn)	4.5	4.3	4.2	(

JNPT – recent performance: Despite the 22% yoy volume growth in FY22, capacity utilization in FY22/ Apr 22 was 74%/ 78%, respectively. Thus, we believe the current waterfront capacity can handle 20-30% higher cargo. Construction of phase-2 (2.4MTEU capacity; Rs32bn construction cost) of the fourth container terminal is likely to be completed by Apr 2025F. There has been a delay in



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construction due to Covid-19 and confirmation of the revised layout. Once complete, the phase-2 of the fourth container terminal will increase JNPT's waterfront capacity by 30%.

(KTEU)		Volume									
	Capacity	FY17	FY18	FY19	FY20	FY21	FY22	Apr 22			
JNPCT	1,500	1,534	1,482	1,056	719	544	440	25			
yoy growth %			(3)	(29)	(32)	(24)	(19)				
NSICT	1,200	729	641	561	531	751	948	71			
yoy growth %			(12)	(13)	(5)	41	26				
NSIGT	800	445	659	948	987	780	1,186	98			
yoy growth %			48	44	4	(21)	52				
APM	1,800	1,793	2,028	2,048	1,985	1,669	1,866	159			
yoy growth %			13	1	(3)	(16)	12				
PSA	2,400	-	23	520	809	933	1,245	145			
yoy growth %					56	15	33				
Total	7,700	4,500	4,833	5,133	5,031	4,677	5,685	498			
yoy growth %			7	6	(2)	(7)	22				

Going ahead, connectivity to the dedicated freight corridor (DFC) is likely to boost Pipavav port in FY23-24F, while JNPT could be connected in 1.5-2 years. Of the three main ports on west coast (JNPT, Mundra, GPPV or Pipavav), GPPV registered the highest proportion of container cargo using rail (54%) vs. JNPT (18%) and Mundra (32%) in FY22.

Figure 22: Container cargo for the three main container ports on west coast - Mundra	1,
Pipavav and JNPT	

(MT)	FY20	FY21	FY22
Container cargo			
JNPT	61	58	69
Mundra	70	83	95
Gujarat Pipavav	13	11	9
Total	144	151	17
% Container cargo using Rail transpo	rt		
JNPT	16	20	1
Mundra	30	30	3
Gujarat Pipavav	49	48	5

SOURCES: INCRED RESEARCH, COMPANY REPORTS, JAWAHARLAL NEHRU PORT TRUST

Iron ore (4% of total port cargo in FY22): We estimate 30% decline in port volume in FY22-24F \rightarrow

Iron ore at ports (FY22) was 51MT, down 8% over FY20-22. Ports on the west coast handled 29% of the total iron ore cargo in FY22.

India's Iron ore exports stood at 15MT in FY22 (vs. 25MT in FY20). We believe the balance 36MT iron-ore cargo at ports in FY22 was mainly coastal cargo. Going ahead, we expect the recent rise in export duty on iron ore to lead to negligible iron ore exports in FY24F. As a result, we expect iron ore volume at ports to decline to 36MT in FY24F (30% dip over FY22-24F)

Note: In May 2022, the government of India raised export tariff on new iron ore and concentrate to 50% (30% earlier), and duties on pellet to 45% (zero earlier).

				CAGF	र %					CAGR %	
(MT)	FY18	FY20	FY22	FY18-20	FY20-22	(MT)	FY18	FY20	FY22	FY18-20	FY20-22
Total - Major Ports	49	55	51	6.4	(3.8)	Total - Major Ports	49	55	51	6.4	(3.8)
Paradip	12	23	20	37	(7)	Major Ports - East	24	41	36	28.8	(6.3)
Vizag	11	14	15	16	1	Major Ports - West	24	15	15	(22.6)	2.8
Mumbai	8	7	7	(5)	(2)						
New Mangalore	5	5	4	1	(7)						
Mormugao	10	2	4	(59)	45						
Other major ports	3	4	2	18	(35)						



Fertilizer and others (17% of total port cargo in FY22): We factor in 10% growth in FY22-24F vs. 11% growth in FY20-22 ➤

Fertilizer and other cargo volume at ports (FY22) stood at 199MT, growing 11% over FY20-22. In FY22, MPs handled 132MT (66% of overall fertilizer and other cargo). In FY20-22, fertilizer and other cargo volume at MPs rose 14%, while the volume at private ports rose 6%.

Ports on west coast handled 46% of the total fertilizer and other cargo in FY22. On west coast, MPs handled 71% of the volume, while on east coast MPs handled 63% of the volume.

Figure 25: Break-up of fertilizer and other cargo handled by ports Figure 26: Break-up of fertilizer and other cargo handled by MPs and main private ports

				CAGE	R %					CAG	R %
(MT)	FY18	FY20	FY22	FY18-20	FY20-22	(MT)	FY18	FY20	FY22	FY18-20	FY20-22
Total - Major Ports	137	116	132	(7.9)	6.8	Total - Major Ports	137	116	132	(7.9)	6.8
Kandla	43	34	38	(12)	7	Major Ports - East	69	60	67	(6.6)	5.8
Kolkata	19	18	19	(5)	3	Major Ports - West	68	56	65	(9.2)	7.8
Paradip	14	13	16	(2)	11	Total - Main private ports	49	62	66	12.9	3.2
Vizag	15	13	17	(7)	15	Main private ports - East	27	38	40	19.0	2.4
Mumbai	11	9	11	(8)	9	Main private ports - West	22	24	27	5.1	4.4
Chennai	8	7	6	(12)	(6)	Grand Total	186	178	199	(2.0)	5.6
Other major ports	27	23	26	(6)	4	East Coast	95	98	107	1.2	4.5
Total - main private ports	49	62	66	12.9	3.2	West Coast	90	81	92	(5.5)	6.8
Mundra	15	12	11	(9)	(6)						
Dhamra	8	15	15	39	(0)						
Hazira	4	7	9	27	14						
Dahej	1	2	3	11	22						
Katupalli	0	0	1	0	410						
Gujarat Pipavav	1	2	3	21	28						
Krishnapatnam	10	8	11	(8)	17						
Gangavaram	10	14	12	20	(6)						
Other APSEZ ports	(0)	2	2								
Grand Total	186	178	199	(2.0)	5.6						

We estimate 15% volume growth for ports in FY22-24F ➤

Our volume growth estimate for FY22-24 may seem aggressive vs. the muted 1% growth over FY20-22. However, the implied CAGR over FY20-24 is 3.9%, which is the same as FY18-20 CAGR. FY21-22 was impacted by extraordinary events like Covid-19, shipping logjam and a sharp rise in price of commodities like crude oil and coal.

