

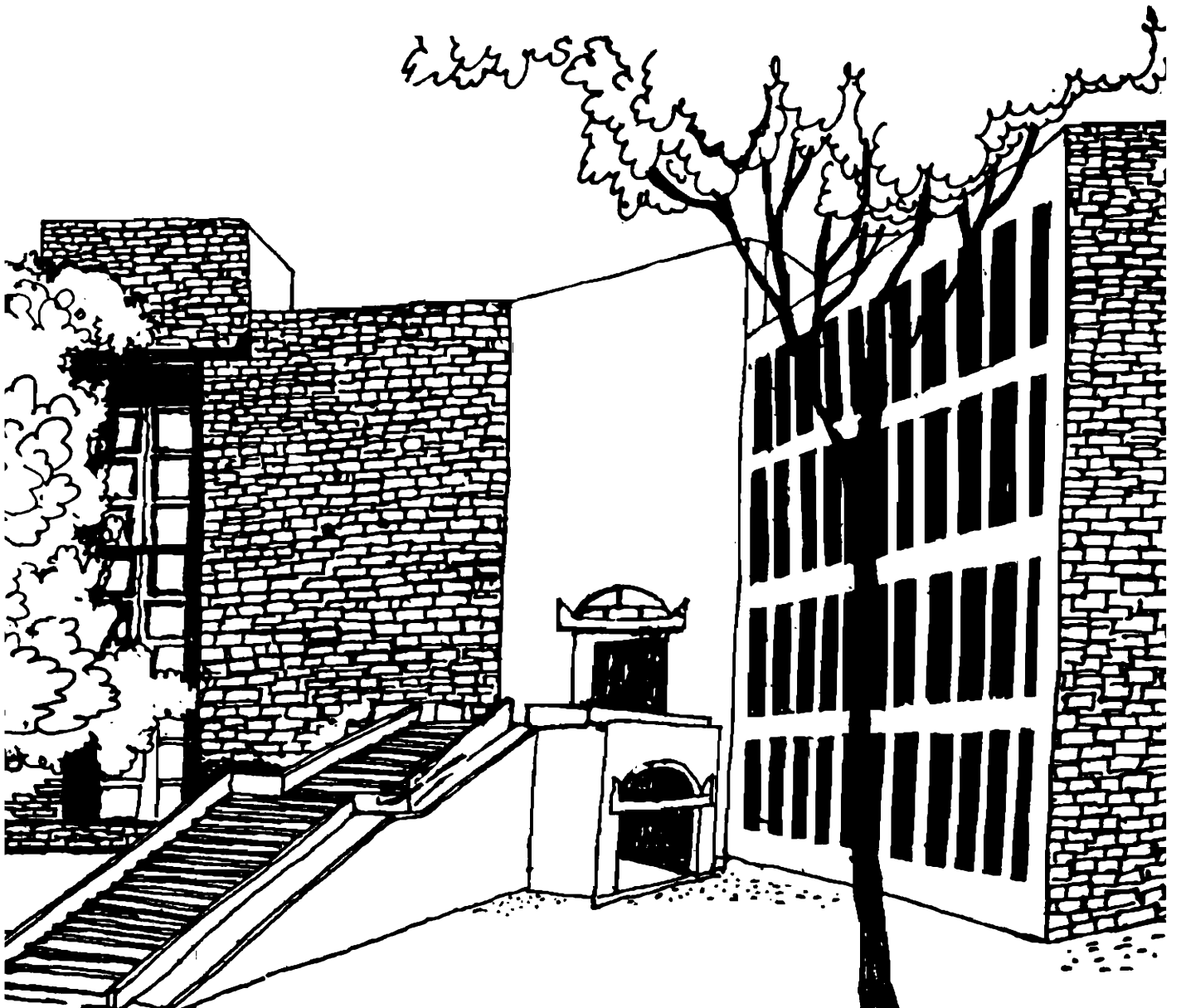


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AHMEDABAD

Working Paper



GLOBAL AIRLINE COMPETITION UNDER OPEN
SKIES POLICIES AND CABOTAGE

By

P.S. Thomas
K. Balakrishnan

W.P. No. 98-03-06
March 1998

11439

WP1439



WP

98-03-06
(1439)

The main objective of the working paper series of the IIMA is to help faculty members to test out their research findings at the pre-publication stage.

INDIAN INSTITUTE OF MANAGEMENT
AHMEDABAD - 380 015
INDIA

Abstract

Given the criticality of civil aviation policy for developing countries such as India and China and developed countries such as Japan, Britain and the United States, we review global airline competition to shed light on the seemingly varied approaches adopted by different countries. What are the forces operating in the global airline business ? What are the sources of protectionism in aviation ? What are the implications of the above for public policy ? In this paper we review growth/share factors, regulatory evolution and sources of protectionism to chart global trends in foreign investment and strategic alliances in aviation. Bermuda 1 and Bermuda 2 seem to have given way to Open Skies I and Open Skies II. In order to access the funds which airlines acutely need and improve customer welfare, we foresee relaxation on foreign investment in domestic airlines and even cabotage i.e. foreign airlines on domestic routes. Will EU-style cabotage prove a prelude to lifting of cabotage elsewhere especially in the US? Policy-makers should prepare for this eventuality in their planning and decision making for civil aviation.

