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CHAPTER 8

Lions and Tigers: LCCs in Southeast Asia

Air travel has never been safer than today, which is remarkable given that so much of the increase in traffic in the past 15 years or so has occurred in regions with weaker safety records. In 2015, for instance, the International Air Transport Association (2016) reported a total of 68 commercial airline accidents worldwide in which the aircraft hull was at least substantially destroyed. With nearly 38 million flights completed during the year, the accident rate fell to 1.81 accidents per million flights, a level well below the 5-year average. Likewise, the number of fatalities in accidents was just 136, an incredibly low number (albeit still tragic for those affected). To put these numbers in perspective, 30 years earlier more than 1000 people died in aviation accidents in 1985 at a time when the number of passenger-kilometers was 5 times smaller than in 2015 (ICAO, 1986a, 1986b). Perhaps most incredibly, there was not a single fatal commercial airline jet aircraft accident1 in all of 2015 (IATA, 2016).

But, of course, aviation is not completely safe and accidents happen. On December 28, 2014, just a few days before the beginning of 2015’s seemingly remarkable good luck, Indonesia AirAsia flight QZ8501 crashed into the Java Sea 44 minutes after departing Surabaya, Indonesia for Singapore. All 155 passengers and 7 crew members on board were killed. Like other airline disasters, the crash of QZ8501 tore a gash in the everyday, taken-for-granted, relentlessly kinetic fabric of commercial air transportation. And through that tear features of the contemporary airline industry in Southeast Asia were revealed—features that might otherwise remain unknown.

1 There were two fatal airline jet crashes that were not accidental in 2015. On March 15th, a Germanwings A320 en route from Barcelona to Dusseldorf was flown intentionally into mountainous terrain in southern France by a mentally ill pilot, killing all 150 on board (Ewing & Eddy, 2015). On October 31, a Metrojet A321 en route from Sharm el-Sheik, Egypt to St. Petersburg, Russia was destroyed shortly after take-off by a bomb apparently placed aboard by an affiliate of the Islamic State (Youssef, 2016). All 224 people on board were killed.
Like the other affiliates in the AirAsia family, the Indonesian carrier’s slogan is “Now everyone can fly.” Were those lost on that fateful day a mix of “everyone”? To some degree, yes. The dead included a pair of South Korean missionaries, a young Indonesian entrepreneur making his first trip to Singapore, the managing director of an electronics firm, an Indonesia maid who worked in Singapore but had traveled home for a wedding, several teachers and a couple of university students, and 41 people from an evangelical church in Surabaya who had made a block booking to save money on their shared New Year’s holiday in Singapore (BBC, 2015; Patience, 2015). All 155 traveled in the same economy class seats. Aviation in this region has come some way from its traditional emphasis on luxury and class distinctions (Bowen, 2010).

The crash also highlighted the dynamism and free-wheeling character of the Southeast Asia’s airline industry. In the aftermath of the disaster, it was discovered that Indonesia AirAsia did not have permission to operate the Surabaya–Singapore flight on Sundays. Some commentators saw in the incident disquieting evidence that Indonesia’s aviation sector, fueled by low-cost carriers (LCCs) like Indonesia AirAsia, was growing too fast for pilot training and supporting infrastructure to keep pace (Fuller & Bradsher, 2015). Indeed, an aviation safety expert at the Massachusetts Institute of Technology observed in 2015 that Indonesia’s aviation fatality rate was about one fatality per million passengers or 25 times the US rate (Smith, 2015).

Ultimately, the crash of QZ8501 was attributed to a faulty part (a cracked solder joint in a component controlling the rudder) and primarily to pilot error, not to unsustainable growth in the aviation system, but the accident likely did contribute to the reversal in Indonesia AirAsia’s fortunes. For the full year of 2015, its passenger volumes fell by 17% versus 2014 and its fleet shrank from 30 to 25 (AirAsia, 2016). But for Indonesia as a whole, 2015 was another year of aviation growth, with passenger volumes up slightly (World Bank, 2018).