We expect a yoy growth in private ports to outpace MPs by 510bp, like the relative outperformance by private ports (vs. MPs) over FY18-20 (560bp).

				CAGR		CAGR 9	
(MT)	FY18	FY20	FY22	FY18-20	FY20-22	FY24F	FY22-24
POL	357	384	364	3.6	(2.6)	422	7.
Coal	250	274	252	4.7	(4.1)	326	13.
Container	225	260	296	7.4	6.7	339	7.
Iron Ore	49	55	51	6.4	(3.8)	36	(16.3
Fertiliser and others	186	178	199	(2.0)	5.6	219	5
Total	1,067	1,151	1,162	3.9	0.5	1,342	7.

				CAGR	%		CAGR %
(MT)	FY18	FY20	FY22	FY18-20	FY20-22	FY22F	FY22-24F
Major Ports	679	704	720	1.8	1.1	802	5.5
Main Private ports	387	447	442	7.4	(0.6)	540	10.6
Total	1,067	1,151	1,162	3.9	0.5	1,342	7.5



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InCred Equities

India

HOLD (no change)

Consensus ratings*:	Buy 22	Hold 2	Sell 1
Current price:			Rs736
Target price:			Rs753
Previous target:			Rs742
Up/downside:			2.3%
InCred Research / Cor	nsensus	:	-12.5%
Reuters:			
Bloomberg:		A	DSEZ IN
Market cap:		US\$2	21,396m
		Rs1,58	53,651m
Average daily turnover	:	US	\$\$64.5m
		Rs4	4683.5m
Current shares o/s:		2	,031.8m
Free float:			36.2%
*Source: Bloomberg			

Key changes in this note

- Reduce FY23F EBITDA by 4%.
- Reduce FY24F EBITDA by 1%.
- Increase target price by 1% to Rs753,



Major shareholders	76 Helu
Promoter and Promoter Group	63.8
Life Insurance Corporation of India	10.5
Camas Investments Pvt. Ltd.	1.3

Adani Ports & Special Economic Zone Ltd

Trading at fair valuation; maintain Hold

- We expect APSEZ's cargo (ex-Gangavaram Port or GPL) to grow 28% over FY22-24F. This implies an organic volume CAGR of 9% over FY20-24F.
- We maintain Hold rating with a higher target price of Rs753 (Rs742 earlier).

We expect APSEZ cargo (ex-GPL) to grow 28% over FY22-24F

For Adani Ports & Special Economic Zone or APSEZ, ex-Gangavaram Port or GPL, we expect the volume to grow 28% over FY22-24F vs. our estimate of 15% growth for the ports sector and 22% growth for private ports. This implies a volume CAGR of 9% for APSEZ (ex-acquisitions) over FY20-24F. We expect APSEZ's volume growth to be driven by (a) 45% growth in coal cargo (24% of APSEZ's FY22 cargo) due to our 28% estimated growth in coal cargo (FY22-24F) in the ports sector and 18MT incremental coal at Adani Power and Tata Power's Mundra power plants; (b) 20% growth in container cargo (48% of APSEZ's FY22 cargo) driven by connectivity of Mundra port with the Dedicated Freight Corridor or DFC – this is a tad higher than our estimate of 14% growth for the sector's container cargo; (c) 20% growth in POL cargo (14% of APSEZ's FY22 cargo), a tad higher than our estimate of 16% growth for the sector's POL cargo.

Retain Hold rating; target price raised to Rs753 from Rs742 earlier

Over FY20-24F, we forecast a 19% EBITDA CAGR driven by recent acquisitions. Excluding acquisitions, we expect a 12% EBITDA CAGR. In FY23F, we expect 14% RoCE and net debt/EBITDA of 2.2x (vs. 3.7x in Mar 2022). Pledged shares, as a percentage of promoter holding, was comfortable (13% in Apr 2022), lower than in Mar 2020 (58%). The value of pledged holding was Rs135bn in Apr 2022 vs. Rs187bn in Mar 2020. APSEZ trades at 14.1x FY23F EV/EBITDA, close to its five-year median forward EV/EBITDA (13.3x). We cut our FY23F/FY24F EBITDA by 4%/ 1%, respectively. We raise our target price on APSEZ to Rs753 (from Rs742 earlier) and maintain Hold rating on it. Our SOTP-based target price implies 12x FY24F EV/EBITDA (10% discount to five-year average EV/EBITDA). We believe the discount is warranted as 12% of our target enterprise value or EV is from recent acquisitions/under-construction assets and valued at acquisition price/capex (mainly GPL, Sarguja Rail and Vizhinjam). Key upside risk is a sharper-than-expected growth in cargo. Macro slowdown and delay in ramp-up at Adani Power and Tata Power's Mundra power plants are downside risks.

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Financial Summary	Mar-20A	Mar-21A	Mar-22A	Mar-23F	Mar-24F
Revenue (Rsm)	114,388	125,496	151,390	193,610	229,342
Operating EBITDA (Rsm)	71,311	79,834	95,640	123,356	144,729
Net Profit (Rsm)	37,631	49,943	47,281	72,934	94,923
Core EPS (Rs)	23.2	22.3	26.5	34.5	44.9
Core EPS Growth	9.6%	(3.8%)	18.8%	30.3%	30.1%
FD Core P/E (x)	31.70	32.97	27.75	21.30	16.37
DPS (Rs)	3.2	5.0	5.0	3.3	2.0
Dividend Yield	0.53%	0.83%	0.83%	0.56%	0.33%
EV/EBITDA (x)	24.29	22.62	19.63	14.83	12.06
P/FCFE (x)	35.11	(29.79)	48.48	201.87	38.37
Net Gearing	85.7%	92.5%	90.5%	59.8%	34.1%
P/BV (x)	5.83	4.88	4.06	3.48	2.89
ROE	19.0%	16.1%	15.9%	17.6%	19.3%
% Change In Core EPS Estimates				(2.19%)	4.69%
InCred Research/Consensus EPS (x)					

SOURCES: INCRED RESEARCH, COMPANY REPORTS



Trading at fair valuation; maintain Hold

We expect APSEZ's cargo (ex-Gangavaram Port or GPL) to grow 28% over FY22-24F \blacktriangleright

Commodity-wise performance for MP+ APSEZ in FY20-22: Total cargo grew at a 2% CAGR. POL/coal cargo (26%/ 21% of total volume, respectively) declined at 1%/ 3% CAGR, respectively. Container cargo (29% of total volume) grew at a 9% CAGR.