"There is rarely any public interest in a subject when it is technically or narrowly defined. The special interests almost invariably prevail. But if political leaders can understand what is right and fair, devise a comprehensive plan for improvement and describe to the public clearly what should be done, then even the most far reaching reforms are possible".

JIMMY CARTER (1976)
US Democratic Party Leader

Global Airline Competition Under Open Skies Policies & Cabotage*

Consider the following vignettes of global aviation policy from different parts of the world. The first two provide contrasting developments in two emerging economies, China and India. The next two highlight the convergence occurring between Eastern and Western Hemisphere countries, Japan and Britain, vis a vis the USA.

In China, a long term program of airport upgradation and construction was launched in the early 1980s. By 1995 about 30-40 airlines began operating at three levels, national, regional and "independent". Even the Chinese airforce ran a civilian service. But with a subsequent decline in passenger growth from double digit to 5% levels, the authorities effected a freeze on new entry and encouraged mergers due to widespread losses.

International stakes had become perceptible in Chinese airlines. An aviation fund backed by George Soros had a joint venture with provincial (business and government) interests in one coastal, short haul airline. China had a 25% equity stake in Cathay-Pacific, Hong Kong's "flag" carrier run by the Swire Group. Cathay-Pacific in turn had an equity stake in an airline which operated on China - Hong Kong routes. China also had a 40% stake in an airline which was in the unique position of flying between Taiwan and China via Macau. China was planning to allow foreign investment in its aviation sector to the extent of 35% and was reportedly interested in negotiating an 'open skies' deal with the US lifting all restrictions (except cabotage, the right to operate domestically) on flights between the two countries. In 1997 China had placed a large order for planes with Boeing for delivery by 2001 with the help of financing from Japanese banks. Its 20 year requirements for planes were estimated to be of the order of \$ 124 billion.

In India, noted management columnist, Gurcharan Das, had recently dubbed the aviation policy scene as "Air Farce One". In the aftermath of devaluation and liberalization in the early 1990s, air taxi operators were allowed to take to the Indian skies. With scheduled airline status following very quickly, the domestic government monopoly of Indian Airlines began to crumble rapidly (by as much as 40% on trunk routes). In keeping with traditional foreign investment policies in the manufacturing sector, foreign investment in airlines had been allowed up to 40%. Two Middle East airlines shared a 40% stake

***Acknowledgement :** This study was facilitated greatly by a seed money grant (ref. 1104120) to the authors from the Research & Publications Committee of the Indian Institute of Management, Ahmedabad. It is based on secondary data and is intended for academic purposes

equally in one new entrant. Another got technical assistance from Lufthansa. A \$ 650 million joint venture between Tatas and Singapore Airlines was proposed.

But the new entrants soon came down to earth. Almost all of them were grounded by 1996 for financial reasons including accumulated tax liabilities. Hence the government announced that a comprehensive civil aviation policy would be formulated. As an interim measure the 40% foreign investment limit was made available only to non-airline investors, blocking the Tata-SIA proposal. The Middle Eastern airlines mentioned above were forced to divest their stakes. Any new proposals were scrutinized for evidence of "indirect" control by foreign airlines. Though a new airport policy managed to get Cabinet clearance before the government fell in November 1997, a major international airport project at Bangalore remained held up for various reasons. Obtaining parliamentary approval of a comprehensive civil aviation policy was now expected only after general elections i.e. in May - June 1998 at the earliest.

While a duopoly had emerged on domestic routes, Air India, the flag carrier was fighting a grim battle to remain viable on the highly competitive international ones (after having had to part with lucrative Persian Gulf routes to Indian Airlines) with a relatively small, ageing fleet and increasing financial losses. Calls for the merger of Air India and Indian Airlines, their privatisation and the encouragement of competitors in the domestic market began to grow more vocal. Meanwhile Boeing estimated Indian 20 year plane requirements at 300 aircraft worth \$22 billion.

In the next two vignettes we see how the US^{was} engaged on two major aviation policy fronts simultaneously with Japan on one side and Britain (and the European Union, EU, looming behind it) on the other. For years Japan had chafed under an "unfair" bilateral air services agreement (ASA) with the US dating back to the post-war period. After the currency realignment of 1985, transpacific air traffic grew rapidly and the American carriers were able to appropriate most of the gains. They had also begun to invade the heavily travelled routes between

Japan and South East Asia. US- Japan friction, thus began to grow in the aviation sphere and a series of negotiations had to be held. The US was insisting on an open skies agreement along the lines of those it had signed in Europe and Asia with 24 other countries. But the Japanese air travel market was probably bigger than all the others put together. The Japanese believed that the US domestic market (which was protected by cabotage restrictions) cross subsidised fares on international routes. So they demanded access to it in return for any concessions. Japanese carriers were disadvantaged by a relatively high cost position due in part to a regulated industry structure. A deal was finally hammered out in early 1998. It was less than an "open skies" agreement as fares were subject to a Japanese veto. But the US succeeded in inserting a "trigger mechanism" in the form of a provision to resume

negotiations after 4 years for an open skies deal. The implication was that the Japanese would have to move towards parity on cost competitiveness during this period. Japanese airlines lost no time in beginning discussions for alliances with American airlines.

