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The development of the airline industry from 1978 to 1998

A strategic global overview

Daniel Chan
Deputy Head of Department/Group Head, Republic of Singapore Air Force, Singapore

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Abstract *Looks at the world airline industry, from 1978 to 1998, from a strategy perspective. Traces the strategic developments and the strategy responses of the key airline players that have had a profound impact on the shape and direction of the industry. These include the deregulation of the industry, the nature and extent of competition, the emergence of brand/differentiation based competition, and airline alliance developments, strategies and their implications. Also provides a glimpse of what the future will hold for the world airline industry, including the prospects of increased global market concentration and the emergence of mega consortia, comprising lead airlines from key regions of the world, on the global stage. These global consortia, which will marginalise other players, will also compete against each other on the basis of branding/differentiation.*

Introduction

The airline industry is a unique and fascinating industry. It captures the interest of a wide audience because of its glamour, reach and impact on the large and growing numbers of consumers/travellers worldwide. British Airways (BA) Chairman, Sir Colin Marshall, in describing the industry in 1994, called it "the flywheel for the engine of the world's industry." The industry figures involved are staggering and speak for themselves. The industry is worth over US$1,000 billion (directly, indirectly and "induced"), employs 22 million people, and transports and services over 1.25 billion passengers a year. A quarter of the world's manufactured exports by value reach their markets by air. The industry is also at the heart of travel and tourism, the world's largest industry, employing one in nine workers (*Corporate Location Journal*, 1994, p. 15).

This research paper looks at the development of the world airline industry over the past 20 years, from 1978 to 1998, from a strategy perspective. This is in contrast to most of the existing research literature on the airline industry which tends to approach the subject primarily from an economics, regulatory or public policy perspective. This research paper traces and analyses the strategic developments and the strategy responses of the key airline players that have had profound impact on the shape and direction of the industry. As the essence of strategy formulation is coping with competition (Porter, 1979), the latter will be dwelt on in great detail throughout the paper. The key developments and issues covered include the deregulation of the industry, the nature and extent of competition, the emergence of "brand"/differentiation-based competition, and airline alliance developments, strategies and the longer-term implications. These strategic developments have shaped and directed the airline industry and will continue to do so in the years ahead. This research paper also provides a glimpse into what the future will hold for the world airline industry, including the prospects of increased global market concentration and the emergence of mega consortia, comprising of lead airlines from key regions of the world, on the global stage. These global consortia, which will marginalise other players, will also compete against each other on the basis of branding/differentiation.

Strategic outcome after 20 years of deregulation

1978 was a watershed year for the airline industry. It was the year airline deregulation was first introduced in the USA (Williams, 1994). From the outset, airline deregulation had attracted much attention because of its mass impact on the large numbers of consumers/travellers. It generated further interest when the deregulated industry turned out to be so different from what was confidently predicted by advocates of deregulation. Looking back, it was clear that deregulation advocates had underestimated or misjudged the ability of incumbents to defend and protect what were supposedly to have become their highly vulnerable markets. Incumbent carriers had responded with innovative strategies to deal with the new and sudden change of competitive scenario brought upon them by deregulation. More significantly, they succeeded in redefining some of the rules of the new game/competition. The result was an airline industry, kept within a regulatory time bubble for about four decades, emerging to replicate the kind of strategic behaviour observed in other competitive industries (Williams, 1994).

By 1998, 20 years after the industry deregulation was first mooted in the USA, the US airline deregulation experience has be imitated and replicated around the world. Within key regions of the globe, distinct market segments of air travel have emerged. The first pertains to the main regional/global trunk system markets dominated by big and powerful hub-and-spoke class carriers, while the second relates to peripheral markets operated by relatively weaker point-to-point carriers. The latter class of carriers has more or less given up trying to penetrate and compete in the former markets dominated by the big and powerful carriers. The airline industry meanwhile has become increasingly global in orientation and scope.

Some historical and political legacies

The airline industry carries with it certain historical and political legacies that have constrained it from developing fully like other industries. Over the past three decades or so, the world has seen the markets for many goods and services worldwide developing into internationally organised enterprises. Recently, we have also witnessed the rising wave of cross-border or global mergers and acquisitions in many major world industries, such as financial markets/services, telecommunications, information technology, car manufacturing, shipping, etc. Airline services, on the other hand, still retain a certain conservative nationalistic character inhibiting their full growth internationally, despite ironically having played a key role in facilitating or bringing about such international transformations.

Historically, aviation has played an important strategic role in the affairs of the state. This stemmed from the experiences of the Second World War and the Cold War, leading to the tight governmental control of national aviation capabilities. Even in recent times, such as the 1990/1991 Gulf War, the US Government, for instance, invoked its national emergency (Civil Resource Air Fleet) provisions calling upon the mobilisation of civil aviation resources in support of the national war effort (O'Connor, 1995). This role of civil aviation is unlikely to become defunct in the near future.

In addition, flag carrying scheduled airlines worldwide have played the "ambassadorial" roles for the nations they represent abroad. For example, it is often said that it was Singapore Airlines (SIA) that first introduced Singapore to the world. Although these roles have gradually diminished over time, the extent to which this has been allowed to be the case varies from nation to nation. Today, even where these roles are no longer important, many flag carrying airlines are still viewed very much as symbols of national prestige and pride.

Nations with big and strong flag carriers have often voiced support for the call for airlines to be subjected to international market forces, confident that their airlines can survive and fare better against smaller or weaker airlines. For the latter, however, this inevitably means the prospects of either their relegation to playing mere supporting or secondary roles dictated by the dominant carriers at best, or the precipitation of their eventual collapse at worst. The need to protect one's own carrier's interests has been, and remains in many cases, of considerable importance.

This explains, for instance, why bilateral air agreements and services between nations have been extremely difficult thus far, as in many instances airlines are still government-owned and much of the trade in aviation services is still controlled by governments. For some airlines disadvantaged because of country size, such as SIA or KLM, these constraints can be stifling. Their frustration is aptly reflected by SIA CEO, Dr Cheong Choon Kong's lament in 1997 that "For no rational reason, the aviation industry is not game to be like other industry" (*Asian Business*, 1997, p. 22). Dr Cheong also highlighted the point that bilateral agreements are made by governments, which has accounted for why the aviation industry is so different from any other industry. Even governments of the USA and EU, strong proponents of deregulation and international market forces, have taken positions contrary to their avowed free market beliefs whenever these were deemed to be against their national interests (O'Connor, 1995). SIA, however, hopes that ultimately the growing number of liberal air bilateral agreements will be merged into a single multilateral one, *à la* the World Trade Organisation.

All these nationalistic factors in the airline industry explain why the industry has not developed in a comparable manner and at a similar pace to many other industries. In today's highly internationalised world, globalised products and services have become very common. Even commercial shipping and leisure/vacation cruise lines have gone the way of the internationalisation tide. However, this has yet to be the full experience for the airline industry. The demise or acquisition and control of a flag carrier by a foreign-owned airline remains a politically sensitive matter. In the case of Pan American, in its time the US flag carrier, it has been argued that its collapse was allowed by the US Government only because there were other nationally owned airlines ready to step into that role (Williams, 1994). It is only when flag carrying airlines are allowed to shed these historical and political roles that the industry will develop fully like other industries.

