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ViewCube

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Wind in the tail

Air passenger traffic growth should pick up next fiscal

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ViewCube is a compilation of sector views expressed during CRISIL's webinars. These include CRISIL's own views, and that of stakeholders.

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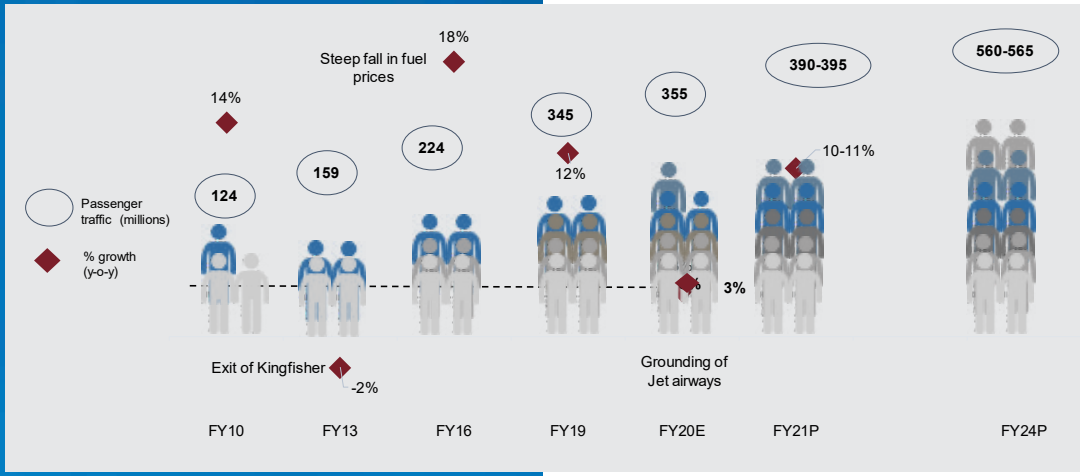
Our view

Brisk passenger traffic to challenge infrastructure, attract capex

Air passenger growth is expected to decline this fiscal to ~3% from 12% in fiscal 2019, owing to the grounding of Jet Airways. Between April and October 2019, growth slowed to 1% on-year, but this should rebound to ~11% next fiscal, helped by the low-base effect.



Source: AAI, CRISIL Research

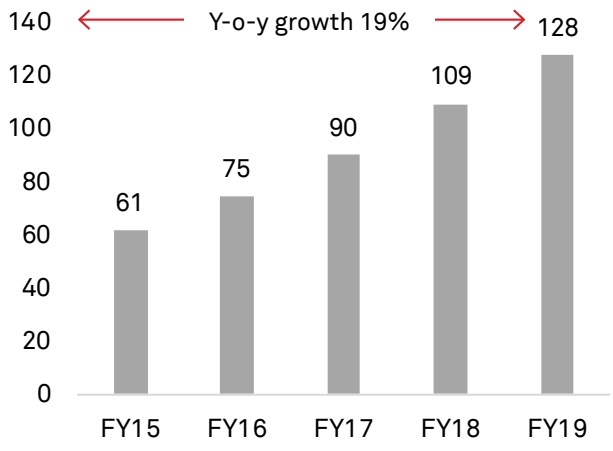
The primary driver of growth in air travel is the country's gross domestic product (GDP) growth. The number of passengers' flown-to-GDP multiplier is likely to increase from 2.1x over the past five years to 1.8x over the next five years, implying a five-year compound annual growth rate (CAGR) of 10-11% in passenger traffic over fiscals 2020 to 2024

There are two other factors driving passenger growth. One is the increasing preference for air travel. The differential between AC railway tickets and flight tickets has narrowed from Rs 4.7 per km to Rs 3.2 per km over the past decade. This has led to a 15% growth in air passenger traffic and flat growth in rail traffic over the past five years.

Second is increasing connectivity to Tier II and III cities. Low-cost carriers have introduced direct flights to smaller cities such as Rajkot, Mangaluru, Allahabad, Jabalpur, and Raipur.

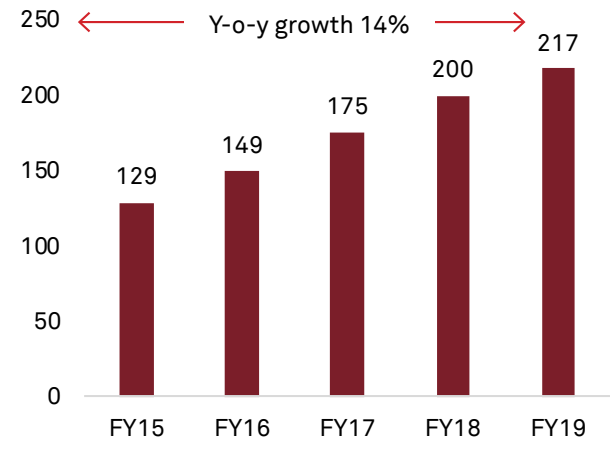
Air passenger traffic at non-metro airports grew at 19% CAGR, compared with 14% at metro airports over the past five financial years.