Britain was closely observing the result of the US/Japan talks. The US had been pressing Britain to sign an open skies deal along the lines of the ones it had obtained from Netherlands and Germany. But Britain was insisting on relaxation of both foreign investment limits in US airlines and cabotage restrictions. The proposal of an integration of British Airways (BA) and American Airlines (AA) which had the potential of changing the landscape of international aviation, was held up in reviews on both sides of the Atlantic since 1996. Other alliances had received the "go ahead" quickly from US authorities under the aegis of open skies agreements and had started functioning thus affecting the fortunes of British Airways. The competition policy makers in the EU had begun to play a decisive role in the BA/AA deal and were insisting on measures such as giving up runway times (slots) at congested airports, reducing dominance on certain routes etc. even in the alliances which had already begun functioning as mentioned above. The US practice of entering into bilateral open skies deals was running into opposition from the European Commission (EC) which wanted to negotiate such rights including cabotage on an EU wide basis with non EU parties such as the US.

Purpose and Strategy

Given the foregoing dynamics in global civil aviation our purpose is to shed some light on the broader canvas against which such developments are being played out. What are the forces operating in the global airline business? What forms does global airline competition take? What are the implications of these forces and forms for a country's civil aviation policy? These are some of the questions which stimulated the present study. Till about a decade ago there was a tendency to compartmentalise domestic and international spheres of civil aviation. But as we will see developments in one are almost inextricably linked to those in the other. So we take the position that an integrated, global view has to be adopted.

In the sections which follow we explore the global context of civil aviation including growth / share factors and regulatory evolution, the moves toward deregulation / privatization, the emergence of global de-regulation especially in terms of foreign investment provisions and approvals of strategic alliances, and finally, the forms which protectionism continues to take (including through cabotage) under deregulation and privatization.

Global Context of Civil Aviation

Growth / Share Factors : Passenger traffic in global civil aviation markets is broadly divided into "domestic" and "international" categories. The former consisted of travellers within country borders while the latter was made up of all scheduled cross border passengers. The size of a market was measured not only by the numbers of passengers enplaning or disembarking but also by the product of passengers and kilometers (or miles) flown. The latter was known as Revenue Passenger Kilometers (RPKS or RPMs). Another important measure of a market was its compound annual growth rate (CAGR) whether in travelling passengers or RPKs.

Let us take a look at the US market, at about 40% the largest and most stable domestic air travel market in the world. According, to a recent Financial Times report US domestic passengers numbered an estimated 600 million in 1997 up from about 275 million in 1980 and 400 million in 1991. This represents a long term compound annual growth rate of 4.7% and a short term CAGR of 6%.

In terms of RPKs, the US domestic market was about 531 billion in 1991 registering a 10 year CAGR of 5.7% International traffic by US airlines i.e. transatlantic, transpacific and to / from Latin America accounted for about 190 billion RPKs or about 25% of the total level. Growth rates here ranged from 7.1% to 15.3%, significantly higher than the domestic market.

According to the forecasts of McDonnell Douglas in 1996, the US would reach 838 billion RPKs in 15 years representing CAGR between 1991 and 2011 of only 2.2%. But McDonnell Douglas' 15 year forecast of traffic growth in North America (i.e. including Canada and possibly Mexico and the Caribbean region) was 4.2% approximately. By contrast, growth within the Far East was projected at nearly 10% p.a. to 2011 though this has now been scaled back due to the recent Asia-Pacific "meltdown".

Another feature of the US market is the two tiered structure which has emerged over the last two decades since deregulation. About 50% of the market is competitive, i.e. between incumbents and startups, and fares could average a mere 15 cents/km. In the remainder where oligopolistic and even monopolistic conditions still exist, the fare could be around \$ 1 per km.

Exhibit 1 provides a sample of international civil aviation statistics for broad perspective purposes.

Regulatory Background : Following the first transatlantic flight by Charles Lindbergh in 1925, North American and European nations recognised the international significance of air travel. The Convention of Paris and the subsequent Geneva Air Convention established that each state enjoyed complete and exclusive sovereignty over the air space above its territory. (The continuing restrictions on cabotage operations by foreign airlines on a country's domestic routes seem to originate here).

Thereafter the regulatory histories of the US and European nations developed on slightly divergent lines. In Europe and the Commonwealth (including Canada) the trend was towards the merger of small airlines into government owned "flag carriers". Air France, British Overseas Airways Corp and Lufthansa emerged from such mergers.

In the US four or five private airlines (United, American, TWA, Eastern etc.) had grown dominant through acquisitions. But under a Presidential decree triggered by public outcries of rigged bidding for mail contracts, they reverted to their constituent airlines. Thus when the Civil Aeronautics Board (CAB) was established in 1938 to establish safety standards and prevent cut throat competition, it recognised "grandfather rights" of 23 trunk carriers. The CAB awarded domestic routes on the "cross-subsidization" principle to help these carriers achieve overall rate of return norms. Some large intra - state markets (chiefly California and Texas) were exempt from CAB regulation though they remained subject to state level regulation. CAB also did not have jurisdiction over international aviation where the State Department secured almost sole rights for Pan American to operate for a long time until it was joined by TWA and Northwest Airlines.