Nevertheless, Southeast Asian aviation, more generally, was poised for rationalization by 2015 after years of incredible growth, most of it on LCCs. In 2013, LCCs accounted for a larger share of capacity in this region than in any other, but by 2018 the budget airline sector had reached a kind of plateau (at least relative to the full-service network carrier [FSNC] sector\(^2\)), and South Asia (Chapter 9) had overtaken Southeast Asia as the region with

\(^2\) Between 2013 and 2018, LCCs’ share of seat capacity in Southeast Asia grew from 47.0% to 49.9%. During the same period, their share in South Asia grew from 40.9% to 50.7% (OAG, 2013, 2018).
the greatest LCC capacity share (see Table 1.1). Still, a couple of the region’s carriers rank among the largest no-frills airlines in the world (see Table 1.2), and low-cost aviation continues to reach into new markets (e.g., Myanmar). Perhaps nowhere else in the world has the surge in LCCs been as stunning as in this region. In this chapter, the emergence and massive expansion of AirAsia, Lion Air, Cebu Pacific, and other LCCs are explored. Why has this region proven so particularly hospitable to the LCC phenomenon and can it continue? And how has their rise affected everyday life in the region? Accidents like QZ8501 are tragic, but very rare; and the predictability and safety of LCCs have helped to streamline their ascent among the options enjoyed by an increasingly mobile Southeast Asian population. What have the consequences been?

8.1 AIRASIA: A FLYING CONFEDERATION

On November 18, 1996, AirAsia launched its first commercial flight, a short charter hop from Kuala Lumpur to Pattaya, a beach resort on the Gulf of Thailand (Chok, 1996). The carrier had just two 737s and planned on cautious growth, with the goal of being profitable by the third year. It was a modest beginning for a company intended to become Malaysia’s second national airline after flag carrier Malaysia Airlines, but it had no choice but to be circumspect given the severe constraints placed on AirAsia’s growth. Malaysia’s transport minister, who was aboard the first flight, made clear that there would be no direct competition between AirAsia—which initially flew under the brand Pacific Eagle—and Malaysia Airlines. Indeed, more than a year before AirAsia’s first flight, Malaysia Airlines’ chairman was quoted in the country’s main newspaper saying, “We go out and search for the routes, and the ones we have identified, we operate them. Of course we are reluctant to give them up.” (quoted in Azmi, 1995). And thus the opening to Pattaya, a secondary Thai gateway to which the larger airline did not operate.

In the next couple of years, AirAsia made brief forays into Indonesia and Taiwan, too, but all three foreign markets were abandoned as the Asian Financial Crisis gained momentum. By 1999, the airline’s network was just a skeletal frame of secondary domestic routes linking East and West Malaysia via Kuala Lumpur’s old airport3 (New Straits Times, 1999). It was not

3 In 1998, the new Kuala Lumpur International Airport opened at a site 45 km south of the city. The former airport for the city, which by then was called Sultan Abdul Aziz Shah Airport but is better known by its old name of Subang, became a secondary gateway popular with LCCs. Subang, which is located 23 km from downtown Kuala Lumpur, was an important base for AirAsia until the government compelled the airline to move to KLIA beginning in 2002.
enough to be viable, and the tiny airline continued to lose money, compelling its owner, the Malaysian industrial conglomerate DRB-Hicom, to look for a buyer. And on September 5, 2001, AirAsia, still with just two 737s, was sold to Tune Air for one Malaysian ringgit (about USD 0.25) and 50% of its net liabilities (New Straits Times, 2001).

By 2016, the family of seven airlines under the AirAsia brand operated nearly 200 aircraft and flew to destinations throughout Asia and beyond. The parent airline, Malaysia-based AirAsia, had revenues in 2015 of nearly USD 1.5 billion and net income of USD 130 million. How did a carrier which languished for years then surge to become one of Asia’s largest and most influential airlines?

Part of the answer is timing. AirAsia picked a terrible time to get airborne. Within months of its launch in 1996, the economies of Thailand, Indonesia, and then Malaysia were sent spiraling downward by the Asian Financial Crisis. And then a week after its purchase by Tune Air, the attacks of September 11, 2001 sent a shockwave through the global economy and especially the global airline industry. Yet these successive crises helped spur the government of Malaysia and other Asian economies to loosen their control over aviation, and AirAsia rapidly expanded into the spaces created by deregulation. By early 2002, the airline was dealing with a “deluge of inquiries” about its services between Kuala Lumpur and other major Malaysian cities including Penang—routes already served by national carrier Malaysian Airlines (Singh & Maria, 2002).

