

**“AIRPORT PRIVATIZATION IN INDIA”**



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**By  
CRISTIN BABU  
500028428**

**GUIDE NAME: VINU A ANTONY  
DESIGNATION: ELECTRICAL ENGINEER  
ORGANISATION: PRIME ELECTRICAL CONTRACTORS & ENGINEERS**

**UNIVERSITY OF PETROLEUM & ENERGY STUDIES, INDIA  
CENTRE FOR CONTINUING EDUCATION  
UNIVERSITY OF PETROLEUM & ENERGY STUDIES, DEHRADUN**

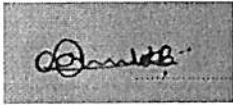
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Signature:



Name of the Student: CRISTIN BABU

Residential Address: Akkarakaran house, Azad road, Irinjalakuda,  
Thrissur, Kerala, India

Pin: 680125

Telephone/Mobile: +08089135551

E-mail: cristinakkarakaran@gmail.com

Date: 18-10-2015

Place: Kerala



*Prime*

'A' GRADE ELECTRICAL  
CONTRACTORS & ENGINEERS

### Declaration by the Guide

This is to certify that the MR.CRISTIN BABU a student of Executive BBA (program)

SAP ID- 500028428 of UPES has successfully completed this dissertation report on "AIRPORT PRIVATIZATION IN INDIA" under my supervision.

Further, I certify that the work is based on the investigation made, data collected and analyzed by him and it has not been submitted in any other University or Institution for award of any degree. In my opinion it is fully adequate, in scope and utility, as dissertation towards partial fulfillment for the award of degree of Executive BBA

Signature

Name & Designation: VINU A ANTONY, ELECTRICAL ENGINEER

Address: AKKARAKARAN HOUSE, IRINJALAKUDA, THRISSUR

Telephone: 04802832650

Mobile: 09746531899

E-mail: [vinuaantony@gmail.com](mailto:vinuaantony@gmail.com)

Date: 18-10-2015

Place: KOCHI

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**Executive Summary / Abstract:**

Airports have evolved mainly as government-run enterprises. Now, many airports seek privatization in part to improve their abilities to compete in the new global economy. The manner of ownership covers a wide spectrum: government-owned and controlled airports, government-owned corporations, and independent airport authorities, public-private partnerships with government majority ownership or with private majority ownership.

Reasons to privatize an airport include an improved ability for an airport to diversify its operations to enhance profitability, to fund expansion, and to improve competitiveness. The arguments for privatization include that the falling availability of public funds, and a need to change to the market-oriented outlook that private businesses develop.

Objections to airport privatization are related to the apprehension that a private operator will take advantage of the monopoly that airports represent in air travel. Not all airports are suitable for privatization. Some in the developed world, such as in the USA, are controlled by local governments and affected by airline requirements. The less developed countries and their airport authorities lack sufficient funds to develop their airports; although these countries need these airports, privatization is impractical, and alternate business plans must be developed.

Unlike other countries, Canada, Australia, and New Zealand have taken the path of mixed public-private control to maintain power over matters that affect the public good. Privatization enables a long term focus to meet the demands of international competition, to maintain a customer-focused plan, and to free the government from providing subsidies to an unprofitable enterprise. The potential for Canada to completely privatize the National Airport System Airports is small due to the serving of the public good under the current system.

Airport privatization has become a trend in the past thirty years as economies change and the air transport sector matures. Airport management and ownership, once mainly the domain of governments, has evolved into a mix of public and private airport ownership. Airports must now compete with other airports around the world for business, and government may not be the best owner for a globally-competitive enterprise.

Airports must have the freedom to compete on the commercial level, and not just provide a service to the travelling public.

Airports seek privatization in part to improve their abilities to develop a customer-focused business plan. This paper will present a review of the history of privatization and predictions for the future of this trend, and a comparison of the means, effects, and relative success of government/ public vs. private control.

This is a process of transferring the control of an enterprise from the government sector to the private sector. Generally, but not always, this also means transferring ownership of the Public Sector Enterprise as well as control.

By privatization, I mean that a service that is being provided by government is sold, partly or wholly to the public who then become the shareholders or stakeholders. Privatization is the most common forms of alternative service delivery for-profits and non-profits-oriented enterprises.

Privatization can be accomplished by sale or lease. It can be accomplished by the government selling 100% of an enterprise, or selling 51%, or even by selling a minority stake - so long as the private sector is given full managerial control. Without transferring control to the private sector, the government can raise revenue by selling a smaller share, but that is not privatization as such.





**CHAPTER 1**  
**INTRODUCTION:**



Airports have evolved mainly as government-run enterprises. They serve the public good, and were thus taken on as any other part of public infrastructure would be. Bridges, roads, ports, and other transportation-related projects have traditionally been part of the public good. However, many of these facilities are being privatized. Roads and bridges are now conceived of as wholly privately developed and owned, or as public-private partnerships.

Privatization can provide several benefits. It can remove the burden from the government's finances, spread the risk associated with operations, and introduce ways to improve efficiency and competition. Often better airport management can be put in place. For example, if the airport is run under a government department, facility commercialization would be difficult. Private management can reorganize the accounting so that the airport's costs and revenues can be monitored and adjusted, costs can be cut, and revenues boosted.

The arguments for privatization are many. Less public investment is needed; on the one hand, public funds are less available than they once were, and on the other hand, private corporations have a market-oriented outlook for their business plans. Improved access to commercial financial markets, improved ability for an airport to diversify, and improved operational efficiency may be the result. Employees and management are motivated to perform better. Lastly, a deregulated airline industry led to growth which the existing model of airport management and ownership could not handle.

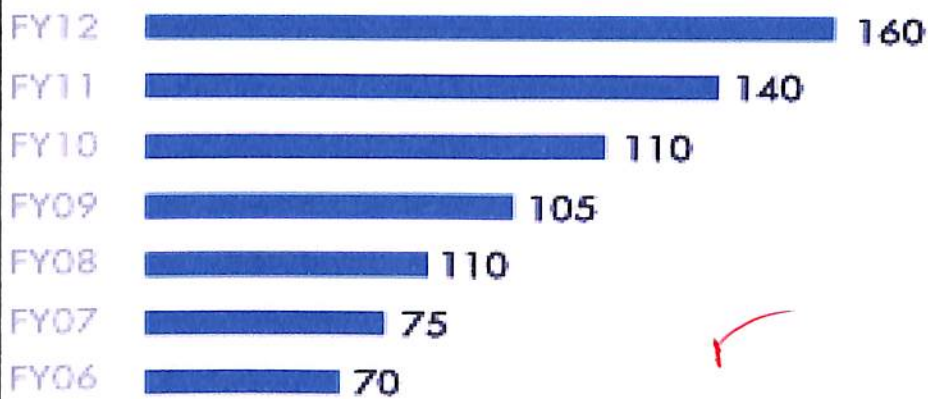
Privatization may be a better option if market forces can enable competition rather than a monopoly, meaning less government regulation is necessary. This preserves the public good and makes the enterprise more likely to be profitable. Conversely, if the potential exists for a monopoly in a market, then the involvement of the government in ownership is necessary, and so is more government regulation. Table 1: "Government Control of Essential Elements of operations in three countries", shows how Canada, Britain, and Australia deal with these concerns by maintaining control in key areas of the public good of aeronautical standards, access, and pricing.



