

AIRPORT/AIRLINE ECONOMICS AND INFRASTRUCTURE

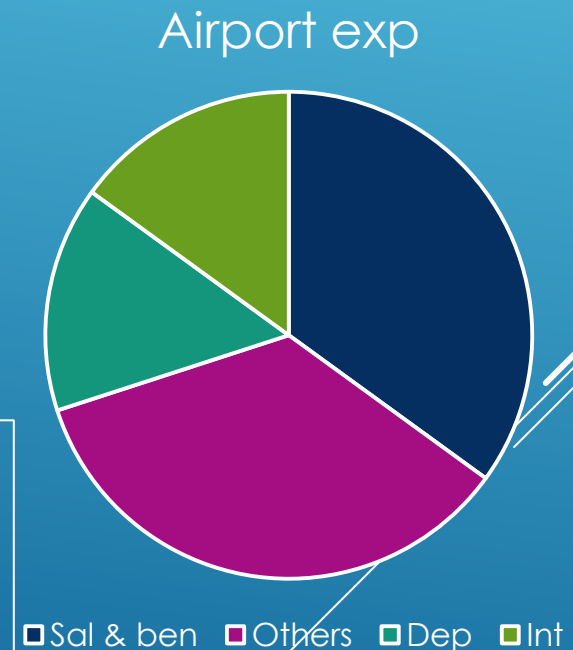
GROUP CAPTAIN AANAND NAIDU POLA

EXPENDITURE AND REVENUE STRUCTURE IN AIRPORTS

EXPENSE PROFILE

- ▶ IT MUST BE EMPHASIZED THAT EACH AIRPORT IS UNIQUE, AND THE
- ▶ ANY AIRPORT'S TOTAL EXPENSE IS COMPOSED OF (1) OPERATING EXPENSE AND (2) CAPITAL EXPENSE,
- ▶ WITH THE MAJOR COMPONENTS FREQUENTLY LOOKING LIKE THIS:
- ▶ OPERATING EXPENSE: SALARIES & BENEFITS
OTHER (UTILITIES, SUPPLIES, ETC.)
- ▶ + CAPITAL EXPENSE: DEPRECIATION
INTEREST
- ▶ = TOTAL EXPENSE

Airports are very capital intensive.
* The largest category of operating cost is usually salaries and benefits.
* Within the category marked "Other", utility expense (electric power and gas) is frequently the largest single item.



EXPENDITURE AND REVENUE STRUCTURE IN AIRPORTS

REVENUE PROFILE

- ▶ LARGE AIRPORTS – FROM CONCESSION
- ▶ SMALL AIRPORTS – FROM GENERAL AVIATION USERS

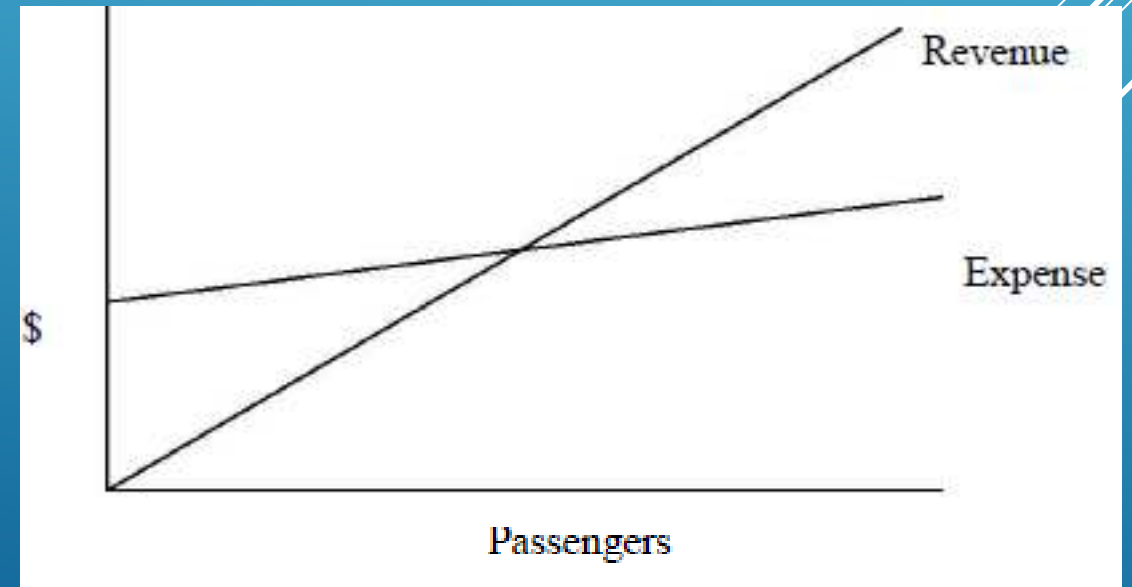
SINGLE AVIATION MARKET

- ▶ SCHEDULED DOMESTIC AIRLINES
 - ▶ TRANSIENT, CORPORATE GEN AVN
 - ▶ CHARTER TRAVEL TO TOURIST DESTINATIONS
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EXPENDITURE AND REVENUE STRUCTURE IN AIRPORTS

RELATIONSHIP BETWEEN REVENUE AND EXPENDITURE

- ▶ Revenue starts from zero, as no customers means no income, however, Expense starts at a fixed amount whether or not any Passengers/aircraft operate
- ▶ Airport revenues increase with passenger traffic