APSEZ (ex-KPCL and GPL) commodity-wise performance in FY20-22: Total cargo grew at a 4% CAGR, higher than the 1% CAGR at MPs. Coal cargo (24% of total volume) declined at a 9% CAGR due to lower volume at Tata Power/ Adani Power plants at Mundra (28MT in FY20 to 10MT in FY22). Container cargo (48% of total volume) grew at a 13% CAGR and POL cargo (14% of total volume) grew at a 16% CAGR.

	Volumes (MT)			yoy growth (%)		
	FY20	FY21	FY22	FY21	FY22	
Major Ports	705	676	720	(4)	-	
POL	237	207	222	(13)		
Coal	149	134	148	(10)	1	
Container	147	144	167	(2)	1	
Others	172	191	183	11	(
Adani Ports ex-KPCL	224	227	242	1		
POL	25	29	33	17	1	
Coal	71	65	59	(9)	(1	
Container	91	103	117	12	1	
Others	36	30	34	(16)	1	
Major Ports + APSEZ ex-KPCL	928	902	963	(3)		
POL	262	235	255	(10)		
Coal	221	199	206	(10)		
Container	238	247	284	3	1	
Others	208	221	218	7	(

APSEZ gave guidance of 350-360MT cargo in FY23F (up 24-27% yoy). This includes 30-35MT from GPL. On a like-to-like basis, this implies a yoy growth of ~15% vs. 7% growth in FY22. We expect 349MT of cargo in FY23F and excluding GPL, we estimate 316MT of cargo in FY23F (up 12% yoy).

For APSEZ, ex-GPL, we expect the volume to grow 27% over FY22-24F vs. our estimate of 15% growth for the ports sector and 22% growth for private ports. This implies a volume CAGR of 9% for APSEZ (ex-acquisitions) over FY20-24F. We expect APSEZ's volume growth to be driven by the following:

- 45% growth in coal (24% of APSEZ's FY22 cargo) due to our 28% estimated growth in coal cargo (FY22-24F) in the ports sector and 18MT incremental coal at Adani Power and Tata Power's Mundra plants.
- 20% growth in container cargo (48% of APSEZ's FY22 cargo) driven by connectivity of Mundra port with the DFC. This is a tad higher than our estimate of 14% growth for the sector's container cargo.
- 20% growth in POL cargo (14% of APSEZ's FY22 cargo), a tad higher than our estimate of 16% growth for the sector's POL cargo.



InCred Equities

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Figure 30: Detailed volume break-up of APSEZ over FY20-24F

		Vol	umes (MT)				уоу	growth %		
	FY20	FY21	FY22	FY23F	FY24F	FY20	FY21	FY22F	FY23F	FY24F
Total	223	247	282	349	400	7	11	14	24	15
Total ex-GPL	223	247	282	316	363	7	11	14	12	15
Total ex-KPCL and GPL	223	227	242	271	312	7	2	7	12	15
Mundra	139	144	150	170	203	1	4	4	13	19
Container	70	83	95	107	114	6	18	15	12	7
LNG & LPG	1	3	3	5	7		257	20	67	40
Adani Power	17	14	6	6	17	38	(19)	(56)	-	181
Tata Power	11	10	4	4	11	(1)	(11)	(56)	-	153
Crude Oil	22	21	23	27	28	(17)	(2)	10	17	3
Others	19	14	18	21	25	(13)	(22)	27	15	19
Katupalli	11	9	7	7	7	22	(19)	(16)	-	-
Dhamra	30	32	33	37	42	44	9	3	12	12
Hazira	22	22	25	27	30	10	1	13	10	10
Dahej	6	6	8	9	10	(30)	(8)	37	12	12
Krishnapatnam		20	40	45	50			103	12	12
Gangavaram	-	-	-	34	38				na	12
Others	15	14	18	19	20	22	(9)	31	5	5

Mundra port: Over FY22-24F, we expect 32% volume growth driven by (a) 18MT incremental coal for Adani Power and Tata Power's plants at Mundra, and (b) container cargo getting a boost by connectivity to the Dedicated Freight Corridor or DFC, while connectivity of Jawaharlal Nehru Port or JNPT to the DFC will take place 1.5 years later.

Dhamra, Hazira, Dahej and Krishnapatnam or KPCL (combined 106 MT cargo in FY22): While the combined volume grew 7% yoy in FY22, we factor in 24% growth over FY22-24F. This is because coal accounts for 54% of the cargo in FY22 and we expect 28% growth in the port sector's coal volume over FY22-24F.

KPCL: FY22 cargo declined 16% yoy. We factor in flat volume over FY22-24F.

GPL: While FY22 volume (30MT) declined 8% yoy, we factor in 24% growth over FY22-24F. This is because coal comprised 59% of the cargo in FY22 and we expect 28% growth in the port sector's coal volume over FY22-24F.

Retain Hold rating; target price raised to Rs753 from Rs742 ➤

Over FY20-24F, we forecast a 19% EBITDA CAGR driven by acquisition of KPCL, GPL and Sarguja Rail. Excluding acquisitions, we expect a 12% EBITDA CAGR. In FY23F, we expect 14% RoCE and net debt/EBITDA of 2.2x (vs. 3.7x in Mar 2022). Pledged shares, as a percentage of promoter holding, was comfortable (13% in Apr 2022), lower than in Mar 2020 (58%). The value of pledged holding was Rs135bn in Apr 2022 vs. Rs187bn in Mar 2020.