In a world swept increasingly by global mergers and acquisitions in many major industries, such as financial markets/services, telecommunications, information technology, car manufacturing, shipping, etc., the airline industry cannot remain unaffected for long. There are indications that the industry is indeed responding. The pace of change, though slow at present, should accelerate in the near future.

Strategic direction of the industry: globalisation and the trend of airline alliances

In recent years, with the trend towards globalisation of the airline industry, the formation of airline alliances as a strategy to cope with competition has gathered momentum. Alliance strategy is a part of every good strategist's repertoire and, when properly managed, is among the best means to bring strategy to bear in global markets as noted by Ohmae (1991). Without the protected position of national airlines brought about by deregulation, building alliances as a strategy became necessary for many airlines to stay competitive and gain access to a global market too huge for any existing airline to dominate (Johnstone, 1996).

Virtually every major airline is involved in some kind of alliances or another. Some are in as many as 30 partnerships, and none has shown any scruples about linking up with two directly competing rivals at the same time (Johnstone, 1996). However, the alliance strategy has not turned out to be smooth running for many. A study by the Boston Consulting Group found that only a third of the intercontinental alliances in place in 1992 still existed three years later. Alliances within the same region showed a slightly higher survival rate, with 59 percent of them lasting the three years (*Business Times*, 1998a, p. 2). This state of iterative and constant search for the best/right "dancing" partners looks set to continue for some time to come.

The announcement by British Airways (BA) and American Airlines (AA) in 1996 about their intention and plans to marry their services across the Atlantic has attracted much attention and generated great interest. It involved BA dumping an earlier alliance forged with USAir for the AA deal. BA has since sold off its 24.6 percent shareholding in USAir and ended an extensive operating alliance linking their networks. In terms of scale and scope, the proposed BA and AA partnership breaks new ground and stretches the alliance strategy hitherto known. The deal is under scrutiny and is being examined by US, UK and EU regulatory authorities. While there have been immediate and strong reactions from both sides of the Atlantic, meanwhile many with aspirations to be major world players are watching how these events will unfold with great interest. The proposed BA and AA alliance, if allowed to go through, may herald a new phase of airline alliances building, besides the obvious impact that the alliance will have as it may now pose a formidable threat to other airlines worldwide. The BA and AA alliance is highly significant, as between the two they control between 60 percent and 70 percent of the transatlantic traffic. With this alliance, they will be able to give customers/travellers an unprecedented choice of transatlantic flights – a choice other airlines would find difficult to match.

The alliance does not involve an equity swap, but aims to combine operations on all transatlantic flights. According to the proposal, BA and AA will pool resources and possibly collaborate on pricing. At the heart of the deal is a code-sharing and schedule co-ordination arrangement. Code-sharing is now very common in the airline industry. It can be used to expand the number of flights offered at only a low incremental cost. By providing access to each other's flight codes, two airlines can quickly increase the number of flights they offer to customers/travellers, without having to negotiate for extra airport slots. For example, with such code-sharing, if one airline with weekly flights from City A to City B teams up with another with a twice-weekly service, sharing flight codes will enable both airlines to sell tickets on each other's flights. As a result, both will be able to offer three flights a week. Negotiating for extra airport slots, on the other hand, can be a difficult and tricky business. There is, moreover, no guarantee of certain success. For example, Heathrow Airport in London is one of the most tightly controlled airports in the world. The lion's share of airport slots and terminal space is secured by BA. Historical precedence is the main criterion in the apportioning process. This is often referred to in the airline industry as "grandfather's rights". The result is that incumbent carriers currently "entrenched" or operating the most flights at an airport have the greatest advantage. Newcomers virtually have little chance unless they have something else to trade with.

Some strategic implications for the future

From an industry-wide strategic perspective, the BA and AA alliance has three other potentially significant strategic implications. The first is that of the co-ordination of their schedules to offer flights onwards to a final destination beyond the transatlantic leg. AA will be able to offer tickets on BA's network across Europe and onwards from London to destinations in Asia, such as Hong Kong, Singapore, etc. BA, on the other hand, will have access to hundreds of domestic US flights that it is not able to provide under current regulations. In total, it is estimated that the two airlines could offer around 36,000 different routes. The strategic implication of the threat that this alliance will pose to other world airlines is obvious.

In contrast to the spontaneous "cry-foul" responses from US and UK airlines such as Virgin Atlantic Airways, USAir (the "jilted" partner), Continental Airlines and TWA, Asian airlines have remained tight-lipped, reacted cautiously and have kept their cards close to their chests. Their response will ultimately depend on how the final act will unfold. This leads us to the second point, which is that, although this alliance, if allowed to go through, will spawn greater competition and threat against other world airlines, the potential benefits to other world airlines, particularly Asian airlines with aspirations to be major global airline players, may be very much greater. This is because these Asian airlines present as obvious and necessary players to be courted by US and European carriers with global dominance vision and intent. Therefore they may become key beneficiaries of such developments without having to pay the high and costly "start-up" costs for bringing this about, as can be seen from the current BA and AA alliance experience, which is still mired in protracted legal and regulatory battles.

The third point is that there may be the potential that, if the US, UK and EU authorities do allow the deal to go ahead, concessions or compensation for the BA and AA domination of transatlantic routes at the outset of the deal could come by way of opening up their airports as well as transatlantic skies to greater competition. Singapore Airlines, an Asian airline with global vision and intent, for example, could potentially benefit and would certainly take advantage of such opportunities. In June 1996, while in London to attend the signing ceremony for SIA's purchase of Rolls-Royce engines, SIA CEO, Dr Cheong Choong Kong, took the opportunity to drive home the point to the UK government. In a speech at which the UK deputy prime minister and trade minister, Mr Michael Heseltine, was present, he was quoted as saying: "One possible way to restoring the balance is to open the skies above the USA and Britain, not only to American and British carriers, but also to airlines from third countries. SIA has been trying for many years to obtain transatlantic traffic rights from London, and we hope that our request will finally be considered more favourably" (Johnstone, 1996).

SIA, an airline with no domestic routes to monopolise, has been pushing for increases in its intercontinental routes for many years now. To help expand its network of flights, it has code-sharing agreements with 17 airlines, including key partnerships with Delta Airlines and Swissair. SIA, Delta Airlines and Swissair are partners of the Global Excellence Alliance, which has been marketed as "A seamless travel experience around the world with three excellent airlines".

SIA's expansion has been through agreements that have to be negotiated bilaterally, making growth a slow and painful process for SIA. If the BA and AA alliance goes through and precipitates the pace of deregulation, airlines such as SIA could be key beneficiaries, and could become more formidable global players in the airline industry.

The genesis and forerunner of a global deregulated airline industry: the US experience

Any start point on the discourse of a global deregulated airline industry must begin with the USA. It was in the USA that the deregulation idea for the airline industry was first mooted (Williams, 1994). As will be evident later on, lessons learned from the US experience were replicated in other deregulated regions and can provide important insights into the deregulated world airline industry.

In the USA, the airline industry is a strategic industry. Since its inception, the US government has played a critical role in fostering the industry. Beginning in the 1920s, the airline industry was used by the US government as a vehicle to promote economic growth, provide jobs, and draw the nation closer together (Prestowitz *et al.*, 1993).

The industry has enhanced US leadership in aircraft, engines, computer/telecommunications systems and software. In 1993, direct employment in the US airline industry accounted for 670,000 workers, with another 2.5 million indirectly employed. The US airline industry reduces the US trade deficit by more than US$10 billion per year (Prestowitz *et al.*, 1993).