FINANCIAL MANAGEMENT AT AIRPORTS

CONCEPT OF FINANCIAL MANAGEMENT IN AIRPORTS

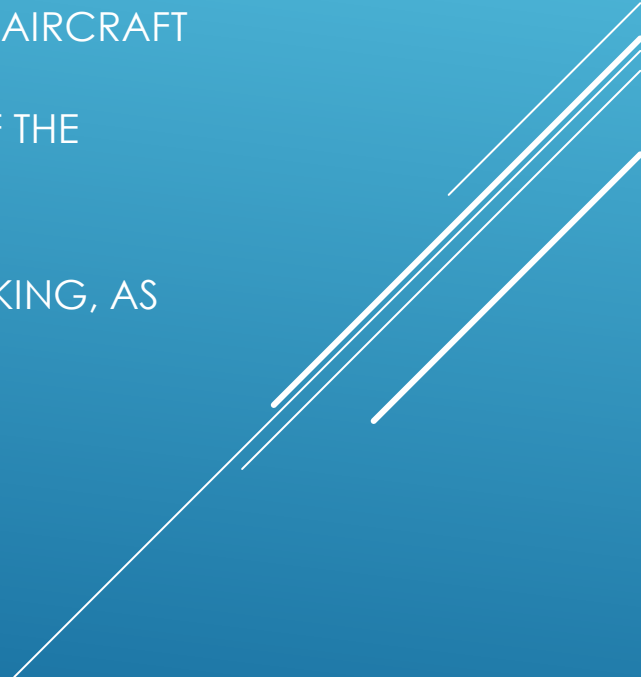
ICAO's Policies on Charges for Airports and Air Navigation Services (Doc 9082, Section I, paragraphs 9-10)

DOC 9082 RECOMMENDS THAT, TO ENSURE THE USE OF BEST PRACTICES OF GOOD CORPORATE GOVERNANCE OF AIRPORTS, STATES SHOULD CONSIDER:

- ▶ OBJECTIVES AND RESPONSIBILITY OF THE ENTITIES
- ▶ SHAREHOLDERS RIGHTS
- ▶ RESPONSIBILITIES OF THE BOARD
- ▶ ROLE AND ACCOUNTABILITY OF THE MANAGEMENT
- ▶ RELATIONSHIPS WITH INTERESTED PARTIES
- ▶ DISCLOSURE OF INFORMATION.

FINANCIAL MANAGEMENT AT AIRPORTS

ECONOMIC PERFORMANCE MANAGEMENT IN AIRPORTS

- ▶ IDENTIFY KEY PERFORMANCE AREAS (KPAS);
 - ▶ DEFINE PERFORMANCE OBJECTIVES TAKING INTO ACCOUNT THE INTERESTS OF AIRCRAFT OPERATORS, END-USERS AND OTHER INTERESTED PARTIES
 - ▶ SELECT PERFORMANCE INDICATORS (AND SUPPORTING METRICS)
 - ▶ ESTABLISH PERFORMANCE TARGETS TAKING INTO ACCOUNT THE INTERESTS OF AIRCRAFT OPERATORS, END-USERS AND OTHER INTERESTED PARTIES
 - ▶ CREATE AND IMPLEMENT A PLAN, IN COOPERATION WITH OTHER MEMBERS OF THE AVIATION COMMUNITY, TO ACHIEVE PERFORMANCE TARGETS
 - ▶ CONSIDER, AND WHERE APPROPRIATE, PROVIDE PERFORMANCE INCENTIVES
 - ▶ PERIODICALLY ASSESS ACTUAL PERFORMANCE RESULTS BY USING BENCHMARKING, AS APPROPRIATE
 - ▶ PUBLISH PERFORMANCE REPORTS ON THE RESULTS ACHIEVED.
- 

PRICE REGULATIONS & AIRPORTS CONCESSIONS

PRICE REGULATIONS

- ▶ TRADITIONALLY AIRPORTS PERCIEVED AS MONOPOLIES
 - ▶ SO REGULATIONS REQUIRED TO PROTECT CUSTOMERS
 - ▶ 4 TYPES OF REGULATIONS
 - ▶ RATE OF RETURN REGULATION
 - ▶ COST OF SERVICE REGULATION
 - ▶ PRICE CAP REGULATION
 - ▶ INTERVENTION REGULATION
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PRICE REGULATIONS & AIRPORTS CONCESSIONS

TYPES OF AIRPORT CHARGES

- ▶ AERONAUTICAL VS NON-AERONAUTICAL FEES
- ▶ AERONAUTICAL COSTS ARE THOSE ASSOCIATED WITH PROVIDING
 - ▶ RUNWAY SERVICES, AND
 - ▶ TERMINAL SERVICES FOR TICKETING AND BOARDING PASSENGERS.
- ▶ NON-AERONAUTICAL COSTS ARE THOSE ASSOCIATED WITH OTHER TERMINAL SERVICES, COMMERCIAL LAND DEVELOPMENT, ETC