Consequent to these developments, the International Air Transportation Association (IATA) came into existence for establishing an air traffic code and coordinating schedules. Later IATA began coordinating international air fares and then effectively became a cartel notwithstanding US aversion to price fixing.

In 1944, the Chicago Conference sought to achieve a multilateral system of exchanging air traffic rights among nations. But with European and other governments keen to protect their carriers against the stronger American airlines, only the first two of the eight freedoms* were subject to detailed bilateral negotiations between countries, carrier by carrier, route by route. These were formalised in so-called Air Service Agreements (ASAs). The model used for this purpose was the ASA between the US and UK widely known as the Bermuda Agreement. A clause in this agreement referred fare setting issues to IATA. Over 1000 accords were signed to cover international civil aviation under the Bermuda model. In 1990, ASAs did not allow carriers from one country the right to cabotage or commercial operation on the domestic routes of another country.

*of the air (see exhibit 2) were accepted multilaterally. The next five freedoms

In general ASAs sanctified a duopoly on air routes between two countries. In Europe until recently, fares on such routes were fixed at the higher of the two cost structures. Revenues on the route were pooled for equal sharing. If more than one airline was designated by a country they jointly handled its half of the cartel. The US was able to exercise greater leverage in ASAs with other countries because of the greater attractions of access to US gateway cities.

Parenthetically, other global industries operate under multilateral agreements intended to facilitate free trade. Aviation, however, was an exception. In other industries it did not matter if investment in domestic firms originated from abroad. But foreign airlines were generally barred from buying majority stakes in another country's carriers. As to minority investments, typically stronger airlines invested in weaker ones with a view to turn them around financially. But general investors preferred stronger airlines rather than weaker ones for portfolio investment purposes. Strategic investors with an active interest over the longer term required either monopolistic rights for building the required capabilities or had to have a base in a closely related business to successfully integrate either vertically or horizontally. At the level of (wealthy) individuals, however, there was considerable scope for unrelated diversification e.g. by chicken farmers, cattle breeders, shipping tycoons, jewellers etc. into airlines.

Deregulation/Privatisation : In the 1970s pressure began to build up for deregulation in the US and for privatisation in Britain. In the US, fares and routes were regulated so carriers competed on inflight services and the addition of capacity thus keeping fares high. However, the operations of the non-CAB airlines of Texas and California attracted national attention in the US on account of their lower fares, greater efficiency and sounder finances.

US economists had also begun to propose "contestability theory" to justify deregulation arguing that, in the absence of sunk costs, the threat of potential entry by a "hit and run" (or instant) competitor would ensure that competitive conditions existed even if economies of scale and scope were prevalent. Thus when an economist, Alfred Kahn, was appointed Chairman of CAB he proceeded to replace lawyers on the staff with economists and the Airline Deregulation Act was signed in October 1978 by President Jimmy Carter providing for the CAB's phase out by 1985.

The main effect of US deregulation was to intensify domestic competition. Numerous new entrants took to the skies for the first time and applied pressure on airfares and resulting yields. Incumbents accelerated moves towards "hub and spoke" route structures embodying economies of scale principles, and they improved load factors by consolidating traffic and effectively utilizing large capacity aircraft. This resulted in a decline in non-stop (point-to-point) services between

many locations and a concomitant increase in delayed flights. With the lack of a domestic route structure, Pan Am was seriously disadvantaged as an international carrier. Approval of its acquisition of National Airlines proved too little too late. When Pan Am's finances deteriorated it sold its overseas routes to other American carriers who thus expanded on to the international scene, initially via secondary European airports.

In the US context, privatization mainly refers to the contracting out of local public services by government to private providers. Thus it is applicable primarily at municipal and county levels. In the US, airport management/operation was the usual candidate for privatization.

In Britain, Margaret Thatcher became the single most powerful force for privatization of state industry across the board when she became Prime Minister in 1979. The aim was to reduce state monopolies and encourage private competition. In the case of airlines, a spectacular demonstration effect had been provided during the mid 1970s by the private sector Laker Airways which successfully challenged the established transatlantic carriers by a "no frills" service (called "Skytrain") between Gatwick and Newark. Although Laker eventually succumbed to competition in 1981, it was partly instrumental in inflicting heavy losses on British Airways whose privatisation consequently had to be delayed and effected only in 1987. With this the regulatory spotlight shifted in the UK to the Civil Aviation Authority (CAA), the airport operator, BAA, and the Airport Coordination Ltd. (ACL). CAA had responsibility for air safety and airline economics. In the latter context it used a pricing formula called "RPI-X" where RPI was the retail price index and X represented a desirable efficiency gain. The ACL was an independent coordinator of take off and landing (or runway) slots which were particularly scarce at Heathrow airport.