Figure 31: Consolidated	d income	statemer	nt and ba	alance sl	neet	Figure 32: Key financial	ratios an	d valuat	ion		
	FY20	FY21	FY22	FY23F	FY24F		FY20	FY21	FY22	FY23F	FY24F
Income statement (Rs bn)						Financial Ratios (x)					
Port volume (MT)	223	247	282	349	400	RoCE %	12	10	10	14	17
Sales	114	125	151	194	229	RoE %	19	15	14	16	18
EBITDA	71	80	96	123	145	EBITDA Margin %	62	64	63	64	63
EBITDA ex-KPCL, GPL,						Net debt/ EBITDA	3.1	3.7	3.7	2.2	1.3
SRCPL and SEZ	70	73	81	94	111	Net debt/ Equity including					
Interest	20	21	26	29	24	Minority Interest	0.9	0.9	0.9	0.6	0.3
Depreciation	17	21	27	28	29	EBIT/ Interest	2.8	2.8	2.7	3.3	4.7
Adjusted PAT	48	45	55	73	95	Valuations (x)					
Balance sheet (Rs bn)						P/BV	5.8	4.8	4.0	3.4	2.9
Net Worth	256	306	383	447	537	EV/ EBITDA	-	-	19.1	14.1	11.5
Minority Interest	2	15	4	5	6	P/E	-	-	27.9	21.0	16.2
Net Debt	221	297	350	270	185						
Net Fixed assets	337	490	575	516	511						
Net working capital	96	74	61	106	116						
Goodwill	33	40	59	59	59						
Investment & others	14	13	41	41	42						
SOURC	ES: INCRED I	RESEARCH	ESTIMATES	, COMPANY	REPORTS	SOURC	ES: INCRED	RESEARCH	ESTIMATES	S, COMPAN	(REPORTS

APSEZ trades at 14.1x FY23F EV/EBITDA, close to its five-year median forward EV/EBITDA (13.3x). We reduce our FY23F/FY24F EBITDA by 4%/1%, respectively. We raise our target price on APSEZ to Rs753 (from Rs742 earlier) and maintain Hold rating on it. Our SOTP-based target price implies 12x FY24F



EV/EBITDA (10% discount to five-year average EV/EBITDA). We believe the discount is warranted as 12% of our target EV is from recent acquisitions/ underconstruction assets and valued at acquisition price/capex (mainly GPL, Sarguja Rail and Vizhinjam).

(Rsm)	FY23F		FY24F	
	Old	New	Old	New
Sales	199,230	193,610	227,690	229,342
% change		(3)		1
EBITDA	127,977	123,356	145,896	144,729
% change		(4)		(1
PAT	74,191	72,934	90,219	94,923
% change		(2)		5

	(Rs/share)	(Rs bn)	Basis
EV APSEZ's stake			
Mundra Port	273	576	DCF @ WACC of 11.3% implying EV/E of 12.7x FY24F
SEZ	13	27	DCF @ WACC of 11.3%
Dahej	11	23	DCF @ WACC of 11.3% implying EV/E of 8.1x FY24F
Hazira	94	199	@ 13x EV/E FY24F
Dhamra	81	171	@ 13x EV/E FY24F
Katupalli	6	13	@ 13x EV/EBITDA FY24F; implied 0.5x acquisition EV
Adani Logistics	35	73	@ 16x EV/EBITDA FY24F; implied 1.1x EV/Assets FY23F
Marine Business	135	285	@ 13x EV/E FY24F
Krishnapatnam	110	233	@ EV/E of 13x FY24F; implied 1.7x acquisition EV
Vizhinjam	18	37	@ Capex
Gangavaram	29	62	@ acquisition price; implying EV/E of 7.7x FY24F
Sarguja	28	60	@ acquisition price; implying EV/E of 12.3x FY24F
Other assets	30	63	@ Capex
NPV of NWC change	(11)	(23)	
Total EV	853	1,802	
Less: Net debt less			
other investments	(100)	(211)	
Target Price	753	1,591	



BY THE NUMBERS



Profit & Loss

(Rs mn)	Mar-20A	Mar-21A	Mar-22A	Mar-23F	Mar-24F
Total Net Revenues	114,388	125,496	151,390	193,610	229,342
Gross Profit	83,415	92,901	111,174	147,362	176,156
Operating EBITDA	71,311	79,834	95,640	123,356	144,729
Depreciation And Amortisation	(16,803)	(21,073)	(27,396)	(28,281)	(29,168)
Operating EBIT	54,508	58,761	68,244	95,075	115,561
Financial Income/(Expense)	(893)	(1,589)	(4,015)	(1,903)	5,445
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)					
Profit Before Tax (pre-El)	53,615	57,172	64,229	93,172	121,006
Exceptional Items	(11,176)	5,748	(8,817)		
Pre-tax Profit	42,439	62,920	55,412	93,172	121,006
Taxation	(4,594)	(12,433)	(7,459)	(19,566)	(25,411)
Exceptional Income - post-tax					
Profit After Tax	37,845	50,487	47,952	73,606	95,595
Minority Interests	(214)	(544)	(672)	(672)	(672)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	37,631	49,943	47,281	72,934	94,923
Recurring Net Profit	47,598	45,330	54,911	72,934	94,923
Fully Diluted Recurring Net Profit	47,598	45,330	54,911	72,934	94,923

Cash Flow					
(Rs mn)	Mar-20A	Mar-21A	Mar-22A	Mar-23F	Mar-24F
EBITDA	71,311	79,834	95,640	123,356	144,729
Cash Flow from Invt. & Assoc.					
Change In Working Capital	17,055	21,871	13,422	(45,329)	(10,135)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	(11,176)	5,748	(8,817)		
Other Operating Cashflow					
Net Interest (Paid)/Received	(893)	(1,589)	(4,015)	(1,903)	5,445
Tax Paid	(3,645)	(12,617)	(7,513)	(19,246)	(25,411)
Cashflow From Operations	72,653	93,248	88,717	56,878	114,628
Capex	(48,476)	(182,219)	(130,552)	30,818	(24,135)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	(3,957)	(10,582)	(37,250)		
Cash Flow From Investing	(52,433)	(192,800)	(167,801)	30,818	(24,135)
Debt Raised/(repaid)	22,748	49,382	110,521	(80,000)	(50,000)
Proceeds From Issue Of Shares	(19,600)				
Shares Repurchased					
Dividends Paid	(485)	(7,867)	(12,394)	(21,508)	(5,059)
Preferred Dividends					
Other Financing Cashflow	(9,418)	31,906	51,235	2,657	491
Cash Flow From Financing	(6,755)	73,421	149,362	(98,851)	(54,568)
Total Cash Generated	13,466	(26,131)	70,278	(11,155)	35,925
Free Cashflow To Equity	42,969	(50,170)	31,436	7,696	40,493
Free Cashflow To Firm	39,727	(78,261)	(53,522)	116,713	114,960