In 1988, following a most profitable year, the US airline industry, however, became a troubled industry. The three years after 1988 saw profitability deteriorate and losses soar. The airlines lost a total of US$10 billion more than the industry had made in its entire history (Prestowitz *et al.*, 1993). To fully understand the developments in the US airline industry, we need to go back to events that occurred following deregulation in 1978.

Challenge of the status quo and the strategic counter-response by incumbents

After the US government deregulated the industry in 1978, new entrants entered the market and challenged the status quo. New airlines entered high volume point-to-point markets with costs 30-40 percent lower than the established carriers, largely driven by low cost non-union labour and the wide availability of inexpensive second-hand aircraft. This first wave of new entrants concentrated on challenging the established players who operated large point-to-point networks that concentrated on directly linking cities with non-stop flights.

The established airlines, led by American Airlines, responded with a full range of innovative strategies, capitalising on their size to the fullest advantage. They established hub-and-spoke networks, set up frequent flyer programmes, exploited computer reservation systems (CRS), etc. The most important strategic development was the adoption of the hub-and-spoke network which allowed the airlines to reduce the number of flights required to provide universal coverage throughout their networks (Prestowitz *et al.*, 1993). In turn this reduced their cost, which was passed on to the consumers in the form of lower fares.

All these new strategies, which conferred advantage on the larger airlines, allowed the larger airlines to use their size as a weapon against the smaller upstart airlines. Their strategic response destroyed the new entrants. By 1986, most carriers of the post-deregulation era had disappeared and the industry stabilised. With the first round of consolidation over, the industry had its most profitable year ever in 1988 when net profits exceeded US$1.6 billion.

The clash of the giants

The elimination of new entrants, however, did not see the end of competition. A new round of air wars was sparked off, when American Airlines decided to expand its network to one of national coverage with an enlarged hub-and-spoke network. The rest of the industry responded, following suit by building their own national networks and purchasing large numbers of new aircraft to support their own expansion. The hub-and-spoke carriers, having destroyed the new entrants, went after each other. Competition intensified as hub carriers connected new cities to their networks.

Between 1988 and 1990, US carriers' jet fleets increased, and those of American, Delta and United increased by more than 60 percent. To fund this growth, the airlines began to lease aircraft in increasing numbers. Aircraft rental expenses increased in nominal terms from US$5.8 billion in 1988 to US$8.8 billion in 1992.

Airline borrowing to acquire new aircraft (both loans and lease commitments) and to cover losses in combination with the bleak outlook for future profitability caused rating agencies to downgrade airline credit ratings to "junk" status.

Business travel began a steady decline in 1986. Price wars, arising out of excess capacity, ensued, as airlines chased revenue to fill empty seats. This culminated in the industry losing a total of US$10 billion in the 1990-1992 period. The result of rising debt and aircraft lease costs, price wars and declining business traffic was bankruptcy. By 1992, three major US carriers, Midway, Pan Am and Eastern, had been liquidated, and America West, Continental and TWA were in bankruptcy (Prestowitz *et al.*, 1993).

However, many bankrupt airlines were allowed to continue operating. US bankruptcy laws were established to give companies a second chance through restructuring. However, in the case of airlines, there were suggestions that, at least in some cases, the bankruptcy law was being exploited (Prestowitz *et al.*, 1993). In some instances, airlines continued to fly for as long as two years in bankruptcy, which in effect is tantamount to a backdoor government subsidy for an uncompetitive airline. Continuing operations by bankrupt carriers put enormous pressure on the other airlines.

Turning point: relief on the domestic front and forays into the international arena

With only prospects of continued fare wars, industry losses, and probably more bankruptcies, an important turning point came, with pressure on the domestic US market relieved, when attention was channelled on to the lucrative and growing international markets. With the US domestic market suffering from excess capacity and low growth, the rapidly growing international market in the 1990s, especially in the Asia Pacific market, presented the much needed and welcomed window of opportunity. US carriers seized upon the opportunity of the moment, and quickly redeployed US airline resources to international markets. US carriers thus became major players in an arena where they had comparative advantage since they enjoy significant relative cost advantages.

US carriers very quickly made significant inroads into the Asia Pacific market, leveraging on favourable air agreements concluded in the 1950s. In the 1950s, about two-thirds of the passengers travelling between the USA and Japan were Americans. Consequently, US airlines were given liberal landing rights in Japan, which had remained unchanged even though the travelling patterns have swung in the opposite direction. As a result, US carriers have a strategic advantage and were able to reap immense success in Asia in the early 1990s. The most successful were United Airlines and Northwest Airlines, two airlines which had grown leaner and tougher during more than a decade of deregulation battles back in the USA.

Northwest Airlines, a pioneer in the region with more than 50 years' operating experience in Asia, raked in US$2.4 billion, about 30 percent of its US$8 billion in annual revenues from its Asian operations in 1994. This has been expanding by some 7 to 8 percent a year since. Northwest Airlines entered the Asian market soon after it was opened up by Pan Am. United Airlines became an Asian powerhouse following its takeover of the collapsed Pan Am's Pacific division in 1986. It had added between 15 to 25 percent more capacity each year, tripling annual revenues from US$1 billion to US$3 billion by 1994 (*Fortune*, 1994, p. 26).

The systematic marginalisation of the domestic competition

Before 1984, code-sharing alliances between US large carriers and their smaller commuter counterparts were few. A major transformation, however, occurred over the next two years, with the result that by the middle of 1986 all of the 12 US major carriers and four of the national airlines had developed code-sharing alliances with these commuter airlines. Almost all of the largest 50 commuter airlines were party to code-sharing alliances with a major airline by 1985. These airlines accounted for over 75 percent of the passenger traffic carried by the whole of the commuter airline industry in the USA (Williams, 1994).

This phenomenon arose as a direct result of the major airlines developing their hub-and-spoke networks. The economies of scope that are achievable with this type of route configuration are realised fully only when all possible locations are being served. As a consequence, the rapid development of nationwide route networks became a key priority for the large carriers by the mid-1980s. In order to operate profitably in low density markets it was essential to make use of small turbo-prop aircraft, typically seating up to 30 passengers. Larger carriers, with no prior experience nor the intention of operating in these markets or such aircraft, instead worked to incorporate the traffic of these commuter airlines. The result was that, with the development of traffic hubs by the major airlines, commuter carriers found themselves re-organising around the hub system developed by the larger carriers. This growing integration strengthened the hands of the major airlines against the commuter airlines. Oster and Pickrell (1986), for example, noted that some commuter airlines were pitted against one another in the major carrier's battle for control of a hub and were encouraged by the major carrier partner to provide economically high levels of service in a fight for market share.

Carriers with computerised reservation systems (CRS) further exploited the benefits of code-sharing. As route networks became more extensive, sales and marketing channels and frequent flyer programmes were used to reach out to more customers and to expand their customer base. For all intents and purposes, code-sharing services operated by commuter carriers, in conjunction with or on behalf of their partners, became extensions or integral parts of the larger carriers' route networks. In effect the commuter airlines had little choice but to go along with such arrangements in order to survive. In the process they lost their autonomy and became increasingly integrated with the major airlines. This marginalisation of virtually all of the smaller independent carriers by the large carriers ensured that competition from the former source was effectively eliminated.