The massive interest in AirAsia was fueled by its low fares, which were as much as 60% below prevailing fares in early 2002. By mid-2003, the airline occasionally offered promotional fares for as little as MYR 1.99 (or about USD 0.50) between Kuala Lumpur and Penang, which are separated by about 325 km (New Straits Times, 2003a). The remarkably low ticket prices reflected the new ownership’s relentless focus on lowering costs. The chief executive officer, Tony Fernandes, explained the company’s strategy as one of “low fares, no frills and classless” with the goal being, “We’re going for the volume - when more people fly, there’ll be more flights and greater frequency…” (quoted in Zanina, 2002).

Fernandes, who was 38 when he led the investors who bought AirAsia, had made his name and his fortune in the pop music industry and had no airline experience before his move in 2001. But among the other investors in the venture was Conor McCarthy, former director of group operations at European LCC Ryanair, and he strongly influenced the business plan of the reborn airline (The Edge Malaysia, 2002). The Irishman redirected
Fernandes’ initial plan to target long-haul routes toward short-haul sectors of 3 hours and less; and he preached the importance of cost control as a “religion” (The Edge Malaysia, 2002). More specifically, like LCCs elsewhere, AirAsia slashed its turnaround time, took advantage of the nascent Internet to lower marketing and distribution costs, encouraged multitasking personnel, adopted a single aircraft type (the 737), and did some ancillary services (e.g., ground handling) in-house (Khanna, 2003). By 2003, the airline’s costs were among the lowest in the world: USD 0.025 per available seat-kilometer versus USD 0.042 for Ryanair (Khanna, 2003) and less than half the level of Malaysia Airlines (O’Connell & Williams, 2005).

AirAsia also emphasized clever advertising, beginning with its populist slogan, “Now everyone can fly” and aggressive pricing. The combination of ebullient marketing and tight cost control propelled the LCC skyward. By mid-2004, it had 19 used jets, was bringing more into the fleet at a steady clip, and was soliciting bids from Boeing and Airbus for 80 new-build jets (Bowermaster, 2004). By 2006, the carrier’s position was so strong in Malaysia that the government decided to allocate almost all domestic routes to AirAsia, which could serve them at a lower cost than Malaysian Airline System (MAS) (The Business Times, 2006). Simultaneously, the government ordered MAS to cease offering its so-called “supersaver fares,” which AirAsia had long claimed were predatory because they were underwritten by government subsidies given to the flag carrier.

Even as AirAsia secured its dominant position domestically, it was expanding across Southeast Asia. In October 2003, it began by tapping into the lucrative Singapore market via services to Senai, a Malaysian airport located 30 km from the causeway linking the two countries. Getting from Singapore to Senai required two bus trips and clearing immigration, but the low fares made it an attractive option: five reporters for the Singapore Straits Times tested which was the best way to get from the Esplanade in downtown Singapore to Kuala Lumpur’s famed Petronas Towers (Loh, 2003). A nonstop shuttle flight on Singapore Airlines (SIA) between the city-state’s Changi Airport and Kuala Lumpur International was fastest at just 4 hours and 10 minutes including ground transportation time, but cost the most—SGD 417.60 (USD 240). Conversely, taking the AirAsia flight out of Senai slashed the cost to SGD 27.70 (USD 16) but took nearly 7 hours. The AirAsia option was made more attractive by introductory promotional fares but even at the LCC’s regular fare on the route, the circuitous route through Senai was competitive with the cost of driving one’s own car, taking the train, or traveling by bus between Singapore and Kuala Lumpur.
The tourist resort of Phuket in southern Thailand was the carrier’s first actual destination outside Malaysia (AirAsia, 2004). In a sense, the airline was returning to its roots since the first iteration of AirAsia—before Fernandes—had begun with a route to the beaches of Thailand. Phuket was added to the network in December 2003. By the end of 2004, the airline had nine foreign destinations across Thailand and Indonesia, and was competing both domestically and internationally head-to-head against MAS and other flag carriers.

Almost simultaneously, AirAsia began to form joint ventures to better tap other regional markets. The first was Thai AirAsia, owned 51% by Thailand’s Shin Corporation and 49% by AirAsia. Shin Corp., a telecommunications conglomerate owned by the family of then-Thai Prime Minister Thaksin Shinawatra, was a powerful partner for the Malaysian LCC (Ghosh, 2003). The partnership worried homegrown players in Thailand’s infant budget airline industry, but in drawing close to the country’s top leadership, AirAsia was repeating its Malaysian experience: Tony Fernandes’ decision to purchase AirAsia in the first place could be traced back to a suggestion made at a face-to-face meeting between the music industry executive and Malaysia’s Prime Minister at the time, Mahathir Mohamad (Maria, 2002).

