Strategic Directions for ASEAN Airlines in a Globalizing World

The Emergence of Low Cost Carriers in South East Asia

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Abstract

Deregulation and liberalization of airlines industry in ASEAN spurred rapid growth in its airline industry. The rapid growth was driven by the emergence of low-cost carriers. At least seven new airlines in ASEAN claimed to be low-cost carriers. ASEAN low-cost carriers operate on a point-to-point basis to optimise fleet use. In addition, ASEAN low-cost carriers made some innovations not commonly found in other regions in their attempts to reduce costs, ranging from short messaging service (SMS) booking, to call centre reservation with payment through ATM, using convenience store networks such as 7-Eleven, and facilitating payment in instalments. The emergence of low-cost carriers in ASEAN has prompted more people to fly due to the substantial decrease in fares. It has also pushed the network carriers to adjust extensively to survive and remain profitable. Many of the network carriers were pushed to restructure, some even established low-cost subsidiary carriers to compete with the new entrants.

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A. INTRODUCTION: ASEAN AIRLINE INDUSTRY

Not so long ago, the ASEAN sky was dominated by a few long-established airline companies. Most of these airlines, known as flag carriers of each country—such as Garuda Indonesia, Singapore Airlines, Malaysia Airlines and Thai Airways—are in fact owned or partly owned by their respective governments.

The development of the airline industry in ASEAN can be traced to the initial post-independence period in Southeast Asian countries. At that time, governments saw having a flag carrier as a high priority, not just to serve transportation needs, but also to raise their countries' international profile.

Rapid development of Southeast Asian economies, as well as their popularity as tourist destinations, contributed to these flag carriers' high growth from the 1970s until the early 1990s. These airlines catered to travellers' needs, flying domestic routes, short-haul regional flights and also international travel, and also providing full on-board and ground services, with connectivity and transfer to other carriers, operating in a hub-and-spoke network model, and covering as many demand categories as possible by offering several classes of services.

Government protection allowed them to dominate their domestic markets. Thai Airways, for example, was virtually the only carrier available for domestic routes in Thailand, as the Thai government restricted other domestic airlines. In Indonesia, although there were a few other carriers serving domestic and regional routes, they either had business relationships with Garuda or were owned by people close to inner government circles. These airlines' dominant position, combined with government protection, allowed them to charge high fares on their services, particularly for domestic and regional flights, yielding very high profits.

This situation came to an end in the late 1990s when economic crisis swept across Asia. Southeast Asian aviation industry was severely affected by the 1997 crisis. The number of passengers travelling international routes into and out of Indonesia, for example, fell by 20 per cent, and domestic routes were even harder hit. It was the same in other countries—international travel from Singapore fell by five percent, while the number of passengers travelling to and from Malaysia did not grow significantly.[1]

Several airlines, their considerable debts denominated in US dollars, faced severe financial difficulties. Garuda Indonesia was forced to undergo a restructuring program and was scheduled for privatization. Philippine Airlines was also grounded in 1999 after incurring US$338 million losses over the previous four years. Although a number of airlines survived, all were forced to restructure to some extent.

Deregulation and liberalization in several Southeast Asian countries, partly driven by the crisis, have created a new competitive environment in the ASEAN airline industry. A number of new ASEAN airlines have emerged, predominantly in the cut-fare sector, including Malaysia's Air Asia, Thailand One To Go and Nok Air, Singapore Tiger Airways and ValueAir and Indonesian Lion Air, Adam Air and AWAir, radically changing the nature of the airline business in ASEAN.

This section attempts to assess the development of these low fare airlines and their impacts on the region's airline and other transport industries. Section 2 discusses the characteristics of low cost airlines and their presence in the ASEAN market. Section 3 discusses the impact of the presence of low-cost carriers in the ASEAN market. Section 4 discusses policy issues regarding the emergence of low-cost carriers in the market.

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1 The figure is based on the number of passenger departing from each countries.

B. ASEAN LOW-COST CARRIERS: A REVOLUTION IN AIR TRAVEL?

The airline business in Southeast Asia has changed rapidly over the past five years. Deregulation and liberalization of the industry in many ASEAN countries accelerated the growth of the industry. Development and change has been driven, however, by a new breed of low-cost airlines serving domestic and short-haul regional routes.

In fact, the growth of low-cost carriers since 2001, when Air Asia announced its strategy with the catchy slogan 'now everyone can fly', has been tremendous. The ASEAN market's potential is impressive—49 city pairs with population more than one million, within two hours' flight of one another and 30 per cent of these served by only one airline (Hooper 2004:5–6). Questions remain, however, whether this potential can be realised and whether the low-cost business model can survive intense competition.

This section discusses the recent trend of low cost carrier expansion in the region.

1. Low-cost carriers in the airline industry

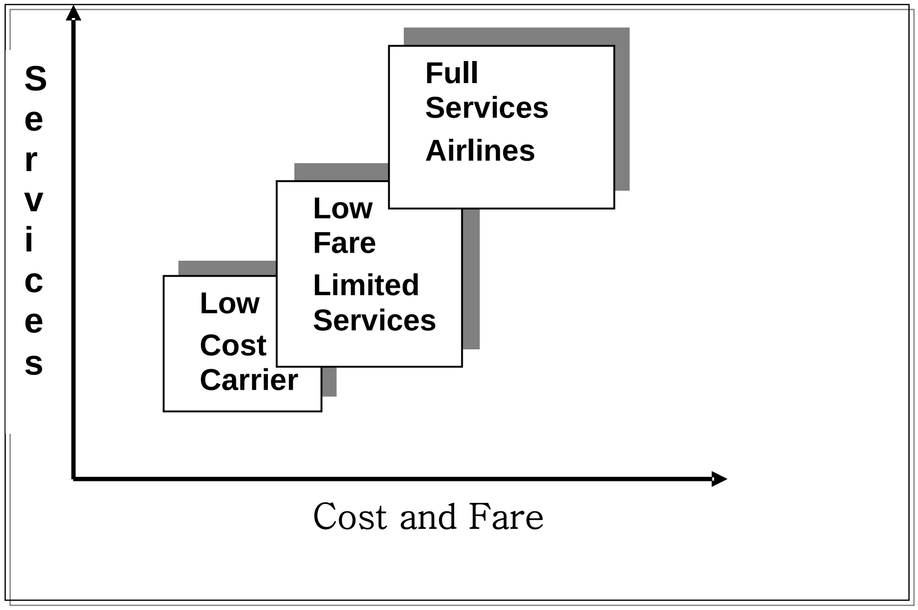
Over the past 15 years, the aviation industry has undergone a revolution with the emergence of a new business strategy concentrating on what are known variously as low-cost, no-frills, and low-fare carriers. While it is difficult to specifically define low-cost carriers, it is important to compare this new business model with other models of airline services.

The most commonly-noted difference between low-cost carriers and conventional airlines is, of course, the difference in fare. But beyond this the differences between low-cost carriers and conventional full services carrier are much more complicated. Tretheway (2004) noted that low-cost carriers tend to provide point-to-point services, rather than extensive hub-and-spoke networks. Other authors have defined the low-cost carriers according to their cost structures (Hansson et al. 2003), as well as the 'no-frills' level of services they provide compared to full-service carriers.

Hooper (2004) applies Porter's generic business strategies to differentiate between cost-leadership airlines, service-differentiated airlines and market-focused airlines. Low-cost carriers usually start as cost-leadership airlines trying to carry passengers at the lowest cost possible and providing minimal services—in contrast to the traditional carriers, which provide a full-range of services and products to cater for a wide range of market segments. At the next stage of development, most of the low-cost airlines tend to focus on particular markets and routes, transforming themselves into 'niche' airlines.

