Opportunities and Financing Outlook for Aviation Sector
# Opportunities and Financing Outlook for Aviation sector

## March, 2018

**Corporate Finance and Infra Banking, YES BANK**

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As India enters the next phase of economic growth, a major overhaul of our aviation sector is critical to complement the needs of our growing economy. Aviation has played a vital role in facilitating growth of business and economy in India, but there is still significant scope for improvement and penetration.

India’s Civil Aviation sector has been consistently registering double digit growth for the last 13 quarters. This growth is primarily fueled by improving economic environment like increasing middle class, growth in cross-border trade, capacity expansion of low-cost carriers (LCCs), development of world class airports, increased Foreign Direct Investment (FDI) in domestic airlines and heightened focus on regional connectivity.

To fulfill growing demand, the Government has envisaged huge capex of around US$ 15.5 billion towards development of Greenfield airports, expansion of Brownfield airports, fleet addition & maintenance by Indian Carriers and strengthening ancillary services like skill development, MRO, Cargo handling, amongst others in the value chain. This development plan by airports and airlines requires strong support from Banks, Lessors, Private Equity Firms and other Financial Institutions to cater their funding requirement.

I am pleased to present this YES BANK and FICCI Knowledge Report on “Opportunities and Financing Outlook for Civil Aviation Sector”, which highlights the key market trends and outlook for Airports, Airlines, General Aviation and MRO. The report analyses traditional financing tools used by Aviation stakeholders vis-à-vis innovative financing techniques that can be adopted for raising low-cost funds.

I am confident that you will find the contents of this publication insightful and instrumental in fast-tracking Indian Aviation industry’s growth story.

Thank You.

Sincerely,

Rana Kapoor
Managing Director & CEO YES BANK
Chairman YES Global Institute
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Abbreviations

AAI  Airport Authority of India
ATF  Aviation Turbine Fuel
BIAL  Bangalore International Airport Limited
DIAL  Delhi International Airport Limited
GDP  Gross Domestic Product
GHIAL  GMR Hyderabad International Airport Limited
GST  Goods and Services Tax
IATA  International Air Transport Association
MIAL  Mumbai International Airport Limited
MoCA  Ministry of Civil Aviation
MTOW  Maximum Take off Weight
MRO  Maintenance, Repair and Overhaul
NCAP New Civil Aviation Policy
OEM  Original Equipment Manufacturer
PA  Purchase Agreement
PDP  Pre Delivery Payments
RCS  Regional Connectivity Scheme
UDAN  Ude Desh ka Aam Nagarik
India Aviation Background
1. India Aviation Background

The last decade has witnessed substantial expansion in the aviation sector in terms of number of operational airports and aircrafts, and resultant investments in the sector. The first half, 2009-2014, saw sluggishness in Indian Aviation Industry as result of high fuel prices, effects of a global financial crisis and limited pricing power which contributed to industry wide over-capacity. However, during the later part of the decade, strong economic supported by conducive industry environment with low ATF prices and rationalization in seat capacity owing to restructuring in the airline industry resulted in the profitability for the airline sector.

With strong economic outlook, policy push through introduction of New Civil Aviation Policy, weak crude oil outlook and political stability, air passenger traffic is expected to grow to 442 million by FY35 from 104 Mn domestic and 55 Mn International passengers.

1.1 Favourable Economic Conditions

Annual domestic seats per capita

- Annual domestic seats per capita of India is around 0.08 which is significantly low compared to other developing markets such as Brazil and China.
- Lower penetration rates suggests significant opportunities for growth.

Source: CAPA
1.2 Fleet Forecast

Indian carriers operated 496 aircraft in FY17 up from 381 in FY08. At the end of FY17, Indian airlines had ordered more than 800 planes. In a recent forecast by Boeing, it expects Indian airlines to order as many as 2,100 planes worth US$290 billion over the next 20 years. This increase is led by strong passenger demand, low fuel prices, high load factor, strong local currency and strong economic growth.