Thai AirAsia was launched in early 2004 on routes linking Bangkok and the country’s main domestic destinations. AirAsia kept the prime Kuala Lumpur-Bangkok sector for itself but Thai AirAsia did extend its early network from Bangkok to AirAsia’s second hub at Senai (Ariffin & Abas, 2004).

Less than a year later, AirAsia formed a similar 49–51 joint venture in Indonesia by acquiring a private airline called AWAir International (Tan, 2004). Again, the partner was well-connected. Among the founders of AWAir had been Abdurrahaman Wahid, who at the time of his investment was the head of Nahdatul Ulama, the largest Muslim organization in the world’s most populous predominantly Islamic country. Wahid went on to be elected president of the country. In 1999, AWAir had been the first new carrier to start up operations after Indonesia deregulated its airline industry, but just 2 years later it suspended operations in the face of severe competition (FlightGlobal, 2002). The AirAsia acquisition revived the defunct carrier.

Rechristened Indonesia AirAsia, the affiliate—like its Thai and Malaysian counterparts—targeted the lucrative Singapore market early on. In January 2005, the carrier was poised to launch flights to Changi Airport in the newly liberalized market between Singapore and Indonesia (Leng, 2005). Just a day before the inaugural flight, however, the plan
had to be scrapped because the Singaporean authorities said the appropriate documents had not been filed in time. Fernandes cried foul, claiming protectionism. As an interim measure, Indonesia AirAsia served the Singapore market via the nearby Indonesian island of Batam (Kaur, 2005), much as AirAsia had done in Senai. Using the Batam service required a ferry ride to Batam, but for those willing to endure the added time and trouble, the combined service offered travel to Jakarta at less than half the cost of flying nonstop from Singapore (Arshad, 2006).

By mid-2006, Indonesia AirAsia served 7 destinations (including 2 in Malaysia); Thai AirAsia served 16 destinations (including Singapore and points in Malaysia, Burma, Cambodia, Vietnam, and China); and AirAsia had stretched its operations to 33 destinations across Malaysia, Brunei, Thailand, Burma, Cambodia, Vietnam, the Philippines, and Macau (AirAsia, 2006). With a network that encompassed nine Southeast Asian countries, the carrier group was well on its way toward fulfilling its ambition to be the airline of ASEAN (the Association of Southeast Asian Nations). Fernandes was quoted in 2004 declaring, “I always had a vision of AirAsia going Asean.” (Ganapathy, 2004). And so it had—with only Laos, among ASEAN members, missing from its network.

AirAsia’s success fueled a broader regional flourishing of LCCs and further liberalization of the market. A particularly important and long-awaited development in that regard was the opening of the Singapore-Kuala Lumpur market to new competitors. Long one of the world’s most heavily trafficked routes, the link had been a virtual duopoly for decades. The air service agreement governing the route gave almost all traffic rights to SIA and Malaysia Airlines, and those carriers in turn split all revenue (regardless of which carrier moved which passenger) 50-50 (Kaur, 2007). SIA and MAS had an 85% combined market share on the route in advance of its liberalization, and roundtrip fares for the 300-km route were about USD 290. But as part of the more general liberalization of aviation in ASEAN, new competitors were allowed on the route from February 1, 2008, and AirAsia was among them. It entered the route with two roundtrips a day and fares of about USD 75.

With deregulation across Southeast Asia and the region’s budget airline phenomenon gaining momentum, AirAsia ordered 60 Airbus A320s in 2005, then 40 more in 2006, and then 50 more in 2007 (Sreenivasan, 2007). At the time of 2007 order, Fernandes predicted AirAsia would be the largest airline by passenger numbers in Asia within 7 years. The airline did not quite attain that goal (ANA, Air China, China Eastern, and China
Southern were all larger than AirAsia in 2014), but it was easily the largest in Southeast Asia, with more than twice as many passengers as SIA and its affiliates (Air Transport World, 2015). And by then, the “federations of AirAsias in the region” (Shameen, 2003) that the airline had begun to build early in its history stretched from India to Japan. AirAsia began its remarkable ascent by copying elements of the Southwest Airlines model, but as it gained altitude the Malaysian LCC entered into joint venture after joint venture to form copies of itself (Table 8.1). Their combined networks blanket much of Southeast Asia and beyond (Fig. 8.1).