Another perspective on low-cost carriers' position in the airline industry comes from Franke (2004), who argues that the main characteristics of the airline business model are the services, including on-board services; interconnectivity; and complexity (Figure 1). Low-cost carriers strive to reduce costs substantially and offer low-fare flights by providing only basic services to customers. On the other hand, 'conventional' airlines compensate for high fares by providing full-service flights. Between these two extremes, other airlines offer lower fares and operate at lower cost than traditional airlines, but still provide a range of services, albeit limited.

Figure 1: Low-Cost Carriers' Position



Adapted from Franke 2004.

Low-cost carriers operate on a point-to-point route basis, as opposed to the hub-and-spoke networks operated by network carriers. Point-to-point operation has some advantages: the carriers can offer direct, and hence shorter, flights; the baggage handling procedures are simpler, which lowers the airlines' handling costs; and the logistics of dealing with connecting flights are eliminated. The cost, however, is the inconvenience to the passenger of not having connecting flights and baggage handling.

In addition, low-cost carriers try to optimise their fleet utilization by choosing cheaper and less crowded secondary airports. They can thus use their fleet more efficiently and consistently, especially if they focus on short-haul routes. Low-cost carriers reduce costs by not providing in-flight meals or entertainment, and sometimes by simplifying or even eliminating seat allocation. Typically, they will unbundle these services and sell them separately to passengers. This strategy results in cost reduction and allows cheaper fares.

The low-cost structure differs from traditional airline structures in distribution channels and marketing strategies. Loading factors became an important element in operational cost reduction. Therefore, low-cost carriers need to simplify booking and purchasing procedures. While traditional airlines depend on travel agent networks for distribution, low-cost carriers have introduced new distribution channels, such as direct selling, call centres, bank and supermarket networks. Innovative marketing strategies not only bring in more passengers, but also allow significant reductions in distribution and marketing costs.

Of course, each low-cost carrier is likely to choose a particular combination of cost-reduction strategies from this general list, depending on the specific travel, domestic regulation and market access environment it faces.

2. Environmental conditions of low-cost carriers in Southeast Asia

It is widely accepted that the low-cost carrier business model was introduced in the 1970s in Southwest Airlines' service of local routes in Texas. Southwest pioneered the low-cost carrier and successful no-frills service at a low price, offering point-to-point routes and maintaining a single-model aircraft fleet. Other US airlines, recognising Southwest's success, adopted the same model, but only some survived.

In the early 1990s, the low-cost carrier model was introduced in Europe. Irish carrier Ryanair transformed itself from a conventional regional airline into the European 'Southwest' Airlines in 1991. Focusing initially on the large leisure market between Ireland and the United Kingdom, the airline dramatically shook up services across the Irish Sea. It then rapidly built a network of intra-EU routes linking London's third airport, Stansted, with more than 50 other under-utilized secondary airports in several countries, making it the second largest low-cost carrier in Europe. Since then several other low-cost carriers have been established, including Easyjet, currently the largest low-cost carrier in Europe.

This new airline business model was soon adopted in Asia, particularly Southeast Asia, as young entrepreneurs saw its potential in the region's growing travel market. Now, at least seven carriers in Southeast Asia claim publicly to be low-cost carriers, while some others also offer low-fare tickets with additional services. Nonetheless, the development of the low-cost carrier model in the region remains questionable. Indeed, several differences in the nature of airline business in Southeast Asia compared to European or American markets could hinder their development in the region.

New demand for air services

The success of the low-cost carrier model in Europe and America has been driven by new growth in demand for air services, in addition to the shift of existing demand away from traditional airlines. Several studies show that the creation of new markets has stimulated low-cost carriers (for example, Windle and Dresner 1999). While some of this is a result of existing air travellers choosing to travel more, the majority is a result of people choosing to fly where previously they would have used land transport. That is, in America and Europe, an existing body of land-based travellers has been drawn to fly instead.

Southeast Asia's travel market differs from American and European ones. The Southeast Asian market can be divided into international and domestic travelers. Around 18 million people traveled between countries in Southeast Asia in 2003, 10.5 million of which came from Singapore, Indonesia, Thailand and Malaysia.[2] These figures indicate that the international travel market within ASEAN countries is relatively large. In contrast to Europe, however, most international travel within ASEAN is by air.

For example, among 3.2 million visitors to Singapore from other ASEAN countries in 2003, only 40 per cent came by sea or land. Around 50 per cent of ASEAN's visitors to Thailand were air travellers. The dominance of air transportation in Southeast Asia may be even larger than the statistics suggest, as ASEAN countries' visitor-arrival data includes a large proportion of local cross-border trips—that is, land trips made by people from one country to the contiguous regions of a neighbouring country (mostly for trade and tradition, rather than travel)—compared to travel between major cities. No data are available on city-to-city international travel in the region, but it is clear that geography hampers the development of land transport networks to service this market.

2 CEIC Database on the number of international arrivals of countries in South East Asia.

This means the low-cost ASEAN carriers might not be able to create substantial new demand by shifting travellers from other modes of transportation, such as sea and land transportation. Instead, they will have to depend on the existing market, which means competing with the incumbents, or try to increase existing travellers' frequency of travel.

The story might look different for the domestic markets. Two ASEAN countries, Indonesia and the Philippines, are archipelagic countries, which means that domestic travellers have to rely on unreliable and unpleasant sea and land transportation to travel between cities. Also, travelling by road or rail between cities in other ASEAN countries takes much longer than by air. Low-cost airlines in these countries have great potential if they can lure some of the huge numbers of domestic travellers away from land transport before expanding into the more competitive international market. Where they have no significant domestic market, airlines might find it difficult to compete with the incumbent traditional carriers and other low-cost carriers.

Cost structure

Another factor behind low-cost carriers' success in Europe and America is their ability to keep costs much lower than the traditional airlines. As noted above, low-cost carriers apply a number of methods to reduce costs: operating point-to-point routes, using secondary airports, offering no-frills services, and reducing labour costs. North American carriers, for example, reduced operating costs by 2.5 per cent by using secondary airports. By not providing meals, airlines can reduce costs by up to 3.2 percent (Najda 2003), and can make additional savings by cutting other services.

The other cost component, and perhaps the most important, is low cost-carriers' control of labour costs. In the United States, SouthWest and JetBlue were able to maintain labour costs around 30–40 per cent lower than the traditional carriers by paying lower salaries and adopting more aggressive employment and labour relations policies (*Wall Street Journal*, 9 October 2002). Hansson et al. (2003) estimated that the labour cost difference between low-cost carriers and full-service carriers in Europe is around 50 per cent, which accounted for 33 per cent of the total cost gap between them (Table 2). In general, there is a significant cost gap between low-cost carriers and traditional airlines, contributing strongly to these carriers' success in Europe and the United States.

While low-cost ASEAN carriers have some opportunities to emulate this model, there are some constraints. Only a few cities in the region have secondary airports, and these tend to be idle superseded international airports in the region's major capital cities, which limits the potential for this form of cost reduction. Other major cities and provinces normally do not have adequate airport facilities for regular flights.

Low-cost ASEAN carriers will also have trouble finding slack in tightening labour costs. Because wage rates are generally quite low in the region, traditional airlines already pay their employees relatively low wages. Thus, there is little room for low-cost carriers to make savings in this regard. Similarly, the traditional carriers' provision of meals only accounts for 2–4 per cent of their total operational cost, as food is relatively cheap in the region, so the potential savings from not providing meals are not great.[3] Overall, then, low-cost carriers will have to develop new ways of cutting costs in order to compete effectively.

3 Interview with executives from several airlines in Indonesia, Malaysia, Thailand and Singapore. The figures vary from one airline to another, and between different types of flight class.

Market access

The third factor distinguishing ASEAN low-cost carriers from their American or European counterparts is market access. Unlike Europe, ASEAN is not a single market, particularly when it comes to airline services. Access to the air travel market varies across the ASEAN member countries.