Passenger traffic at non-metro airports



Source: AAI, CRISIL Research

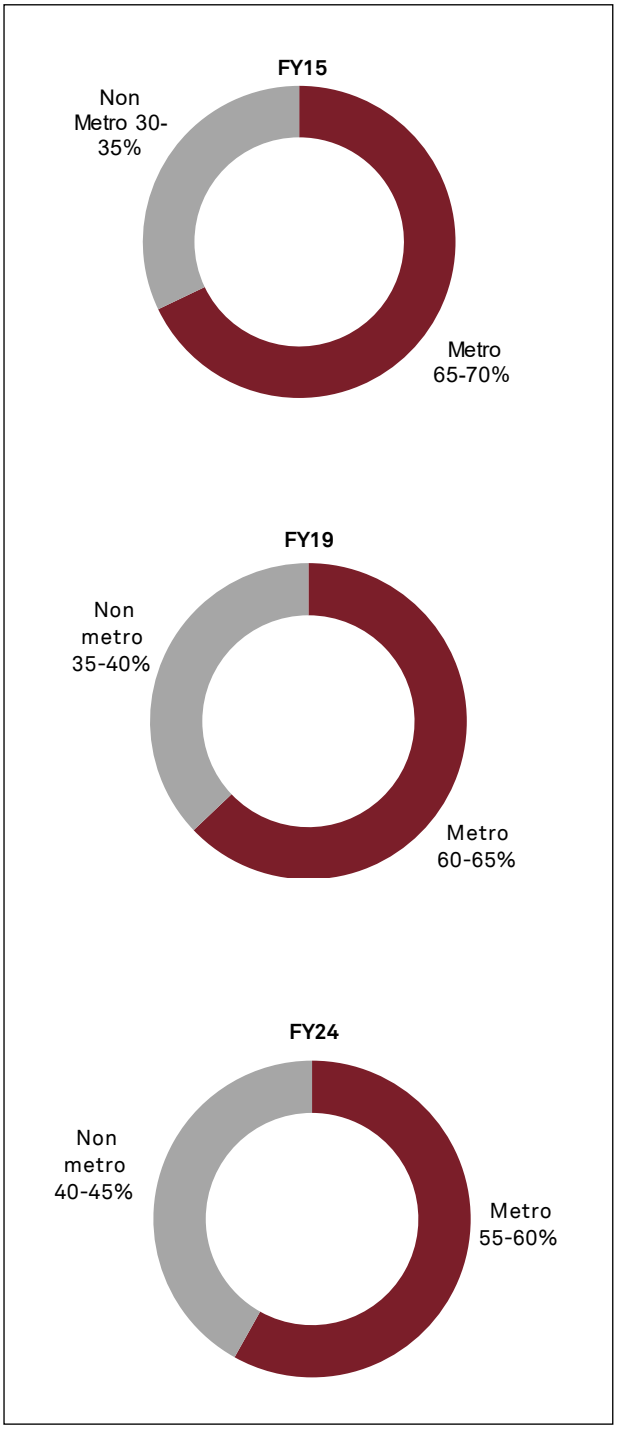
Passenger traffic at metro airports



Source: AAI, CRISIL Research

Sixteen new non-metro airports commenced operations over the past five years. With the increasing connectivity to non-metro cities, the share of non-metro airports in terms of passenger traffic increased from 30-35% in fiscal 2015 to 35-40% in fiscal 2019, and is expected to be 40-45% by fiscal 2024.

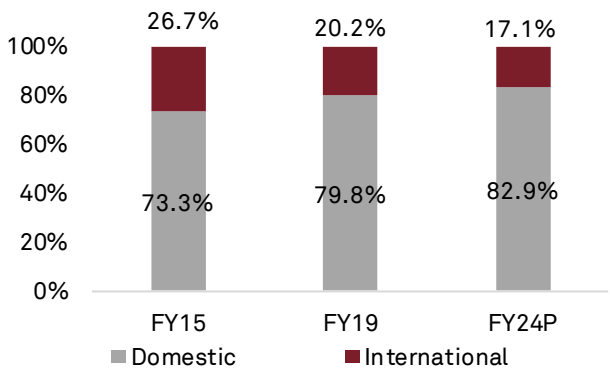
Increasing connectivity to boost non-metro passenger traffic share



Note: Passenger growth rate is for sum of domestic and international passengers
Source: AAI, CRISIL Research

Improved connectivity and deepening air-travel penetration into tier 2 and tier 3 cities are expected to drive the share of domestic passenger traffic in total traffic to 83-84% in fiscal 2024 from 80% currently.

Increasing connectivity to boost domestic passenger traffic share

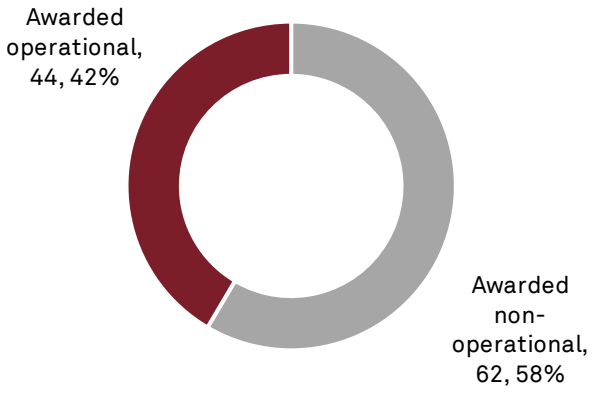


Source: AAI, CRISIL Research

UDAN contributes less than 5% of the total domestic traffic

Some 106 airports have been awarded under the regional connectivity scheme (RCS), UDAN, until November 2019 and 44 operationalised. Basic infrastructure was in place at 44 airports and only minor upgrades were needed for operationalising them. The average capital expenditure (capex) incurred for operationalising the airports was less than Rs 10 crore per airport.