By 1987, the European Union (EU) began the process of deregulating and privatising its airline industry. The stimulus for this effort came from both the US and the British experience. The EU passed three sets of deregulation measures in 1987, 1990 and 1992 which phased out many restrictions on discounts, capacity, market access and new entry. These packages also phased in "fifth freedom" (or beyond rights) for European carriers albeit on EU routes. As explained earlier, fifth freedom rights pertain to commercial operations between the second and third (in this case EU) countries on a route. While these measures also applied to EFTA states which joined the EU in July 1991, all other countries (e.g. US) remained subject to prevailing bilateral ASAs.

Thus a Single European Market (SEM) in air transport has been in place since January 1993. Under this regulatory regime, the freedom of "consecutive cabotage" (upto 50% of route capacity)

became available i.e. (when a domestic sector in another (EU) country was combined with a route to the home country.) From April 1, 1997, this right was expanded to full cabotage. Non EU airline cabotage continued to be disallowed however.

More than 95% of EU cross border routes are monopolies or duopolies. Only 26 of these routes are served by 3 or more airlines where there is some prospect of price competition. Of the 15 busiest cross border routes, 100 continue to be served by the two national flag carriers making it desirable for start ups to enter.

Towards Global Deregulation

Global deregulation moves coincided with US airline deregulation and the initiation of British public sector privatisation. In 1976, the Bermuda agreement was denounced by the British due to a perceived disadvantage vis a vis Pan Am and TWA. A more restrictive agreement called Bermuda 2 was then negotiated in 1977. But the US neutralized its effect by signing a more flexible treaty with the Netherlands which departed from IATA provisions. As a result the UK experienced deep fare discounting and agreed to more flights on routes to

London. Thus US airlines continued to participate in IATA's rate setting activities as long as IATA's fares corresponded to the liberal approach taken by the Europeans in 1982. Nearly a decade later, the US sought to replace Bermuda 2 with an 'Open Skies' agreement with the Netherlands and applied pressure on the UK. The latter countered with a demand for cabotage in the US.

In 1992 the US succeeded in getting the Netherlands to agree to what the UK had declined. The US and Netherlands signed an "open skies" agreement which gave airlines in both countries (e.g. the Netherlands' KLM) unlimited access to all domestic cities and eliminated other restrictions. Cabotage continued to be disallowed. (Note that geographically the Netherlands is even smaller than the UK). Within a short period of entering into this agreement KLM and Northwest began to integrate their operations (see below). Open skies agreements with eleven other countries soon followed and in 1996 the US and Germany entered into an open skies agreement bringing the total figure for the US to 16 (including four which pre dated its 1992 agreement with the Netherlands). The problem with this as the Economist put it was that each bilateral signed with America by a liberal EU state exposes the weakness of the illiberal. Thus the EC was pressing for powers to negotiate air agreements for the EU as a whole .

Meanwhile in addition to the pre 1992 'open skies agreement with Singapore, the US had entered into such agreements with Malaysia, Taiwan, Brunei and New Zealand, all in 1997. An agreement with Korea was imminent while Indonesia (and even China) was interested.

Foreign Investment : In February 1987, the British government sold 720 million shares of BA for pounds 900 million (\$480 million). There was no controversy regarding the acquisition of any of these shares by foreign airlines. However, five months later BA announced a merger with British Caledonian (Bcal) with the regulator's approval partly in order to keep Bcal from being acquired by SAS. The matter of foreign control was important because of bilaterals. If Bcal were to be "non British", the foreign partner in ASAs could cancel the airline's licenses on routes to that country.

In October 1988, SAS managed to buy 9.9% of Texas Air's common stock for \$50 million and obtained a seat on its board. Texas Air was the holding company of Continental Airlines of the US. By 1990 SAS' holdings increased to 18% and three board seats.

In late 1989 BA attempted to acquire 15% of United Airlines. It was dubbed a "marketing merger" but also involved sharing terminals in 4 US cities. However, this investment, part of a larger transaction, failed to materialize when the \$6.79 billion deal fell through foiled by the bankers. Besides, the purchase by United of Pan Am's London routes aggravated the situation.

The US Federal Aviation Act prohibited foreign owners from controlling more than 25% of the voting stock of a US airline. This was supposed to have been liberalised to 49% in 1992 when US airlines suffered heavy losses but it did not materialise.

On July 21, 1992 BA announced that it would invest \$750 million in US Air representing an equity stake of 44%. BA and US Air structured the agreement to give BA 21% of the American carrier's voting stock to stay within the overall 25% limit on foreign control. With this deal BA got veto rights to company policy and access to 38 US cities (subsequently 65). But BA withdrew the offer in the face of strong American opposition and submitted a smaller package. Though US Department of Transportation (DOT) approved, it subjected it to a review in 12 months. When BA proposed an alliance with AA in 1996 it withdrew from US Air which filed a suit against it.