## 1.1 Indian Airports Analysis

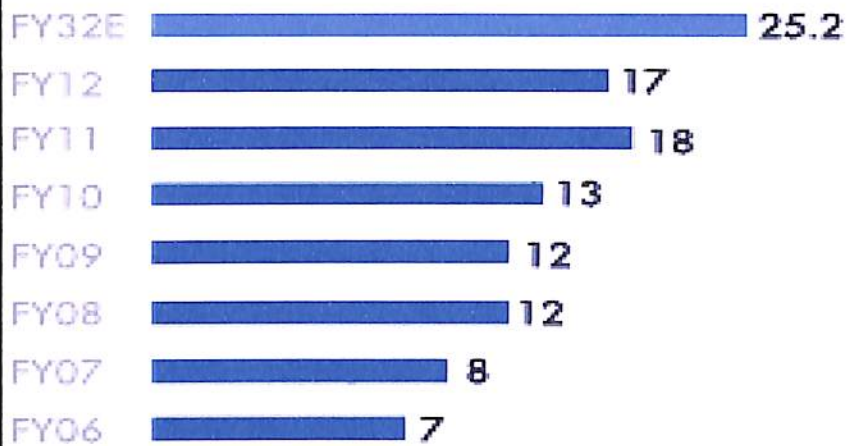
### 1.2 Passenger Traffic

Growth in passenger traffic has been strong since the new millennium, passenger traffic expanded at a compound annual growth rate (CAGR) of 14.1 per cent over FY06–12.



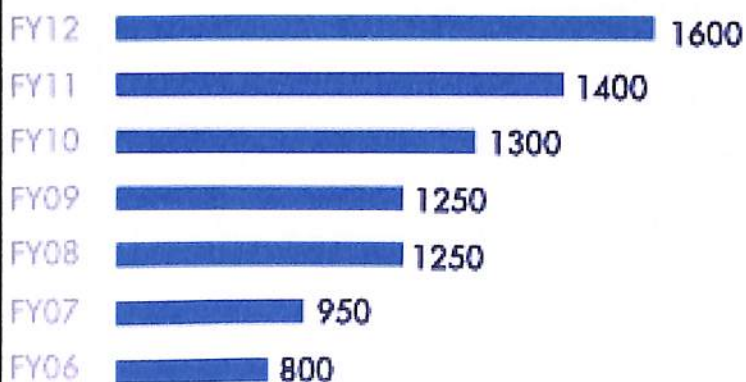
### 1.3 Freight Traffic

Freight traffic is expected to be five times the current level by the end of the next two decades.



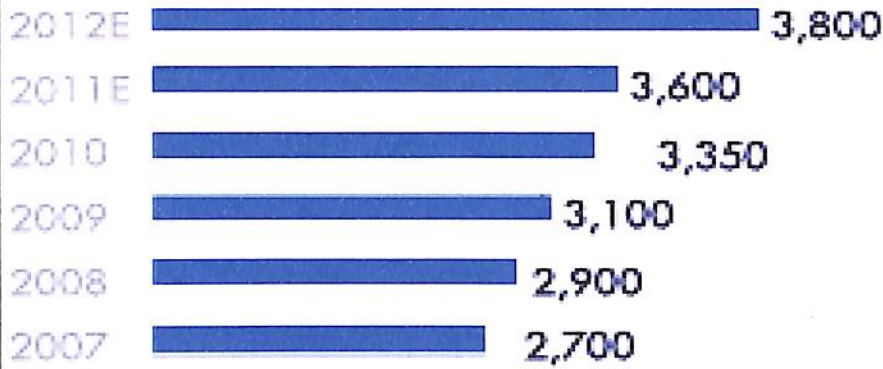
### 1.4 Aircraft Movement

Total aircraft movement recorded a compound annual growth rate (CAGR) of 10.7 per cent over FY06-12.



### 1.5 Growth

Per capita income is expected to increase at a compound annual growth rate (CAGR) of 7.9 per cent during 2007-2012E.



## CHAPTER 2

### LITERATURE REVIEW:

#### 2.1 History

Privatization, if properly structured, yields substantial and enduring benefits. A detailed and rigorous Bank examination of privatizations in Vietnam and China, found that divestiture was good for the economy as a whole and had led to higher productivity and faster growth in all. The Chilean telephone company doubled its capacity in the four years after sale. The privatized telephone company in Mexico reduced its per-unit laborcosts sharply.

Another study found that firms privatized by public offerings in 15 countries: Vietnam, China, Jamaica, Chile, Singapore, and Mexico amongst others, increased returns on sales, assets, and equity, raised internal efficiency, improved their capital structure, and increased capital expenditures. They also expanded their workforces by small margins. Privatization often is accompanied by layoffs, but this is not always so-jobs increased after privatization in divested firms in the Philippines, Vietnam, Tunisia, Mexico, Chile and China.

Most privatization success stories come from high-income and middle-income countries. Privatization is easier to launch and more likely to produce positive results when the company operates in a competitive market, and when the country has a market-friendly policy environment and a good capacity to regulate. The poorer the country, the longer the odds against privatization producing its anticipated benefits, and the more difficult the process of preparing the terrain for sale.

Nonetheless, successes can be found in low-income countries, too. Privatization turned around an almost moribund textile firm in Niger, helped revive a defunct development finance corporation in Swaziland, and revitalized an agro-industrial firm in Mozambique. The Mozambique firm diversified into new products, began servicing its debts, and increased production fivefold.



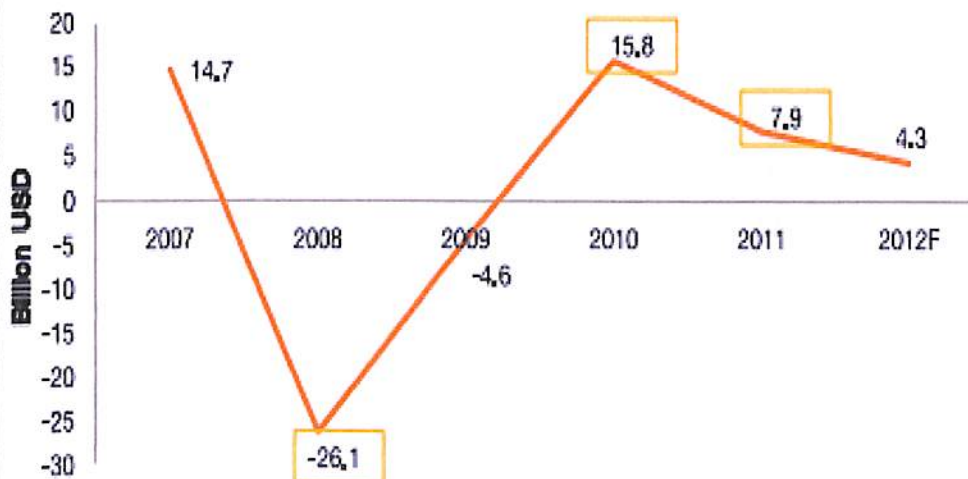
In the case of Russia, it can be evaluated, however, that privatization policies systematically discriminated against outside investors, resulting in a very high rate of inside ownership, and a continuing powerful role for the state. Had these policies been different, many more firms could have improved their performance.