Singapore has traditionally adopted liberal policies both as a reflection of its geography and as part its strategy to establish itself as a regional hub. Thailand has followed this lead, granting more access such as traffic rights and adopting an open sky policy from 2001. Others have implemented more restrictive policies. Malaysia has provided access to its domestic destinations based on reciprocal rights. Indonesia and the Philippines provided limited access and restricted destinations to other countries' airlines. Aviation policies are generally underdeveloped in Cambodia, Laos and Myanmar, but somewhat more advanced in Vietnam. While airlines from other ASEAN countries might operate in this sub-region, the uncertainty of sustainable rights remains high.

Efforts have been made towards greater access in the region. Cambodia, Laos, Myanmar and Vietnam are members of the proposed CLMV regional air services agreement, which will provide unlimited capacity and traffic rights across member countries. Meanwhile, other ASEAN countries remain dependent upon bilateral agreements. Other countries' limited access to ASEAN countries' domestic markets will slow the development of low-cost carriers in the region. Consequently, the domestic markets will be extremely important for low-cost carriers in the near term, but this will privilege carriers operating in those countries with larger domestic markets. Relaxing access to regional markets would, of course, alter this scenario considerably.

3. Business models of Southeast Asian low-cost carriers

Low-cost airlines in Southeast Asia face a different business environment to those in Europe or the United States. This situation forces new entrants to apply different models that allow them to penetrate the market and acquire a significant share, while at the same time substantially reducing operating costs.

Distribution channel and marketing

One of the common features of low-cost airlines is simple booking and ticketing arrangements. Internet reservation, with credit card payment, and ticketless systems are common distribution channels. Traditional carriers have also moved towards this distribution channel as it is the most convenient way for certain passengers, but it has also significantly reduced costs. This system might not work successfully for Southeast Asian low-cost carriers, however, for several reasons.

First, the proportion of the population with access to the internet has not reached a significant level in the region. Internet access rates in Indonesia and Thailand, the two markets with the greatest potential, were about 7 per cent and 8 per cent respectively. Singapore is the only country with widespread internet access. Second, credit cards and online payment are relatively limited in the region.

While airlines based in Malaysia and Singapore provide online booking and payment, only a few airlines based in Thailand have these facilities. At the moment no airline in Indonesia offers online reservation and payment, except AWAir, a subsidiary of Malaysian-based Air Asia, which adopted AirAsia's online reservation and ticket sales system.

To overcome this problem, most carriers come up with innovative ideas. Lion Air of Indonesia, together with its low-cost subsidiary, Wings Air, provides reservations via short message services (SMS), which can be finalised and paid for through ATMs. Recently, call-centre reservation with subsequent ATM payment has become the most effective distribution channel for many airlines, particularly the low-cost carriers, in ASEAN countries. Sales through call centres accounted for about 40–50 per cent of low-cost carriers' total ticket sales in Indonesia and Thailand, and up to 30 per cent for Malaysian and Singaporean carriers.[4]

A more innovative ticket sales system has been implemented by several low-cost carriers in Thailand, notably NokAir and One-Two-Go. They use convenience store networks, such as 7-Eleven, to sell tickets. Customers can purchase their airline ticket while doing their groceries. These two airlines even offer passengers a range of instalment-payment options to purchase airline tickets.[5] Innovation in distribution has not only provided convenience to consumers, but has also raised awareness of these airlines in the market. NokAir has reported that the load factor was more than 78%**,** meaning their flights were filled 78 per cent on average, and boasted that it will have over two million passengers in 2005. One-two-go has also maintained a stable position in the Thai domestic market by concentrating on innovative distribution channels.

Some other low-cost carriers in the region preferred to employ more conventional ways of raising market awareness—price discounts. AWAir allocated 18,000 seats with unreasonably low prices to attract consumer's attention when the company re-launched its operations. Air Asia's other subsidiary, Thai Air Asia, also applied a similar strategy to get more attention from the Thai public.

Route selection and airport choice

As mentioned earlier, low-cost carriers in Southeast Asia have greater market opportunities in domestic markets than in the regional market. Most low-cost carriers have become established running routes from a hub in their base country's capital city. Thus, Air Asia started by connecting Kuala Lumpur and other parts of Malaysia, particularly Sabah and Sarawak. One-two-go also started by serving the huge demand on the Bangkok–Chiang Mai route. The same strategy was also adopted by new airlines in Indonesia, which mostly operate between Jakarta and other big cities.

As the airlines operate point-to-point networks, most open several other hubs to connect further destinations. The opening of new hubs becomes more important, especially when the carrier decides to expand into the more competitive international and regional markets—a new hub might serve as a departure point for longer international flights. Later, when the Air Asia entered international market, its second hub was opened in Johor Baru, to offer an alternative for the Singapore market.

A distinctive feature of low-cost carriers is their use of secondary airports. Although secondary airports are mostly only available in capital cities, there are some attempts to adopt this strategy. Lion Air and Wings Air, for example, are trying to get access to Jakarta's old airport, Halim Perdana Kusuma, which is currently used for charter and air force flights. Some airlines have used airports in nearby cities as an alternative to airports in capital cities. Sriwijaya Air flies to Malang airport in East Java province, instead of flying to the capital city, Surabaya, which is 80 kilometres away.

While this model remains difficult to implement for other destinations in Southeast Asia, the low-cost carriers in the region are still looking for ways to exploit it. Secondary airports tend to have lower fees, can be more convenient for customers,

4 From interview with executives of airlines in the region. While call center takes quite a big portion of selling, travel agent remain important, mostly for business segment.

5 "Nok Air and Aeon offer easy payment terms", *Bangkok Post,* 16 February 2005.

and, more importantly, tend to have less traffic. Aircraft find it easier to get landing priority and terminal space, and the ground operations tend to be more efficient, all of which allow airlines to increase their fleet utilisation.

Secondary airports can also provide a solution for the market access problem in international destinations. One of the reasons why Air Asia opened its hub in Johor Baru is that the airport can serve as a secondary airport for Singapore. The airline can thus cater for the demand on the Jakarta–Singapore route, for instance, without running into market access problems. Thai AirAsia also flies from Bangkok to the border city of Udon Thani and advertises a shuttle bus into Vientiane, again avoiding the need to obtain rights to operate in Laos airspace.

Fleet utilization

High rates of fleet utilization, as well as high load factors, are also a major factor in low-cost carriers' business model. With high utilization and high load factors, a low-cost airline will reduce costs significantly. The key for high utilization is to shorten the time between one flight and another. This requires good operating systems to ensure that all necessary ground handling procedures can be completed during a limited period.

Low-cost airlines in Southeast Asia targeted 12 hours' utilisation of their aircraft per day in order to increase flight frequency. This number is much higher than the traditional carriers, which normally utilize their aircraft for 6–8 hours per day. In order to reach such a high rate of utilization, the time gap between flights is restricted to only 25–30 minutes.[6]

One way to simplify ground handling procedures and cut down the time gap is by using one type of aircraft for the airline's whole fleet, typically the Boeing 737-200 or Airbus 320, which are suitable for short-haul flights carrying a relatively large number of passengers. There are a lot of other major benefits from this approach. The major benefit comes from cost cutting in maintenance spending: low-cost carriers do not have to hire a lot of people with different skills to do the inspection and checking; they need only prepare staff capable of checking one type of aircraft. Similarly, flight attendants and pilots can be assigned to any flight needed.

Most of the region's low-cost airlines rely on leased aircraft. This allows them to reduce the sunk costs and the need for capital, but in the longer run it may prove more expensive than simply owning the aircraft. This is one reason why Air Asia decided to purchase 40 new aircraft for its next stage of development.

Other cost-reduction strategies

While low-cost airlines in the region might find themselves paying the same wages as their full-service competitors, some possibilities to reduce labor costs remain. First, they can increase labour efficiency by hiring workers to perform many different tasks. For example, the incumbent full-service Indonesian carrier, Merpati, employed more than 3000 employees, while Lion Air of Indonesia employed about

6 Most airlines executives interviewed in this study ensure that 25 minutes gap is a sufficient amount of time for all necessary ground handling, although they also admitted that sometimes it can not be fulfilled due to various external problems.