In 1989 the US DOT which took over the residual functions of the CAB approved the sale of 49% of the equity of Northwest Airlines to KLM. Reports of KLM's initial investment vary from 10.5% to 19.3% of Northwest's voting stock the rest being non-voting and preferred stock. KLM believed that US restrictions did not prevent a foreign carrier from accumulating one-third of the board seats and exercising considerable power over major airline management decisions. Initially, however, it was

apprehended that KLM would have to decrease, and even divest its stake in Northwest. But consequent to Northwest's leading role in the transport of American troops in the Gulf War and the 1992 open skies agreement between the US and the Netherlands, the US DOT obtained anti-trust exemption for the "alliance" and full-scale cooperation between the two airlines began (see below).

However, by 1995 Northwest was accusing KLM of trying to take it over and succeeded in devising a "poison pill" shareholders' rights plan preventing KLM from exercising options for adding to its holding of 19%. Though KLM filed suit against this move, in 1997 it announced that it would divest its stake by 2000 while intensifying the "alliance" for five years. The capital gain was considered sufficient to buy out the Dutch government's 25% stake in KLM.

In early 1998, Northwest took a 14% controlling stake in Continental Airlines also of the US in conjunction with a code sharing agreement but placed it in a trust so that it could use it only to block mergers and not interfere in management (i.e. set prices) for six years.

In contrast to BA's privatisation experience, the issue of foreign (i.e. American) ownership of Air Canada was a live one at the time of its privatisation. Two options were considered by the Canadian authorities in this connection. One was to restrict foreign ownership to a specific percentage of the voting equity as the Americans had done. The other was to have a "golden share" provision which would allow the Canadian government to exercise a veto to prevent the airline from falling into foreign hands. Reportedly this provision was employed in the public sector privatisations in Britain and France. (For its part, Air Canada had a 19.6% stake in Continental Airlines of the US).

In Europe, restrictive ownership rules were relaxed to allow EU airlines to buy stakes in former national airlines in the EU. Thus BA took 49% stakes in Germany's Delta Air (later renamed Deutsche BA) and France's TAT. However, as between the US and EU, there was an imbalance as US carriers could hold up to 49% of an EU carrier whereas European companies are limited to a 25% voting stake in US carriers.

Alliances : The BA/US Air deal of 1993 gave a big jolt to American carriers. It gave BA access to hundreds of US air travel markets and started a snowball effect in the American industry. Within months of the deal Continental forged a marketing agreement with Air France and United crafted a broad tie-up with Lufthansa. Through the creation of "global alliances" airlines sought to offer "seamless" service to passengers through joint use of reservation systems,

ticketing, flight numbers, frequent flyer programs etc. For such agreements to work well there had to be a certain complementarity between the participating airlines (in matters such as route patterns) while comparability was necessary in levels of service quality to avoid unpleasant surprises among alliance customers.

KLM seemed to be an inveterate deal maker. Before investing in Northwest it was about to sign a marketing agreement with American Airlines. After the Northwest deal it entered into cooperative marketing arrangements with Singapore Airlines and Japan Air Lines. It was often in discussion with British Airways. In 1993 it floated a plan for a European mega carrier called Alcazar consisting of KLM, SAS, Swissair, and Austrian Airlines. The deal did not materialize because of the link to Northwest and the objections of Delta which was allied with Swissair.

In 1988, Swissair had approached Delta for an alliance. The two announced a code sharing and marketing partnership. They also agreed to purchase 5% of each other's common stock. In 1991 Delta secured many of Pan Am's US-Europe routes including access not only to the key hub at Frankfurt but also a number of smaller European cities. This had given it "insider" status in Europe in the post 1993, SEM air travel scene. Swissair, however, was considered a non-EU carrier and was worried about EU cabotage restrictions. Parenthetically, the anomaly regarding the applicability of EU cabotage to Delta or Swissair is compounded by the existence of a German carrier named Delta Air Regionalfluckerkehr which BA bought and renamed Deutsche BA. And Singapore Airlines which had an alliance with Swissair cemented by a symbolic share holding broke off recently to tie up with Lufthansa in a possible prelude to joining the bigger Star Alliance. In early 1998, the European Commission (EC) had initiated formal anti-trust inquiries into six airline alliances to gauge the extent of stifling of competition in Europe where fares were generally double those in the US. These included BA with American Airlines (see below) and US Air; Lufthansa with United Air Lines and SAS; KLM with Northwest and Air France with Delta and Continental.

Protectionism

Cabotage : As noted at the outset, the reservation of domestic operations to nationals of the country has been a long standing protectionist measure. The US, with its large air travel market has benefited the most from cabotage. As a result it has developed strengths not only in airlines and airports but also in aircraft manufacture. Eliminating US cabotage apparently requires changes in laws and strong union opposition is apprehended by managements of US airlines. As things stand the US has increased the number of international gateways, adding some in

the interior as a result of political lobbying. Thus British Airways flies direct to 22 US destinations. With the moves towards European integration, countries in the region have gradually eliminated cabotage vis a vis other members of the European Union. A British owned airline can now operate in France or Germany and vice versa. As noted earlier there does seem to be a slight anomaly vis a vis non-EU cabotage with Swissair concerned about its intra - EU flights being treated as non-EU cabotage while reportedly Delta Airlines has managed to operate such flights by buying Pan Am's routes e.g. Frankfurt-Berlin (formerly in East Germany).