All the various factors described above had acted in a synergistically potent way to strengthen the large airlines and gave them an even greater competitive advantage over the smaller and weaker airlines. The innovative and full exploitation of the CRS was a key factor in enabling the major airlines to realise the full advantages of their reconfigured route system.

The shake-out and industry consolidation

The spectre of a small number of comparably sized and equally endowed megacarriers ultimately surviving and emerging from the shake-out brought about by deregulation was emerging. The collapse of Pan Am, Midway and Eastern in 1991 drove this point home. In 1994, one major carrier, America West, was under bankruptcy protection. Continental and TWA had emerged from this position in 1993. One other major carrier, USAir, also faced substantial financial difficulties. By 1994, American, Delta and United emerged as candidates for independent long-term survival. About a year later, Northwest joined the ranks. These carriers are now more or less of similar size and market power, following some of their acquisitions from bankrupt airlines. In particular, each has been able to expand considerably its international network as a consequence of the dire needs of Pan Am, Eastern and TWA to cover their debts.

To date the ability of the four largest carriers to exercise full control of their competitive environment is, however, checked to a certain extent by the protection afforded to bankrupt airlines. The desperation of this latter group in their attempts to generate revenue has produced several spectacular price wars, plunging nearly all operators in the industry into heavy financial loss during the recession in the earlier 1990s. The one exception is Southwest, which has remained consistently profitable. Its low-cost no-frills philosophy, to which it has consistently adhered, has proved highly successful in the US domestic market, and allowed it to co-exist with the megacarriers. Since 1995, the four surviving megacarriers have, however, avoided mutually destructive battles. The US airline industry has become a more stable operating environment, with fewer opportunities for domestic expansion.

The steady state in 1998

By 1998, 20 years into the US airline deregulation, the US airline industry has consolidated into two distinct market segments. The first is the hub-and-spoke market dominated by the established and powerful carriers, and the second, peripheral markets serviced by point-to-point carriers, exemplified by Southwest Airlines. The established airlines have established full dominance and are able to fend off penetration and competition by new entrants.

Recent strategies used include what is known in the industry as "bracketing" as well as preventing entry by new entrants (*Business Times*, 1998b, p. 2). As an illustration of the former, in September 1996, the then defunct Pan American World Airways was resurrected as a low-cost carrier. It offered a daily scheduled service between New York and Los Angeles (one of the nation's most lucrative routes), at an unrestricted fare of US$199 each way. The big carriers responded by slashing their fares for flights on the route departing just before and after Pan Am's, but continued charging normal fares for all other flight times. After a year-long struggle, Pan Am was forced out of the route, and fares returned to their previous levels. This was repeated all over the USA whenever start-up carriers tried penetrating new markets. In contrast, when left to themselves, the big carriers avoided costly and mutually destructive price wars and were charging more or less similar fares.

On the latter, as a means of preventing entry by entrants, the big carriers have acquired almost all the available take-off and landing slots at the nation's most important airports – New York's JFK International and La Guardia, Washington's National and Chicago's O'Hare International – and have controlled access by not selling or leasing them to new entrants.

In other important cities, the big airlines often hold exclusive, long-term leases on airport facilities, giving them control over access to arrival and departure gates and check-in counters.

Southwest Airlines has partially surmounted the barriers to price competition because, after 27 years in the business, it is able to swamp its markets with cheap, high-frequency flights departing throughout the day, a strategy that circumvents bracketing.

Airlines, exemplified by Southwest, have focused their limited strategies and resources on short-haul routes with high traffic densities. However, access to many of these routes is denied to them by the restrictions on airport access. As a result, even after 20 years of deregulation, at least half of the US air travel market, especially the densely populated north-east, has been left untouched by such low-cost competitors (*Business Times*, 1998b, p. 2).

The European experience

Compared to their US counterparts, European scheduled carriers have had the additional benefit of seeing for themselves the strategies that were employed by their counterparts in the USA who had worked in a deregulated market. In addition, one of the key strategies employed by US carriers to defend themselves against competitors, the restructuring of their essentially linear route systems to hub-and-spoke systems, was already a feature of the European air transport scene. Each European flag carrier has had its routes centred on a single hub, invariably its capital city (Williams, 1994). In contrast to the situation in the USA, the position of dominance at each hub was defended through market entry barriers imposed by the relevant regulatory authorities. When this defensive protection was removed, European flag carriers responded by formulating new defensive strategies. These strategies took into account their respective strengths and weaknesses, and were modified over time to suit changed market conditions, to counter EU regulatory efforts as well as result in greater strategic insights.

Pre-emptive strategies: securing the home front

Pre-emptive strategies employed by European airlines included those of keeping potentially powerful competitors at bay. This included preventing carriers from other countries acquiring medium-sized scheduled airlines based in one's home territory, particularly those operating international services. In the case of France and the UK, there were these scheduled airlines of sufficient size that could pose a threat to the flag carriers. In the French case, UTA with its experience of long haul operations could, if it were acquired by or merged with another major European airline, pose a formidable challenge to Air France, as market access to routes previously denied became a possibility.

In the UK, British Caledonian with its base at Gatwick initially posed the greatest potential threat to BA (in much the same way as UTA did to Air France) by making it possible for a prospective player to gain access to runway slots and terminal space in the UK. At this time, additional carriers were denied access to Heathrow (the flag carrier's base), which in effect shielded BA from some degree of competition. Birmingham airport, another possible point of access for a potential competitor, was checked by BA through its part acquisition (since terminated) with Maersk of The Plimsoll Line, owners of the then Birmingham Executive Airways. Its part purchase of the Plimsoll Line also provided it with the potential to keep SAS at bay in its home ground. On the other hand, BA was itself checked in its unsuccessful attempts to obtain a shareholding in Sabena, in conjunction with KLM, which were aimed at achieving a geographical dominance at the main traffic generating western edge of Continental Europe (Williams, 1994).

Defensive strategies: strengthening own hub's dominance

The key defensive strategy involved consolidating one's position of dominance on home ground. This included the acquisition of other carriers or engaging carriers to operate scheduled services on one's behalf. As a result, most independent carriers' operations became dependent upon the country's flag carrier. Many operated feeder services to and from the flag carrier's hub, while others operated regional routes with aircraft types not operated by the national carrier. For carriers which were not operationally dependent on the national carrier, many took the prudent step of simply avoiding direct competition with the powerful flag carrier.

This locking-in and marginalisation of locally based small and medium-sized airlines was a strategy employed by many Western European flag carriers. Air France, for example, contracted carriers such as TAT and Brit Air to operate services on its behalf. Other European flag carriers also adopted this strategy in containing potential competitors.

In recent years, as far as acquisitions are concerned, there was the increasing trend of dominant carriers becoming part owners of smaller airlines, with the aim of exerting greater influence and control on the latter. In some instances, flag carriers acquired complete ownership of smaller airlines.

Expanding access within the EU: cross-border acquisitions

With the third and final stage of the liberalisation of Europe's airline services set, which allows carriers based in any of the member state countries the possibility of operating any route they choose, more cross-border acquisitions have taken place. Acquiring control of an established carrier provides a quick and easy means for entry into what previously were foreign markets. BA's acquisition in 1992 of a 49 percent shareholding in the German regional carrier Delta Air (since renamed Deutsche BA) was one such case in point.