42% of awarded airports under UDAN are operational, rest face lack of infrastructure



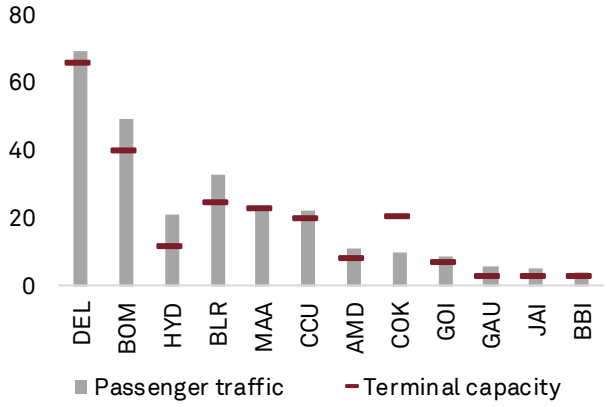
Source: DGCA, CRISIL Research

The remaining 62 airports were awarded but remain non-operational owing to varied reasons such as lack of airport infrastructure, slot constraints and higher cancellations on RCS routes. While the key reason has been the lack of infrastructure, CRISIL expects an average capex of Rs 50-100 crore per airport to operationalise them. Traffic on UDAN routes accounts for less than 5% of the total domestic traffic and is expected to remain around this level over the next five years.

Huge congestion necessitates doubling of investments over fiscals 2020-24

Mainline airports, such as Mumbai, Delhi, Bengaluru, and Hyderabad, have been operating at par or above their designed capacity on both the terminal and airside. Airports restricted by space constraints, such as Mumbai, have constructed rapid exit taxiways to enhance airside capacity. Airlines are overcoming airside congestion by deploying narrow-body aircraft that have larger capacity and are denser; for example, IndiGo deployed A321 aircraft instead of A320s on certain busy routes, leading to a capacity increase of 25-30% in terms of seat count per aircraft.

Operating close to peak terminal utilisation



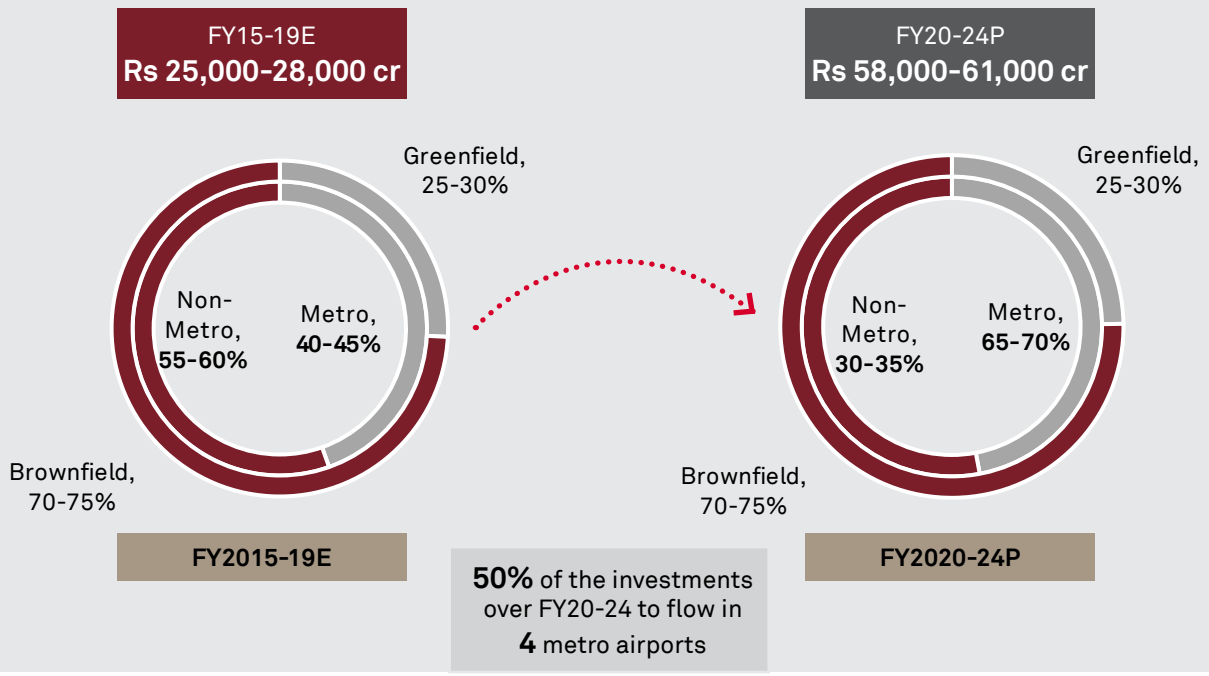
Source: AAI, Airport operators, CRISIL Research

These measures are only a stop-gap arrangement, with further capacity increases to be through capex for new runways, terminals and associated infra-structure.

Over the next five years, investments worth Rs 58,000-61,000 crore are expected to flow into the industry, compared with Rs 25,000-28,000 crore invested over fiscals 2015-19.

As the majority of the airports attracting these investments are in metros (Delhi, Bengaluru and Hyderabad), the share of metros in investments is high, at 65-70%, up from 40-45% in fiscals 2015-19. Capacity expansion of the existing major airports will account for the bulk of the share, thus maintaining the share of brownfield investments at 70-75%.

High congestion, especially at metro airports, to keep share of brownfield investments high at 70-75% between fiscals 2020 and 2024

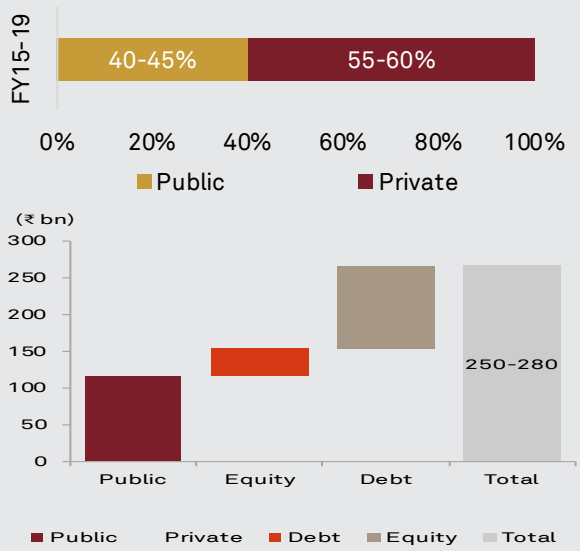


Source: CRISIL Research

Funding capex not a constraint; share of private monies expected to increase

The capex undertaken during fiscals 2015-19 was funded by public and private sources, in the ratio of 40-45% to 55-60%. Private players brought in equity and raised debt to fund the capex requirement.