PRICE REGULATIONS & AIRPORTS

CONCESSIONS

TYPICAL AIRPORT CHARGES

- ▶ **LANDING FEES.** MOST AIRPORTS CHARGE FEES BASED ON THE WEIGHT OF THE AIRCRAFT. HEAVIER AIRCRAFT PAY MORE BOTH BECAUSE OF THE GREATER WEIGHT AND BECAUSE THE FEE PER TONNE OF LANDED WEIGHT ITSELF IS OFTEN HIGHER.
- ▶ IN CANADA, IT IS COMMON FOR AIRPORT TO HAVE THREE —WEIGHT CLASSES, II WITH THE HIGHEST CLASS CAPTURING ALMOST ALL JET AIRCRAFT. LANDING FEES ARE PAID BY PASSENGER AIRLINES, CARGO AIRLINES AND NON-COMMERCIAL AIRCRAFT
- ▶ **TERMINAL FEES.** THESE ARE FEES FOR USE OF THE —COMMON AREAS II OF THE AIRPORT TERMINAL, SUCH AS BOARDING GATES AND QUEUING SPACE IN TICKETING AREAS. THESE FEES ARE TYPICALLY ASSESSED ON THE BASIS OF THE NUMBER OF SEATS ON THE AIRCRAFT. A FEW AIRPORTS ASSESS FEES BASED ON THE NUMBER OF ON-BOARD PASSENGERS, BUT THIS REQUIRES MORE DETAILED DATA COLLECTION. ONLY PASSENGER CARRIERS PAY TERMINAL FEES. CARGO CARRIERS AND NON-COMMERCIAL USERS DO NOT REQUIRE TERMINAL SERVICES. OTHER TERMINAL FEES. SOME AIRPORTS WILL HAVE ADDITIONAL CHARGES FOR TERMINAL SERVICES. FOR EXAMPLE, THE VANCOUVER INTERNATIONAL AIRPORT HAS A —TURN AROUND FEE II CHARGED ONLY TO THOSE CARRIERS WHO USE THE TRANSBORDER CUSTOMS FACILITY. THIS FEE ALLOWS FOR COST RECOVERY FOR SPACE AND FACILITIES REQUIRED FOR U.S. PRECLEARANCE OPERATIONS.

PRICE REGULATIONS & AIRPORTS CONCESSIONS

TYPICAL AIRPORT CHARGES

- ▶ **SECURITY CHARGE.** PRIOR TO TRANSFER OF AIRPORTS, SECURITY SERVICES WERE PROVIDED AT NO CHARGE BY FEDERAL SECURITY SERVICES. AFTER TRANSFER, THESE SERVICES WERE WITHDRAWN AND AIRPORTS WERE REQUIRED TO PROVIDE THEIR OWN SECURITY SERVICES. MOST AIRPORTS INSTITUTED A FEE ON AIR CARRIERS TO RECOVER THESE COSTS. GENERALLY THIS IS A COST PER SEAT OR A SCHEDULE OF FIXED FEES BASED ON TYPE OF AIRCRAFT.
- ▶ **EMERGENCY RESPONSE FEE.** A FEW AIRPORTS HAVE SEPARATED EMERGENCY RESPONSE SERVICES COSTS INTO A SEPARATE CATEGORY AND ASSESS A SEPARATE FEE
- ▶ **AIRPORT IMPROVEMENT FEES.** THESE FEES ARE ASSESSED BY NOT-FOR-PROFIT AIRPORT AUTHORITIES ON PASSENGERS. THESE FEES DO NOT HAVE DIRECT COSTS ASSOCIATED WITH THEM. INSTEAD THEY ARE FEES INTENDED TO GENERATE CASH CURRENT WITH OR IN ADVANCE OF CONSTRUCTION PROJECTS. WHILE AIRPORT ACCOUNTING PRACTICE VARIES SOMEWHAT, THESE FEES ARE NOT GENERALLY CONSIDERED TO BE AERONAUTICAL FEES.
- ▶ **COMMERCIAL FEES.** THESE ARE CHARGES FOR A LARGE VARIETY OF NON-AERONAUTICAL SERVICES. THEY INCLUDE FEES FOR SPACE RENTALS FOR COMMERCIAL ACTIVITIES, AIRLINE BUSINESS CLASS LOUNGES, FEES FOR ADVERTISING AND OTHER DISPLAYS, LAND RENTALS FOR CARGO AND MAINTENANCE FACILITIES, FEES FOR PROVISION OF NETWORK/PHONE/ELECTRIC SERVICES, CURB USE FEES FOR COMMERCIAL TRANSPORTATION VEHICLES, ETC.

PRICE REGULATIONS & AIRPORTS CONCESSIONS

SCOPE OF PRICE REGULATION

- ▶ *RATE OF RETURN REGULATION*
 - ▶ *COST OF SERVICE REGULATION*
 - ▶ *PRICE OF SERVICE REGULATION*
 - ▶ *SINGLE TILL PRICE CAP*
 - ▶ *MULTI-TILL PRICE CAP*
 - ▶ *TRIGGER REGULATION*
 - ▶ *SELF REGULATION*
 - ▶ *REGULATION BY CONTRACT*
- 

AIRPORTS CONCESSIONS & ITS IMPACT ON REVENUES

- ▶ *AIRPORT REVENUE STRUCTURES*
 - ▶ *FACTORS INFLUENCING CONCESSION REVENUES*
 - ▶ *SELECTION OF CONCESSIONAIRES AND CONTRACT TERMS*
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AIRPORTS CONCESSIONS & ITS IMPACT ON REVENUES

AIRPORT REVENUE STRUCTURES

- ▶ TRADITIONALLY COMMERCIAL ISSUES A PERIPHERAL CONCERN TO NEEDS OF AERONAUTICAL OPERATIONS
- ▶ AIM OF THE AIRPORT AUTHORITY TO PROCESS PASSENGERS AS QUICKLY AND EFFICIENTLY AS POSSIBLE
- ▶ TWO DIFFERENT APPROACHES
 - ▶ TRADITIONAL VIEW – AIRPORT EXISTS TO ENSURE THE EFFICIENT MOVEMENT OF PASSENGERS BETWEEN ONE DESTINATION AND ANOTHER
 - ▶ ALTERNATIVE APPROACH – VIEWS AIRPORTS WITHIN A BROADER FRAMEWORK OF ECONOMIC CHANGE AND COMMERCIAL OPPORTUNITY
- ▶ COMMERCIAL-ORIENTED AIRPORT APPROACH SUGGESTS THAT AIRPORT EVOLVES TO BECOME A MORE SOPHISTICATED MARKET ENTITY THAT MAY BE DESCRIBED AS —MULTIPOINT SERVICE-PROVIDER FIRM