SOURCES: INCRED RESEARCH, COMPANY REPORTS



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BY THE NUMBERS...cont'd

Balance Sheet					
(Rs mn)	Mar-20A	Mar-21A	Mar-22A	Mar-23F	Mar-24
Total Cash And Equivalents	73,139	47,008	104,921	104,193	139,49
Total Debtors	32,021	29,257	24,697	46,466	55,04
Inventories	2,883	9,919	3,812	9,681	11,46
Total Other Current Assets	120,424	103,891	108,745	127,555	141,62
Total Current Assets	228,467	190,075	242,175	287,895	347,62
Fixed Assets	336,831	490,475	574,815	515,716	510,683
Total Investments	11,780	22,362	59,611	59,611	59,61 ⁻
Intangible Assets	32,863	40,364	59,179	59,179	59,17
Total Other Non-Current Assets	9,227				
Total Non-current Assets	390,700	553,200	693,605	634,506	629,47
Short-term Debt					
Current Portion of Long-Term Debt					
Total Creditors	46,334	50,026	55,582	77,444	91,73
Other Current Liabilities	4,824	6,030	7,537		
Total Current Liabilities	51,158	56,056	63,120	77,444	91,737
Total Long-term Debt	294,627	344,010	454,530	374,530	324,53
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	7,002	6,367	6,367	6,074	5,78
Total Non-current Liabilities	301,629	350,377	460,897	380,604	330,31
Total Provisions	7,949	15,875	25,335	12,130	12,13
Total Liabilities	360,736	422,308	549,353	470,178	434,17
Shareholders Equity	256,235	306,283	382,500	446,812	536,67
Minority Interests	2,196	14,685	3,928	5,411	6,24
Total Equity	258,431	320,967	386,428	452,223	542,919
Key Ratios					
-	Mar-20A	Mar-21A	Mar-22A	Mar-23F	Mar-24
Revenue Growth	4.7%	9.7%	20.6%	27.9%	18.5%
Operating EBITDA Growth	0.9%	12.0%	19.8%	29.0%	17.3%
Operating EBITDA Margin	62.3%	63.6%	63.2%	63.7%	63.19
Net Cash Per Share (Rs)	(109.01)	(146.18)	(165.51)	(127.98)	(87.60
BVPS (Rs)	126.12	150.75	181.08	211.52	254.0
Gross Interest Cover	2.79	2.76	2.67	3.28	4.7
Effective Tax Rate	10.8%	19.8%	13.5%	21.0%	21.0%
Net Dividend Payout Ratio	11.8%	17.5%	16.2%	7.5%	3.49
Accounts Receivables Days	95.60	89.11	65.04	67.08	80.7
Inventory Days	64.52	71.67	62.31	53.24	72.5
	454.62	539.52	479.25	524.93	580.5
		12.2%	11.0%	13.4%	17.09
Accounts Payables Days	11.8%				10.00
Accounts Payables Days ROIC (%)		/*	11.8%	14.4%	10.97
Accounts Payables Days ROIC (%) ROCE (%)	13.6%	12.8%	11.8% 8.1%	14.4% 10.2%	
Accounts Payables Days ROIC (%) ROCE (%) Return On Average Assets		/*	11.8% 8.1%	14.4% 10.2%	
Accounts Payables Days ROIC (%) ROCE (%)	13.6% 9.2%	12.8% 8.6%	8.1%	10.2%	12.2%
Accounts Payables Days ROIC (%) ROCE (%) Return On Average Assets Key Drivers	13.6% 9.2% Mar-20A	12.8% 8.6% Mar-21A	8.1% Mar-22A	10.2% Mar-23F	12.2% Mar-24
Accounts Payables Days ROIC (%) ROCE (%) Return On Average Assets	13.6% 9.2%	12.8% 8.6%	8.1%	10.2%	16.9% 12.2% Mar-24F 18.5 14.6

SOURCES: INCRED RESEARCH, COMPANY REPORTS



India

ADD (no change)

Consensus ratings*: Buy 15	Hold 2	Sell 0
Current price:		Rs78
Target price:		Rs140
Previous target:		Rs140
Up/downside:		79.5%
InCred Research / Consensus:		25.7%
Reuters:		
Bloomberg:	G	SPPV IN
Market cap:	U	S\$519m
	Rs3	37,660m
Average daily turnover:	U	IS\$1.1m
	F	Rs80.6m
Current shares o/s:		483.4m
Free float: *Source: Bloomberg		56.0%

Key changes in this note

> NA



Relative (%)	(10.1)	(5.7)	(31.6)
Major shareholders	tius Limited		% held 44.0
ICICI Prudential			8.4
HDFC Trustee Compa	any Ltd.		7.4

Gujarat Pipavav Port Ltd

Possessing a trigger and a rerating catalyst

- We feel the commissioning of the dedicated freight corridor (DFC) in 2HFY22 will boost GPPV over FY23F-24F, while JNPT could be connected in FY24F.
- Extension of concession period at favourable terms is a re-rating trigger.
- We maintain our estimates, Add rating and a target price of Rs140. We believe that at CMP, GPPV is not factoring in any concession extension beyond FY29F.

Volume surge likely in FY23F-24F

We believe the commissioning of the dedicated freight corridor (DFC) in 2HFY22 will boost GPPV over FY23F-24F, while JNPT could be connected in FY24F. Of the three main ports on the west coast (JNPT, Mundra and GPPV or Pipavav), GPPV had the highest proportion of container cargo using rail infrastructure (54%) vs. 18% at JNPT and 30% at Mundra in FY22. Rail infrastructure connecting Pipavav is compliant with Double Stack Electric Freight in accordance with the DFC. Over FY22-24F, we factor in 51%/39% growth in container/ total cargo, respectively.