Boeing projects a worldwide demand for 41,030 new airplanes over the next 20 years, with India carriers needing more than 5.1 percent of the total global demand.

Table 1: New Airplane Deliveries to India: 2017-2036

<table>
<thead>
<tr>
<th>Airplane type</th>
<th>Seats</th>
<th>Total new deliveries</th>
<th>Dollar value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional jets</td>
<td>90 and below</td>
<td>10</td>
<td>&lt;$1B</td>
</tr>
<tr>
<td>Single-aisle</td>
<td>90-230</td>
<td>1,780</td>
<td>$195 B</td>
</tr>
<tr>
<td>Small widebody</td>
<td>200-300</td>
<td>180</td>
<td>$50B</td>
</tr>
<tr>
<td>Medium/Large widebody</td>
<td>300 and above</td>
<td>130</td>
<td>$45B</td>
</tr>
<tr>
<td>Total</td>
<td>2,100 (5.1% of world total)</td>
<td>$ 290 (4.8% of world total)</td>
<td></td>
</tr>
</tbody>
</table>

Source: DGCA, Economic Intelligence Unit, Yes Bank Analysis

Source: MoCA, Boeing

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New Initiatives, Policy Push and Reforms
2. New Initiatives, Policy Push and Reforms

2.1 Implementation of New Civil Aviation Policy

- NCAP has laid down the solid foundation for the sustainable future growth. The aviation ecosystem has been targeted to become affordable and convenient flying for everyone, with an ultimate objective of increasing domestic ticketing to 300 Mn by 2022 and 500 Mn by 2027, international ticketing to 200 Mn and cargo volumes to 10 Mn tonne by 2027.

- Withdrawal of 5/20 requirement and replaced with a policy which provides level playing field for domestic carriers flying international routes. Airlines can commence international operations and have to deploy 20 aircrafts for domestic operations.

- Multiple concessions and provisions have been granted for MRO service providers like rationalizing customs duty, simplification of goods clearance procedure & no airport royalty for 5 years.

2.2 UDAN Scheme

UDAN scheme has thrown up immense opportunity to the airlines and airports. Mumbai-Porbandar-Mumbai and Mumbai-Kandla-Mumbai started by SpiceJet in June 2017 are registering PLF of more than 90.0%.

Citing the opportunity, Indigo has ordered purchase of 50 ATR 72-500 aircraft. This is for the first time Indigo is looking to mix its narrow body fleet with turboprop jets. Indigo is looking set up a separate division to run turboprop aircraft operations, separate from the company’s main divisions. In June 2017, SpiceJet ordered 50 Q400 planes as part of plans to add more flights to smaller towns.

In Phase 1, five airlines — Alliance Air, SpiceJet, Turbo Megha, Air Odisha and Air Deccan — were awarded 128 routes under the scheme after a bidding process. Under Phase 2 of Regional Connectivity Scheme, MoCA has awarded 325 routes to airlines as well as helicopter operators with the objective of enhancing
flight services to hilly and remote areas. Under the scheme airline operators have to offer half of their seats at discounted rates. The following points lists down the potential offered by UDAN scheme:

1. Regional and remote connectivity has remained highly uneven despite the phenomenal growth in the Civil Aviation in the country. While 70 percent of the Indian population still resides in rural areas, poor reach and inadequate infrastructure have made it difficult for airlines to fully tap into the potential of these markets. The Indian consumption landscape in the small towns is dramatically changing – higher disposable income, demographic dividend of a younger generation, heightened aspirations, increasing urbanization resulting in a growing number of nuclear families are expected to provide strong thrust to the UDAN scheme.

2. Nearly 90% of the total seat deployment by scheduled airline operators is over routes between Metro and other towns and cities and only 10% is over routes connecting Tier II and Tier III towns and cities. This proportion is highly tilted in favour of Metro cities and will change once the implementation of UDAN scheme.