Moreover, corporate governance institutions in Russia function very poorly. Far too frequently, Russian managers have found it easy, not only to flout accepted norms but even to violate explicit laws on information disclosure, shareholder registries, voting procedures and board composition. The difficulty of establishing such institutions underlines the importance of concentrated outside ownership in the Russian environment, since only a determined and powerful owner with an interest in maximizing the value of the firm—has a chance of overcoming the many obstacles to effective restructuring.

## 2.2 Evolution of the industry

Prior to 2001, the aerospace and defense industry was exclusively reserved for DPSUs which have grown tremendously, in part because of the protection, in large measure by developing and acquiring new technologies and by entering into the manufacture of indigenous aircraft. In 2001, the government allowed 100% domestic private investment in the defense sector upon obtaining an industrial license and FDI of up to 26% with conditions. The introduction of the Defense Offset Policy in 2005, with its several revisions (the last in 2012), has provided significant opportunities for Indian companies. New players are aggressively building capabilities and their attractiveness for potential Tier I and Tier II supplier partnerships. Leading OEM's have not only established their presence but are actively starting to participate in programmers of the Indian government and even forming joint ventures with Indian companies.

### Total net profits and losses posted by airlines globally





### 2.3 Commercial aviation

There is a strong correlation between the gross domestic product (GDP) and the aviation industry. As a country's per capita GDP grows, so does its residents' desire and ability to afford travel, and this desire in turn fuels the demand for aircraft. It is now well-acknowledged that economies outside North America and Europe are expected to lead the world in GDP growth. By 2030, more than 50% of the top 10 economies are expected to be outside the Western Europe and US region. Countries of Asia-Pacific, Latin America and Russia, where long-term GDP growth is forecast above average are expected to have a profound impact on commercial aviation.

Global business and tourism rely heavily on air transport. It facilitates world trade and helps to increase access to international markets and allows globalization of production. According to a recent report by the Air Transport Action Group (ATAG), the total value of goods transported by air represents 35% of the world trade.

#### Global GDP expressed in terms of PPP

Rank in 2011	Country	GDP billion USD(2011)	Projected rank in 2030	Country	Projected GDP billion USD (2030)
1	US	15094	1	China	30634
2	China	11347	2	US	23376
3	India	4531	3	India	13716
4	Japan	4381	4	Japan	5842
5	Germany	3221	5	Russia	5308
6	Russia	3031	6	Brazil	4685
7	Brazil	2305	7	Germany	4118
8	France	2303	8	Mexico	3662
9	UK	2287	9	UK	3499
10	Italy	1979	10	France	3427

Source: World in 2050, PwC report

With increasing liberalization across the world in emerging economies, trade is expected to increase at an accelerated rate with India, China and other emerging countries giving further boost to the commercial aviation sector in these countries.

## CHAPTER 3

### NEED OF PRIVATIZATION OF AIRPORT

#### 3.1 Why privatize

Because ownership is a significant determinant of enterprise performance. In both developed and developing countries, good **State-Owned Enterprises (SOEs)** performance has been very difficult to bring about--and even harder to sustain. Governments facing financial crisis often try to improve performance by bringing in new and dynamic managers, and paying them incentive salaries, granting managers autonomy to set prices, hire and fire. These measures often have a positive effect, but as the crisis dissipates, so does political resolve.

Political interference, a common and deadly disease of SOEs, tends to re-emerge--and painfully-achieved SOE reforms tend to backslide. SOEs thought to be well on the road to recovery have either stopped improving performance or suffered deterioration. In Russia, where reform short of ownership change ended losses in a group of SOEs for years, large deficits have since reappeared. In Vietnam, New Zealand, China and Japan, SOE reforms began to bite only when done in conjunction with privatization. Recognition that SOE reforms are limited and unsustainable, coupled with the fiscal burden of subsidizing loss-makers, has led financially hard-pressed governments to opt for privatization.



### 3.2 How Privatization Works

There are eight key ways about how privatization works:

1. Privatization works best when it is a part of a larger programme of reforms promoting efficiency. Vietnam, New Zealand, the U.K., Mexico, China and Chile are all successful privatizes. Their privatizations were accompanied by reforms to open markets, remove price and exchange rate distortions, and encourage the development of the private sector through free entry. Revenue maximization should not be the primary goal of privatization. It is far better to eliminate monopoly power and unleash potentially competitive activities than to boost the sales price by divesting into protected markets. Moreover, it is also far better to create regulations to protect consumer welfare than to maximize price by selling into an unregulated market.



2. Regulation is critical to the successful privatization of monopolies. In the sale of Vietnam Telecom, everybody won: consumers, labor, government, buyers, and the productive efficiency of the company increased as a result of a well-developed, well-administered regulatory framework.

3. Countries can benefit from privatizing management without privatizing the ownership of assets. Management contracts, leases, and concessions have been successfully used the world over, particularly in sectors where it is difficult to attract private investors.

In Côte d'Ivoire, the leased water company improved technical efficiency, increased new connections, became more efficient in billing and collection of receivables -- and reduced the number of expatriate employees by 70%. But because a change in ownership is usually needed to lock in performance gains, private management arrangements are likely to work best when they are a step toward full privatization.

4. The sale of large enterprises requires considerable preparation. Successful privatizations of large enterprises have entailed breaking them into competitive and marketable units (in East Germany, Vietnam, Argentina, China and Mexico), bringing in dynamic private sector managers (in many telecom and airline sales around the world), settling past liabilities, and shedding excess labor (in steel and railways in Argentina).

Successful privatizing governments also assiduously avoided large new investments for plant modernization and equipment, since getting the private sector to finance and manage these investments was itself a major reason for privatization.

5. Transparency is critical for economic and political success. China, Vietnam Mexico and the Philippines made the sale of enterprises transparent by adopting competitive bidding procedures, developing objective criteria for selecting bids, and creating a clear focal point with minimal bureaucracy to monitor the overall programme. A lack of transparency can result in political backlash, as in the early days of privatization in Poland, or even bring the process to a halt, as in Russia and Guinea.

6. Governments must pay special attention to developing a social safety net. In Tunisia, generous severance packages encouraged voluntary departures and reduced the need for outright dismissals. In many countries--most recently in Eastern Europe and Central Asia: employee ownership schemes, unemployment benefits, and retraining-redeployment programs are being developed to ease the social costs of privatization.

7. The formerly socialist economies should privatize in all possible ways that encourage competition, and they should experiment with all available methods that go beyond a case-by-case approach to privatization. Since the economic and social importance of SOEs is far greater there than in the rest of the world, flexibility is in order--not because privatization is less necessary, but because it is more so. Rampant institutional and policy deficiencies require experimentation with a wide set of privatization tactics.