Container cargo is less sticky to a particular port than bulk cargo

Cargo on a bulk carrier belongs to a single client (hence, single/few locations). In case of container ships, the cargo belongs to multiple users and is destined to/originates from multiple locations. As a result, while bulk cargo is sticky to a particular port (minimizing logistics cost), container cargo is less sticky and, within a broad region, container shipping liners may switch ports. We believe this aspect is important in our thesis of volume shift from JNPT to Pipavav and Mundra ports. While JNPT is not connected to the DFC, Pipavav and Mundra ports are connected.

Extension of concession period at favourable terms to act as catalyst

In 2QFY22, GPPV inked an in-principle Memorandum of Understanding (MoU; nonbinding) with Gujarat Maritime Board to renew its concession (expiring in 2029; remaining life of seven years). A 20-year extension at 25% revenue share (vs. 3% now) can add Rs13 to our target price or TP while an extension at current revenue share (3%) can add Rs75 to our TP. In our TP, we factor in a 70% probability of concession extension with a 25% revenue share (vs. 3% of sales now), in line with port agreements over last five years and a 30% probability of depreciated replacement value (DRV) post current concession period.

Maintain our estimates, Add rating and target price of Rs140

We forecast a 25% EBITDA CAGR over FY22-24F, driven by a 19% volume CAGR. GPPV trades at 5.8x FY23F EV/EBITDA. We believe that at CMP, GPPV is factoring in DRV and no concession extension beyond FY29F. Note: GPPV's median forward EV/EBITDA over the last three years is 8x. Prolonged economic slowdown is a downside risk.

Financial Summary	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Revenue (Rsm)	7,353	7,335	7,408	9,108	10,904
Operating EBITDA (Rsm)	4,465	4,324	4,181	5,293	6,494
Net Profit (Rsm)	2,922	2,183	2,303	3,190	4,106
Core EPS (Rs)	6.0	4.6	4.8	6.6	8.5
Core EPS Growth	42.3%	(23.0%)	3.4%	38.5%	28.7%
FD Core P/E (x)	12.89	17.25	16.35	11.81	9.17
DPS (Rs)	5.6	4.5	5.1	5.8	6.7
Dividend Yield	8.66%	6.96%	7.94%	9.05%	10.31%
EV/EBITDA (x)	6.79	6.84	6.99	5.35	4.15
P/FCFE (x)	13.38	13.18	11.27	8.77	5.46
Net Gearing	(31.2%)	(35.7%)	(38.7%)	(43.7%)	(50.3%)
P/BV (x)	1.81	1.85	1.92	1.94	1.92
ROE	14.1%	10.8%	11.5%	16.3%	21.0%
% Change In Core EPS Estimates					
InCred Research/Consensus EPS (x)					
·		SOURCE	ES: INCRED RES	EARCH, COMPA	NY REPORTS

Analyst(s)



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Possessing a trigger and a rerating catalyst

Volume surge likely in FY23F-24F >

We believe the commissioning of the dedicated freight corridor (DFC) in 2HFY22 will boost GPPV over FY23F-24F, while JNPT could be connected in FY24F. Of the three main ports on India's west coast (JNPT, Mundra and GPPV), GPPV had the highest proportion of container cargo using rail infrastructure (54%) vs. 18% at JNPT and 30% at Mundra in FY22. Rail infrastructure connecting Pipavav is compliant with Double Stack Electric Freight, in accordance with the DFC. Over FY22-24F, we factor in 51%/39% growth in container cargo/total cargo, respectively.

	FY19	FY20	FY21	FY22	FY23F	FY24F
Container (KTEU)	903	873	749	628	832	998
Growth yoy %		(3)	(14)	(16)	32	20
Dry Bulk (MT)	2.1	2.4	3.1	4.2	4.2	4.5
Growth yoy %		15	32	34	-	7
Liquid Bulk (MT)	0.6	0.8	0.7	0.8	0.8	0.9
Growth yoy %		29	(16)	17	-	7
Total - derived (MT)	15.9	15.9	14.8	14.2	17.2	20.0
Growth yoy %		0	(7)	(4)	21	16
Capacity utilization %	61	61	56	54	66	76

Container cargo is less sticky to a particular port than bulk cargo \rightarrow

Cargo on a bulk carrier belongs to a single client (hence, single/few locations). In case of container ships, the cargo belongs to multiple users and is destined to/originates from multiple locations. As a result, while bulk cargo is sticky to a particular port (minimizing logistics costs), container cargo is less sticky and, within a broad region, container shipping liners may switch ports. We believe this aspect is important in our thesis of volume shift from JNPT to Pipavav and Mundra ports. While JNPT is not connected to the DFC, Pipavav and Mundra ports are connected.

Performance of Gateway Terminals at JNPT – the other terminal owned by promoters of GPPV **>**

Besides GPPV, the promoters of GPPV (APM Terminals have a 43% stake in GPPV) have another terminal in India at JNPT (74:26 joint venture or JV of APM Terminals and Container Corporation of India) named Gateway Terminals (GT). The agreement was signed in Jul 2004 with JNPT to build and operate a container terminal for 30 years (COD Oct 2006). Tariff is regulated by the Tariff Authority for Major Ports (TAMP) and the revenue share is 36%. During FY22, GT at JNPT operated at 105% capacity utilization. We estimate that tariff at GT is ~25% lower than at GPPV.

(MTEU)	GPPV	YoY Growth (%)	APM Terminals Mumbai	YoY Growth (%
1QFY21	0.19	(16)	0.35	(33
2QFY21	0.17	(25)	0.41	(19
3QFY21	0.20	(14)	0.46	(6
4QFY21	0.20	(1)	0.46	(5
1QFY22	0.15	(19)	0.47	36
2QFY22	0.16	(7)	0.46	13
3QFY22	0.16	(21)	0.47	2
4QFY22	0.16	(16)	0.47	3



Extension of concession period at favourable revenue share is the key re-rating trigger ➤

In 2QFY22, GPPV inked an in-principle Memorandum of Understanding (MoU; non-binding) with Gujarat Maritime Board to renew its concession (expiring in 2029; remaining life of seven years). A 20-year extension at 25% revenue share (vs. 3% now) can add Rs13 to our target price while an extension at current revenue share (3%) can add Rs75 to our target price.

In our target price, we factor in a 70% probability of concession extension with a 25% revenue share (vs. 3% of sales now), in line with port agreements over last five years and a 30% probability of depreciated replacement value (DRV) post current concession period.