3. In India, many tourist destinations can double the visitors if they are properly connected by air. Some of these destinations include wildlife parks and sanctuaries which are still far away from the reach of surface connectivity and are time-taking and problematic for tourists to reach.
Financing Options for Airlines
3. Financing Options for Airlines

Each financing source is susceptible to both credit market and regulatory shocks which can reduce the supply and increase the cost of financing. Typically, airlines resort to following financing options in India.

3.1 Bank Debt

Commercial banks have always played a significant role in the aviation finance market. They have traditionally provided financing facilities, both secured and unsecured term or revolving credit facilities. Globally, Commercial banks currently fund approximately 33 per cent of new aircraft deliveries as per Boeing.
Why SPC

1. By using SPC, the lenders can have the best of both the worlds – ownership rights via the SPC (via pledge of shares) and a mortgage granted by the SPC

2. Lenders do not want aircraft to be part of the bankruptcy estate of the airline – SPC helps in ring fencing the aircraft

3.2 Leasing

In the last decade, majority of new aircraft financing in the country has been done through operating lease model. Structuring an operating lease gives following advantages to the airlines:

<table>
<thead>
<tr>
<th>Conservation of capital</th>
<th>An operating lease allows an operator to enjoy all the benefits of aircraft ownership for a fraction of the initial cash outlay - thus enabling the operator to use the funds that would otherwise have been required to purchase an aircraft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disintegrate risk of fall in aircraft value</td>
<td>Aircraft market prices are prone to the economic cycles. During period of high interest rates, economic slowdown and higher crude prices, aircraft market prices can move below its depreciated value on any date during the aircraft life. Through operating lease, this risk is avoided.</td>
</tr>
<tr>
<td>Ability to upgrade and change aircraft type</td>
<td>At the expiry of the lease agreement, airlines have an option to getting into newer/more efficient aircraft basis the ever changing business models of the airlines</td>
</tr>
<tr>
<td>Removal of aircraft from a balance sheet</td>
<td>The aircraft is taken off the balance sheet using efficient jurisdiction. At the same time, operator has the exclusive use of the aircraft.</td>
</tr>
<tr>
<td>Flexibility of lease terms</td>
<td>Operating leases can be tailored to meet the individual circumstances and requirements of the lessee, and can offer flexibility in payment terms as compared with straightforward loan finance</td>
</tr>
</tbody>
</table>
Financing Options – Sale and Leaseback or Direct Lease

Key Clauses of the Lease Agreement:
• Lease term: standard 6, 8 10 or 12 years;
• Base rental: higher rental for shorter lease terms;
• Security deposit: 3 months’ base rent is standard, 2 months’ is a good deal;
• Maintenance Reserves: insurance against the operator failing to maintain the aircraft in accordance to the lease. Airlines generally prefers to move away from paying maintenance reserves due burden on cash flow and replace by LC;
• Subleasing rights: Flexibility to sublease the aircraft to any subsidiary and Parent Company or any other entity consented to by Lessor. This is to provide the operator options in capacity management;
• Redelivery conditions: Airframes, Engines, LLPs, Landing Gear and APU status at

Transaction Structure

Scenario: List Price USD 90 Million; Final Purchase Price USD 45 Million
Additionally, under operating lease, airlines generally make following PDP payments to the OEMs:

<table>
<thead>
<tr>
<th>List Price</th>
<th>US$ 90 Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Signing (1%)</td>
<td>US$ 900,000</td>
</tr>
<tr>
<td>24 Months from Delivery (4%)</td>
<td>US$ 3.6 Mn</td>
</tr>
<tr>
<td>18 Months from Delivery (5%)</td>
<td>US$ 4.5 Mn</td>
</tr>
<tr>
<td>12 Months from Delivery (5%)</td>
<td>US$ 4.5 Mn</td>
</tr>
<tr>
<td>Total PDPs</td>
<td>US$ 13.5 Mn</td>
</tr>
</tbody>
</table>

CAPA estimates out of 400 aircraft deliveries by FY22 to Indian carriers, 70%-80% of them will be either on direct lease or sale and leaseback transactions.