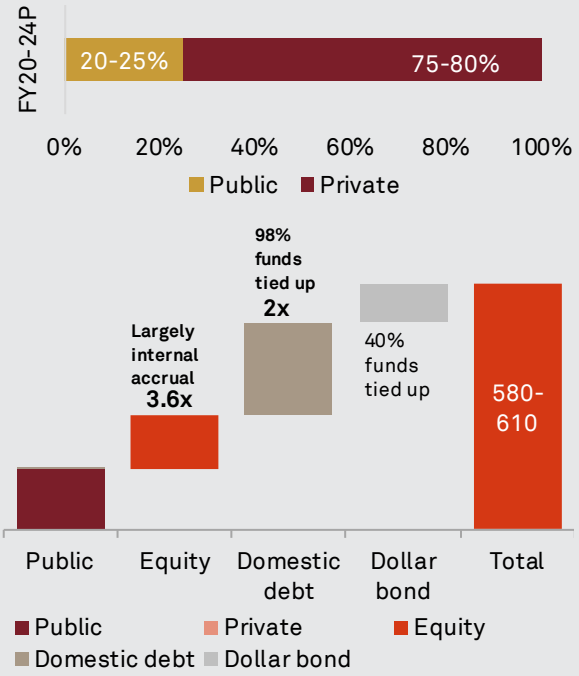
Share of public investments: 40-45% over FY15-19



Source: CRISIL research

The share of private funds is expected to rise to 75-80% through a combination of domestic debt, dollar bonds and equity. The rest is contributed by public funds, which are largely driven by the Union Budget. Despite the doubling in planned capex, funding is not expected to be a constraint owing to the strong balance sheets of private airport operators and keener interest from strategic investors in operational projects. The majority of the fund requirement has been tied up by players. Equity investments (expected to increase 3.6x in fiscals 2020-24 over fiscals 2015-19) are expected through internal accrual, while 98% of funds required through domestic debt, has already been tied up. Additionally, 40% of dollar bond raisings has been secured.

Private investments expected to triple between FY20 and FY24



Source: CRISIL research

New tariff model for airport concessions maintains status quo, changing only the bidding parameter

The Ministry of Civil Aviation has introduced a new model for airport concessions. The divestment of six AAI (Airports Authority of India) airports, won by Adani Enterprises, and the Jewar Airport, won by Zurich Flughafen, were based on the new model.

The hybrid-till approach and regulated return on equity (RoE) remain the same, with the difference being only in the bidding parameter. Currently, the major functioning airports operate on a 30% hybrid-till model, wherein the aero revenue and 30% of non-aero revenue is tied up based on passenger traffic. Moreover, under this model, revenue earned by players during the pre-defined control period should attain a RoE of 16%.

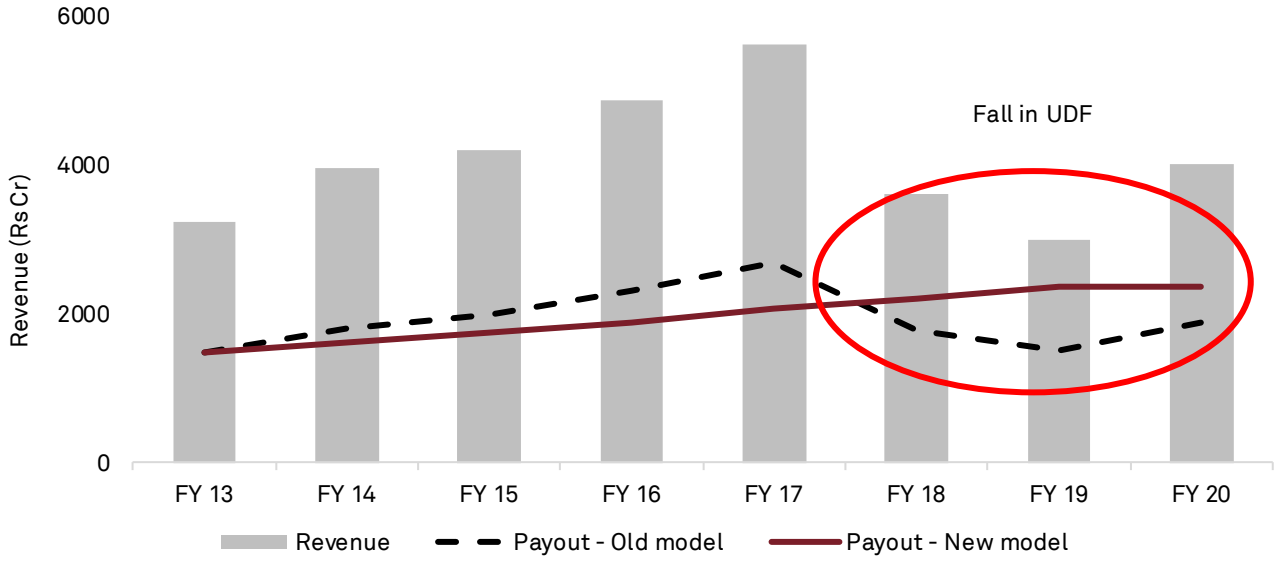
Under the new model, the only difference is the fixed concession fee per passenger, which is the bidding parameter. The government earns a fixed fee per

passenger, irrespective of the revenue earned by an airport operator. This addresses the ambiguity in the determination of gross revenue and leads to faster settlement, as passenger recognition is swifter than revenue recognition. However, operators are subjected to higher sensitivities to non-aero revenues, since cash outflow per passenger is fixed irrespective of revenue receipts. With aero tariffs fixed by the Airports Economic Regulatory Authority (AERA), the non-aero portion plays a major role in determining the margins of operators.