Port	Terminal operator	Revenue share %
JNPT	Port of Singapore Authority	35.7
JNPT	APM Terminals	35.5
JNPT	DP World (new terminal)	28.1
Ennore	Adani Ports	37.0
Mormugao	Adani Ports	20.0
Kandla	Adani Ports	25.0
Vizag	Adani Ports	40.0

Maintain our estimates, Add rating and target price of Rs140 >

We forecast an EBITDA CAGR of 25% over FY22-24F, driven by a 19% volume CAGR. GPPV trades at 5.8x FY23F EV/EBITDA. We believe that at CMP, GPPV is factoring in DRV and no concession extension beyond FY29F. Note: GPPV's median forward EV/EBITDA over the last three years is 8x.

Figure 41: Target price calculation

Figure 38: Income s	tatement a	and Balan	ce Sheet			Figure 39: Key finar	ncial ratios	and valu	ation		
(Rs bn)	FY20	FY21	FY22	FY23F	FY24F		FY20	FY21	FY22	FY23F	FY24F
Income statement						Financial Ratios (x)					
Port volume (MT)	15.9	14.8	14.2	17.2	20.0	RoCE %	22.3	22.4	23.1	35.8	51.6
Sales	7.4	7.3	7.4	9.2	11.0	RoE %	13.9	11.0	9.8	15.2	18.8
EBITDA	4.5	4.3	4.2	5.3	6.5	EBITDA margin %	60.7	59.0	56.3	57.8	59.2
Interest	0.1	0.1	0.0	0.0	0.0	Valuations (x)					
Depreciation	1.3	1.3	1.3	1.3	1.4	P/BV			1.9	1.8	1.7
Adjusted PAT	2.9	2.2	2.0	3.3	4.3	EV/EBITDA			7.3	5.8	4.7
Balance Sheet						P/E			19.4	12.3	9.4
Net Worth	20.8	20.3	20.3	21.0	22.2						
Net Debt	(6.5)	(7.3)	(8.6)	(10.6)	(13.0)						
Net Fixed Assets	15.9	15.2	14.6	13.5	12.9						
Net Working capital	(1.8)	(1.9)	(2.1)	(2.4)	(3.0)						
Investment & Others	0.2	(0.3)	(0.7)	(0.7)	(0.7)						
	SOL	IRCES: INCRE	ED RESEARC	H, COMPANY	REPORTS		SOL	JRCES: INCRE	ED RESEARC	H, COMPANY	REPORTS

Figure 40: Discounted cash flow

•					o o i	
(Rs bn)	FY24F	FY25F	FY26F	FY29F	(Rs/ share)	
EBITDA	6.5	7.3	8.3	11.1	EV	58
Volume (MT)	20.0	21.3	22.8	27	Depreciated Replacement value/ Extension	54
Less: Tax on EBIT	(1.3)	(1.5)	(1.7)	(2.4)	Net cash	22
Less: capex	(0.8)	(0.8)	(0.8)	(0.8)	PRCL stake	5
Less chg in WC	0.5	0.4	0.4	0.3	Target Price	140
FCF	5.0	5.5	6.2	8.3		
Discount rate (%)	11.8 (Be	eta of 0.6; Targe	et debt: Equity of (0.15x)		
EV	28.1					
EV (Rs/ share)	58.2					
	SOUR	CES: INCRED RE	SEARCH, COMPAN	IY REPORTS	SOURCES: INCRED RESEARCH, C	OMPANY REPORTS



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BY THE NUMBERS





Profit & Loss

(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
Total Net Revenues	7,353	7,335	7,408	9,108	10,904
Gross Profit	6,302	6,155	6,180	7,704	9,326
Operating EBITDA	4,465	4,324	4,181	5,293	6,494
Depreciation And Amortisation	(1,315)	(1,335)	(1,357)	(1,392)	(1,428)
Operating EBIT	3,150	2,989	2,824	3,901	5,066
Financial Income/(Expense)	397	341	247	353	409
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)					
Profit Before Tax (pre-El)	3,547	3,330	3,071	4,253	5,475
Exceptional Items	38	(65)			
Pre-tax Profit	3,585	3,265	3,071	4,253	5,475
Taxation	(663)	(1,082)	(768)	(1,063)	(1,369)
Exceptional Income - post-tax					
Profit After Tax	2,922	2,183	2,303	3,190	4,106
Minority Interests					
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	2,922	2,183	2,303	3,190	4,106
Recurring Net Profit	2,892	2,227	2,303	3,190	4,106
Fully Diluted Recurring Net Profit	2,892	2,227	2,303	3,190	4,106

Cash Flow					
(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24F
EBITDA	4,465	4,324	4,181	5,293	6,494
Cash Flow from Invt. & Assoc.					
Change In Working Capital	181	87	(138)	315	
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	38	(65)			
Other Operating Cashflow					
Net Interest (Paid)/Received	397	341	247	353	409
Tax Paid	(1,424)	(1,177)	(726)	(916)	
Cashflow From Operations	3,657	3,510	3,565	5,046	6,903
Capex	(843)	(653)	(222)	(750)	
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments					
Other Investing Cashflow					
Cash Flow From Investing	(843)	(653)	(222)	(750)	
Debt Raised/(repaid)					
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(3,262)	(2,621)	(2,988)	(3,407)	
Preferred Dividends					
Other Financing Cashflow	1,606	523			
Cash Flow From Financing	(1,656)	(2,098)	(2,988)	(3,407)	
Total Cash Generated	1,158	759	354	889	6,903
Free Cashflow To Equity	2,814	2,857	3,343	4,296	6,903
Free Cashflow To Firm	2,888	2,920	3,393	4,346	6,953