These include share give-always (or mass privatization schemes), state-assisted financing methods, free or low-cost shares to employees in privatized firms, and new types of investment-management companies to run groups of companies and diversify risk.

8. In changing the public-private mix in any type of economy, privatization will sometimes be less important than the emergence of new private business. Countries can freeze or restrain the expansion of public enterprises and encourage the growth of a dynamic private sector through free entry, as happened in Korea and appeared to have happened in China and Vietnam.



### 3.3 Types and Techniques of Privatization

A variety of alternative service delivery techniques can be employed to maximize efficiency and increase service quality. Some methods will be more appropriate than others, depending on the service. In searching for ways of cutting costs and increasing service delivery, one or a combination of these techniques can be safely considered:

#### 1. Contracting Out ( or Outsourcing) ✓

The government competitively contracts with private organizations for profit or non-profit to provide a service or part of a service. In other words, the government hires the private sector firms or non-profit organizations to provide goods or services for the government. Under this approach, the government remains the financial, and has managerial and policy control over the type and quality of goods or services to be provided. Thus, the government can replace contractors that do not perform creditably well.

## 2. Management Contracts

The operation of a facility is contracted out to a private company. Facilities where the management is frequently contracted out include: airports, wastewater plant, arena and convention centers.

## 3. Public-Private Competition(or market testing or managed competition)

When public services are opened up to competition, in-house public organizations are allowed to participate in the bidding process.

## 4. Franchising

A private firm is given the exclusive right to provide a service within geographical area. Franchising is of two types:

(i) **Franchising external services**- here, the government grants a concession or privilege to a private sector entity to conduct business in a particular market or geographical area, for example, operating concession stands, hotels, and other services provided in certain parks. The government may regulate the service level or price, but users of the service pay the provider directly.

(ii) **Franchising internal services** –here, the government agencies provide administrative services to other government agencies on a reimbursable basis. Franchising gives agencies the opportunity to obtain administrative services from another governmental entity, instead of providing them for themselves.

## **5. Internal Market**

Departments are allowed to purchase support services such as printing, maintenance, computer repairs and printing from in-house providers or outside suppliers. In-house providers of support services are required to operate as independent business units competing against outside contractors for departments' business. Under Such a system, market forces are brought t bear with an organization. Internal customers can reject the offerings of internal service providers if they do not like their quality or if they cost too much.

## **6. Vouchers**


Government pays for the service; however, individuals are given are given redeemable certificates to purchase the service on the open market. These subsidize the consumer of the service, but services are provided by the private sector. In addition to providing greater freedom of choice, vouchers bring consumers pressure to bear, creating incentives for consumers to shop around for services and for service providers to supply high-quality, low-cost services.

## **7. Commercialization (or service shedding)**

Government stops providing a service and lets the private sector assume the function.

## **8. Self-help (or transfer to non-profit organization)**

Community groups and neighborhood organizations take over a service or government asset such as Local Park. The new providers of the service are also directly benefitting from the service. Government increasingly are discovering that by turning some non-core services- such as zoos, museums, fairs, remote parks, and some recreational programmes- over to non-profit organizations, they are able to ensure that these institutions do not drain the budget.





## **9. Volunteers**

Volunteers are used to provide all or part of a government's service. Volunteer's activities are conducted through a government volunteer programme or through a non-profit organization.

## **10. Corporatization**

Government organizations are reorganized along business lines. Typically, they are required to pay taxes, raise capital on the market (with no government backing-explicit or implicit) and operate according to commercial principles. Government corporations focus on maximizing profits and achieving a favorable return on investment. They are freed from government procurement, personnel and budget systems.

## **11. Asset sale (or Long-Term Lease)**

Government sells or enters into long term leases for assets such as airports, gas utilities or real estate to private firms, thus turning physical capital into financial capital. In a sale lease-back arrangement, government sells the asset to a private sector entity and then leases it back. Another asset sale technique is the employee buy-out. Existing public managers and employees take the public unit private, typically purchasing the company through an Employee Stock Ownership Plan (ESOP).

## **12. Private Infrastructure Development and Operation**

The private sector builds finances and operates public infrastructures such as roads, and airports, recovering costs through user charges. Several techniques commonly are used for privately built and operated infrastructure. With Build-Operate-Transfer (BOT) arrangements, the private sector designs, finances, builds and operates the facility over the life of the contract. At the end of this period, ownership reverts to the government. A variation of BTO model, under which title transfers to the government at the time construction, is completed. Finally, with Build-Own-Operate (BOO) arrangements, the private sector retains permanent ownership and operates the facility on contract.

### 13. Divestiture

This involves the sale of government-owned assets or commercial-type functions or enterprises. After divestiture, the government generally has no role in the financial support, management, regulation or oversight of the divested activity.



## CHAPTER 4

### ANALYSIS:

Privatization is not a blanket solution for the problems of poorly performing public sector enterprises. It cannot in and of itself make up totally for lack of competition, for weak capital markets, or for the absence of an appropriate regulatory framework. But where the market is basically competitive, or when a modicum of regulatory capacity is present, private ownership yields substantial benefits.

The success of any privatization arrangement, whichever technique is adopted, will be dependent on the sincerity of government to pursue it with unblemished policy implementation, support, co-operation and understanding of the citizenry. At the onset, privatization bites very hard, but at the long run, the benefits are multifarious and immeasurable.

#### **4.1 Private Development of Low-Cost**

##### **Airline Terminal Development**

Numerous airports have contracted out the management and operation of parking facilities, concession operations, or entire terminals where the operator manages the facility on behalf of the airport owner for a specified period of time and in return receives a management fee.

A number of airport owners in the United States have contracted the day-to-day operation of their entire airport to private operators. Under an airport-wide management contract, an operator manages the airport (or airport system) under policies and direction from the airport owner for a specified period of time.

The operator's objective is to improve the financial and operational efficiency of the airport, and the operator is typically paid an annual fixed management fee. Sometimes the operator is paid a variable fee based on performance.

The airport owner retains a considerable degree of control over the quality of service provided by the contractor by setting policy and also retains the obligation, control over, and risks

For making capital investments. (The contractor does not bear any of the risks for capital improvements.) The operating budget is usually set and managed by the operator, but approved by the airport owner. Frequently, these types of arrangements are introduced when the airport owner feels the transition can introduce a more efficient operation of the airport where the objective of the operator would be to reduce costs and increase revenues.

Another reason might be to improve customer service. This type of arrangement has also been used when an airport transitions from a municipal or state-run operation to an independent airport authority (e.g., Albany, Harrisburg).

Sometimes the airport owner contracts separately for

- (1) General airport management, operation, and maintenance,
- (2) ARFF services, and
- (3) Parking services.

Even in cases where the airport owner contracts out most of the day-to-day operation of its airport, it may retain control over certain functions. For example, the Burbank-Glendale Pasadena Airport Authority maintains its own police department.