New business model will lead to higher cash flows to developers

The key change in the new business model is the calculation of payouts to the concessioning authority. In the new model, the linking of payouts to the number of passengers rather than revenue may lead to lower cash flows under certain scenarios of slower growth in passenger traffic, and vice versa.

Old business model supports debt servicing; cushions better in scenario of a decline in aero revenue



Source: CRISIL Ratings

Let us consider one such scenario (see chart above) with an example of an operating private airport. The dotted line shows the actual revenue-share payout, while the solid line shows the hypothetical payout under the new business model. During years of strong growth in non-aero revenue and overall revenue – particularly fiscals 2014-17 – the new business model is more beneficial to developers because of lower payout and higher cash flow for the developer. However, during fiscals 2018-20, the old business model is beneficial when there is a revenue fall because of lower tariffs. Under this scenario, the old model adjusts the payout to the fall in revenue, thus cushioning debt-servicing. Hence in a nutshell, under scenario when fall of revenue is not on account of fall in passenger traffic old business model would be beneficial as it will help in reducing concession fee payout and supporting debt servicing.

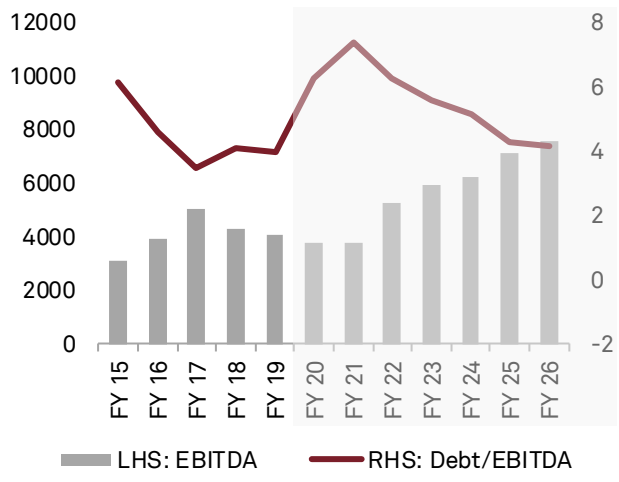
Credit quality to remain largely stable, despite stretched leverage

Leverage of operational airports to stretch during the current capex cycle

The major operational private airports are currently running above their design capacity. They are likely to incur an unprecedented capex over the next five years to nearly double their design capacity.

As this capex will be largely debt-funded, we expect the airports' leverage to increase to a debt-to-EBITDA (earnings before interest, tax, depreciation, and amortisation) of ~7.4 times in fiscal 2021 (see chart below). However, from fiscal 2022, the leverage is expected to decline, as current capex would become eligible to earn a pre-determined return, which, in turn, will boost aero revenue and EBITDA.

Unprecedented capex over the next five years to stretch the financial credit profiles

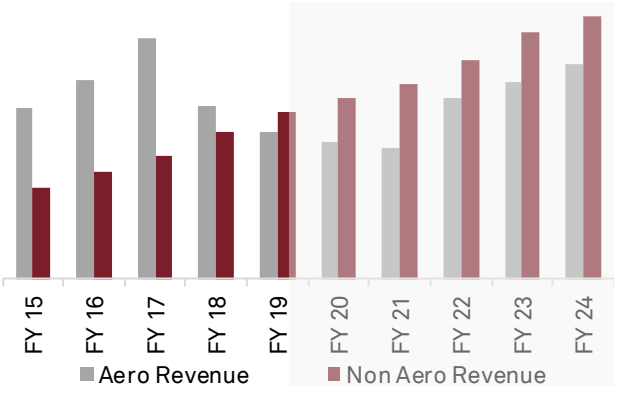


Source: CRISIL Ratings (cumulative EBITDA and debt/EBITDA of four operational private airports)

Aero revenue to turn around from fiscal 2022, while non-aero revenue will continue to support accrual over fiscals 2020-24

For the top four operating Indian airports – which cater to ~50% of national passenger traffic – aero revenue has been declining since fiscal 2017 (see chart below). This is because these airports collected higher-than-entitled aero revenue in their previous control periods owing to higher-than-expected traffic growth. This has brought down aero collections in the subsequent i.e. current period tariff orders. However, from fiscal 2022, aero revenue should turn around as they will earn a fixed regulated return on the asset base which is under construction now.

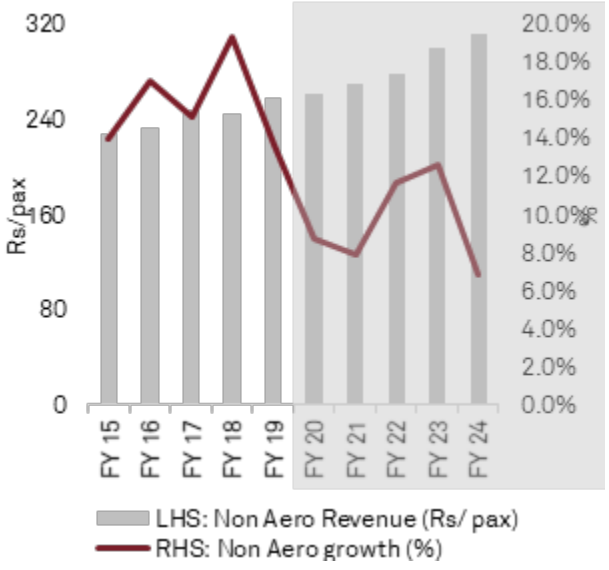
Relative certainty around the bounceback of aero revenue



Source: CRISIL Ratings (cumulative aero revenue and non-aero revenue of four operational private airports, contributing around 50% of passenger traffic)

Non-aero revenue collections will remain strong, given the diverse and sticky nature of services with strong market position and lucrative catchment areas of these airports. The non-aero revenue – collected from a diverse range of services, such as duty-free shops, retail, food and beverage, and advertising – has grown consistently in double digits over the past 5-6 fiscals owing to higher spending per passenger and faster passenger traffic growth.