**Figure 2: India Aviation Fleet Financing – Mar 2017**

**Figure 3: Company wise break up – Mar 2017**

Source: CAPA

### 3.3 Export Credit Agencies

Export credit agencies are often seen as lenders of last resort and they have historically been very important during industry downturns or financial crises. Export Credit Usage has fallen sharply in the last 10 years. Details of leading ECA and respective supported OEM’s as follows:

<table>
<thead>
<tr>
<th>OEM</th>
<th>ECA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airbus</td>
<td>UK Export Finance, France’s Coface, Germany’s Hermes, ATR France’s Coface and Italy’s SACE</td>
</tr>
<tr>
<td>Boeing</td>
<td>Export Import Bank of the United States</td>
</tr>
<tr>
<td>Bombardier</td>
<td>Export Development Canada</td>
</tr>
<tr>
<td>Embraer</td>
<td>Brazil’s Banco Nacional de Desenvolvimento Econômico e Social (BNDES)</td>
</tr>
</tbody>
</table>

Export credit agencies are aware that they are lending tax payer’s money so they take risk very cautiously. This means that although it is reliable – and often the cheapest source of financing – it is also usually the most time-consuming and least flexible structure for a borrower. Over the last decade, ECA loans have lost airline interest as a result of markets remaining healthy and numerous financing options available.
3.4 New Product on the block: Aircraft Finance Insurance

Aircraft Finance Insurance is an innovative product for facilitating finance from Commercial Banks only for Boeing aircrafts. The insurance product is backed by Allianz, Fidelis, Axis and Endurance and managed by Marsh & McLennan.

Insurance companies issue a 100% payment default guarantee, covering principal and interest, to a lender who funds the debt. AFIC receive a first priority security interest in the aircraft. In exchange, they receive upfront premium from the airline. The airline also pays loan margin to the lender through the term of the loan. AFI typically finance 85% of the net aircraft price. For the remaining, airline will put in equity. Generally, the financing term will be 10-12 years depending upon the credit comfort on the airline.

Aircraft Finance Insurance Transaction Structure:
3.5 PDPs – Background, Transaction Structure and Selected Issues

3.5.1 Background

Pre-delivery payments are staged partial payments of the aircraft price made by the customer to the aircraft manufacturer pursuant to an aircraft purchase agreement in advance of delivery of the aircraft. They typically account for as much as 20%-30% of the final aircraft price and are used by the manufacturer to provide the working capital needed to fund the aircraft production.

Until recently, PDP financings were more commonly used in respect of A320s, B-737s, A330s and B-777s. We are now seeing PDP finance for A350s, B-787s, A380s, the B-737 Max and A320 NEOs; in some cases with scheduled deliveries up to 24 months out.

Usually around 75% of an aircraft’s PDPs are financed with the balance paid directly by the customer. This percentage of financed PDPs can be higher depending on the aircraft type, how close the delivery slots are or if the airline risk is particularly low.

An impediment to a financing of this nature is that there is no aircraft, yet, that can be used as security. The main security available to a PDP financier is an assignment of the aircraft purchase agreement. With this viewpoint, PDP financing is often viewed as much of corporate credit risk than the traditional modes of financing aircraft as asset based financing.

3.5.2 Transaction Structure

Purchase Agreement Assignment

Documentation Involved in the PA Assignment

1. Loan agreement between financer and purchases (as borrower)
2. Security Assignment created over aircraft rights under purchase agreement
3. Tripartite consent agreement including step in clauses between manufacturer, purchaser and financer.
3.5.3 Selected Issues in PDP

**Claw Back:** In PDP financing, clawback refers to the risk that a liquidator or judge can claim back payments that were made by a company to a third party preceding the company’s bankruptcy.