8.2 OVERSTRETCHED LION? THE DIFFUSION OF LCCS IN INDONESIA

In mid-2000 a brief newspaper article appeared in the English language Jakarta Post describing the flurry of activity surrounding the launch of seven new airlines in Indonesia’s abruptly deregulated domestic airline industry (Jakarta Post, 2000). Much of the article concerned AWAIR, which—as noted above—would go on to become Indonesia AirAsia. In 2000, AWAIR excited the most interest less because of its commercial prospects than its flamboyant founders. In addition to the country’s president, the investors also included the president’s masseur, a man named Suwondo, who was then at the center of a swirling political scandal concerning embezzled state funds.

By contrast, the article spent just two sentences describing Lion Air, which within 15 years would be the largest airline in Indonesia. The Jakarta Post (2000) said simply, “Lion Airlines will start its commercial operation at the end of this month, according to company director of operations David Lumbuun. He said the airlines would initially fly to some local destinations, including Pontianak, Palembang and Medan, and expand to more cities in the eastern part of Indonesia by the end of this year.” In contrast to the colorful characters behind AWAIR, Lion Air was founded a former itinerant typewriter salesman. Rusdi Kirana moved from typewriters to German baking ingredients and then formed a travel agency with his brother which eventually served as the platform from which Lion Air was launched (Bland, 2015). The carrier began with USD 900,000 and a single leased aircraft.

The first route, Jakarta–Pontianak vv (740-km, 90 minutes flying time), was typical of the kind of sector that has become the bread-and-butter for LCCs across much of the planet. In 1998, on the eve of Asia’s financial crisis, the route had five to six flights per day in each direction: two on the
|                      | AirAsia (Malaysia) | AirAsia Thailand | AirAsia Indonesia | AirAsia Philippines | AirAsia India | AirAsia Japan | AirAsia X* |
|----------------------|--------------------|------------------|-------------------|--------------------|---------------|---------------|-----------|
| First flight         | 1996               | 2004             | 2005              | 2012               | 2014          | 2012/2017     | 2007      |
| Fleet                | 84                 | 56               | 23                | 17                 | 14            | 2             | 30        |
| Hubs                 | 6                  | 6                | 4                 | 3                  | 3             | 1             | 3         |
| Destinations         | 75                 | 56               | 17                | 22                 | 16            | 2             | 28        |
| Routes               | 116                | 81               | 31                | 34                 | 30            | 1             | 33        |
| Countries            | 18                 | 13               | 7                 | 9                  | 1             | 1             | 12        |
| Market share (%)b    | 38.1               | 18.8             | 5.9               | 11                 | 3.7           | NA            | NA        |
| Passengers (million) | 29.2               | 19.8             | 6.7               | 5.3                | 4.4           | 0.03          | 7.8       |
| AirAsia ownership share (%) | 100       | 45               | 48                | 40                 | 49            | 33            | NA        |

*a*Includes AirAsia X Malaysia which operates from Kuala Lumpur International Airport, AirAsia X Thailand whose base is Don Mueang International Airport (Bangkok’s secondary gateway), and AirAsia X Indonesia which flies from Ngurah Rai International Airport, Bali.

*The market share shown is for all group airlines in a particular market, including affiliates and subsidiaries (e.g., AirAsia, AirAsia Thailand, AirAsia Indonesia, and AirAsia X Indonesia all operate in Indonesia).

Data from AirAsia. (2018). AirAsia Berhad annual report 2017. Available from: https://ir.airasia.com/misc/ar2017.pdf (Accessed 14.07.18).
state-owned flag carrier Garuda Indonesia and three or four on the country’s other main state-owned airline Merpati. Altogether, these carriers provided slightly fewer than 500 seats per day between the nation’s capital and Pontianak, the capital of West Kalimantan Province on the island of Borneo. A decade later, after the arrival of the new players, there were 9 nonstop flights and 1200 seats per day in each direction, and Lion Air and another LCC called Adam Air were tied for first rank on the route (OAG, 2008).

By 2008, Lion Air served 27 cities across Indonesia as well as nearby Kuala Lumpur and Penang in Malaysia and Singapore, and by then the rapidly growing LCC was the second largest Indonesia airline in terms of passengers and was rapidly closing in on Garuda.