KLM, a carrier with a disproportionately large international route network in comparison with its small home market, provides an unusual European case. To maintain such a global system requires traffic originating from or destined for other European countries to route via Amsterdam. This was achieved through the partial acquisition of scheduled operators of other states. Air UK was one such example (Williams, 1994).

Links between the major European flag carriers have only developed in recent years. A number of cooperative ventures have been formed, but most have been of a very tentative nature rather than any full blown attempt at combining strategies or resources.

Forging airline alliances for international survival and competitiveness

Against the backdrop of gradual liberalisation, European scheduled carriers began forming alliances aimed at securing their survival in an increasingly global marketplace. The "Third Package" of liberalisation measures agreed by the European Council of Ministers in 1992, which became effective in 1993, removed almost all previous restrictions on entry, capacity and pricing. By 1998 when the last remaining controls on cabotage are removed, air transportation within the EU will be effectively deregulated and, when the EU/EFTA agreement is concluded, an even wider area of free aviation trading will be created. Cross-border investments, mergers and alliances have increased in recent years.

Of the three largest European airlines, BA, widely acknowledged as being the most successful, has been at the forefront of alliance strategy development. BA's alliance developments include the part acquisition of its partners. To gain access to the domestic US market, BA acquired a 25 percent shareholding in USAir in January 1993. This was followed two months later by buying a similar stake in Qantas. Within Europe, BA was able to gain direct access to two of the continent's main traffic generating areas by taking over locally based carriers. In France it purchased 49 percent of the equity of TAT European A/I and in Germany a similar level of shareholding was acquired in regional carrier Delta Air (since renamed Deutsche BA). Although these latter two purchases provided it with a much greater degree of control than would be available under looser arrangements with independent carriers, the outcomes to date have not been entirely satisfactory. Losses at TAT, for example, have been heavy. The financial performance of USAir has been poor. BA has since dumped its alliance with USAir for an even more ambitious alliance with AA.

The other two large European carriers, Air France and Lufthansa, meanwhile had to concentrate on reducing their comparatively high operating cost levels. They formed an alliance partnership with each other in 1991 which did not include any equity swap. However, to date, no substantial mutual benefits have been derived. More recently, Lufthansa has concentrated on establishing an alliance with United Airlines, which has resulted in a number of code-sharing arrangements.

While Europe's big three have had some degree of choice in deciding their future courses of action, smaller European carriers have had little choice but to either join forces with a larger neighbour or merge with others of a similar kind or in a similar plight. The latter option, however, has many inherent difficulties. Take the example of the Alcazar project, which involved the proposed merger of four airlines Austrian, KLM, SAS and Swissair. The aim was to create a carrier large enough to compete on equal terms with the likes of BA, Air France and Lufthansa. The proposal, however, ran into a number of difficulties. A key issue highlighted at the time of the fall-through concerned the choice of US alliance partner. At that time, KLM had acquired a 20 percent major shareholding in Northwest, SAS was similarly involved with Continental and Swissair had a 5 percent cross-shareholding with Delta. As the alliance would only admit one major US carrier and, given the rather strong ties that existed between each of the these European airlines and their respective US partners, the decision on choice of US partner hit an impasse. Another major issue, played down at the time, concerned the question of where the inevitable cuts in staffing levels would occur.

During the Alcazar project, Austrian was also made an alternative offer by Lufthansa, one of the airlines which would have much to lose from such a proposed merger. Whether the offer from Lufthansa was based on a genuine interest in Austrian or was aimed at thwarting the Alcazar project, or both, remains unclear. Since the demise of the project, the three European Quality Alliance members of Austrian, SAS and Swissair, have sought to explore further collaborative possibilities with each other, while KLM has concentrated on developing its ties with Northwest. Besides the above-mentioned high profile alliance activities, there were also many other code-sharing arrangements between European airlines.

Market concentration

While larger airlines have been able to maintain and expand their international networks, the smaller carriers have had to confront the harsh realities concerning operating routes other than their main trunk routes and traditional links with former colonies. Faced with the need to either drop these routes altogether or to find airlines in a similar plight to pool resources, and given the obvious unattractiveness of the former, many chose the latter option. As examples, in 1984, many common destinations were served by both Sabena and SAS. However, by 1993 both airlines were servicing these through joint code-sharing services with other carriers.

The deregulated European airline industry has therefore turned out to be very similar to that in the USA, with the industry dominated by three large carriers, viz. BA, Air France and Lufthansa, and the other airlines playing lesser or secondary roles.

The Asia Pacific: the third major piece of the global airline equation

Intra-USA, Intra-Europe, Asia Pacific, Transatlantic, Transpacific and Europe-Asia account for about 75 percent of the world's air transport. To complete the global picture, Asia-Pacific is the third major piece of the global airline equation.

The Asia Pacific is a huge sprawling discontinuous geographical region of diverse nations. Consequently, in contrast to the situation in the USA or Europe, surface modes of transportation in Asia, whether by rail, road or sea, are not viable alternative forms of long distance travel. In this sense, air travel in the Asia Pacific situation is not unlike the case of the importance of the airline as the primary mode of passenger transportation between the USA and foreign countries, with the virtual demise of the scheduled passenger ocean liner.

In addition, unlike the USA and the EU, the international dimension of the airline industry in the Asia Pacific is relatively more significant than the "intra" dimension.

The world's fastest growing market

The Asia Pacific market was valued at US$10 billion in 1996. Favourable forecasts for air travel in Asia were made independently by two separate world aviation authorities in 1997. The International Civil Aviation Organisation predicted that air travel in Asia will grow at twice the world's rate of 5 percent, and before the turn of the millennium will account for 40 percent of global travel. In 1994, Asia accounted for about 30 percent of the world's air travel (*Straits Times*, 1998a, p. 34). The International Air Transport Association, on the other hand, forecast that, while the economies of the Asia Pacific will be similar in size to those of North America or Europe, Asia would account for half of the world's international air travel by 2010. IATA in 1997 also forecast world international scheduled passenger numbers to grow by an average of 7.1 percent annually to 2000, to reach 522 million, with the most significant growth expected to be in North East and South East Asia (*Asian Business,* 1997, p. 22). Asia's economic growth and swelling middle-class, coupled with its intrinsic, sprawling, discontinuous geographical regions, it was reckoned, will help fuel the growth of the air travel industry relatively much faster than that in the USA or Europe.

Competition for the Asian air travel market since the 1970s has always been fierce. In the early 1990s this became more intense as travel volume slackened. The annual growth rates in the 1970s and 1980s averaged about 11 percent and 12 percent, respectively. However, this slipped below 10 percent in the early 1990s. Although this growth rate was high relative to that attained in the USA and internationally, the lower growth rate put pressure on Asia's main airlines and their international competitors in the Asia Pacific arena. The region was by far the fastest growth market in the world, and continuing intense competition for it can only be expected as a consequence.

The years 1990-1993 proved to be very difficult ones for the airline industry. The economic recession and the downturn in major world economies that began in 1990 were accentuated by the Gulf War in 1991 (Hanlon, 1996). Economic recession deepened after the Gulf War and airlines had to struggle with a slow climb back to profitability. The economic recession in Japan was a major factor in Asia, as Japan accounted for nearly 60 percent of the international air traffic in Asia. Just as things were looking set to take off, Asia was hit by currency turmoil and economic slowdown in 1997 and 1998. While the immediate prospects are clearly affected, with traffic growth in the Asia Pacific expected to be flat or even fall in 1998 and possibly 1999, aviation experts still believe the region's economies will rebound, and the region will regain its position as the world's fastest growing market (*Straits Times*, 1998b, p. 50).