OEMs seek to protect themselves from clawback risk by expressly stating in purchase agreements that the OEM will generally receive PDPs as the absolute owner and that the parties expressly agree that PDPs do not constitute any form of deposit.

PDP Lenders protect themselves from clawback risk by establishing a bankruptcy remote special purpose vehicle in efficient/law friendly jurisdiction. This ensures de-linking of the underlying aircrafts airline’s potential bankruptcy estate.

**Cherry Pick:** Another point of consideration for lenders and manufacturers is their right to “cherry-pick” particular aircraft. Generally, lenders finance different aircraft and each lender will want ring fence the aircraft which has assigned to him so that it is not prejudiced in respect of matters relating to the other aircraft in the purchase agreement.

3.5.4 Summary

Despite, PDP financing being a popular option in aircraft acquisition, there are a number of key factors involved in the negotiation of the PDP financing arrangement from the perspective of OEMs, Airlines and Lenders.

In this regard, there is a balance to be struck between

1. The lender’s exposure and the ease with which it can exercise its security in a default situation;
2. The Airline’s ability to manage its assets, and to negotiate freely with the manufacturer; and
3. The manufacturer’s ability to retain payments for work done, and the comfort that such payments will not be subject to claw-back, as well as visibility as to the identity of the ultimate purchaser of its aircraft.
4. Airports

In order to build world class airports, the government has acknowledged the need for the participation of private players in the development of airport infrastructure. Development of Delhi and Mumbai airports is funded from private equity, commercial banks borrowings, and internal resources of private partners.

According to ICRA, airports seen investment of INR 520 Bn in the last decade. In the next 10 years, it estimates airports need investment of INR 2.4 Tn

4.1 Bank Debt

Borrowing from commercial banks has been the most common method of financing for medium to long term financing requirements. For short term working capital or bridging finance bank overdrafts, floating lines or in some cases short-term loans have been used in the past.

AAI has finalized the capex plans to the tune of INR 650 Bn (INR 175 Bn for the next five years) and around INR 220 Bn for brownfield expansion in Delhi, Mumbai, Hyderabad and Bengaluru by private operators and around INR 210 Bn for greenfield airports.

Considering the huge capex lined up, bank debt will be most sought after medium of finance. In 2014, launched the 5/25 scheme (officially called the Flexible Structuring of Long Term Project Loans to Infrastructure and Core Sector Industries). As per this scheme, even though the loan will be refinanced after 5 to 7 years, while initially underwriting the loan (Initial Debt Facility-IDF), the lenders will assume amortization period (ie; period over which the principal will be repaid) of 20-25 years. The portion of the principal which will remain unpaid at the end of 5-7 years will be refinanced (Refinancing Debt Facility-RDF). However, this amount to be refinanced needs to be stated upfront.

Banks fund such loans through customer deposits whose typical maturity is 2-3 years. Then to service its liabilities the bank would have to repeatedly go out to generate more liabilities (deposits and borrowings) to service its existing liabilities. Such issues, often highlighted as asset-liability-management (ALM) issues, are not looked kindly by any banking regulator and investors.
4.2 Bond Financing

The bond market in the country is not yet matured. We do not have much precedence in the sector which utilized this route. Bonds can help airport operator with immediate free cash and lower cost of financing. However, Overseas Bond Offering has seen traction in the recent past.

1. In 2017, GMR Hyderabad International Airport Ltd (GHIAL) raised US$350 Mn senior, secured, fixed-rate notes of 10-year tenure at an attractive pricing of 4.25%. The proceeds was used towards refinance the current outstanding Rupee Term Bank Loan, Bank External Commercial Borrowing (ECB) and towards partial funding of proposed capital expenditure.

2. In 2016, another GMR group company, Delhi International Airport Limited raised US$ 522 Mn via dollar bond issue at a pricing of 6.125% with 10 years maturity, which was utilized to refinance high-cost rupee term loans and an existing foreign currency loan worth approximately US$90 Mn.