AIRPORTS CONCESSIONS & ITS IMPACT ON REVENUES

AIRPORT REVENUE STRUCTURES

AERONAUTICAL	NON-AERONAUTICAL
LANDING FEES	CONCESSIONS
PASSENGER FEES	RENTS
AIRCRAFT PARKING FEES	DIRECT SALES(shops, catering etc by airport operator)
HANDLING FEES(If handled by airport operator)	CAR PARK(if by airport operator)
Other aeronautical fees (ATC< lighting, aero bridges etc)	RECHARGES (for water, electricity etc)
	OTHER NON-AERONAUTICAL REVENUE (consultancy, visitor and business services, property devpt etc)

AIRPORTS CONCESSIONS & ITS IMPACT ON REVENUES

FACTORS INFLUENCING CONCESSION REVENUES

Concession in its original context means the payment that the airport authority charges the owner or manager of an operation to conduct commercial activities in the airport, whereas rent or lease refers to the right to occupy certain defined premises or a specific area of realty

PRINCIPAL DETERMINANTS OF CONCESSION PERFORMANCE

- ▶ TOTAL TRAFFIC HANDLED BY AN AIRPORT
- ▶ TOTAL AMOUNT OF SPACE ALLOCATED FOR RETAILING AND OTHER COMMERCIAL ACTIVITIES
- ▶ CHARACTERISTICS OF PASSENGER TRAFFIC AND BUYING BEHAVIOUR OF THOSE PASSENGERS
- ▶ OPERATIONS AND MANAGEMENT OF CONCESSION
- ▶ CHARACTERISTICS OF CONTRACT AND RENTAL FEES
- ▶ MARKETING STRATEGY
- ▶ PRICING STRATEGY

AIRPORTS CONCESSIONS & ITS IMPACT ON REVENUES

SELECTION OF CONCESSIONAIRES AND CONTRACT TERMS

PROCESS FOR SUCCESSFUL LETTING OF CONCESSIONS

- ▶ DEVELOP PORTFOLIO STRATEGY
 - ▶ DEFINE MARKET STRATEGY FOR EACH CONCESSION
 - ▶ DETERMINE SPACE AND LOCATION REQUIREMENTS
 - ▶ PROACTIVELY MARKET THE AIRPORT TO POTENTIAL CONCESSIONAIRES
 - ▶ PREPARE DESIGN CONCEPTS AND SPECIFICATIONS FOR CONTRACTS
 - ▶ TENDER/NEGOTIATION/SELECTION PROCESS
 - ▶ MONITOR AND REVIEW CONCESSIONAIRE PERFORMANCE
 - ▶ WORK WITH CONCESSIONAIRES ON IMPROVEMENTS AND REDEVELOPMENT
- 

AIR TRANSPORT INFRASTRUCTURE ; SUPPLY AND DEMAND

NATURE OF AIR TRANSPORT INFRASTRUCTURE

- ▶ AIR TRANSPORT INFRASTRUCTURE (ATI) PROVIDES NODES IN A NETWORK OF DOMESTIC AND INTERNATIONAL AIR LINKS THAT IS VITAL FOR THE DELIVERY OF AIR TRANSPORT
- ▶ IT INCLUDES THE PHYSICAL STRUCTURES, NAMELY, AIRPORTS AND AIR TRAFFIC CONTROL (ATC) FACILITIES, AND THE ORGANIZATIONS INVOLVED IN COORDINATING THEIR PROVISION AND USE
- ▶ WITHOUT ATI, AIR TRANSPORT CANNOT FUNCTION, AND WITHOUT A WELL-FUNCTIONING AIR TRANSPORT SYSTEM AND THE INTERNATIONAL LINKAGES
- ▶ IT PROVIDES, NATIONAL MARKETS WILL BE SMALLER AND SOME MARKETS MAY NOT EVEN EXIST, PARTICULARLY FOR LANDLOCKED, ISOLATED, AND LOW-POPULATION-DENSITY COUNTRIES
- ▶ IN THE CURRENT GLOBAL MARKETPLACE, ATI IS CRITICAL TO DEVELOPMENT
- ▶ ATI, LIKE ALL INFRASTRUCTURE, IS A CAPITAL GOOD
- ▶ ATI IS NOT A PURE PUBLIC GOOD, AND THEREFORE, IT IS CAPABLE OF BEING PRICED AND IS CHARGEABLE , HENCE HAS THE POTENTIAL TO BE FINANCIALLY SELF-SUSTAINING

AIR TRANSPORT INFRASTRUCTURE ; SUPPLY AND DEMAND

SUPPLY OF AIRPORT AND AIR NAVIGATION SERVICES

- ▶ AIRPORTS PROVIDE THE INFRASTRUCTURE AND FACILITIES NECESSARY TO FACILITATE AIR TRANSPORT
- ▶ THE ESSENTIAL ELEMENTS OF AN AIRPORT INCLUDE RUNWAYS, TAXIWAYS AND AIRFIELD LIGHTING, APRONS AND RAMP FACILITIES, TERMINAL BUILDINGS FOR PASSENGER PROCESSING THROUGH CHECK-IN AND SECURITY, BAGGAGE SORTING AND FREIGHT), AND GATE LOUNGES (WHERE PASSENGERS CONGREGATE TO BOARD AIRCRAFT)
- ▶ GROUND-HANDLING SERVICES ARE PROVIDED WITHIN AIRPORTS
- ▶ RESPONSIBILITY FOR ENSURING THE PROVISION OF SECURITY AND FIRE AND RESCUE GENERALLY HAS BEEN VESTED WITH THE AIRPORT OPERATOR
- ▶ THE PROVISION OF ANS INVOLVES AIRPORT AND EN ROUTE ATC IS THE RESPONSIBILITY OF THE CIVIL AVIATION AUTHORITY