Sometimes the airport owner retains the responsibility for supervising and providing airport police services (e.g., Harrisburg International Airport).



#### **4.2 Functions that the airport owner typically retains under its control**

- Airline use agreement compliance
- Rates and charges policy
- Air service development policy
- Assurances and compliance for federal and state grant programs
- Long-range planning
- Capital expenditure policy and implementation
- Debt issuance policy
- Land acquisition and development policy and planning
- Airport industrial and economic development policy (and sometimes management)
- Environmental policy

Often the management fee is fixed with little or no incentive component, which effectively means the arrangement is one large service contract. By comparison, in Indianapolis the initial fee structure was based almost entirely on incentive compensation where the airport authority's main objective in contracting with BAA was to reduce airline payments per enplaned passenger. The community felt that this would induce the airlines to provide more air service, which in turn was expected to stimulate regional economic development.



### 4.3 Generic Privatization Models

Privatization refers to the shifting of governmental functions, responsibilities, control, and in some cases ownership, in whole or in part, to the private sector. The term "airport privatization" is often understood to mean the transfer of an entire airport to private operation and/or ownership, but private sector involvement at airports can take many forms. Figure 1.2 illustrates the potential range of strategies available for private sector participation in airport management,

Operation and development under four generic privatization models. The range extends from the least level of private involvement to the most private sector involvement. A critical distinction is made between:

- **Partial Privatization—**

Partial privatization refers to strategies where partial control and at least a portion of ownership remains with the public owner.

- **Full Privatization—**

- 

Full privatization refers to strategies where the complete control and/or operation of an entire airport are vested with a private entity through long-term lease or sale (either under or outside the Airport Privatization Pilot Program or APPP).

#### **4.4 guidelines in civil aviation**

The FDI guidelines in Indian civil aviation are listed in the table below:

Proposed regulatory authority The Ministry of Civil Aviation is planning to establish an Airport Economic Regulatory Authority (AERA). AERA, an independent regulator would be responsible to facilitate the development of the Indian airports.

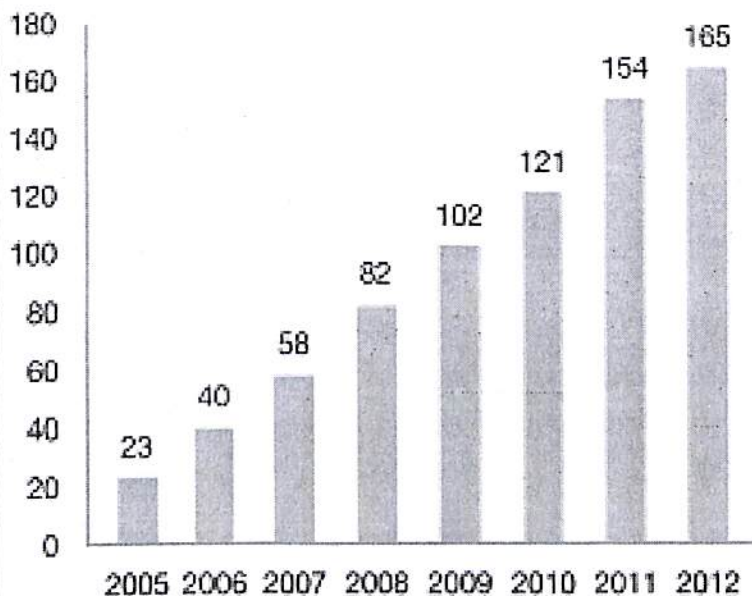
AERA will also look into issues such as tariffs, and monitor the quality of services rendered by various airports.

Initially only major airports viz those airports which have or are designed to have annual passenger throughput of more than 1.5 million will fall under the purview of AERA. However, if at a later stage it is felt that any other airport with a throughput of less than 1.5 million passengers needs to be brought under AERA, the government will accordingly notify such an airport as a “major airport” and bring it under the scope of AERA.

#### 4.5 General aviation (GA)

The GA market, which includes business jets and non-scheduled charter services by fixed and rotor wing aircraft, provides services for diverse operations ranging from business, agriculture, law enforcement, fire and rescue services, to varied government, educational, non-profit and business organizations. Servicing and supporting the aircraft companies is an entire value chain including fixed base operators (FBOs), maintenance technicians, suppliers and service providers. Individuals who use GA aircraft realize numerous competitive business advantages, particularly in saving time and improving productivity of key personnel.

##### Business jets fleet operating in India

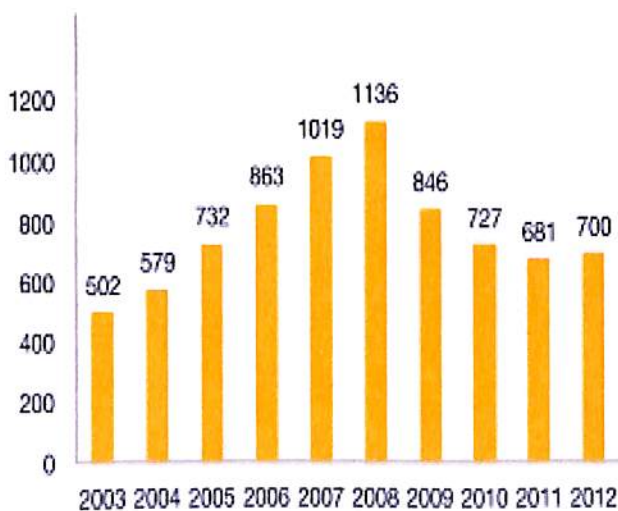




While business aviation has generally stayed under the shadow of the scheduled commercial aviation, it is a key segment of the civil aviation sector. The industry downturn of 2009-10 had a massive impact on the GA aircraft manufacturing industry. The global production of GA aircraft dropped a staggering 52.8% from 4,276 aircraft in 2007 to 2,020 in 2010. From 2010, the aircraft production has been relatively flat year-over-year.

Apart from the poor economic environment, the other reasons for the major decrease in sales could be that the average price per aircraft worldwide almost doubled since 2007 along with the increase in fuel costs. The business jet market has completed four tough years and may have to face another difficult year before demand begins to improve. However, sustained growth is likely to return from 2014 as the jet fleet replacement cycle begins in USA and Europe

**Global business jets delivery (2003-2012)**



## 4.6 Present scenario for key aviation areas and stakeholders

### Domestic airlines

Over the past few years, the number of domestic airlines increased which led to a reduction in fares (till early 2008) facilitating the increase in passenger growth. Launching of the low cost airline model by Air Deccan in 2003, initiated a series of new airlines coming in the aviation sector taking the total number of airlines to ten. A spate of mergers and acquisitions started in 2006 has reduced the number of scheduled airlines from ten to the current seven which include National Aviation Company of India Limited (Air India, Indian Airlines and Air India Express brand); Jet Airways (Jet Airways and Jetlite brand); Kingfisher Airlines (Kingfisher and Air Deccan (now Kingfisher Red) brand); Spice jet, Indigo Airlines; Go Air and Paramount Airlines. NACIL, Jet Airways and Kingfisher-Air Deccan combine have permission to fly international routes.