1200 workers to perform essentially the same operations. Other low cost carriers can go even further, hiring 200 employees to service say 25 flights per day.[7]

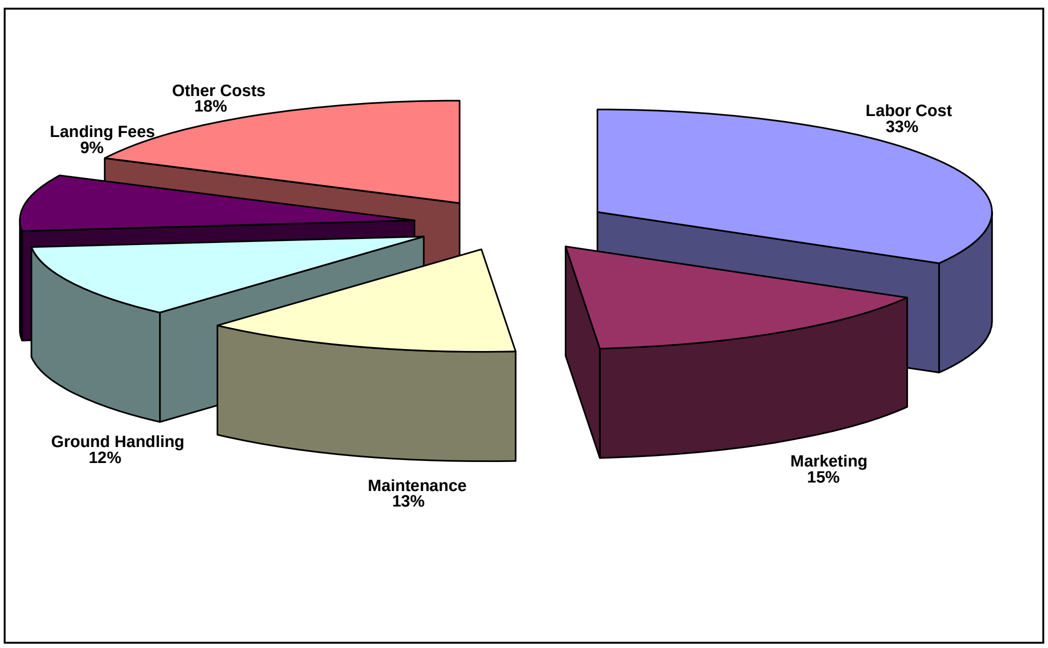
Second, the airline can outsource some activities, retaining only the significant parts in-house. Low-cost carriers in their initial stages find it cheaper to maintain only a small workforce directly working on flights and technical services, contracting other organisations to perform administrative operations such as IT and accounting, as well as other services such as baggage handling and maintenance.

Low-cost airlines: how low can it go?

The above strategies indicate that it is possible for low-cost carriers to reduce operational costs significantly compared to traditional full-service airlines. But the question remains whether the so-called low-cost carriers in Southeast Asia are really low cost in nature or just high-cost airlines operated with low-quality services. In addition, the sustainability of this business model remains in question.

As explained earlier, low-cost carriers can extract significant cost reductions from many aspects of airline operations. Najda (2003) calculated the operating cost for available seats-per-mile of several US-based airlines for a twelve month operational period and found that low-cost carriers can lower their cost by 5.2 cents per seat, per mile compared to network carriers. The author contrasted Jet Blue, whose costs were 6.8 cents per seat per mile, with United Airlines, whose costs were 12.0 cents. Hansonn et. al.(2003) describe the main factors behind cost differences of European network airlines and low cost carriers. This is underpinned by Figure 2, which shows the main factors explaining the significant cost differences of 8.41 cents/ASM between low-cost carriers and full service airlines in Europe.

Figure 2: Main Drivers of Cost Difference between Low-Cost and Network Carriers



Source: Hansson 2003

Note: total unit-cost difference between LCCs and full-service airlines is 8.41 c/ASM

7 At the first stage of its operation, an LCC normally employs less number of employees, but along with the expansion of business, the number of workers grows rapidly. AWAir, for example only employs around 160 workers to serve a fleet of 4 aircrafts, but planning to increase more in the future as the fleet becomes bigger.

No substantial information is currently available to judge the cost structure of low-cost carriers in Southeast Asia. Some estimates mention that their unit cost for every kilometre flown is around 3 US cents per seat. Air Asia has even set itself the target of 2.5 US cents per seat to ensure its competitiveness in the market. These figures, however, have been questioned by other players as being too low to cover all direct and indirect costs.[8] Such low cost targets raise concerns about aircraft safety and maintenance, including the age of fleets operated by the low-cost carriers. In addition, people in the industry also argue that cost reductions extracted from workers, through low salaries and minimal training, will hamper the sustainability of the operation. Time will tell whether the model is sustainable or just a short-lived experiment.

8 In an interview, Indonesia Airlines Association (INACA) mentioned that possible cost cutting of LCCs only allow 25% of price reduction. More than that means no more flight safety

C. THE IMPACT OF EMERGING LOW-COST CARRIERS IN SOUTHEAST ASIA

1. Lower fares

Substantial falls in airfares have become common in Southeast Asia in recent times, with passengers now enjoying more competitive prices. Travelling across East Asian countries has certainly become considerably cheaper.

In 2004, *Asiatime* reported that the new Singapore-based airlines, Valuair Ltd (established in May 2004), pushed Cathay Pacific and Singapore Airlines to cut fares almost by half. Valuair began using Airbus A320s, carrying 162 passengers a trip from Singapore's Changi airport to Bangkok, with return tickets costing US$80 under a short-term promotional rate (*Asiatime*, 2004). In early 2005, a new Singapore budget airline, Tiger Airways (established in December 2003), went even lower, offering promotional rates of US$72 for the Singapore–Bangkok return trip. In contrast, a Singapore Airlines flight on the same route would cost roughly US$106 per adult, without taxes, and would be conditional on a minimum two-day stay in Bangkok. Meanwhile, Thai Airways was much more expensive even than this. Recent quotes from several airlines show that airfares have fallen further (Table 1). Economy-class Singapore–Bangkok flights could found from as low as S$60.99 (US$36.5) to as high as S$180 (US$108).

Table 1: ASEAN Airline Airfares for Singapore–Bangkok

Airlines	From–To	Cost	Website source
Air Asia	Singapore—Bangkok	SGD 60.99	www.airasia.com
Tiger Airways	Singapore—Bangkok	SGD 90.23	www.tigerairways.com
Valuair	Singapore—Bangkok	SGD 120.00	www.valuair.com
Thai Airways	Singapore—Bangkok	SGD 180.00	www.chanbrothersflights.com
Singapore Airlines	Singapore—Bangkok	SGD 170.00	www.chanbrothersflights.com

Note: The price is for internet booking.

The emergence of low-cost carriers in domestic markets has had an even greater impact. In Indonesia—a potential market of 220 million passengers—the entry of budget airlines has resulted in very low airfares. In the past, the five airlines serving the domestic market were able to fix prices through their industry association, and customers could not challenge it. The practice ended when Indonesia introduced a competition law in 1999 (see Box 1 for details), stifling the collusion and thereby causing airfares to drop.