AIR TRANSPORT INFRASTRUCTURE ; SUPPLY AND DEMAND

RECOVERY OF COSTS OF SUPPLY

- ▶ COSTS OF PROVIDING SERVICES SHOULD BE BORNE BY THE USERS OF THE INFRASTRUCTURE, THAT IS, BY AIRLINES AND AIRCRAFT OPERATORS, AND EVENTUALLY BY THE AIRLINES' CUSTOMERS
- ▶ AIRPORT OPERATORS RECEIVE REVENUES FROM CHARGES FOR FACILITIES AND SERVICES DEEMED TO BE —ESSENTIAL TO ACCOMMODATE AIRCRAFT MOVEMENTS AND TO PROCESS PASSENGERS

AIR TRANSPORT INFRASTRUCTURE ; SUPPLY AND DEMAND

RECOVERY OF COSTS OF SUPPLY

- ▶ SUPPLEMENTARY FACILITIES, SUCH AS DEPARTURES, BAGGAGE SYSTEMS, CHECKIN DESKS, AND CARGO AND MAINTENANCE SHEDS, ARE SUBJECT TO SEPARATE CHARGES BECAUSE DIFFERENT AIRLINES HAVE DIFFERENT REQUIREMENTS IN THESE AREAS
- ▶ ICAO GUIDELINES FOR AIRPORT OPERATORS SET OUT BROAD PRINCIPLES ON THE COSTS TO BE RECOVERED THROUGH AIRPORT CHARGES AND ON THE STRUCTURE OF THOSE CHARGES – BUT NOT MANDATORILY FOLLOWED
- ▶ AIRPORT CHARGES, ARE REGULATED BY THE CHICAGO CONVENTION, WHICH REQUIRES NON-DISCRIMINATION ON AIRPORT ACCESS AND CHARGES. FURTHER CONSTRAINTS MAY BE IMPOSED IN BILATERAL AIR SERVICES AGREEMENTS

AIR TRANSPORT INFRASTRUCTURE ; SUPPLY AND DEMAND

RECOVERY OF COSTS OF SUPPLY

- ▶ AIRPORTS (PARTICULARLY MAJOR ONES) HAVE POTENTIAL TO EARN VARIOUS FORMS OF ECONOMIC RENT, NAMELY, LOCATION AND MONOPOLY RENTS. LOCATION RENTS EXIST BECAUSE USERS OF THE AIRPORT FOR ECONOMIC ACTIVITY ARE PREPARED TO PAY A PREMIUM FOR PREFERRED LOCATIONS. CENTRAL TO THIS NOTION IS THE SCARCITY VALUE OF LAND. MONOPOLY RENTS ARISE FROM AIRPORT MARKET POWER AND DISCRETION OVER PRICE
- ▶ CHARGES FOR EN ROUTE ANS, AIR NAVIGATION SERVICE PROVIDERS (ANSPS) (TYPICALLY A STATUTORY MONOPOLY) CALCULATE COST BASED ON THE TOTAL FACILITIES AND LABOUR USED TO PROVIDE SERVICES, WHICH MAY INCLUDE MILITARY EQUIPMENT USED TO PROVIDE SERVICES TO COMMERCIAL AIR TRAFFIC. COMBINED WITH THE PROJECTED WORKLOAD, THE COST BASE IS USED TO CALCULATE A RATE PER UNIT OF SERVICE
- ▶ SOME NATIONS SUPPORT ATI THROUGH SUBSIDIES OUT OF GENERAL TAXATION OR OTHER GOVERNMENT INCOME, TAXES ON AVIATION-RELATED ACTIVITIES, LOANS, EQUITY INJECTIONS, ACCEPTING LOW RETURNS ON PAST INVESTMENTS, OR PREFERRED TAX TREATMENT

AIR TRANSPORT INFRASTRUCTURE

SUPPLY AND DEMAND

COST CONDITIONS

- ▶ ATI, AND AIRPORTS IN PARTICULAR, CHARACTERIZED BY THE FACT THAT CAPACITY CAN BE INCREASED ONLY IN LARGE CHUNKS I.E ENHANCEMENTS TO EXISTING (OR NEW) INFRASTRUCTURE REQUIRED TO MEET DEMAND ARE INDIVISIBLE AND ENTAIL LUMPY INVESTMENT AT CONSIDERABLE INTERVALS
- ▶ NEW AIRPORT TERMINALS OR RUNWAYS ARE CLASSIC EXAMPLES
- ▶ HUGE INVESTMENTS REQUIRE HEAVY FINANCE AND ARE INHERENTLY RISKY BECAUSE CONSTRUCTION AND MAINTENANCE COSTS MAY RISE SIGNIFICANTLY DURING THE PERIOD BETWEEN DESIGN OF THE FACILITY AND ACQUISITION OF FINANCE AND ITS CONSTRUCTION
- ▶ ABILITY OF AIRPORT INFRASTRUCTURE PROVIDERS TO DELIVER INCREASED CAPACITY AND IMPROVED SERVICES AT REASONABLE COST TO USERS WILL BE A SUBSTANTIAL DETERMINANT OF WHETHER THE AIR TRANSPORT INDUSTRY WILL BE ABLE TO RESPOND TO ANTICIPATED DEMAND GROWTH
- ▶ BASIC CHOICE IS BETWEEN INVESTING NOW AND AVOIDING A DETERIORATION OF QUALITY IN THE EVENT OF A SURGE IN THE DEMAND FOR AIR TRANSPORT, OR DELAYING INVESTMENTS AND AVOIDING LARGE FIXED INVESTMENTS THAT COME WITH VARYING LEVELS OF FINANCING COSTS