4.3 Public listing of airports including structuring as investment trusts;

As per the final regulations by SEBI, Any project in infrastructure sector is permissible asset to take InvIT route for fund raising. Large operational airports can resort to InvIT to deleverage balance sheet.

**Background:** InvIT is a mechanism that enables developers of infrastructure assets to monetise their assets by pooling multiple projects under a single entity (trust structure). InvITs are a first-of-their-kind really long-term instruments. At present, Government Securities or G-secs are the only other instruments with such a long life.

**Transaction Structure**
Features

InvITs have to ensure that they distribute 90% of their net cash flows to the unit investors. There is a leverage cap of 49% on the net asset value. There is also a cap on exposure to under-construction assets (for publicly placed InvITs). The sponsor of the InvIT is responsible for setting up the InvIT and appointing the trustee. The sponsor shall hold minimum 15% of the units issued by the InvIT with a lock-in period of three years from the date of issuance of units. The InvIT regulations also require companies to maintain certain investment ratios, including 80 percent of investments in completed and revenue-generating assets.

Global / India experience

Worldwide InvITs are positioned as high-dividend paying investments suitable for investors who are especially looking for long-term, stable cash flows with moderate capital appreciation. Major debt-laden infrastructure entities looking to deleverage and long-term refinancing options have welcomed the InvITs route. At present, Summary of Indian Companies which have launched/ are under planning launch Trust or have received the approval from SEBI are as under :

<table>
<thead>
<tr>
<th>Company</th>
<th>Listed or not</th>
<th>Assets under consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterlite Power Transmission Ltd</td>
<td>Listed</td>
<td>Power Transmission assets</td>
</tr>
<tr>
<td>IRB Infrastructure Developers Ltd</td>
<td>Listed</td>
<td>Roads</td>
</tr>
<tr>
<td>GMR Infrastructure Ltd</td>
<td>Not listed yet</td>
<td>Mix of operational road and transmission assets</td>
</tr>
<tr>
<td>MEP Infrastructure Developers Ltd</td>
<td>Not listed yet</td>
<td>Toll Collection and Operate, Maintain &amp; Transfer assets</td>
</tr>
<tr>
<td>IL&amp;FS Transportation Ltd</td>
<td>Not listed yet</td>
<td>Roads, thermal and renewable energy assets</td>
</tr>
<tr>
<td>Adani Group</td>
<td>Not listed yet</td>
<td>Ports, power transmission lines and power generation assets</td>
</tr>
</tbody>
</table>
Taxation

Investors of InvITs draw comfort from a favorable tax-regime. Dividend income is tax exempt. There is a small withholding tax for interest income to NRI unit holders. Further, there is the pass-through structure of InvITs mandating distribution of a minimum 90% of net-distributable cash and nil dividend distribution tax.

4.4 Masala Bonds

| Meaning | Plain vanilla bonds issued by an eligible Indian entity in foreign markets and the interest payments and principal reimbursements are denominated (expressed) in rupees. |
| Eligible Borrower | Any corporate or body corporate including REITs and INVITs including Indian Banks subject to certain conditions |
| Form of Borrowing | Eligible resident entities allowed to issue only plain vanilla Rupee denominated bonds issued overseas in a Financial Action Task Force (FATF) compliant financial centres |
| Available routes and limits | Any proposal for issuance of these bonds will be examined at FED, Central Office, Mumbai and such request should be forwarded through AD bank only (Approval Route only) |
| Minimum Maturity | Upto USD 50 million per FY - 3 years and above USD 50 million per FY – 5 years |
| All-in-cost ceiling | 300 basis point over the prevailing yield of the GoI securities of corresponding maturity |
| End-use Prescriptions | All purposes except: • Real estate activities other than development of integrated township / affordable housing project • Activities prohibited as per the foreign direct investment guidelines • Purchase of Land • Investing in capital market and using the proceeds for equity investment somestically • On-lending to other entities for any of the above purposes |
Financial Stakeholders Experience With the Aviation Sector
5. Financial Stakeholders Experience With the Aviation Sector