Figure 3: Domestic passengers carried by Indian domestic carriers (in lakhs)

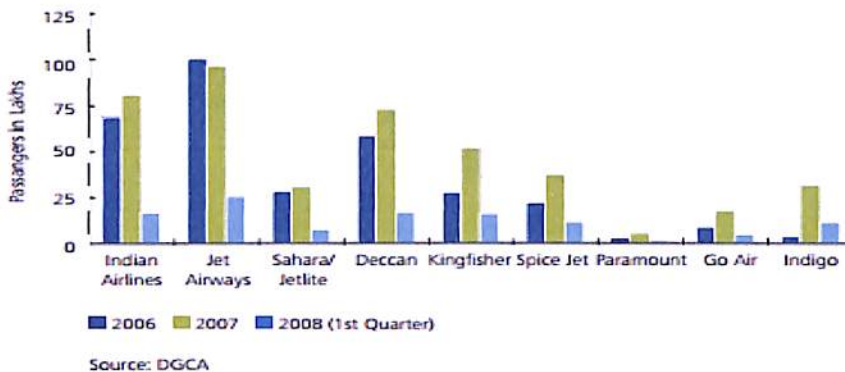
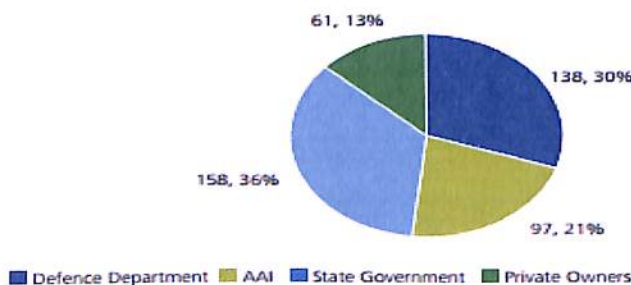


Figure 4: Ownership pattern of the airports/ airstrips (operational / non-operational) in the country



## 4.7 Airports

There are around 454 airports/airstrips in the country which includes operational, non operational, abandoned and disused airports, whose ownership pattern is illustrated in figure 4.

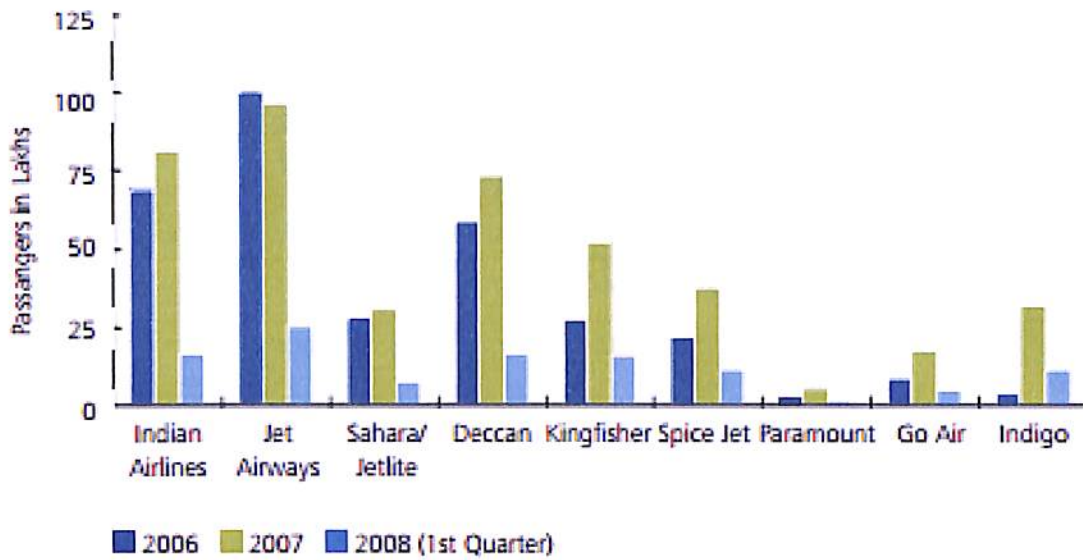
In India, Airports Authority of India (AAI) is the authority for the development and management of airport infrastructure and air traffic management.

With the rise in the number of airlines, growing passenger segment and route expansion, there is a need for Indian airports to have their infrastructure in place, which unfortunately at present is the weakest link in the chain. The Government has acknowledged the infrastructure deficiency and has wisely sought private sector participation to facilitate infrastructure improvements (modernization of Delhi and Mumbai airports, commissioning of green field projects at Hyderabad Bangalore, modernization of 35 non metro airports).

The estimated investments at Delhi airport are in the order of Rs. 7,531 crores; while that at Mumbai airport is estimated to be in the region of Rs. 11,553 crores. Greenfield airport projects have also been proposed at Goa, Navi Mumbai, Pune, Greater Noida and Kannur. The objective is to develop facilities conforming to international standards and try to encourage the domestic operators to shift base, so as to decongest the major airports.

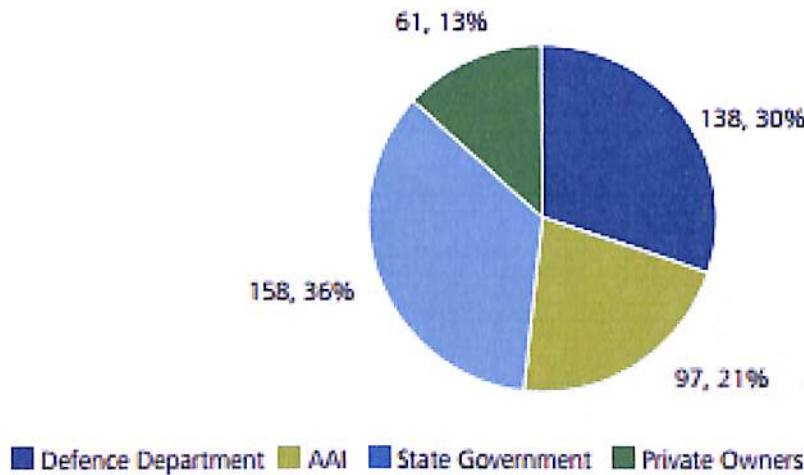
AAI is also planning to identify non operational airports that could be put to use to provide better air connectivity in the country. AAI is in the process of carrying out feasibility studies for this purpose. The Civil Aviation Ministry has set a target of getting around 500 airports operational in the country by 2020. This will include renovation of used airports, developing greenfield airports, establishing merchant and low cost airports and airports dedicated to movement of cargo and logistics.

Figure 3: Domestic passengers carried by Indian domestic carriers (in lakhs)



Source: DGCA

Figure 4: Ownership pattern of the airports/ airstrips (operational / non-operational) in the country



Source: 11th Five Year Planning Commission's working group report on Civil Aviation.

## CHAPTER 5

### INTERPRETATION OF RESULTS:

India's strong economic performance over past couple of years has led to an impressive growth in aviation sector. The recent times have seen India being on radar of global aviation industry players. The growth story for Indian aviation, as experts believe, is going to continue over next decade. However, continuing this growth story would require many structural reforms and removing of bottlenecks from the system. Infrastructure in India still remains a major bottleneck and aviation sector is no different.