Asia Pacific's "brand" and major airlines

During the boom years, many of Asia's top airlines developed into major world players, capitalising on Asian charm and hospitality in their service. Japan Airlines (JAL), All Nippon Airways (ANA), Cathay Pacific and Singapore Airlines (SIA) are today in the league of the world's top airlines. Most of these carriers have established reputations of high quality in-flight service and have become formidable international highly-differentiated competitors. Asia Pacific also boasted an impressive set of national airlines that each had more than US$1 billion in annual revenues and extensive international route networks. These included Qantas, Air New Zealand, Thai International, China Airlines (of Taiwan), Malaysia Airlines, Garuda Indonesia and Korean Air. In 1994, about 40 airlines founded by state-owned companies had also sprung up in the People's Republic of China alone (*Fortune*, 1994, p. 26).

A global overview of the industry

We now look at the airline industry at the international level. In 1992, United Airlines' Chairman, Stephen Wolf, argued that competition would continue to remain a feature of the scheduled airline industry despite increasing levels of market concentration. An important question that follows concerns the nature and extent of the competition that will unfold on the international airline scene.

Deregulation in the USA had unleashed a considerable amount of competitive pressure on US carriers in their domestic markets. Substantial gains in efficiency resulted from the competitive process, with the larger carriers forced to reorganise and reduce their operating costs. Average fares fell in real terms and demand for airline services doubled over a decade.

The protection of bankrupt companies afforded by US bankruptcy legislation has enabled a number of financially defunct carriers to survive. Consumers have benefited considerably from the fare wars that this has brought, but the outcome for the airlines during recession has been massive financial losses. By 1995, following a shake-out, competition among the major surviving airlines has more or less become a much more controlled and stable affair than the comparative hysteria of earlier years. The megacarriers had avoided each other in direct confrontational and mutually destructive battles. As the deregulated airline market became more mature, these mutually costly and destructive fights have more or less diminished. By 1998, 20 years into deregulation, the US airline market has stabilised and developed into one dominated by four major powerful airlines.

The restructured US airline industry presented a considerable threat to carriers worldwide. The ability of the few powerful and financially strong US carriers to develop fully their domestic hub-and-spoke route systems has enabled them to extract considerable economies of scope and density. Having exploited most of the benefits that this strategy can offer in the USA, these airlines have built on this sound base by developing extensive international networks. Non-US carriers, without the benefits of extensive domestic feeder networks, were placed at a considerable competitive disadvantage. In addition, the extensive fifth freedom rights held by US airlines worldwide have provided them with opportunities to develop hub operations abroad. For a variety of reasons, including those of congested airspace, limited access to take-off and landing slots at major airports, and poorly-designed passenger terminals that cannot be adapted for hub operations, other world carriers have been unable to derive fully the kind of benefits that US airlines have derived from the hub-and-spoke route networks (Williams, 1994).

In comparison to US carriers, major European and Asia Pacific carriers derive the bulk of their profits from international operations. Consequently, the expansion of international routes and operations by both powerful US and Asia Pacific airlines have triggered intense international competition. The entry to international operations of a number of non-flag carrying airlines based in the Asia Pacific, such as SilkAir (of Singapore), Asiana Airlines (of South Korea) and EVA Airways (of Taiwan), had further intensified competition.

Competitive tactics: better service, cost cutting and price slashing

On costs, the US carriers had a clear comparative advantage. Their labour costs, which were slightly more than 30 percent of overall fixed costs, were only about half those of their Asian competitors (*Fortune*, 1994, p. 26). As for the European airlines, a McKinsey study in 1993 estimated that US airlines have a

28 percent labour productivity advantage over the former (*The Economist*, 1993, p. 18). Asian airlines generally had higher wage levels and employed more staff. This is in contrast to the US carriers, which, having to survive in the competitive deregulated US market, had long trimmed their staff and negotiated lower wages with the unions. It was noted by United Airlines in 1994 that "Unlike the Asians, we have gone through the hard-knocks school of deregulation" (*Fortune*, 1994, p. 26).

Airlines worldwide responded to the threat posed by the deregulation battle-hardened low cost carriers from the US, by offering better or differentiated service, undertaking several cost-cutting measures, and slashing prices to stay competitive. In-flight service, amenities and meals, for instance, were improved. Computerised reservations systems were strengthened, and frequent flyer programmes launched.

Airlines worldwide resorted to price slashing as one of the tactics in the 1990s to stay competitive. In 1994, for instance, prices fell by about 20 percent or more on some of the more popular and hotly contested routes (*Asian Business Review*, 1996, p. 34). Service and quality standards were also raised to attract travellers. However, the collective price-cutting tactics hurt the industry's profitability and yields as a whole. In 1997, Pierre Jeanniot, IATA's director-general, warned that such repeated price-slashing tactics will have a potentially devastating effect on the industry's future. He also warned that the industry needed urgently to protect its yields as well as continue to drive unit costs down (*Business Times*, 1997, p. 6). According to IATA's 1997 figures, collective net profits from international scheduled services fell from US$5.2 billion in 1995 to US$3 billion in 1996. Yields dropped six times as fast as unit costs – 2.5 percent against 0.4 percent (*Business Times*, 1997, p. 18). Jeanniot stressed the need for airlines and their marketeers to strike a realistic balance between yields and fares charged.

Similar sentiments were also echoed by SIA Chairman, S. Dhanabalan in 1997. When reiterating SIA's long-standing strategy of dealing with such competitive tactics, he pointed out that "Strong competition is not new to SIA. Every now and then, some airline, in an attempt to gain market share, will resort to senseless heavy discounting. It is a short-term phenomenon. We take such competition in our stride... If others resort to cutting fares, we can certainly do the same and we have a far better financial strength to cut fares and last longer than anyone else. But we ask ourselves first whether it is necessary to do that... So far, we have had no need to do so (*The Sunday Times*, 1997, p. 32).

"Brand" and differentiation-based strategy

Asian airlines, notably SIA, led the charge by competing not just on the basis of costs and prices, but also by differentiating themselves on high-quality service. In Europe, a couple of like-minded airlines, led by BA, also entered the differentiation game by positioning themselves as service oriented rather than "commodity" airlines. After suffering through years of poor market image during the 1970s and before, BA, in the span of a decade through the 1980s, had radically transformed itself into a globally established and highly differentiated airline. Service has become a centrepiece in the airline's corporate and marketing strategy.

Interestingly, although the airline industry in the USA has always been a "commodity" rather than a service industry, by 1998 there were indications that a segment of the US market was indeed evolving into a service-oriented market. According to the Air Transport Association in 1998, first class and business class seats now account for more than 22 percent of US airlines' domestic passenger revenue, up from the 9.5 percent in 1987 (*The Sunday Times*, 1998, p. 40). As a consequence, US airlines are expanding their accommodation for travellers in business class as well as first class. Service has taken on a more important emphasis.