Box 1: The Road to Flexible Tariff Setting

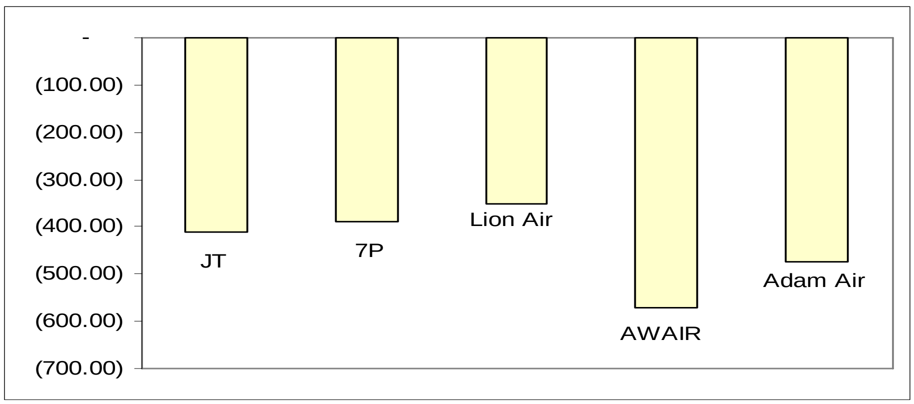
Before passing Enactment Law No.5/1999 on Prohibition of Monopolistic Practices and Unfair Business Competition, Indonesia did not have a sufficient regulatory framework on business competition. The 1995 Constitution does not have a provision on business competition or monopolistic practices. Indonesian airlines enjoyed a highly profitable cartel. Although the government was, by regulation, responsible for setting airfare prices, in reality, the airline companies colluded to set prices through Indonesian Airlines Association (INACA), based on the Ministry of Communication Decree No.25, 1997.

Two years after the law's enactment, the Competition Commission, the body responsible for implementing Law No.5/1999 on Prohibition of Monopolistic Practices and Unfair Business, decided that the airlines' policy of fixing prices through the Association (INACA) was a case of unfair competition that violated Articles 5 and 11 of the Law. The Competition Commission asked the Ministry of Communication to take control of price setting as outlined by Law No.15 1992 regarding Air Transportation. Since then, however, the government has allowed airfares to be determined in the market.

For example, airfares on the Jakarta–Surabaya route, a 1000 kilometre trip, fell to as low as US$20, compared to as high as US$90 prior to deregulation. With the entry of new airlines in domestic markets over recent years, price setting has become relatively competitive. Different airlines serving the same route frequently applied different prices, with new entrants usually offering substantially lower fares than incumbents (Figure 3).

It is interesting to note, however, that lately the full-service airlines have taken to releasing discount airfares on occasion. Despite this, trade analysts are convinced that conventional carriers cannot win the fare war, as fares cannot be reorganized without first reorganizing operations (*Asiatime*, 2004). As we previously suggested, the low-cost carriers' model in ASEAN may differ according to local conditions, but these carriers still impose a significant competitive threat to the full-service carriers.

Figure 3: Indonesia, New Entrants vs. Incumbents, Price Differences (in Rp '000)



Source: Travel agent's quotation

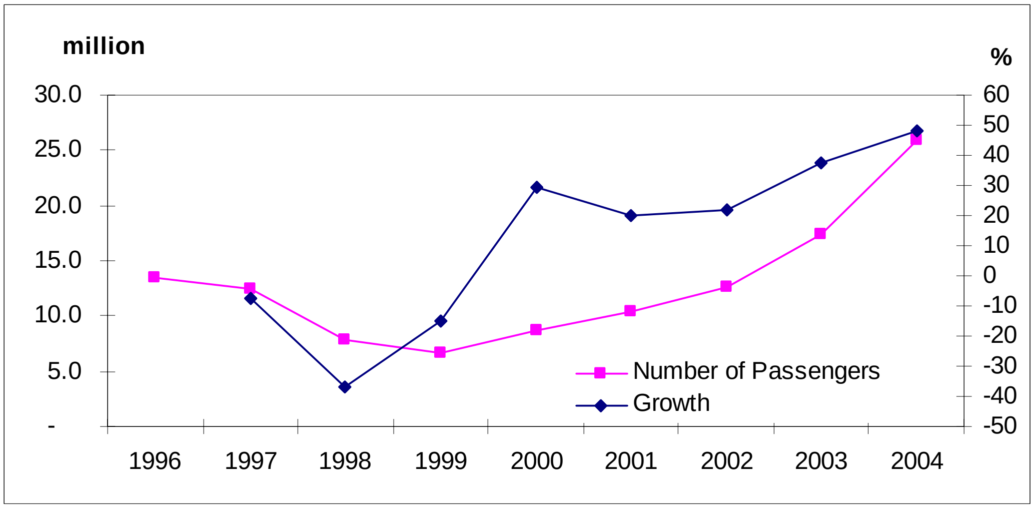
The most aggressive low-cost ASEAN airlines also began to serve the Indonesian market, with AirAsia in the vanguard followed by several others. Recently, Valuair entered the Indonesian market, offering a low-fare promotional rate of US$104 for the Jakarta–Singapore return trip—substantially lower than the already low fare offered by the Indonesian domestic carrier, Lion Air, who offered one way trips on the same route for US$114. Air Asia also made flying to Kuala Lumpur from Jakarta and other cities much cheaper, offering a direct return trip for less than US$100, compared to US$250 with a full-service airline.

The entry of new players increased competition in the domestic market. In an attempt to protect domestic airlines, the government recently closed four large and high-potential cities—Medan, Jakarta, Surabaya and Denpasar—to non-Indonesian budget airlines, having already closed Yogyakarta and Semarang. The Minister for Communication argued that protection was necessary because domestic airlines were not yet competitive with other budget airlines in ASEAN but gave no indication about how long the protection would be retained (*Kompas* daily, 23 March 2005).

2. More people travel

A consequence of the lower fares is that more people are travelling. Figure 4 illustrates the growth of passenger numbers in Indonesia, and the acceleration of this growth in 2004, but further work is required to isolate the effects of low-cost carriers' entry from other economics variables affecting traffic growth.

Figure 4: Indonesia, Number of Air Passengers (Million) and Growth Rate (%)



Source: CEIC

3. The network carriers

The entry of new players in the industry certainly alarmed the incumbents; that the new entrants were low-cost carriers did nothing to ease their fears. Franke (2004) argues that the low-cost carriers' presence presents some dilemmas for the network carriers. The network carriers may not be able to respond to the low-cost challenge without weakening their competitive position relative to other network carriers. Second, network carriers have had little success in capturing a share in the price-sensitive market segment stimulated by the low-cost carriers. There have, of course been some exceptions, but these typically have been at a higher-cost base compared to the competing low-cost carrier. Third, network carriers have not only lost market share to low-cost carriers without being able to access the new demand, they have also experienced declining yields.

Southeast Asia is no exception here. Despite the increased demand for air travel, Southeast Asia's three largest network carriers have experienced years of negative growth. In 2001/2002, Malaysia Airlines passenger numbers fell 6 percent, while those for Singapore Airlines and Thai Airways fell by 1.6 percent. In 2002/2003, Thai Airways continued to experience declining demand while Malaysia Airlines and Singapore Airlines managed to have positive growth. In 2003/2004, Malaysia Airlines faced declining demand once again (Table 2). Garuda Indonesia also lost market share to new entrants, its share falling to 32 per cent in 2004 from 46 per cent in 1999.

Table 2: Passengers on East Asian Network Carriers (y-oy percentage change)

	Malaysia Airlines	Singapore Airlines	Thai Airways
1996/97	7.41	8.73	6.08
1997/98	(1.65)	(0.54)	0.14
1998/99	(9.31)	6.86	7.45
1999/00	12.12	7.87	8.39
2000/01	8.94	8.85	5.19
2001/02	(6.04)	(1.58)	(1.63)
2002/03	3.76	3.80	(6.92)
2003/04	(5.82)	n.a.	14.62

Source: CEIC database

Our interview with the managements of several ASEAN network carriers[9] revealed that they recognise the need to restructure their business to regain profitable growth. Some have established low-cost subsidiaries to compete with the new-comers—Thai Airways set up Nok Air, Singapore Airlines set up the joint venture Tiger Airways; and Garuda Indonesia launched Citilink, to serve point-to-point routes. Many, however, questioned whether Garuda Citilink can really be categorised as a low-cost carrier as it remains under the management of Garuda Indonesia. Indeed, recent reports indicate that the new management of Garuda Indonesia has decided to put Citilink under a separate management team (*Kompas* daily, 22 March 2005), but it remains to be seen whether subsidies from the parent company will be removed.