AIR TRANSPORT INFRASTRUCTURE ; SUPPLY AND DEMAND

EVOLUTION OF ATI PROVISION

- ▶ IN DEVELOPING AND DEVELOPED ECONOMIES, THE PERCEPTION OF ATI AS A STRATEGIC ASSET REQUIRING GOVERNMENT PROVISION FOR POLITICAL AND SOCIAL REASONS, SUCH AS ITS ROLE IN GENERAL ECONOMIC DEVELOPMENT AND PROSPERITY OR IN SUSTAINING EMPLOYMENT, PREVAILS
- ▶ RECENT DRIVE TOWARD PVT SECTOR PARTICIPATION, PARTICULARLY IN AIRPORTS, LIKE HYDERABAD, DELHI, BANGALORE ETC STRIVING TOWARD GREATER EFFICIENCY FOR THE BENEFIT OF THE GROWTH AND DEVELOPMENT OF AIR TRANSPORT
- ▶ PPP SUCH AS COCHIN, CANNANORE AIRPORTS ALSO BENEFIT GROWTH

AIR TRANSPORT INFRASTRUCTURE ; SUPPLY AND DEMAND

AIR TRANSPORT DEMAND

- ▶ DEMAND FOR ATI IS A DERIVED DEMAND FROM THE MARKET FOR AIRLINE SERVICES
- ▶ DEMAND FOR DOMESTIC AIR TRAVEL DEPENDS (TO A GREATER OR LESSER EXTENT) ON THE QUALITY OF OTHER TRANSPORT INFRASTRUCTURE LINKS, NAMELY, ROAD AND RAIL
- ▶ INTERNATIONAL TRAVEL DEPENDS ON THE OPENNESS OF THE ECONOMY
- ▶ THE GREATER THE EXTENT OF LIBERALIZATION, THE MORE DEMAND
- ▶ THE GREATER THE AMOUNT OF COMPETITION, THE MORE COMPLEX ATI PROVISION BECOMES
- ▶ DEMAND FOR INTERNATIONAL TRAVEL ALSO DEPENDS ON THE GEOGRAPHY OF THE COUNTRY

INTERNATIONAL AVIATION : OPEN SKIES AND GLOBAL AVIATION

ONE OF THE GREAT BENEFITS OF AVIATION HAS BEEN ITS ABILITY TO MAKE THE WORLD SMALLER AND PROMOTE GLOBALIZATION

OPEN SKIES AGREEMENT

- ▶ 1992 FIRST AGREEMENT BETWEEN USA AND NETHERLANDS
- ▶ KEY PROVISIONS FOR OPEN SKY AGREEMENTS
 - ▶ THE FIRST, AND PROBABLY THE MOST IMPORTANT, PROVISION CONTAINED IN ALL OPEN SKIES AGREEMENTS IS THE ABSENCE OF RESTRICTIONS ON INTERNATIONAL ROUTE RIGHTS
 - ▶ SECOND -THAT AIRLINE PRICING SHOULD BE DETERMINED BY MARKET FORCES
 - ▶ THIRD MAJOR PROVISION IS ENSURING FAIR AND EQUAL OPPORTUNITY TO COMPETE
 - ▶ MECHANISMS FOR DISPUTE SETTLEMENT
 - ▶ CONSULTATION PERTAINING TO UNFAIR PRACTICES,
 - ▶ LIBERAL LEGAL CHARTER AGREEMENTS (WHEREBY CARRIERS CAN CHOOSE TO OPERATE UNDER THE CHARTER REGULATIONS OF EITHER COUNTRY)
 - ▶ AGREEMENTS PERTAINING TO THE SAFE AND SECURE OPERATION OF FLIGHTS BETWEEN THE TWO COUNTRIES

INTERNATIONAL AVIATION : OPEN SKIES AND GLOBAL AVIATION

BENEFITS FROM OPEN SKIES AGREEMENT

- ▶ SIMILAR TO THOSE OBTAINED FROM DOMESTIC DEREGULATION
- ▶ AIRLINES ARE ABLE TO FLY MORE ROUTES, WHICH ULTIMATELY LEADS TO INCREASED COMPETITION, RESULTING IN LOWER AVERAGE AIRFARES
- ▶ ENABLES NEW CITY PAIRS (DOMESTIC TO FOREIGN) TO BE FLOWN THAT WERE PREVIOUSLY NOT POSSIBLE
- ▶ CONSUMERS BENEFIT FROM OPEN SKIES AS THEY RECEIVE MORE FREQUENT SERVICE AND PAY LOWER PRICES AS A RESULT OF INCREASED COMPETITION
- ▶ AIRLINES ALSO BENEFIT FROM OPEN SKIES AGREEMENTS, BUT VARY, DEPENDING ON THE AIRLINE'S POSITION IN THE MARKET
- ▶ CARRIERS THAT ARE CURRENTLY EXCLUDED FROM A MARKET (OR HAVE LIMITED SERVICE) GAIN MORE FROM OPEN SKIES AGREEMENTS