## 5.1 Potential Economic Benefits of Airport Privatization

Originally airports were considered to be part of a nation's essential infrastructure, and less attention was paid to profit than to operations (Frost & Sullivan). The three means of economic gains to be found in privatization are: improvements in operating efficiency: the private for-profit business model more often leads to a further exploration for means to cut costs and boost revenues than does public management; the introduction of new management styles and marketing skills directed to serve users with a more consumer-oriented approach; and the ability to make better investment decisions.

The trend in many countries is now to contemplating the potential for profit from an airport. The example of the Vienna airport will serve to illustrate how privatization in a developed country can benefit an airport's operations. Before 1978, the airport was a public utility and had to seek subsidies to cover losses. In 1978, the airport management was reorganized so it would work like a commercial enterprise, but with public sector shareholder ownership. A further reorganization took place in 1992 to address industry and customer needs separately from the service divisions. Measures such as strategic planning and cost control were introduced to improve the airport's competitive advantage (Graham 2008, 17). A share issue was made in 1992 for expansion and improved commercial operations, signaling a transition to private sector control.

Privatization enables a long term focus to meet the demands of international competition, to maintain a customer-focused plan, and to free the government from providing subsidies to an unprofitable enterprise. Many privatizations have taken place because the potential for airside growth is limited. In other words, the developed countries have reached saturation on airside growth, so they seek growth from commercial services. This means shopping, restaurants, hotels, joint ventures are added to the airport to add value and capture more dollars. In addition, Button asserts that the success of privatized airports has encouraged governments to change the management and operations of their airports to mirror what the privately-run operations are doing (2006, 3). Then, the facility is seen as a single monopoly, but as separate revenue-generating businesses. Privatization seems to enable a better response to market forces by developing commercial potential.

## 5.2 Operating environment considerations regarding privatization

The operating environment needs some favorable market conditions for success in privatization. External market forces can encourage or prevent successful conversion to private control or ownership; Button asserts that regulatory changes in airport policy in countries such as the UK came against a backdrop of successful liberalization of many other markets, quite strong macroeconomic growth, and with fairly well defined objectives" (2006, 3). A privatization could not proceed in the absence of these factors, as in the case of a less developed country. There, the private sector has limited access to capital markets and the government may not be able to afford to borrow internationally. The catch is that these economies lack sufficient development for an investment to have acceptable risk levels; without the airport and other transportation infrastructure, though, the country cannot develop.



### 5.3 Determining the potential of an airport for privatization

Not all airports are suitable for privatization, and the experience differs in the developed and less developed worlds. In the developed world, the USA is an anomaly. Less privatization has happened there, and this may be because most airports are under local control, and also under significant pressure from the airlines that use them. Both entities can interfere with any contemplated changes. The approach used in Canada, New Zealand, and Australia, has been to turn the airports into not-for-profit corporations. Such airport authorities as Vancouver Airport Services, a not-for-profit corporation, operate their own and other airports.

The case in the less developed world for airport privatization differs due to the lack of both public and private funds for infrastructure development. Still, these countries need these airports, and alternate business plans must be developed. Less developed countries have much more growth potential in air transport and that can be met with improved facilities and increased capacity. The major part of their revenue is airside.

"A generalization of airport trends in developing and developed countries" will illustrate this phenomenon. Button adds that airports in less developed countries do not generate sufficient revenue to cover costs, so the governments must provide subsidies, and this makes these airports unsuitable for privatization. A full privatization cannot be expected until a national economy can support infrastructure improvements and an airport can prove its potential for profitability.

#### Opportunities and Advantages

- Accesses private sector expertise for specialized functions
- Applies private sector techniques to accelerate project delivery and reduce construction costs for capital improvements
- Provides potential to cut costs and optimize efficiency and thereby reduce costs to tenants
- Retains airport oversight of contracts to ensure compliance with airport goals



- Reduces airport costs for employee salaries and benefits as well as post retirement expenses and liability (pension, medical, etc.) Involves low implementation risk and complexity
- Allows airport management to focus on core and strategic issues
- Maintains airport owner control over land uses and facilities
- Accesses private sector expertise for specialized functions and commercial development  
Provides potential to cut costs and optimize efficiency and thereby reduce costs to tenants  
Provides opportunity for airport to be managed and operated as a business Streamlines day-to-day operational decision making
- Brings increased emphasis on revenue enhancement, commercial, and economic development Provides potential for new revenue/economic development initiatives Can streamline and improve certain processes (e.g., renegotiating nonairline contracts)
- Furnishes potential to impose contractual obligation for contractor to achieve performance targets Provides opportunity for staff to gain m management expertise
- Reduces ongoing m municipal employee compensation, including post retirement expenses (pension, medical, etc.) Provides greater incentives for management and employees to perform better
- Provides more commercial and operational freedom for contractor
- Accesses private sector expertise for specialized functions and commercial development  
Reduces reliance on municipal debt and conserves public capital for those areas where public funding is the only alternative
- Transfers risk exposure for cost overruns, delays, and debt repayment to the private sector
- Has potential to reduce operating expenses and increase operational efficiencies due to avoidance of public procurement processes and to private sector motivations and incentives
- Attains the latest technical and managerial expertise for the infrastructure project

- Applies private sector techniques to accelerate project delivery and reduce construction costs Can enhance commercial development revenues
- Creates/retains jobs for the local economy
- Avoids unnecessary risks for airport owner Minimizes or eliminates delays from local procurement policies that tend to delay contract awards
- Has potential to provide low-cost facilities to tenants (especially when tax-exempt financing is employed)
- Limits administrative burden of airport and staffing responsibilities for facility financing, bidding, design, construction oversight, marketing, ongoing maintenance, administration, and management
- Allows airport management to focus on other strategic issues and assets Creates potential to promote increase in service, commerce, and economic development
- Secures a lump sum or ongoing lease payments by selling or leasing airport for budgetary relief (“asset monetization”) or for annual payments to government owner
- Obtains private capital investment for capacity expansion and modernization and reduces need for public investment and debt, particularly in light of the potential loss of tax-exempt financing, real reductions in AIP funding, and no increase in the PFC level \* Provides ability for the private sector to innovate, introduce operational and technological efficiencies, and create new income streams
- De-politicizes airport operations and insulates airport from broader public policies Provides flexibility to structure and tailor debt to meet infrastructure needs, including potential to tap foreign markets for financing.