In contrast to other ASEAN network carriers, Malaysia Airlines, a publicly listed company, has no plan to set up its own low-cost carrier. It is more focused on reducing costs, from fleet renewal to outsourcing and subcontracting. It has also adopted some innovative cost-reduction strategies pioneered by the low-cost carriers, such as internet booking, although it is still at a very early stage in this process.

Airline Business in its editorial of September 2004 asked the question 'could the network carriers finally be making up ground on their low-cost rivals?' Recent evidence, it argued, suggests that

> …network carriers may be finding a new market level for the premium they can charge for their full-service offering. That in turn raises the questions of exactly what that premium is; what service levels are required to win it; and whether it can be delivered profitably.

The editorial quotes Jamie Baker of JPMorgan, who states that

> …the network cost disadvantage relative to low-cost carriers has closed to around a third over the last year, thanks to lower labour rates and rising aircraft utilisation. The gap could be down to 20–25% by 2005. However, he also suggests that the underlying premium on unit yields may be no more than 10%.

On the other hand, the editorial observes that

> …some even argue that the revenue premium is a myth or at least deceptive. The case is argued by Kevin Mitchell, of the Business Travel Coalition (who) argues that business travellers may be willing to pay something extra, but it is hard to measure. "It is perhaps in the 5% to 10% range, but it is not going to be there for ever," adds Mitchell, pointing out that as the network majors come down in price so the low-fare carriers are coming up in terms of service.

The editorial notes that that talk of convergence is growing and that examples abound in Europe and the United States. Convergence is, of course, also possible in ASEAN. The editorial concludes by saying that

> The game appears to be on to find out what passengers really want and are willing to pay for: lounges, loyalty schemes, in-flight service, convenient airports. As the (size of the) premium becomes clearer, so too will the challenge on costs. And although the story so far has been played out in short-haul markets, it is surely only a matter of time before the same lessons translate onto long-haul routes too.

Clearly, therefore, the full-service carriers are responding to the competitive threat posed by the low-cost carriers. This is not the first challenge faced by the incumbents—another was that from the charter operators—but most other earlier threats have come from technological change, such as larger aircraft or those which promoted new direct services. An important advantage of the full-service carriers is their ability to operate across a range of markets (defined in terms of both geography and types of travellers) and thereby diversify their risks. As discussed below, the removal of restrictions inherent in the bilateral system which limit full-service carriers' ability to capture benefits from their structure and position will add to their capacity to compete.

9 We interviewed the management of Singapore Airlines, Malaysian Airlines and Thai Airways.

4. Market dominance

Deregulation is expected to reduce market dominance. Before the crisis hit, the airline industry in Southeast Asia was dominated by state-owned companies—Malaysia Airlines, Thai Airways, Singapore Airlines, Garuda Indonesia and Merpati Nusantara.

But the 1997 crisis destabilised the Indonesian airline industry, with indebted airlines facing severe financial difficulties, restructuring and staff cut-backs. Sempati, one of the private domestic airlines in Indonesia was even forced to shut down. The financial crisis also made airline companies increase fares, partly because of the high dollar-component of costs. On the other hand, as the crisis drove incomes down, the number of people travelling by air also fell, particularly in 1997– 99.

The Indonesian government decided to ease entry into the airline industry in 2000, issuing a number of new licenses. By 2004, 28 airlines were licensed, 22 of which are currently in operation, and one of which is a joint venture between Air Asia and domestic partner. Before entry was eased, there were only five scheduled airlines in Indonesia, with limited routes, and most domestic markets were served by Merpati and Garuda. In 2004, Merpati and Garuda captured about 38 per cent of Indonesia's air travel market, while the new entrants (both low-cost carriers and others) captured 35 percent of the market.

In Thailand, deregulation of the airline industry also attracted a number of new players, some of them low-cost carriers. Orient Express attempted to fight incumbents in the pre-deregulation era in Thailand, but was unsuccessful, suspending operations in 1999. In 2001, when Prime Minister Thaksin adopted the open sky policy, Orient Express resumed operations and has since expanded by establishing a low-cost subsidiary, One Two Go. Recently, at least six low cost and secondary airlines have emerged in Thailand—PB Air, Phuket Air, Bangkok Airways, Nok Air (a subsidiary of Thai Airways), One Two Go and Thai Air Asia taking away a significant share of the incumbent market.

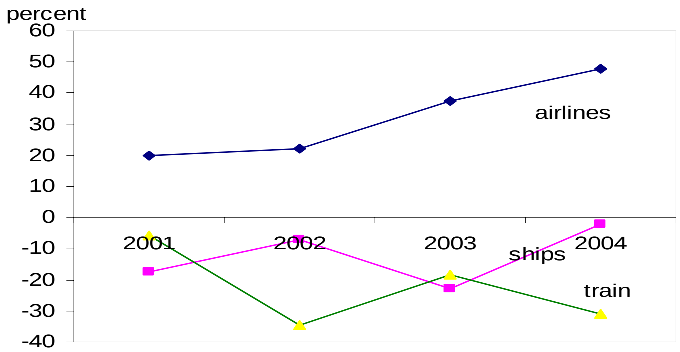
5. Other modes of transportation

The travel market in ASEAN is different from that in Europe. Travel across ASEAN countries is mostly conducted by air, which means that low-cost carriers might not be able to create substantial new demand by shifting travellers from other modes of transportation, such as sea and land transportation.

The domestic air travel market in some ASEAN countries is rather different from the regional market. Indonesia, for example, an archipelagic country, needs competitive airlines to ease travel from Java to other regions. Land and ship transportation is an unpleasant and time-consuming way to reach cities in Sumatra, Kalimantan and Sulawesi. For example, a trip from Jakarta to Medan, a city in Sumatra, takes more than 30 hours by bus or ship but 1.5 hours by plane.

The emergence of low-cost carriers in Southeast Asia definitely will have significant impact on the other modes of transportation in the domestic market. The unpleasant land and ship transport between distant parts of Indonesia is slowly being usurped by fast, affordable air travel. While the number of airline passengers has continued to increase tremendously since 2000, the number of rail and sea passengers has shrunk (Figure 5). At the same time, the Jakarta–Medan airfare is sometimes cheaper than the business class bus fare. In Indonesia, low-cost airlines' potential to capture the new demand for air travel is relatively high.

Figure 5: Indonesia, Growth in the Number of Air, Rail & Sea Passengers, 2000–04 (%)



Source: Ministry of Communication

D. POLICY ISSUES

1. Consumer protection policy

Low service standard

To cut costs, low-cost carriers deliver lower standards of service. Unlike full-service carriers, low-cost carriers do not offer in-flight services such as meals and entertainment. Low-cost carriers also apply open seating arrangements to assure short turn-around time. Customers, who are used to full service might find this unusual, and uninformed passengers might complain.

But can a minimum standard be legislated without hampering competitive forces and limiting consumers' choice? Legislating a minimum standard—that is, one higher than the current standard applied by the low-cost carriers, implies higher costs, which could result in higher fares and fewer service choices for consumers. This in turn will drive demand for air travel down, especially for the low-cost carriers' market segment. Given that the growth of low-cost carriers is crucial to stimulate economic growth, setting a minimum service standard would be counterproductive.

Leaving it to the market would allow for automatic adjustment—the low-cost carriers would increase their service standard gradually, albeit slowly. The more important issue is probably ensuring that consumers are well-informed on the conditions of low-cost carriers' services and allowing them to make an informed-decision when purchasing airline tickets. So far, however, the campaign and advocacy on matters relating to low-cost carriers has been limited.