INTERNATIONAL AVIATION : OPEN SKIES AND GLOBAL AVIATION

OPEN SKY POLICY - INDIA

- ▶ NATIONAL CIVIL AVIATION POLICY 2016, INDIA CAN ENTER INTO AN 'OPEN SKY' AIR SERVICES AGREEMENT ON A RECIPROCAL BASIS WITH SAARC NATIONS AND COUNTRIES BEYOND A 5,000 KILOMETRE RADIUS FROM THE INDIAN CAPITAL, NEW DELHI
- ▶ 2005 AGREEMENT WITH USA
- ▶ 2016 WITH JAMAICA, GREECE, GUYANA, FINLAND, CZECH REPUBLIC, SPAIN AND SRI LANKA
- ▶ 2017 WITH JAPAN
- ▶ AGREEMENT WITH SOME RESTRICTIONS WITH UK A LIMITED OPEN-SKY WITH ASEAN AND BILATERAL AGREEMENTS WITH MORE THAN 100 COUNTRIES

OPEN SKIES AND GLOBAL AVIATION

GLOBAL AIRLINE ALLIANCES

- ▶ MAJOR BENEFIT OF GLOBAL ALLIANCES TO THE AIRLINES AND CONSUMERS IS AN EXPANDED AND OPTIMIZED ROUTE NETWORK
- ▶ PROVIDE A TRAVELER WITH GREATER FLIGHT OPTIONS AND HELP MAKE THE TRAVELING EXPERIENCE MORE ENJOYABLE
- ▶ ALLIANCES ENABLE AIRLINES TO ACHIEVE BENEFITS FROM ECONOMIES OF SCOPE
- ▶ TO BE SUCCESSFUL, THE CONNECTIONS BETWEEN CARRIERS IN AN ALLIANCE MUST BE SEAMLESS AND EASY
- ▶ JOINT INFORMATION TECHNOLOGY COULD GREATLY REDUCE COSTS AMONG ALLIANCE MEMBERS
- ▶ ANOTHER MAJOR BENEFIT OF AIRLINE ALLIANCES IS COST RED UCTION IN MAINTENANCE AND OPERATIONAL ACTIVITIES AS A RESULT OF BULK PURCHASING AND SHARING OF RESOURCES
- ▶ E.G TATA SINGAPORE AIRLINES IN INDIA
- ▶ STAR ALLIANCE IS ONE OF THE WORLD'S LARGEST GLOBAL AIRLINE ALLIANCES, AIR INDIA BEING PART OF IT

OPEN SKIES AND GLOBAL AVIATION

GLOBAL AIRLINE ALLIANCES

▶ DISADVANTAGES

- ▶ greatest cost involved in joining global alliances is that incurred in bringing information technology systems in line with other alliance members
 - ▶ increased overhead costs
 - ▶ One area of potential concern for various alliance partners is, as new airlines are added to the alliance, the importance of an existing airline may be reduced
 - ▶ Data Protection Issues
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ECONOMICS OF AVIATION SAFETY AND SECURITY

- ▶ TERM "SAFETY" IS OFTEN USED INCORRECTLY AS AN ABSOLUTE VALUE- THAT IS, ONE IS EITHER SAFE OR UNSAFE
- ▶ SAFETY IS NEVER ABSOLUTE, SINCE THERE IS ALWAYS SOME PROBABILITY OF AN ACCIDENT
- ▶ BENEFITS OF SAFETY ARE UNDENIABLE-NOT ONLY FROM A MORAL STANDPOINT, BUT ALSO FROM AN ECONOMIC STANDPOINT
- ▶ POTENTIAL ECONOMIC BENEFITS OF AVIATION SAFETY INCLUDE
 - ▶ STRENGTHENED CONSUMER DEMAND
 - ▶ STRENGTHENED LABOUR SUPPLY
 - ▶ REDUCED INSURANCE COSTS
 - ▶ LOWER COST OF CAPITAL LOWER LIABILITY RISK
 - ▶ REDUCED COSTS ASSOCIATED WITH GOVERNMENT FINES OR PENALTIES

OPEN SKIES AND GLOBAL AVIATION

INCENTIVES FOR AVIATION SAFETY

- ▶ PASSENGERS' REACTION
 - ▶ LABOUR REACTION
 - ▶ FINANCIAL CONCERNS
 - ▶ INSURANCE COST AND LIABILITY RISKS
 - ▶ GOVERNMENT ENFORCEMENT
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OPEN SKIES AND GLOBAL AVIATION

INCENTIVES FOR AVIATION SAFETY

▶ PASSENGERS' REACTION

- ▶ AN AIRLINE THAT IS PERCEIVED TO BE LESS SAFE, AS A RESULT OF AN ACCIDENT OR INVESTIGATION, IS LIKELY TO SEE A DECREASE IN DEMAND COMPARED TO "SAFER" AIRLINES
- ▶ OPPOSED TO THE ACTUAL LEVEL OF SAFETY, SINCE PASSENGERS USUALLY KNOW VERY LITTLE ABOUT THE ACTUAL LEVEL OF SAFETY OF THEIR FLIGHT
- ▶ PERCEPTIONS OF AVIATION SAFETY ARE LARGELY A RESULT OF ACCIDENTS, PARTICULARLY ACCIDENTS THAT RECEIVE EXTENSIVE MEDIA ATTENTION