The change in Indian regulations, whereby foreign airline investment is barred but non-airline investment is allowed is symptomatic of cabotage considerations. The problem with cabotage is that it could affect bilateral agreements with some countries. Thus if country X is allowed cabotage then a bilateral with country Y may be affected.

Anti-trust : Another fairly general form of protectionism was in relation to consumers. (This came in conflict with cabotage). In the US the Justice Department was concerned about price fixing and territorial demarcation among incumbents as well as predatory pricing against new entrants. Things were complicated by the prevalence of computer reservation systems (which potentially offered the opportunity to signal price intentions to other players) and the asymmetry in visibility of price reductions and service quality reductions. Moreover, any impression that "anti-trust was protecting weak players" had to be avoided.

For a while in Europe and some other countries there was a question as to the applicability of anti-trust laws. Supposedly, public corporations were more likely to act in the public interest. In the UK, where privatisation had made considerable headway in the interests of competitiveness, there was still a tussle with the competition authorities over mergers and acquisitions. Here the question was whether to apply local or international standards to arrive at judgments about the anti competitiveness of mergers.

Subsidies : Government ownership and subsidies provided a significant degree of protection for producers such as airlines by insulating them from harsh market conditions. They created what the Economist called the "distressed state airline syndrome" whose symptoms were a) continuing losses b) huge debts c) lack of competitive mentality d) overstaffing and e) hostile unions. The standard treatment was state budgetary support. In Europe the European Commission (EC) based in Brussels had tightened up on the grant of subsidies by governments to national airlines that were in trouble. However, there were persistent pleas from governments for extending such support for "one last time". A more difficult argument to refute was the need for time to get an airline into shape for privatisation since a loss maker's shares would find no buyers.

Chapter 11 : The US version of airline protectionism was found in the Chapter 11 bankruptcy provision. This is to be distinguished from Chapter 7 which had an element of finality to it. Under the latter, nearly 200 airlines had reportedly closed up between 1978 and 1995. However since 1991, almost 20% of the US airline industry's capacity was operated by technically bankrupt airlines under chapter 11. This provision protected a carrier's shareholders from employees and, to some extent creditors. Under the supervision of the bankruptcy judge, labour union contracts could be revoked and new creditors enjoyed superior claims to old creditors. Chapter 11 was invoked by Braniff in 1982 and Continental in 1983: They were able to reduce their workforces or cut compensation levels drastically to survive. It also seems that Chapter 11 operators cut fares to survive and this tended to moderate over all fare levels in the US.

Conclusion

A review of airline regulatory history shows longwave cycles of regulation and liberalization. The laissez faire approach of the early years gave way to a regulated system upto World War II. As the US emerged with a strong aviation industry other countries were on the defensive in the post war era. Nevertheless, Bermuda 1 was essentially a liberal model for bilateral air services agreements. With technological change in the late 1960's, Britain applied pressures for a more restrictive regime towards the US. But within the US the move was towards deregulation. The result was the almost simultaneous signing of the restrictive Bermuda 2 agreement with the US and the Airline Deregulation Act of 1978. The pressures created by the latter spilled into the international sphere with successful moves towards open skies (I) agreements with Britain's European rivals. With the signing of a less than open skies agreement (let us say open skies II) with Japan we have reached an interesting juncture. The pressure is now building up on the US from Britain, France and Japan for relaxing foreign investment and cabotage restrictions. The EC in particular is objecting to bilateral open skies deals and wants to negotiate on an EU wide basis. Competition has evolved from airline vs airline towards alliance vs alliance (see exhibit 3) but this may change in future.

The US had experienced steadily increasing concentration levels but so far they had not been regarded as anti-competitive. However there were continued bottlenecks to entry in the US airline industry. With unsecured debt markets closed to weaker airlines and the government unable or unwilling to provide relief via reduction of taxes on tickets and fuel, the prospect of accessing international sources of capital became problematic.

Besides, research shows that the threat of competition is not as powerful as actual competition in cutting fares. It requires at least three carriers on a route to achieve this. Many routes cannot support so many carriers. Mergers between airlines helps to consolidate traffic and develop hub and spoke systems but squeezes out smaller ones and deters new entrants. Fares stay high.

The global airline industry is probably among the most complex, dynamic and international of businesses. Many of the developments of a seemingly domestic nature can be better appreciated in the global context while a number of developments at the global level are likely to impact local conditions within a shorter time than one would expect. In these circumstances it behooves policy makers such as those in India to intensify planning and decision making activities in the aviation sector so that their country-men can benefit from progress in this vital infrastructure activity.