Denied boarding

Most airlines systematically overbook, allowing more confirmed bookings than there are available seats. A standard may be needed for dealing with passengers with confirmed seats who are denied boarding because the plane is full.

> IATA allows member airlines to establish their own denied boarding compensation scheme. The IATA's passenger service conference resolution recommended that passengers that are denied boarding should be entitled to compensation in addition to a full refund of the unused portion of ticket. Before denying boarding, the airline concerned may call for volunteers not to board such flights (Code of Conduct, page 16).

Many low-cost carriers are not IATA members. In Indonesia, Garuda is a member of IATA, but the 25 other scheduled airlines are not. IATA recommendations and resolutions may not be relevant to low-cost carriers. Anecdotal newspaper reports of secondary airlines denying boarding indicate that consumer rights are not highly respected. Although passengers can get full refund for denied boarding, airlines rarely follow the recommended denied boarding procedures, and are not all that considerate of consumers. Customers are often informed that they cannot board only a few minutes before departure.

Misleading 'discounted fares'

It is very common to see airline advertisements offering unbelievably low fares, usually accompanied by extremely small print detailing the stringent conditions. Such ads can be misleading. For example, AWAir attracted a large number of customers by offering an incredibly low fare, selling thousands of seats for the next few months within the first month of the offer. But consumers were often disappointed to find that the incredible offer applied only to a limited number of seats and were attached to range of conditions.

In Indonesia, this type of gimmick attracted the attention of the Competition Commission (KPPU), which was concerned that it could be unfair competition and consequently demanded clarification from AWAir's management. At the same time, the Competition Commission also questioned the management of Wings Air, another low cost airline, about similar issues.

In Thailand, the Consumer Protection Board recently considered fining three low-cost carriers for running misleading advertisements on their airfare (*Business Day*, 22 December, 2004)

Risk of failure vs. consumer rights

Given low-cost carriers' tendency to operate in one market, with high gearing, there is a high potential for them to fail. Most airlines' customer agreements do not explicitly describe customers' rights in the case of business failure. This a crucial issue that needs to be addressed.

The formal clause of agreement between airlines and customers, supported by regulation, is more biased towards airlines. Regulations, international and national, preserve the right of the carrier to change routes or transfer passengers to another carrier, but national regulation does not protect consumers against airlines' failure to deliver services.

Consumers need such protection. If an airline fails to deliver a bulk group order from travel agents due to operational or business failure, who will cover the loss? Reviewing the existing international and national regulations reveals that such losses are not covered at all. Most regulation deals only with technical safety, licensing, tariff issues, flight cancellation and delays, and the resulting compensation. Given that the probability of airline business failure is increasing, a method for protecting consumers against this risk is becoming ever more urgent.

Although, such protection is not necessarily binding, offering such protection would distinguish particular airlines from others. The responsibility for such cases needs to be clearly stated.

Safety concerns

One of the main concerns about low-cost carriers' operation is their attitude to flight and aircraft safety. Uninformed members of the public may feel that low-cost carriers, attempting to cut costs wherever possible, might also reduce expenditure on maintenance and other related aspects of flight safety.

Recent serious and small accidents involving the Indonesian low-cost carrier, Lion Air, have raised the issue of aviation safety, particularly among low-cost carriers.[10] There are calls for tighter regulations, which would impose additional costs on the airlines. The real problems, however, lie more in the implementation of safety regulations, as most ASEAN countries do not have sufficient capacity to conduct evaluation and control of airlines operating in the region. One of the oft-proposed solutions to the safety concerns is the establishment of independent regulatory bodies. The implementation of this proposal can become a talking point of regional cooperation between ASEAN countries.

10 A Lion Air plane had a serious accident as it landed during a heavy downpour in November 2004, killing 26 people. During the period January-May 2005, there are 10 smaller incidents involving aircrafts of this airline.

2. Competition issues

State subsidies and competition

A state-owned airline may be receiving a subsidy from the government in face of private competition, which undermines the competitive process and inhibits entry of new suppliers. Also, there may be competition concerns if the incumbents respond by setting up their own low-cost carriers and there is cross-subsidy between the traditional airline and the low-cost airline (these matters of competition policy are discussed further below).

Because Philippines Airlines received subsidies from the government, it never needed to operate efficiently, and came close to collapse in the late 1990s as a consequence of risky investment decisions.

Second, state-owned Garuda Airlines nearly went bankrupt in 1998, during the Asian Crisis, because of the massive debt it had accumulated through years of inefficiency and internal corruption. In 2001, the company underwent debt restructuring, with creditors agreeing to extend the payment period by five years until 2010. Garuda issued shares valued at Rp1.3 trillion, a considerable proportion of which is in mandatory convertible bonds (MCB), held by state-owned Bank Mandiri and state-owned airport operators PT Angkasa Pura I and PT Angkasa Pura II.

While Philippines Airlines did not establish a low-cost subsidiary in response to the new entrants, Garuda did and left it under the same management. Cross-subsidies between Garuda and its subsidiary are therefore inevitable. To ensure a level playing field, Garuda must place the subsidiary under separate management to allow transparent financial reporting and prevent cross-subsidisation.

Minimum fare

At the same time, there are competition concerns related to the incumbents' reaction in terms of pricing. In some cases they have gone further, pressuring other transportation sectors to seek a minimum fare regulation to try to limit the substitution away from their services.

The *Jakarta Post* (20 December 2004) reported that the Indonesian Transport Ministry is considering setting floor prices at 30 percent of the ceiling fares, as stipulated by Ministerial Decree No.9/2002. For the 1,495 kilometre Jakarta–Medan route, the ceiling fare is Rp1.27 million, so the floor price would be Rp381,300. The article quoted a Garuda Indonesia spokesman claiming that floor fares were needed to ensure healthy competition. Whether the policy proposal will actually be implemented or not remains unclear.

3. International issues

As discussed above, international market access for air transport services in the ASEAN member countries remains restricted. Market access can be seen as the right of an airline to serve a given route between its own country and another country, and also the right to carry passengers between those countries. These rights are known as the fourth and the fifth freedom of the air. Access can be further provided to allow foreign airlines to operate domestic services, known as cabotage. ASEAN member countries usually rely on bilateral agreements between individual countries to give access for international routes, while access for cabotage remains closed for most countries.

Some attempts have been made to establish multilateral agreements for air services in the region. The ASEAN Free Trade Agreement on Services (AFAS) has placed air transport as one of the three priority targets on the roadmap of services-trade liberalisation.

The CLMV countries have also proposed an agreement that would provide unlimited capacity and traffic rights to countries within this sub-region. However, the journey to a more liberalized sky in ASEAN will be uncertain and turbulent. The restrictive industry environment will hamper further development of air services in the region, particularly for low-cost carriers.

Recent cases have shown that low-cost carriers might be more exposed to restrictive regulation than the full-service airlines. Singaporean authorities refused AWAir's request to begin flights between Jakarta and Singapore. Indonesian authorities have also just announced their intention to limit access for foreign low-cost airlines carrying passengers to four big cities in Indonesia, despite the current presence of two foreign low-cost carriers in the country.

This condition forces the airlines in the region to find ways to circumvent market access issues—the use of secondary airports near borders is one example. Air Asia and Thai Air Asia, for example, have used the secondary airport of Johor Baru and Udon Thani to get access to Singapore and Laos. One-Two Go of Thailand also flies from Bangkok to Macau to avoid difficulties in obtaining access to Hong Kong.

Another way of increasing access, particularly to domestic markets, is to set up a subsidiary with a partner from the target country. Low-cost carriers who want to operate across borders may be limited by bilateral agreements. It may be possible to bypass this problem by setting up a joint-venture airline in the designated market. Air Asia, for example, has set up subsidiaries in Thailand and has bought out inactive airlines in Indonesia. In the future, other ASEAN airlines may also follow this strategy, but its success will depend on ownership and investment regulations in each country.