Continued traction expected in non-aero revenue

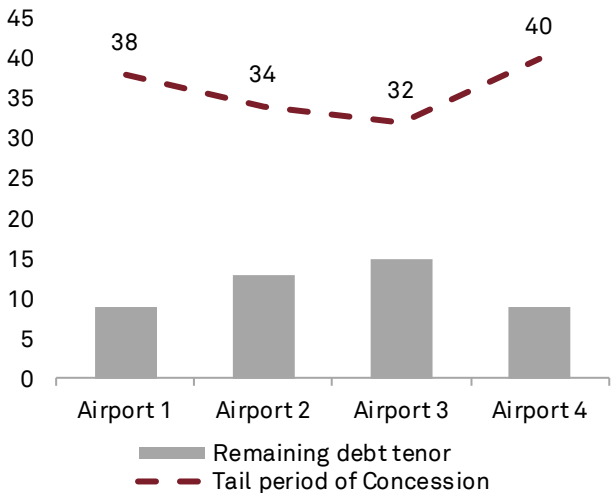


Source: CRISIL Ratings (cumulative non-aero revenue per passenger and non-aero growth of four operational private airports)

Healthy financial flexibility stems from remaining concession life, healthy cash balances and premium land bank

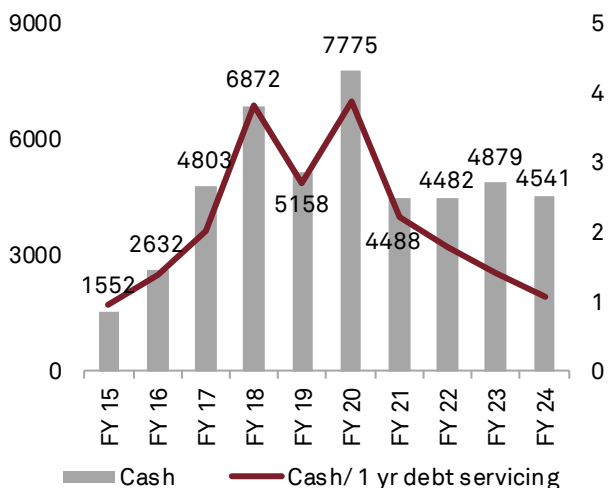
The airports are expected to maintain a healthy financial flexibility. There is long concession life left after the current debt tenures run out for these airports, giving them the option to refinance debt and reduce any immediate debt-servicing pressures (see chart below). Additionally, the cash balances of airports are expected to remain healthy, implying a healthy cushion against debt servicing.

Assets have flexibility to extend debt tenures



Source: CRISIL Ratings

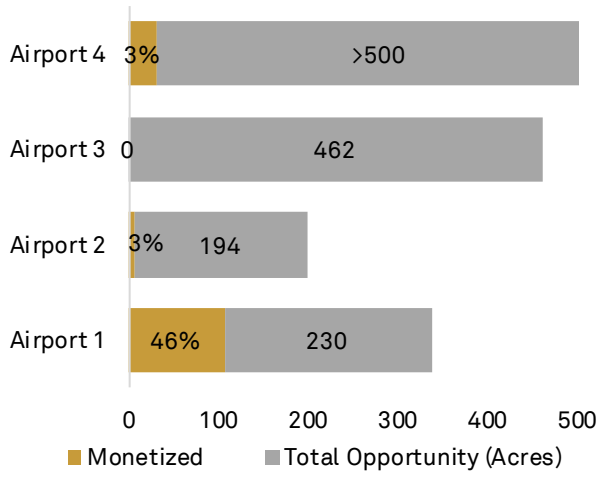
Healthy cash balances over debt servicing



Source: CRISIL Ratings (cumulative cash and Cash/1 year debt servicing of four operational private airports)

The airports also have a premium land bank at central locations with connectivity advantages and possibility of long-term leases.. The land banks of these airports can be readily monetised for raising deposits or leases supporting their financial flexibility.

Premium unutilised landbank at airports



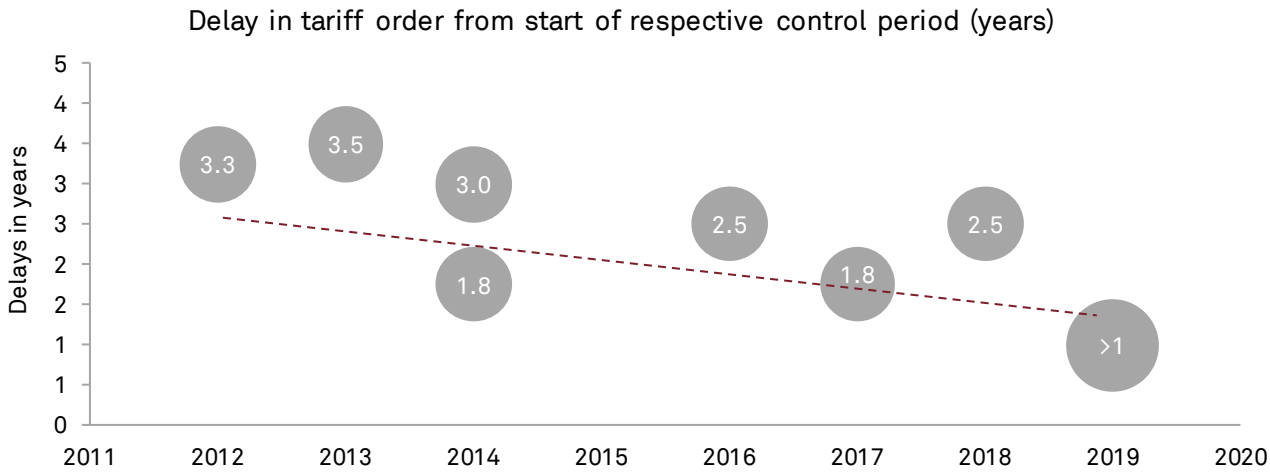
Source: CRISIL Ratings

Although delays in tariff orders can be a potential risk, improving regulatory environment lends confidence