	EXHIBIT 1														
	DOMESTIC						INTERNATIONAL						TOTAL		
	1980	1992	1993	1994	CAGR %	1980	1992	1993	1994	CAGR%	1980	1992	1993	1994	CAGR%
WORLD	586	915	820	881	2.9	163	230	318	344	5.5	749	1145	1138	1225	3.6
PAX-KM	622	943	899	952	3.1	467	983	1047	1140	6.6	1089	1926	1946	2092	4.8
USA	269	417	418	461	3.9	26	48	51	53	5.2	295	466	469	514	4.0
PAX-KM	327	549	552	593	4.3	83	215	220	228	7.5	410	764	772	822	5.1
JAPAN	41	69	69	71	4.0	4	12	11	13	8.8	45	81	80	84	4.6
PAX-KM	29	53	53	55	4.7	22	55	54	63	7.8	51	108	107	118	6.2
CHINA	3	22	26	32	18.4	NM	5	5	5	NM	3	27	31	37	19.7
PAX-KM	3	30	34	39	20.0	1	11	11	12	19.4	4	41	45	51	19.9
INDIA	5	9	7	9	4.3	2	2	2	3	2.9	7	11	9	12	4.0
PAX-KM	4	8	6	8	5.1	7	9	8	10	2.6	11	17	14	18	3.6
NOTES															
(1) PAX = scheduled passengers carried (millions)															
(2) PAX-KM = Passenger kilometers (billions)															
(3) CAGR = 1980 - 1994 = 14 years															
(4) DOMESTIC = Total - International															
(5) Totals may not tally due to rounding															
(6) NM = Not meaningful															
Source : Statistical Year Book (1996), United Nations.															

Exhibit 2

Operating Rights or Freedoms:

1. Innocent passage: the right to fly over another state.
2. Technical stop: the right to stop for repairs or refuelling.
3. The right to take passengers and cargo from the airline's country of origin to another state.
4. The right to pick up passengers and cargo in another state and bring them to the airline's country of origin.
5. The right to pick up passengers and cargo in another country and carry them to a destination(s) other than the airline's country of origin.
6. The right to pick up passengers and cargo in one state bring them to the airline's country of origin and transfer them to flight(s) for a foreign destination(s): often referred to as gateway traffic.
7. The right to carry passengers and cargo between two states, neither of which is the airline's country of origin.
8. The right to carry passengers and cargo between two points within a state, other than the airline's country of origin.

Source: Alan P. Dobson (1995). Flying in the Face of Competition: The Policies and Diplomacy of Airline Regulatory Reform in Britain, the USA and the European Community 1968-94.
Brookfield, VT: Ashgate.

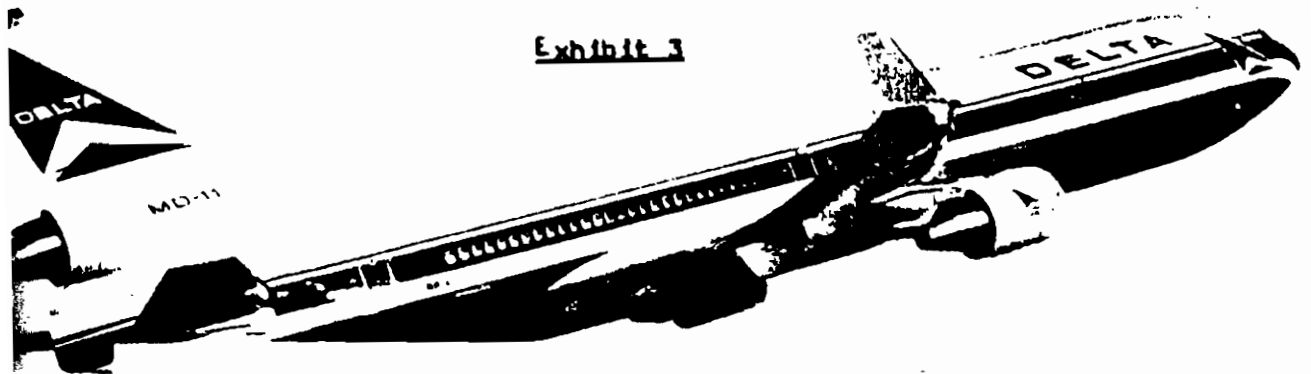


Exhibit 3

DELTA

Atlantic Excellence Alliance (with antitrust immunity):
Delta, Austrian Airlines, Sabena, Swissair

Delta's code-sharing partners:

Aer Lingus, Aeromexico, Air Jamaica, Finnair, Korean Air, Malev,
TAP Air Portugal, Transbrasil

Pending approval:

Air France, All Nippon Airways, China Southern

UNITED

Star Alliance (with antitrust immunity):

United, Air Canada, Lufthansa, SAS

United's code-sharing partners:

Thai International, Varig (Brazil)

NORTHWEST

Alliance with antitrust immunity:

Northwest, KLM

Northwest's code-sharing partners:

Air U.K., Eurowings (Germany), Pacific Island Aviation

Pending approval:

Air China, Garuda (Indonesia), JAS (Japan)

AMERICAN

Alliance with antitrust immunity:

American, Canadian Airlines, British Airways (proposed)

American's code-sharing partners:

Alitalia, British Midland, Gulf Air, LOT (Poland),

Qantas, Singapore, South African Airways

Pending approval:

Aerolineas Argentina, Air Liberté (France), Asiana (S. Korea),

Avianca (Colombia), China Airlines (Taiwan), El Al,

Iberia, LanChile, Philippine, TACA International,

TAM Lineas Aéreas del Mercosur