OPEN SKIES AND GLOBAL AVIATION

INCENTIVES FOR AVIATION SAFETY

▶ LABOUR REACTION

- ▶ EMPLOYEES DO NOT WANT TO WORK IN AN ENVIRONMENT WHICH THEY BELIEVE IS UNSAFE
- ▶ RESULT OF THE PERCEPTION OR THE REALITY OF REDUCED SAFETY, EMPLOYEES, PARTICULARLY FLYING CREW, MAY FEEL THAT THE AIRLINE IS ENGAGING IN QUESTIONABLE SAFETY PRACTICES

OPEN SKIES AND GLOBAL AVIATION

INCENTIVES FOR AVIATION SAFETY

▶ FINANCIAL CONCERNS

- ▶ STOCK MARKET WILL ALWAYS REACT NEGATIVELY TOWARD AN AIRLINE THAT EXPERIENCES AN ACCIDENT, PARTICULARLY ONE THAT INVOLVES FATALITIES
- ▶ A LOSS OF EQUITY VALUE FOR AN AIRLINE WILL HAVE OTHER, AND POSSIBLY GREATER, NEGATIVE FINANCIAL EFFECTS
- ▶ AIRLINE WILL FIND IT MORE EXPENSIVE TO RAISE CAPITAL, AND THIS CAN BE QUITE SERIOUS SINCE AIRLINES ARE HIGHLY CAPITAL INTENSIVE

OPEN SKIES AND GLOBAL AVIATION

INCENTIVES FOR AVIATION SAFETY

- ▶ INSURANCE COSTS AND LIABILITY RISKS
 - ▶ AS A RESULT OF AN AIRLINE ACCIDENT, PARTICULARLY IF THE AIRLINE IS DETERMINED TO BE LIABLE TO ANY EXTENT, THE AIRLINE'S INSURANCE PREMIUMS ARE LIKELY TO INCREASE DRAMATICALLY IN THE FUTURE
 - ▶ SUCH INCREASES CAN HAVE A SIGNIFICANT EFFECT ON AN AIRLINE'S PROFIT MARGINS
 - ▶ RELATED TO INSURANCE PREMIUMS, AIRLINES WILL FIND THAT THEIR LIABILITY RISKS WILL INCREASE SUBSTANTIALLY AS A RESULT OF AN ACCIDENT

OPEN SKIES AND GLOBAL AVIATION

INCENTIVES FOR AVIATION SAFETY

- ▶ GOVERNMENTAL ENFORCEMENT
 - ▶ FINES LEVIED BY THE GOVERNMENT ARE SUBSTANTIAL AND PROVIDE AN INCENTIVE FOR SAFETY,
 - ▶ THE GREATEST THREAT POSED TO AN AIRLINE WOULD BE THAT OF A COMPLETE SHUTDOWN DUE TO A SEVERE VIOLATION IN SAFETY PRACTICES
 - ▶ AN ORDER AN AIRLINE TO CEASE OPERATIONS: IN SUCH AN EVENT NOT ONLY WOULD THE AIRLINE'S REVENUE BE EFFECTIVELY CUT OFF, BUT IT WOULD ALSO HAVE TO PAY SIZEABLE COSTS AND PENALTIES

OPEN SKIES AND GLOBAL AVIATION

CAUSE OF AVIATION ACCIDENTS

- ▶ FLIGHT CREW ERROR
 - ▶ AIRCRAFT MALFUNCTION
 - ▶ WEATHER CONDITIONS
 - ▶ AIRPORT/AIR TRAFFIC CONTROL
 - ▶ MAINTENANCE
 - ▶ MISCELLANEOUS/ OTHER LIKE HIJACK ETC
- 
- Three parallel white lines of varying lengths are positioned in the bottom right corner of the slide, slanted diagonally upwards from left to right.

OPEN SKIES AND GLOBAL AVIATION

BASIC ECONOMICS OF SAFETY

- ▶ TO UNDERSTAND THE ECONOMICS OF AVIATION SAFETY, ONE NEEDS TO LOOK AT THE INDUSTRY FROM THE MACRO-LEVEL, WHERE THE BENEFITS OF SAFETY REGULATIONS TO CONSUMERS AND COMPANIES ARE WEIGHED AGAINST THE COSTS OF IMPOSING THE REGULATIONS
- ▶ MANY SAFETY REGULATIONS ENACTED BY GOVERNMENTS ARE BLANKET RESPONSES TO POTENTIAL THREATS, OR MEDIA-GENERATED REACTIONS THAT MERELY ALLEVIATE PASSENGER CONCERNS WHILE NOT INCREASING SAFETY IN ANY SUBSTANTIAL WAY.eg. REMOVAL OF SHOES AND BELTS
- ▶ ELIMINATING COSTLY AIRLINE REGULATIONS THAT DO LITTLE OR NOTHING TO IMPROVE SAFETY WOULD REDUCE TICKET PRICES, DRAW PEOPLE AWAY FROM CARS AND RAIL AND TO AIRCRAFT, THUS IMPROVING TOTAL TRAVEL SAFETY

OPEN SKIES AND GLOBAL AVIATION

SAFETY PREVENTION

- ▶ MAIN REASONS FOR THE RAPIDLY DECREASING AVIATION ACCIDENT RATE SINCE THE 1950S ARE THE VARIOUS SAFETY PROGRAMS/INVENTIONS' ADOPTED BY SAFETY REGULATORS, AIRLINES, AND AIRCRAFT MANUFACTURERS
- ▶ METHODS TO INCREASE SAFETY
 - ▶ AGING AIRCRAFT REGULATIONS
 - ▶ COLLISION AVOIDANCE SYSTEMS
 - ▶ WIND-SHEAR DETECTION
 - ▶ DE-ICING
 - ▶ HUMAN FACTORS