The country’s third-ranked carrier in 2008, Adam Air, bore much resemblance to Lion Air. Adam Air, too, was an upstart launched after the country’s rapid airline deregulation in 1998 (Asmarani, 2007). It was

Fig. 8.1 AirAsia destinations in Southeast Asia. AirAsia and its affiliates based in Thailand, Indonesia, and the Philippines operated to 74 cities across Southeast Asia in early 2018. The airlines’ networks outside of Southeast Asia are not depicted (but see Fig. 8.5). Lion Air and its subsidiaries operated to 131 cities in Southeast Asia, but 100 of those were in its home market Indonesia, and the Lion Air Group reached fewer countries in the region (6) than the AirAsia Group (10). (Data from OAG. (2018). Customized datafile containing detailed worldwide schedules for all airlines for April 2018.)

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created by an entrepreneurial family with interests in a variety of industries (from chopsticks to jewelry) and with strong political connections (a co-founder later becomes parliament speaker). And like Lion Air, Adam Air enjoyed meteoric growth in Indonesia’s buoyant aviation sector. But Adam Air was beset by safety concerns that undermined and eventually terminated its growth. In 2006, one of its jets got lost en route over Java and then meandered for hours before making an emergency landing 4 hours later on the wrong island. In January 2007, another jet crashed into the sea off Sulawesi with 102 people on board (Osman, 2008a). The following month, the fuselage of an Adam Air jet cracked after a hard landing, and then in 2008, another plane ran off the runway. These numerous incidents led Indonesian authorities to ground part of Adam Air’s fleet, and finally in March 2008, the troubled airline collapsed when it could not renew its insurance (Osman, 2008b).

In fact, among the flurry of new budget airlines that jumped into the deregulated Indonesian market, only Lion Air long survived as a significant, independent player. In 2008, Adam Air exited the market, as did another somewhat similar carrier called Batavia Air in 2013. AWAIR teamed up with AirAsia to form Indonesia AirAsia. Another player in the industry, Citilink, was never independent but rather was set up as an LCC subsidiary of Garuda in 2001.

By 2018, Lion Air was the largest airline in the country with 32% of seat capacity to Garuda’s 20% (OAG, 2018). And there were two other airlines in the Lion Air Group: Wings Air was an LCC subsidiary operating turboprops on lightly traveled routes; and, in a rather remarkable turning of the tables, Batik Air was a full-service subsidiary set up by Lion. There have been many instances of FSNCs establishing LCC subsidiaries, but Batik (which is named for the famed method of dyeing cloth in Java) may be the first instance of the parent-subsidiary relationship working in the opposite direction. Altogether the three Indonesia-domiciled airlines in the Lion Air group had just over 50% of seat capacity in the country.

By 2018, the combined networks of the 2 LCC subsidiaries of the Lion Air Group, Lion Air and Wings Air, served 120 cities. Most were in Indonesia and the network there stretched across the full breadth of the country from Banda Aceh in the west to Merauke in the east. Beyond Indonesia, Lion Air flew to China (14 cities), India (1), Malaysia (3), Singapore (1), and Saudi Arabia (1) (OAG, 2018). The carrier’s services to Jeddah reflect, of course, the importance of Islam in Indonesia. Overall, the strongly domestic orientation of Lion Air sharply distinguishes the carrier from
AirAsia, which very early on was intent on breaking out of the relatively small Malaysian market.

Unsurprisingly, Jakarta was the dominant node for Lion Air, with more than a quarter of flights either originating or terminating in the Indonesian capital. Other important hubs were Surabaya at the other end of Java and Makassar, the principal center of Sulawesi and other islands in the country’s northeast. On the trunk route linking Jakarta and Surabaya, Lion Air offered 12–13 flights per day in each direction, and the carrier’s affiliate Batik Air offered another 22 flights per day (OAG, 2018). Together they helped to propel the sector to 11th place among the busiest routes in the world (Table 8.2); in 1998, the same route had ranked approximately 330th. Routes linking Jakarta to Denpasar on the island of Bali and Medan on Sumatra also ranked in the top 25.

Similarly, Lion Air was instrumental in the ascent of Jakarta’s Soekarno-Hatta International Airport in the rankings of the world’s busiest airports (Table 8.3). Among the top airports in the world (ranked by weekly scheduled seat capacity), only Kuala Lumpur International, Indira Gandhi International (Delhi), and Denver International had higher concentrations of no-frills airline operations.