4. Infrastructure Issues

As noted earlier, the rapid growth of low-cost airlines in ASEAN countries has brought significant impact on the number of flights and passengers travelling across ASEAN and also within countries. This growth has created some tension in air transport infrastructure, particularly airport facilities. Unlike similar airlines in Europe and North America, which usually operate at alternative but more affordable airports, most low-cost carriers in ASEAN countries serve consumers from the same airports as network carriers due to the lack of secondary airports.

The new low-cost carriers' operations, coupled with incumbent carriers' response, can produce significant additional demands on airports' runways and airspace. The number of flight departures and arrivals in Changi airport grew more than 20 per cent during 2004. Congestion and flight delays have been observed in many major airports in the region, forcing many airports to operate close to full capacity. The expansion of airport operations also brings some environmental impacts. Airport operators must balance the demands of serving air transport services to serve their regions, while at the same time reducing the negative environmental impact on the local community as much as possible.

The development of new major international airports in several ASEAN countries might relieve this tension. The Thai authorities have announced the opening of a new airport near Bangkok in 2006, to handle around 45 million passengers per year, with the current airport being devoted to domestic and low-cost carriers' regional flights. Singapore is planning to build a new terminal designed specifically for low-cost carriers. Some Indonesian airlines have proposed the use of Halim Perdanakusuma airport, which is currently underutilised, but the plan is unlikely to be carried out in the near future. The long forgotten Terminal A of Soekarno Hatta airport is now being used to cope with pressures imposed by the impressive recent increase in air travel demand.

Since beginning operations in 2001, Lion Air of Indonesia has increased passenger departures from Terminal 2F significantly, exceeding the maximum capacity of the terminal by 25 percent. The Minister of Communication found it necessary to ask Lion to move to the unused Terminal 1A with Garuda Citilink. Merpati and Pelita also decided to move to the less congested departure terminal 1A because domestic departure terminals 1B and 1C had already experienced a 20–30 percent increase in passenger numbers. Although the Jakarta International Soekarno Hatta airport management company plans to expand the existing airport, these pans have not yet been implemented.

As the demand and nature of low-cost carriers' operations are different to those of network carriers, airport specialisation in servicing different types of airlines can ease congestion problem and also increase the industry's efficiency.

However, the increasing need for infrastructure is not only limited to the major cities in ASEAN countries. Low-cost carriers' opening of many new domestic and regional destinations has increased traffic levels in smaller cities, so in the longer term infrastructure and service improvements will be necessary even if capacity is currently not too stretched. Governments, however, will probably not be able to afford all the improvements needed; private investment will be crucial. Where the government can help is in relaxing investment policy to support the demand for airport and other infrastructures.

E. CONCLUSION

Deregulation of the airline industry in Southeast Asia has prompted the emergence of low-cost carriers. More people than ever are flying due to the substantial decrease in fares. It has pushed the network carriers to adjust extensively to survive and remain profitable. Many of the network carriers have had to restructure, some even going so far as to open low-cost subsidiary carriers to compete with the new entrants. Ease of entry and flexible price setting have transformed the industry from being state-dominated to a mixture of public and private, a process that has in turn spurred competition, innovation and dynamism in the region's aviation industry.

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APPENDIX: ASEAN AIRLINES

Airlines	Starting date	No. of Routes and Flights	Fleet
Indonesia			
Bouraq	1970s	72 flights on 22 domestic routes and 2 international	Eight B737 and Three MD82
Jatayu	May 2003	9 flights on 7 domestic routes and 1 international	Four B737-200 and four B727-200
Garuda Indonesia	1946	30 domestic and 24 international routes	Three B747-400, six A330-300, five DC 10-30, 26 B737-400, 17 B737-300, five B737-500, two F28-4000, three F28-3000.
Adam Air	December 2003	38 flights on 10 domestic routes	26 B737-500 and B737-400
Celebes Air	March 2003	4 domestic routes	Three B737-200
Merpati Nusantara Airlines	1962	121 flights on 40 domestic routes and 6 international	Seven B737-200A, two B737-400, nine F28-4000, three Fokker 100, seven IPTN 212-200, seven Twin Otter 300, 10 CN-235-10, six F27-500
Mandala Airlines	1969	22 domestic routes	12 B737-200
Lion Air	June 2000	95 flights on 22 domestic routes and 5 international	19 MD80 and 5 DHC-8-301
Sriwijaya Air	2002	14 flights on 10 routes	Four B737
Bali Air	2002	4 domestic routes	Four HS-748 and two B737-200
Batavia Air	Jan 2002	25 domestic and 3 international routes	14 B737 and one F28
Star Air	July 2001	14 domestic and 2 international routes	Four B737-200 and two MD-83
AWAir	December 2004	14 flights on 5 domestic routes	Two B737-300
Air Paradise	February 2003	14 flights on 3 international routes to Australia	Two A300 and one A310
Airfast Indonesia	1971	Flights to 7 cities in Indonesia and one international route	Four Bell-412, one Bell-212, two Bell-204, two MD-902, one Casa 212-200, three Twin Otter 300, three Boeing 737-200, two MD-82
Riau Airlines	March 2002	7 domestic destinations and 4 international destinations	Two SAAB 340 B, two Cessna C-280
Deraya Airlines	1967	11 domestic destinations	3 Cessna 150, 3 Cessna 172, 1 Cessna 206,2 Cessna 402B, 2 Cessna 402C, 1 PZL 104 WILGA, 2 Shorts SD 330, 3 Shorts SD 360, 3 Casa 212-100, 3 Skyvan, 1 Piper Cheyenne, 5 ZODIAC
Wings Air		11 domestic destinations	
Pelita Air Service	1970	8 domestic destinations	Six Fokker 100, two F28, five Dash-7, eight Cassa.
Dirgantara air Service	1971	7 cities in Kalimantan only	Two C-212, Two 212-100
Trigana Air Service	1991		ATR, Bombardier, Fokker
Kartika Airlines	2001	NA	NA
Papua Airlines	March 2004	5 domestic destinations	B727-200

Airlines	Starting date	No. of Routes and Flights	Fleet
Malaysia			
Malaysia Airlines	1937	32 domestic destinations, 78 international destinations	17 B747-400P, 8 B747-200F, 15 B777-200, 10 A330-300 and five A330-200. 39 B737-400, 10 F50, five DHC6
Air Asia	January 2002	25 international and domestic destinations	B737-300
Philippines			
Philippine Airlines	15 March 1941	32 international and domestic destinations	five B747-400, four A340-300, eight A330-300, six A320-200, three B737-400, four B737-300.
Air Philippines	February 1995	13 domestic destinations	B737-200
Cebu Pacific Air	1996	19 domestic destinations	
Singapore			
Singapore Airlines	October 1972	59 cities in 32 countries around the world	52 B777, A310-300s, B747-400s
Silk Air	February 1989	25 domestic and international destinations in Asia	A320-200, A319-100
Tiger Air	December 2003	4 international destinations	
ValuAir	May 2004	4 international destinations	A320
JetStar Asia			A320-200
Thailand			
Thai Airways	1960	61 destinations in 34 different countries around the world and 13 domestic destinations.	18 747-400, two 747-300, four MD-11, six B777-300, eight 777-200, 12 A330-300, 21 A330-600, 10 B737-400, two Atr-72
Orient Thai	1990	9 International destinations	ATR 72, B717-200, A320-232
Bangkok Airways	1968	20 domestic and international routes	Three ATR 72-200s, six ATR 72-500s, four B717-200 twinjets and two brand new A320-232
Nok Air	2004	5 domestic routes	737-400
One-two Go		6 domestic destinations	B757, B747
Phuket Air	January 2001	8 domestic routes and 7 international routes	B737s
Thai Air Asia		8 domestic routes and 5 international routes	