## Disadvantages

- Could involve organizational disruption (i.e., reassignment or termination of existing employees) Could encounter labor resistance in an effort to protect and increase public sector jobs Requires careful monitoring, which can be expensive and time-consuming
- Presents tension in the outsourcing relationship – the contractor wants to make a profit and the airport owner wants to cut costs Involves considerable time and effort for the bidding process Could involve buyouts and compensation for existing public workers
- Could involve organizational disruption (i.e., reassignment or termination of existing employees) Difficult to truly measure efficiencies for the purpose of justifying compensation Can discriminate against government departments competing in managed
- competition efforts, as regulations generally prevent them from partnering with private firms or guaranteeing performance Requires careful tracking of contract compliance, which can be a time consuming and substantial undertaking for the airport owner
- Becomes increasingly difficult to attain further improvements and realize the full value of the management fee once initial efficiencies are attained Involves considerable time and effort for bidding process and negotiation of complex legal documents Requires that the project have a revenue stream to repay the debt
- Provides airport less control over the project and facility management Loss of control over the development site and future capacity expansion
- Loss of flexibility to change land uses over period of lease
- Less control over types of activities and quality and appearance Involves considerable upfront planning, time, and expense Involves moderate implementation risk

- Less control of facility utilization especially under airline-financed terminals that run the risk of inefficient utilization of gates and associated terminal space
- Could involve organizational disruption and need to reassign or terminate existing employees Could involve buyouts and compensation for existing public workers
- Involves long-term risk if the project encounters financial problems, i.e., the airport may need to step in (even though it is not financially obligated to do so) to preserve the use of the facility and associated airport capacity
- Can expose the airport to political, legal, operational, and financial risk if the transactions not consummated or if the private entity incurs financial difficulties Involves loss of key revenue streams under parking and cargo privatization
- Involves significant time, effort, and out-of-pocket expense to undertake (for both the public and private sector)
- Involves loss of control by policy makers
- Requires multiple layers of approvals (federal, state, local, tenants, and employees) Can be constrained by existence of airline use and lease agreements
- Involves limitations on aeronautical rate increases and requires airline approval to take money out of the aviation system, which can be difficult to obtain and can reduce the value of the transaction
- Tempts elected officials to cash-out value (“borrow against the future”) without necessarily appreciating and understanding the long-term implications to the airport enterprise
- Involves higher financing costs (for private capital) than public tax-exempt debt
- Could involve buyouts and compensation for existing public
- Workers Can involve implementation risk in the event the bidder desires to get out of the transaction
- Can involve loss of control of the airport by the airport owner, which can be mitigated by including performance standards in the lease

- Affords limited opportunities because many of the largest U.S. airports already operate like commercial enterprises and few of the smaller ones have strong commercial potential
- May result in a renegotiation of the contract due to changing market conditions, which are next to impossible to foresee, because of the long-term nature of these leases (50-99 years)
- Creates long-term responsibility for the airport owner to continue to oversee the performance of the privatized operator, and may also require the airport owner to be ready to operate the airport, if needed, in the event of default or bankruptcy
- Can expose the airport owner to political, legal, operational, and financial risk if the transaction is not consummated or if the private entity incurs financial difficulties
- May create greater tort liability risk for a private operator than a public operator in the event of, for example, an act of terrorism or aircraft accident, since the private operator would not likely be entitled to same immunities as a public entity
- Presents potential for controversy in the event of foreign ownership
- Gives airport owner less control over customer service standards and airport pricing although performance standards can and should be included in the lease
- May involve less consideration of local policy issues, environmental impacts, and community interests in favor of shareholder and investor interests
- May receive less local support if the public owner cannot take money out of the aviation system Provides less access to federal grants

## CHAPTER 6

### CONCLUSION AND PRIVATIZAION NEEDS

The encouraging factors include: continuing growth in air travel requires improvements in infrastructure that most governments cannot afford; improvements in economies of scale through expansion of facilities and concentration of services; still more commercial opportunities to be found for exploitation; investors with longevity have the better chance for continued profitability than would newer entrants.

Privatization seems suitable for airports in more developed countries, because while more developed countries used to rely on government financing, the private sector has more to invest in major infrastructure projects than the government does. Allowing a private sector corporation to make profits could encourage the expansion of facilities sooner than a government-owned airport would do this.

The fears that privatizing airports could be unsuccessful for the buyers and operators because of the untested variables, such as real estate values and external forces acting on an enterprise, seem to have calmed down with the growing body of experience in these operations.

While ownership of facilities might be transferred to the private sector, government regulations still affect the business. A private operator cannot exercise eminent domain; it has to follow laws, while seeking to maximize his gain. Therefore an airport will never operate as an entity that is entirely separate from government.

Now the focus is on the next step. The potential for future privatizations depends on the county's economic development and on its growth potential. In the long run, both central and local authorities may have to pursue the course of even greater diversification and commercialization of airport ownership structures.

## SCOPE FOR FUTURE WORK

The Indian aviation sector has witnessed outstanding growth amid fears of global slow down. The year has been full of activities wherein authorities have sought ways to sustain and maintain the growth rate on a long term basis and the market players to look for and appropriately respond to the opportunities which are coming up. The Indian aviation growth trend has resulted in many lucrative business opportunities for players in the aviation industry.

In spite of this, many of global aviation industry players have remained insular to being a part of India's aviation growth story. This has been largely on account of lack of proper market potential assessment, not being able to find the right business partners, not understanding the legal and policy implications or concern of continuity of growth of aviation sector. In times of current US slowdown and fear of recession, the role of developing economies like India assumes

Greater significance with their thrust for capacity and capabilities enhancement and are looked upon as the prime movers of growth. The Indian government has initiated several reforms and steps to keep the momentum going. In view of the above, we present, in this section of the report, an overview of strategic assessment of the opportunities offered by Indian aviation growth.



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## ***X. Appendix:***

### **Abbreviations**

AII Airports Authority of India

AERA Airport Economic Regulatory Authority

AMEs Aircraft Maintenance Engineers

AMHS Automatic Message Handling System

ATC Air Traffic Control

ATF Aviation Turbine Fuel

ATM Air Traffic Management

ATN Aeronautical Telecommunication Network

CAGR Cumulative Annual Growth Rate

CAT Category

CATC Civil Aviation Training College

CCTV Closed Circuit Television

CISF Central Industrial Security Force

CPL Commercial Pilot License

DGCA Directorate General of Civil Aviation

DRDO Department of Defense Research and Development

EDI Electronic Data Interchange

FBT Fringe Benefit Tax  
FDI Foreign Direct Investment  
FID Flight Information Display System  
FMCG Fast Moving Consumer Goods  
GDP Gross Domestic Product  
GH Ground Handling  
HACCP Hazard Analysis and Critical Control Points  
HAL Hindustan Aeronautics Limited  
IATA International Air Transport Association  
IIFCL India Infrastructure Finance Company Limited  
ISRO Indian Space Research Organization  
IT Information Technology  
LCCs Low Cost Carriers  
MIAL Mumbai International Airport Limited  
MNC Multinational Companies  
MRO Maintenance Repair & Overhaul  
NACIL National Aviation Company of India Limited  
NAL National Aerospace Laboratories  
PAP Project Affected People  
PPP Public Private Partnership  
RFID Radio Frequency Identification  
RMS Risk Management System  
RNFC Route Navigation Facility Charges  
RTA Regional Transport Aircraft  
SAARC South Asian Association for Regional Cooperation  
SPV Special Purpose Vehicle  
VCCS Voice Communication and Control System  
VLJ Very Light Jet