A potential risk lies in the timing of tariff orders, which provide a return on capex in the form of aero tariffs to be collected in subsequent periods by airports. In fiscal 2012 - 2015, there was on an average 3-year delay in tariff orders (see chart below) from the beginning of the respective control periods. With the improvement in the regulatory environment, the delay has shortened to around 1.5 years currently. The airports operational airports have an average moratorium of around one year, before the debt repayment kicks in (after their respective scheduled commissioning). Thus, the financial credit profiles of airports may be stretched if delays in tariff orders (providing higher revenue) for the coming control periods exceeds the one-year moratorium.

However, the reduction in delays in tariff orders seen over the past few years lends confidence on timely tariff orders providing aero-revenue entitlement and return on capex. Additionally, developers have taken pre-approvals on capex-cost estimates – which are the most time-consuming items in tariff-order determination process – supporting the confidence on timely release.

Delays in tariff determination are reducing



Source: CRISIL Ratings

Moreover there have been other positive developments on the regulatory front in the recent past, such as approvals on capex above normative estimates and interim orders from the regulator for select assets. These allowed airports to collect higher aero revenue for some time to build liquidity cushion before starting capex.

Credit outlook expected to be stable

Greenfield airports are expected to have relatively more risk over the medium term, given the higher project-related risks than operational airports. The outlook is largely stable for the operational airports despite the huge capex, because of the supportive flexibility in financial profiles and a positive regulatory scenario.

Risk parameters	Under-construction		Operational	
	FY18	FY 20	FY 18	FY 20
Overall Outlook				
Construction risk				
O&M risk				
Regulatory risk				
Financing risk				
Risk surrounding RE monetisation				

Low	Low-Moderate	Moderate	Moderate-High

Their view

These views have been excerpted from a panel discussion during the CRISIL webinar on the airport sector. The webinar was attended by over 250 external participants representing ~130 organisations.

The panelists were

GRK Babu
CFO, GMR Airports, GMR Group

Bhaskar Anand Rao
CFO, Bangalore International Airport

Jugeshinder Robbie Singh
Group CFO, Adani Group

On airport infrastructure privatisation fuelling passenger traffic growth

Privatisation has boosted passenger traffic growth to a much higher level, to over 12% CAGR since 2008. For example, passenger throughput in Delhi international airport was ~16 million during privatisation in calender year 2005 and 2006. Today, after capex and modernisation, the airport can handle 69-70 million passengers per year.

On India continuing to see double-digit growth in passenger and cargo traffic

Though fiscal 2019 was a slow year at airports, air traffic has increased. Air traffic growth will be higher in the future on account of airport privatisation and policy changes such as UDAN. The scheme is still going to drive a tremendous amount of connectivity to and between tier 2 and 3 airports within the country. Propensity to fly in India is still much lower than in other developing countries such as China, Brazil and Russia. Hence, the potential for air traffic growth is huge. Since air travel is a function of per capita GDP growth, the economic slowdown will have some impact, but only in the short term. The current government's target of a US$5 trillion economy by fiscal 2025 or 2030 will turn into reality. The Indian airport sector will definitely expand, with better connectivity and stability.

On the attractiveness of the Indian airport sector from an investment perspective

Airports are probably in the top three infrastructure sub-sectors in terms of capital requirement and traffic attractiveness, making them an alluring proposition. However, if we compare Indian airports to global ones in terms of the value equation, there is still a long way to go. This is largely owing to the inability to develop assets consistent with the passenger growth rate. Many Indian airports are operating at over 100% capacity, impacting passenger amenities. While passenger spend has increased among our peers, the passenger spend rate has stagnated in the domestic market.

In the absence of an improvement in service quality and rapid development of the regulatory framework, whereby the difference between capex and capitalisation timelines are compressed, the stagnant passenger spend rate challenge is unique to India. That is a singular difference in the value proposition of our airports and those of our peer group.

On the new business model and the way to grow investments in India

Airport developers are more comfortable with the new business model as compared with the earlier one in terms of clarity. However, it is a matter of debate whether even this tariff model is the best one. The absolute preference would be for a model where the government accepts a one-off payment for the concession, giving flexibility to the developers.

However, the new airport business model does allow the players to have an alternative perspective. A case in point: any one of the metro airports, such as Delhi airport, attracts ~180 million non-passenger footfalls. A smaller airport such as Ahmedabad attracts ~30 million non-passengers. So, the focus in the revised environment is catering to the airport precinct and not merely terminal retail. The spend patterns of how an airport interacts with its local environment therefore become important. The three best examples of these are the Amsterdam's Schiphol airport, Zurich airport, and Singapore's Changi.

With the passenger fee, concessionaires can focus on passenger amenities. But the new model also

allows players to exploit the precinct and gain from the substantial non-passenger footfalls. It provides the best possible scenario for the government for air movement and the exploitation of the airport precinct for the local community.