5.1 Airlines

<table>
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</thead>
<tbody>
<tr>
<td></td>
<td>• Banks had significant exposure in East West Airline, Modiluft, NEPC, Damania and Archana Airways. All these airlines closed by 1996 – 1997.</td>
</tr>
<tr>
<td></td>
<td>• Exposures estimated to be around INR 2.5 – 3.0 bn.</td>
</tr>
<tr>
<td></td>
<td>• No recoveries till date but banks still possess securities against loans.</td>
</tr>
</tbody>
</table>

Airlines since 2004

• Banks returned to the sector post the deregulation in 2003-04.
• Provided credit in the nature of Term loans / Working Capital/ Non fund based / PDPs.
• Loan quality deteriorated post 2008 onwards due to challenges with Kingfisher, Paramount and Air India.

In FY12, Kingfisher went in for Corporate Debt Restructuring to the tune of INR 90 bn debt, with 18 lenders agreeing to cut interest rates and convert some loans to equity:
• INR 13.9 bn of debt into compulsory convertible preference shares;
• INR 8.0 bn debt converted into redeemable shares for 12 years;
• airline’s average interest rate was lowered to 11 percent, helping the airline save INR 5.0 bn every year on interest cost.

In FY12, Air India debt recast of INR 180 bn was approved by 13-bank consortium, which included:
• issue of INR 74.0 bn worth of non-convertible debentures, guaranteed by the government;
• conversion of about INR 105.0 bn of the airline’s working capital in to long-term loan, carrying an annual interest of 11 percent;
• part of the working capital of about INR 35.0 bn restructured as cash credit arrangement;
• Apart from this, government to infuse equity of about INR 302.3 bn in the 2012-21 financial period.
### Lessors

**Lessors in 1990’s**
- PLM, GPA and Air UK were amongst who faced repossession challenges in 1996 – 1997 after EWA and Modiluft closed operations.
- Air UK had to pay INR 170 mn to AAI in 1997 to repossess 2 B737 – 400s.
- PLM case war referred to arbitration in 1997.
- Lessors increased lease rentals and advances post 97.

**Since 2010**
- GECAS had challenges to repossess aircraft with Kingfisher and Paramount.

### Private Equity (PE)

- No major PE player participated during the period and there was no interest shown by any PE player.

**Since 2004**
- ICICI Ventures and US-based Capital International invested US$40 mn in 2004 and exited via IPO with significant returns but below expectations.
- Isthimar and WL Ross invested in SpiceJet. WL Ross made more than 25 percent annual return on investment while Isthimar returns were below expectations as they delayed their exit.
- Overall, PEs are not averse to investing in airlines especially LCCs subject to a proven track record and reasonable valuation.
6. Outlook for Aviation Value Chain

In the last decade, air travel growth, stood at ~12.0%. This is an expansion 2.3 times greater than the growth of the India GDP growth, which reflects the high income elasticity of air travel. Before 2014, the sorry state of the industry could be attributed to several uncontainable headwinds like depreciating rupee, rising fuel prices and global economic slowdown.

Since 2014, unparalleled growth story has largely been fueled by a growing middle class, rising demand, growth in trade and deregulation of the sector, complemented by capacity expansion of Low Cost Carriers (LCCs), investment in airlines and airport infrastructure, among others. Additionally, key policy reforms by the Government such as the landmark National Civil Aviation Policy 2016, significant increase in budgetary allocation, introduction of regional connectivity scheme UDAN, approvals for construction of 18 Greenfield airports and revival of 50 un-served and under-served airstrips and signing of Open Skies Agreement with strategic partners has further given much required push.