The impetus for alliance strategies: survival and competitiveness in the "dangerous high seas"

Against the backdrop of intensifying competition, both large and medium-sized carriers worldwide have re-rationalised their international strategies and operations. In order to compete with the successful US megacarriers and their Asia Pacific and European counterparts, many medium-sized carriers have formed route sharing alliances with other airlines. However, the ability of these carriers to operate independent international services other than their main trunk routes will be severely challenged as the megacarriers grow and further establish their global networks, either in their own right or in conjunction with others.

Small and medium-sized carriers will increasingly find themselves having to organise around a comparatively small set of powerful megacarriers. Hitherto, this latter group has relied on the formation of collaborative ventures with each other for easier and more cost-effective access to international traffic outside their usual areas of influence. With the recent wave of global alliance development involving many of the world's largest carriers stepping up, more strategic and substantive alliances may be in the offing, and the ability of small and medium-sized carriers to provide efficient feeder or secondary services for these powerful consortia or alliances may to a large degree dictate their futures. The likelihood of nations being able to continue subsidising their loss making flag carriers worldwide will diminish as these dominant airlines consortia or alliances win over more international traffic.

Hamel *et al.* (1989) noted the need to collaborate with one's competitors to win. Alliances in the airline industry are collaborative partnerships which facilitate access and reach to a globalising industry. They are viewed by airlines as necessary and have become the fast-growing area of competitive advantage since 1993 (*Asian Business*, 1997, p. 22). The trend towards increasing airline alliances is now evident. According to a survey conducted by *Airline Business* in 1997, there were only ten such airline alliances in 1983. Three years later, in 1986, this number had grown to 52. By the middle of 1997, the number had, however, proliferated to 363 (*Business Times*, 1998, p. 2). In terms of scope and size, they are also increasing. In 1997, the largest ever alliance, the Star Alliance, was formed by the six partner airlines of United, Lufthansa, SAS, Air Canada, Thai Airways and Varig (of Brazil). Its ranks may grow with more airlines reportedly considering joining. Besides equity swaps, code-sharing, selling seats on each other's flights, many alliances now include mutual access to airlines' airport lounges, pooling of frequent flyer programmes and joint marketing.

Globalisation and global integration of the industry: state of dynamic flux

The pace and extent to which the industry will become globally integrated is intensifying. This is fuelled by the increased demand for international trade, travel and tourism. However, the full benefits of cost advantages and enhanced revenue generation that accrue to large size operations, that tight collaborative linkages would confer to participating airlines over current loose collaborative arrangements, have yet to be realised by airlines at the international level. What has been achieved by all major airlines is the access afforded by global partners.

The current impediments to the formation of global consortia pertain to issues beyond these fundamental cost and revenue considerations. Yet to be surmounted are the issues of structure that must follow strategy (Chandler, 1962) that are not yet fully in place, and the problems of "cultural" fit/compatibility and sustainable convergence of mutual interests of participating parties. If the interests of collaborating carriers do not converge or cannot be sustained, either the weaker will end up serving the interests of the more powerful or the parties will go their separate ways. It is only when sustainable convergence of common interests amongst collaborating airlines can be maintained, and major mergers and acquisitions across borders allowed to take place, that the eventual emergence of a smaller number of tightly integrated giants will become a reality. The latter, however, is currently constrained by control of foreign ownership, anti-trust or anti-competitive legislation.

Many airline chiefs are, however, optimistic and envisage such a future of "white-tail" airlines without distinct national brand identities (*Asian Business*, 1997, p. 22). However, given the current situation, the present state of a variety of collaborative ventures looks set to continue for some time, before such tight global possibilities can finally come about. Factors currently preventing such possibilities can only impede but cannot stop the powerful globalisation tide.

Earlier conventional wisdom concerning the economics of operating an airline has been fundamentally changed as a result of deregulation. The various economies that can be derived from operating large integrated hub-and-spoke route networks, particularly those of scope, are only fully exhausted at very high levels of output. The result in the USA is an industry dominated and controlled by a handful of very large carriers. Given that the total size of the European air transport market is about more than half that of the US domestic market, the scenario of about three to four major airlines controlling the bulk of intra-European traffic by the turn of the millennium appears to be a likely steady-state situation. This, together with the three to four large airlines in the Asia Pacific, will mean a world airline industry scene featuring a dozen or so major global players. The benefits of cost and revenue generation at the global level will eventually force consolidation of the industry at the global level, leading to an even smaller number of global consortia. Besides costs and revenue generation, competition at the global level will also be "brand" or differentiation based.

Within their respective regions, the nature and degree of competition among European-based and Asia Pacific megacarriers would be very similar to that which resulted in the USA. As is apparent from the USA's case, the industry will consolidate to a small number of players which will maintain a satisfactory competitive environment, although, in the case of Asia, the numbers are likely to be slightly larger proportionately because the bulk of the air travel within the Asia Pacific region is in the international domain. The final numbers in each case will depend very much on the strategic intent of the key players and on the nature and strength of their relationships. In certain city-pair markets for example, the presence of just two carriers could result in both efficient services and fares that do not generate near monopoly profits. However, in other duopolistic markets, a tacit understanding on the part of the two affected parties that fare competition is mutually unattractive rather than any covert attempt at collusive action often results.

At the global level, none of the individual megacarriers dominant in their respective regions is currently big enough to be a global player in its own right. All these airlines have to concentrate their hold on their home/niche market as a primary strategy, and have only limited resources to expand on the global scale on their own. Consequently they will have to rely on alliances of various sorts as well as acquisitions to expand their international access and control.

The quest for global dominance and control: the search for the right partners and alliances

The major carriers will seek to concentrate their hold in the respective regions of the world over which they possess a comparative advantage. An important strategy for airlines would be to focus resources on their core markets to defend against rivals. This strategy alone, although necessary, will, however, not be sufficient to achieve global dominance and control. Having continual and assured access to the major airline markets of the world will be a constant strategic challenge. With about 75 percent of total demand for air transport in the world accounted for by the six geographically specific markets of Intra-USA, Intra-Europe, Transatlantic, Asia Pacific, Transpacific and Europe-Asia, a carrier with global aspirations will require a significant presence in each of these major regions. How best this can be achieved remains a critical issue faced by major airlines.

Under unconstrained conditions one obvious solution would be to acquire controlling interests in carriers commanding similar key positions in the other major world regions. If this occurs, it is conceivable that nearly all of the world's airline services will be supplied by an even lesser number of globally integrated megacarriers. Conditions for this to be realised currently do not exist. Apart from political and regulatory factors, it was pointed out earlier that there are the issues of structure that must follow strategy (Chandler, 1962) that are not yet fully in place, as well as "cultural" fit/compatibility, at both the corporate and the operating levels. Initial fit/compatibility, however, also does not prelude a falling out later on, for a variety of reasons, including the divergence of interests further down the road. A global or international airline would also come with a global or international orientation and culture, with the implications that corporate and national cultural characteristics of partner airlines will have to be sacrificed somewhat for the marriage to work. A global or international airline must also develop a corporate culture that can serve an international clientele.

Of all airlines, BA is reckoned to be one of the most active in the quest for global presence and dominance. It has acquired large minority shareholdings in many of its prospective partners. Past opportunities for such purchases in BA's case arose as a result of a potential carrier in question facing dire financial difficulties and having little choice but to accept such a prospect, or the airline in question being privatised, or becoming available as a result of regulatory intervention.