On lack of financing through domestic bond markets

The bond market was tried initially for leading domestic airports. The biggest problem is long-term investors are from either the insurance or provident fund authority. The provident fund market is small and the maximum investment is for 5-7 years. With the market unwilling to consider longer-term debentures or bonds, airport players in India moved to international territory.

Examples of foreign issuances supporting this logic are: Delhi airport, for example, the maiden bond sale was in 2015 for ~US$288 million for seven years, and thereafter, for 10 years. Delhi airport has had three bond sales and Hyderabad airport two, together totaling ~US$1.8 billion. Therefore, unless investors have a long-term appetite in the Indian bond market, it will be very difficult.

Government support is required for development of long term infrastructure financing institutions and syncing with other market conditions such as credit rating. Unless the government develops institutions and supporting environment, raising money from the domestic bond market will be very challenging.

To increase appetite for long-term investment, the rating needs to be brought down to a comfortable level. Moreover, the government can go for a development finance company such as India Infrastructure Finance Company Limited.

On the prospects for consolidation over the next 3-5 years

The presence of new players and the substantial interest in this sector is encouraging. The Airports Authority of India has to grapple with its own limitations to meet capacity requirements and the demands of air traffic, build more new airports, including many more world-class ones, and facilitate new concerts in the sector. For that, we need to have a good mix of new investors. These could be international airports, such as Zurich Flughafen returning to India, or large Indian groups similar to Adani, which is very encouraging, as also financial players such as NIIF, MP Capital and Fairfax. This

would definitely lead to a lot of consolidation, which will drive increased operational efficiency and boost learning in the Indian airports business, making our airports truly international. We have progressed rapidly in the past 10 to 12 years, and new mergers and acquisitions may happen, driving further progress.

On real estate monetisation

The pace of real estate monetization has been slower owing to asset unique factors, regulatory clarifications and market responsiveness. However, going forward pace is expected to pick up, supported also by current ongoing deals.

Delhi airport took a little more than the ideal timeframe to monetise real estate. However, monetisation was achieved for ~45 acres in 2009 and 2010, allowing the airport to raise US~$15 mn as refundable security deposits. Subsequently, owing to restrictions under the OMDA (operations, maintenance and development agreement), clarification regarding which is yet to come from the government, as well as market conditions, monetisation for Delhi airport has moved a little slowly.

However, in 2017, the airport monetised another 23 acre of integrated retail development. In March 2019, it completed 4.9 million square feet of commercial development, which is in the final stages of approval. The airport could have released land earlier. However, doing so would have reduced per-acre valuation.

The airport got almost 2.5 to 3x extra rate when 4.9 million acre were leased to Bharti recently, compared with the rates in 2009 and 2010. That's because the airport held onto the land and released it when lease values improved.

This will be the case in future as well since the airport has kept aside another 5 million square feet for Bharti, which has an option to lease it over the next five years. Thus, Delhi airport will monetise 70-75% of its land.

Hyderabad has a very large land bank of 1,000-1,500 acre. Now, it is picking up a lot, creating special economic zones and signing long term lease rental agreements. It is in the process of releasing 70-75 acre towards the cargo business. The pace is much faster than earlier because Hyderabad is growing more rapidly than other cities.

On the tariff order situation

The tariff order timing is definitely is a risk. Developers have been requesting AERA that timely orders on tariff are critical, both for ensuring adequate operational cash flow and on-schedule capacity addition. Sometimes, however, operators have taken more time to size up the expansion requirement because growth has been dynamic.

AERA has changed the criteria recently and will no longer work on tariffs for smaller airports. However, developers have also been asking AERA to make sure the airport tariff is given priority. Other issues, such as the treatment of certain aero and non-aero revenue shares, have become clearer gradually. As a result, the discussion on tariff orders has been delayed. Hopefully, AERA will strengthen its own organisation and prioritise airport tariff determination.

On risks and returns

While the airport sector is a premier investment opportunity, developers are also mindful they cannot have a very high rate of return.

To understand the risks and rewards, the core philosophy of the sector needs to be understood.

For example, the core philosophy for ports or transmission or power stations is what would happen if no protection was available for the asset. For example, if power purchase agreements were absent in the power generation sector, the survival of the business would be a challenge.

Thus, by default, power entities sell at an exchange merchant and get a sufficient return. The issue is more acute in the airports business, which is a B2C (business to customer) operation.

The 'C' in India is very valuable. Just a glance at India's stock exchange indices can help one ascertain that companies dealing with 'C' are the highest-value entities, such as fast-moving consumer goods companies, which have had a stable return for the past 40 years. Rather than selling fast-moving consumer goods, airport developers are selling a fast-moving consumer service and need to look at the consumer in the same manner.

Thus, what airport developers seek in returns and stability would be exactly same as for FMCG companies, both in terms of value to the shareholder and promoters and to the final consumer. This is how the developer can approach the investment.

If the airport developer's stated and proven objective is it wants to provide the lowest possible cost to the consumer, which is also the stated aim of the regulator aside from safety operations, then both have the same aim.

So, the developer needs to examine where, as a participant in an infrastructure industry, it interfaces with a regulator, thus analysing the objective of the regulator and whether the objective is consistent with the developer's investment case.

Airport developers need to understand if those two objectives can be matched, then delays and regulatory issues are less important because nobody is interested in delaying benefits to the consumer.

Hence, from an infrastructure perspective, there is not much difference between the regulatory interface for a distribution company or airport company or power company. From a return perspective, airports are the best asset class.

CRISIL-rated airport developers

1. Delhi International Airport Ltd
2. Mumbai International Airport Ltd
3. Navi Mumbai International Airport Ltd
4. Bangalore International Airport Ltd
5. GMR Hyderabad International Airport Ltd
6. GMR Goa International Airport Ltd
7. Airports Authority of India

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