In the last decade, commercial banks, lessors, private equity funds, other financial institutions participated in financing to the industry. Considering the huge investments envisaged in the industry in the next 4-5 years on developing airport infrastructure, financing of new aircrafts, supporting the ancillary sectors in value chain, now the question arises where the money will come from?

The outlook of the investor/banking community has changed dramatically in the last 3-4 years. Now, investors are fascinated by India’s growth story and ready to participate even at competitive pricing. Airport operators and airline services are finding favour from the financiers due to stable revenue streams, good repayment track record and positive sector outlook.

If financial markets were to fund capital projects in the country, they would demand a higher return leading to higher costs, compared to funding coming from the government. Basis our understanding, we have outlined the outlook for the entire value chain:
Airline Sector Outlook: Cautiously Positive

Points in favour

• Favourable demographics. India is expected to be 4th largest economy by 2022. More than 500 Million people expected to be in upper and middle class by 2025.

• New Civil Aviation Policy has laid down the solid foundation for the sustainable future growth. The policy targets to enable 500 Mn domestic ticketing by 2027 and 200 Mn international booking through implementation of UDAN scheme (i.e. RCS), which will target indicative airfare of INR 2500 per passenger approximately, for a distance of 500kms to 600 kms on RCS routes (equivalent to about one hour of flight).

Points Against

• Limited ability to hike fares, rising crude oil prices and aggressive borrowing plans to buy planes may eat into the profitability of Indian carriers

Airport Sector Outlook: Positive

Points in favour

• Airport operators have been able to maintain stable repayment schedule in the past.

• Increased budgetary allocation. In the recent budget, airport capacity has been proposed to expand by more than five times to handle a billion passengers a year

• New Civil Aviation Policy has provided much respite to the regulatory regime of airport tariff framework. It outlined that tariffs at all future airports will be calculated on a 'hybrid till’ basis, unless otherwise specified.

• Bankers are, however, prepared to take further exposure with the airport operators provided the company has decent earning visibility, good project structure and sound track record.

Points Against

• Aggressive bidding for the upcoming airport projects resulting in inherent flaw in the sustainability of the project.
**General Aviation Sector Outlook: Stable**

**Points in favour**

- Air travel was once considered a luxury for both business and private needs. This perception has now changed as savings in travel time, comfort and convenience and higher reliability compared to other modes of travel have outweighed the cost differential. The poor connectivity between the metros and smaller cities is why more and more companies and individuals are realising the benefits of using private jets and helicopters.

**Points Against**

- GA aircraft get a lower priority compared to scheduled operators, because of the current traffic load of scheduled flights at metro airports. Delays in take-off and landing clearances may defeat the purpose of investments in GA aircrafts.

- General aviation sector is crippled with bad loans and restructuring. Bankers have suffered a lot due to defaults made by many players in the past. Companies are struggling to meet the repayments due to the lack of profitability, under-penetration and mistreatment of the aircraft than originally envisaged in the business plan.

**MRO Sector Outlook: Stable**

**Points in favour**

- The maintenance, repair and overhaul (MRO) space provides significant growth opportunities, more so because there are not many such facilities in India. While national carrier Air India does all these works within the country, most airlines carry them out overseas -- at a much higher cost. As per industry sources, in 2016, airlines spent about $950 million in aircraft maintenance and servicing, but only 10% of this business came to Indian MRO companies.

- With an expected growth in fleet size of Indian carriers, the Indian MRO market is pegged at an estimated value of USD 5.2 billion by 2036 by KPMG.

- Successful implementation of the provisions of the NCAP 2016, along with other structural reforms in the MRO sector, would endow the Indian MRO industry with the capability to multiply revenues.

**Points Against**

- Unfavourable taxation. MRO players pays 18.0% goods and services tax (GST). The 18% GST, industry representatives said, has come as a blow to the sector which had turned competitive after exemption from customs duty on import of spares and abolition of value-added tax by Maharashtra, which houses 80% of the MRO units in India.