To acquire large minority shareholdings in prospective partners requires substantial capital. Very few carriers are, however, in such a strong financial position of having sufficient finances for such purposes. Moreover, given the difficulties that acquiring carriers have faced in turning their new charges into profitable outfits, even with available capital, many airlines will be wary of acquisitions made under less than ideal conditions.

On the other hand, BA's alliance with Qantas has turned out to be very successful. Both BA and Qantas now have a joint marketing and operating arrangement in South East Asia.

BA is also taking the alliance concept another step further into what is called franchising (Hanlon, 1996), particularly on the routes and in areas where there is the need to operate smaller aircraft, or where BA cannot operate because it is not allowed to, such as in other countries outside Europe (*Asian Business*, 1997, p. 22). BA franchises other carriers to do it in its name. BA gets a franchise fee to pick up more intra- or inter-lining traffic and for the franchisee there is the benefit of BA's marketing and distribution systems which deliver a lot more business to them than they could otherwise achieve.

Then there is also the already described high-profile, highly ambitious and potentially ground-breaking proposed alliance with AA, announced in June 1996, which is still under investigation by the regulatory authorities in the UK, USA and EU.

Another key alliance development used by airlines involves equity swaps among the participating partners. The basis of this arrangement is the derived mutual benefits of the strengths and standings of participating partners. This is best illustrated by the Global Excellence Alliance of Singapore Airlines (SIA), the other major world airline very active in alliance building, with its US partner, Delta and European partner, Swissair. The alliance, formed in June 1995 was "to find quality sources of products and services at cost savings to the three airlines" (Singapore Airlines, 1996).

Unlike BA or SIA, most carriers with limited financial resources have had to seek less costly ways by which to expand (and in some cases maintain) their route networks. Invariably this has involved airlines searching for compatible partners. To ensure the success of a prospective alliance, it is essential that each of the parties involved perceives that they are in a "win-win" arrangement. If not, it is likely that at some point partners may conclude that their interests are not being served and will withdraw to work a more attractive alliance with new partners. Such divergence and break-up of alliances are in fact not uncommon in recent years. Changes in market conditions, which have nothing fundamental to do with the existing alliance partners, may also precipitate such outcomes.

Many alliances now involve a form of code-sharing, in which the participating carriers all indicate that a specific flight being operated is their own. For example, the joint service of BA and Qantas between Singapore and Brisbane is marketed as a BA flight by BA and a QF flight by Qantas. In some arrangements, as in this particular case, one of the partners operates all the flights. The nature of such commercial agreements between the participants varies from case to case, not all being based on a sharing of costs and a pooling of revenues. One variant involves a participating carrier not operating the particular service agreeing to purchase a certain proportion of the available capacity at an agreed rate. A multiplicity of deals is currently in existence and finding the ideal partners in order to establish the best possible code-sharing deal is currently a very active ongoing process.

For travellers and consumers, alliances bring benefits of the ease of transfer, ticketing and collaboration of flight schedulings. For example, the Global Excellence Alliance of SIA, Swissair and Delta Airlines, has been marketed as "A seamless travel experience around the world with three excellent airlines". For airline operators, much more traffic as a consequence can be derived.

The shape of things to come: global consolidation

Although the eventual picture on global consortia/alliances is still unclear, the direction it is headed appears to be fairly certain. Given a few more years of dynamic iterations, the process should converge into a state of a small number of strong and more enduring global consortia/alliances. Underpinning this is the strong wave of global mergers and acquisitions that has swept through key global industries like financial services, information technology, telecommunications, car manufacturing, shipping, etc. The formation of such strong and enduring global airline consortia/alliances, as with any other form of collusive action, will result in competition being played out at the highest levels. This means that size again will be of strategic significance, and will be used as a strategic weapon. If global consolidation occurs on a grand scale, only a small number of consortia/alliances, each comprising lead airlines from all three key regions of the world, would ultimately supply most of the world's air transport demand. As in the domestic US market and the other key regions of the world, competition would continue to feature, but would be confined to the same peripheral type, with the marginalised airlines playing feeder or secondary roles to these global consortia/alliances.

These global consortia/alliances of airlines, just like the megacarriers in the US and deregulation experiences elsewhere, but now played out at the higher global level, will wield considerable power in containing the competition, highly differentiating themselves, expanding their clientele base and generating revenue. Faced with the competitive challenges of the day, they will be transformed into lean and sleek strategy and marketing led powerhouses.

In the longer term, competition among the small set of global players will keep the airline industry lean and efficient. Old style cartels are unlikely to return, but in certain respects the degree of control that these global players will be able to exert over their markets will give some resemblance of this. These global players will not rock the status quo they have so established for themselves, knowing how this can be mutually destructive and disastrous.

Conclusion

The strategic development of the airline industry all over the world has been shaped profoundly by deregulation over the past 20 years. The economies of operating scheduled airline services have been dramatically changed as a consequence. The lessons learned from the US experience, particularly effective competitive strategies against the competition, have been imitated by airlines facing the opening-up of their own markets to competition. In addition, in response to the competition by the successful and powerful US airlines for further international traffic, many carriers had responded by emulating many of the strategies adopted by these US megacarriers.

In Europe, the outcome of European deregulated airline industry mirrored that in the USA. It is now dominated by about three megacarriers. In the Asia Pacific, the emergence of many "brand" or highly differentiated airlines has intensified as well as transformed international competition. These highly differentiated airlines led the charge in transforming international competition from one based on costs and revenue-generation considerations, to include that of differentiation. European-based airlines and more recently US carriers, reacting to this challenge from Asia Pacific, as well as the needs of their domestic markets, have responded by entering the differentiation game in both international and regional markets.

Successful carriers, while dominant within their respective regions, are, however, not big enough to be global players in their own right. This has spurred them to look to alliance strategies as a means for global presence and reach. To acquire some degree of global dominance and control, airlines have resorted to acquiring controlling interests in prospective airlines or equity swaps among participating members. Forming alliances has become the fast-growing area of competitive advantage since 1993. Bolder strategic alliances, as exemplified by the BA-AA deal, although saddled with many initial problems, would eventually facilitate a greater pace as well as scope in global alliance strategies and activities.

Although the eventual picture on global consortia/alliances is still unclear, the direction in which it is headed appears to be fairly certain. Given a few more years of dynamic alliance building iterations and permutations on a pervasive scale, a small number of global consortia/alliances, each comprising lead airlines from all three major regions of the world, would emerge. Many airline chiefs are optimistic and have already envisaged such a future of "white-tail" airlines without distinct national brand identities.

The deregulated airline industry at the global level will more or less mirror the deregulated experiences of the USA, Europe and elsewhere. The industry will be dominated by a small number of global consortia/alliances, with the marginalised players confined to playing feeder or secondary roles. Competition among these global consortia/alliances, which will also be highly differentiated, will keep the industry lean and efficient. However, among themselves, it will not be the mutually destructive kind that will drastically challenge the status quo.

An unstoppable wave of mergers and acquisitions is now sweeping through major global industries in the world. From financial services to telecommunications, from car manufacturing to information technology and shipping, the world is increasingly being served by fewer and fewer large companies able to sell to more people via an ever-growing global communications, manufacturing and transportation network. Airline services, thus far playing a key facilitating role in these international transformations, cannot itself remain unaffected for long and should soon join the ranks of the ever-growing numbers of key global industries swept by the powerful globalisation tide. The new millennium will thus see the emergence of mega global, highly differentiated consortia/alliances of world airlines.

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