SOURCES: INCRED RESEARCH, COMPANY REPORTS



BY THE NUMBERS...cont'd

(Rs mn)	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24
Total Cash And Equivalents	6,495	7,254	7,607	8,496	9,88
Total Debtors	459	441	455	559	66
Inventories	76	105	91	112	13
Total Other Current Assets	514	591	667	820	98
Total Current Assets	7,544	8,390	8,820	9,987	11,66
Fixed Assets	15,882	15,200	14,066	13,423	12,74
Total Investments	830	830	830	830	83
Intangible Assets					
Total Other Non-Current Assets					
Total Non-current Assets	16,712	16,030	14,896	14,253	13,57
Short-term Debt					
Current Portion of Long-Term Debt					
Total Creditors	2,475	2,649	2,587	3,181	3,80
Other Current Liabilities					
Total Current Liabilities	2,475	2,649	2,587	3,181	3,80
Total Long-term Debt					
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities					
Total Provisions	934	1,449	1,492	1,639	1,79
Total Liabilities	3,409	4,098	4,079	4,820	5,60
Shareholders Equity	20,848	20,322	19,637	19,420	19,64
Minority Interests					
Minority Interests Total Equity Key Ratios	20,848	20,322	19,637	19,420	19,64
Total Equity Key Ratios	Mar-20A	Mar-21A	Mar-22F	Mar-23F	Mar-24
Total Equity Key Ratios Revenue Growth	Mar-20A 4.7%	Mar-21A (0.2%)	Mar-22F 1.0%	Mar-23F 22.9%	Mar-24 19.7
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth	Mar-20A 4.7% 14.8%	Mar-21A (0.2%) (3.2%)	Mar-22F 1.0% (3.3%)	Mar-23F 22.9% 26.6%	Mar-24 19.7 ⁴ 22.7 ⁴
Total Équity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin	Mar-20A 4.7% 14.8% 60.7%	Mar-21A (0.2%) (3.2%) 59.0%	Mar-22F 1.0% (3.3%) 56.4%	Mar-23F 22.9% 26.6% 58.1%	Mar-24 19.7 22.7 59.6
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs)	Mar-20A 4.7% 14.8% 60.7% 13.44	Mar-21A (0.2%) (3.2%) 59.0% 15.00	Mar-22F 1.0% (3.3%) 56.4% 15.74	Mar-23F 22.9% 26.6% 58.1% 17.57	Mar-24 19.7' 22.7' 59.6' 20.4
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs)	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17	Mar-24 19.7' 22.7' 59.6' 20.4 40.6
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5%	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1%	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0%	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0%	Mar-24 19.7 22.7 59.6 20.4 40.6 101.3 25.0
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1%	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6%	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7%	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8%	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3 25.0' 94.6'
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3 25.0' 94.6' 20.5
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05 27.85	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40 27.98	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07 29.18	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31 26.49	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3 25.0' 94.6' 20.5 28.5
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days Accounts Payables Days	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05 27.85 849.36	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40 27.98 792.09	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07 29.18 778.33	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31 26.49 749.94	Mar-24 19.7 22.7 59.6 20.4 40.6 101.3 25.0 94.6 20.5 28.5 808.1
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days Accounts Payables Days ROIC (%)	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05 27.85 849.36 20.8%	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40 27.98 792.09 20.7%	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07 29.18 778.33 20.6%	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31 26.49 749.94 30.7%	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3 25.0' 94.6' 20.5 28.5 808.1 43.2'
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days Accounts Payables Days ROIC (%) ROCE (%)	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05 27.85 849.36 20.8% 17.2%	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40 27.98 792.09 20.7% 15.8%	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07 29.18 778.33 20.6% 14.8%	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31 26.49 749.94 30.7% 20.9%	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3 25.0' 94.6' 20.5 28.5 808.1 43.2' 26.8'
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days Accounts Payables Days ROIC (%)	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05 27.85 849.36 20.8%	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40 27.98 792.09 20.7%	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07 29.18 778.33 20.6%	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31 26.49 749.94 30.7%	Mar-24 19.7 22.7 59.6 20.4 40.6 101.3 25.0 94.6 20.5 28.5 808.1 43.2 26.8
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days Accounts Payables Days ROIC (%) Return On Average Assets	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05 27.85 849.36 20.8% 17.2%	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40 27.98 792.09 20.7% 15.8%	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07 29.18 778.33 20.6% 14.8%	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31 26.49 749.94 30.7% 20.9%	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3 25.0' 94.6' 20.5 28.5 808.1 43.2' 26.8'
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days Accounts Payables Days ROCE (%) Return On Average Assets	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05 27.85 849.36 20.8% 17.2%	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40 27.98 792.09 20.7% 15.8%	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07 29.18 778.33 20.6% 14.8%	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31 26.49 749.94 30.7% 20.9%	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3 25.0' 94.6' 20.5 28.5 808.1 43.2'
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days Accounts Payables Days ROIC (%) ROCE (%)	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05 27.85 849.36 20.8% 17.2%	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40 27.98 792.09 20.7% 15.8%	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07 29.18 778.33 20.6% 14.8%	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31 26.49 749.94 30.7% 20.9%	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3 25.0' 94.6' 20.5 28.5 808.1 43.2' 26.8' 14.9'
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days Accounts Payables Days ROCE (%) Return On Average Assets	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05 27.85 849.36 20.8% 17.2% 10.4%	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40 27.98 792.09 20.7% 15.8% 7.8%	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07 29.18 778.33 20.6% 14.8% 8.5%	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31 26.49 749.94 30.7% 20.9% 11.8%	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3 25.0' 94.6' 20.5 28.5 808.1 43.2' 26.8'
Total Equity Key Ratios Revenue Growth Operating EBITDA Growth Operating EBITDA Margin Net Cash Per Share (Rs) BVPS (Rs) Gross Interest Cover Effective Tax Rate Net Dividend Payout Ratio Accounts Receivables Days Inventory Days Accounts Payables Days ROIC (%) ROCE (%) Return On Average Assets Key Drivers	Mar-20A 4.7% 14.8% 60.7% 13.44 43.13 42.57 18.5% 113.1% 24.05 27.85 849.36 20.8% 17.2% 10.4% Mar-20A	Mar-21A (0.2%) (3.2%) 59.0% 15.00 42.04 47.44 33.1% 116.6% 22.40 27.98 792.09 20.7% 15.8% 7.8% Mar-21A	Mar-22F 1.0% (3.3%) 56.4% 15.74 40.62 56.48 25.0% 129.7% 22.07 29.18 778.33 20.6% 14.8% 8.5% Mar-22F	Mar-23F 22.9% 26.6% 58.1% 17.57 40.17 78.01 25.0% 106.8% 20.31 26.49 749.94 30.7% 20.9% 11.8%	Mar-24 19.7' 22.7' 59.6' 20.4 40.6 101.3 25.0' 94.6' 20.5 28.5 808.1 43.2' 26.8' 14.9' Mar-24

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