As Lion Air has consolidated its position as Indonesia’s dominant airline, especially domestically, other airlines have continued to fall by the wayside. The consolidation has been helped along by Indonesian government policy, in particular a law introduced in 2011 requiring airlines to operate at least 10 aircraft, with at least 5 of those owned (as opposed to leased) by the carrier (Leithen, 2012). The law was meant to address the country’s poor aviation safety record, but had the side effect of inhibiting new entrants and augmenting the already formidable advantages of size. Lion Air was positioned to be the big—literally—winner in the ensuing shakeout.

Indeed, the rise of Lion Air has been accompanied by a massive expansion of its fleet, from one jet in 2000 to 369 aircraft across the whole Lion Air Group4 in mid-2018 (Planespotters, 2018). The mainstay of the fleet is the Boeing 737, especially the -900ER. Indeed, Lion Air was the launch customer for the largest version of the venerable “Baby Boeing.” The airline initially ordered 60 of the jets, which in a standard all-economy Lion Air

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4 The Lion Air Group included Batik Air (55 aircraft), Batik Air Malaysia (3 aircraft), Lion Air (113 aircraft), Malindo Air (42 aircraft), Thai Lion Air (33 aircraft), and Wings Air (56 aircraft) (Planespotters, 2018).
| Rank | City-pair                  | Seats per week (000) | LCC capacity share (%) | City-pair                  | Seats per week (000) | LCC capacity share (%) |
|------|---------------------------|----------------------|------------------------|---------------------------|----------------------|------------------------|
| 1    | Río de Janeiro–São Paulo vv | 243                  | 55.1                   | Jeju–Seoul vv             | 325                  | 50.3                   |
| 2    | Sapporo–Tokyo vv          | 241                  | 22.1                   | Sapporo–Tokyo vv          | 261                  | 34.1                   |
| 3    | Fukuoka–Tokyo vv          | 204                  | 14.5                   | Fukuoka–Tokyo vv          | 242                  | 27.9                   |
| 4    | Jeju–Seoul vv             | 199                  | 39.5                   | Osaka–Tokyo vv            | 236                  | 22.5                   |
| 5    | Melbourne–Sydney vv        | 198                  | 19.9                   | Río de Janeiro–São Paulo vv | 222                  | 51.2                   |
| 6    | Osaka–Tokyo vv            | 196                  | 9.8                    | Melbourne–Sydney vv        | 202                  | 58.1                   |
| 7    | Beijing–Shanghai vv        | 184                  | 2.6                    | Beijing–Shanghai vv        | 198                  | 5.1                    |
| 8    | Hong Kong–Taipei vv        | 162                  | –                      | Hanoi–Ho Chi Minh City vv | 182                  | 52.9                   |
| 9    | Delhi–Mumbai vv           | 141                  | 37.1                   | Bangkok–Phuket vv          | 180                  | 58.8                   |
| 10   | Cape Town–Johannesburg vv | 141                  | 25.4                   | Delhi–Mumbai vv           | 170                  | 42.6                   |
| 11   | Okinawa–Tokyo vv          | 134                  | 6.9                    | Jakarta–Surabaya vv        | 168                  | 42.3                   |
| 12   | Chicago–New York vv        | 128                  | 22.1                   | Okinawa–Tokyo vv          | 159                  | 18.2                   |
| 13   | Brisbane–Sydney vv         | 107                  | 7.6                    | Hong Kong–Taipei vv        | 158                  | –                      |
| 14   | Jakarta–Singapore vv       | 107                  | 46.2                   | Bangkok–Chiang Mai vv      | 144                  | 65.6                   |

Continued
Table 8.2  Top city-pairs by airline seat capacity, 2008–18—cont’d

| Rank | City-pair                  | Seats per week (000) | LCC capacity share (%) | City-pair                  | Seats per week (000) | LCC capacity share (%) |
|------|----------------------------|----------------------|------------------------|----------------------------|----------------------|------------------------|
| 15   | London-New York vv         | 105                  | –                      | Cape Town-Johannesburg vv | 143                  | 64.7                   |
| 16   | Barcelona-Madrid vv        | 103                  | 24.1                   | Jeddah-Riyadh vv           | 142                  | 29.5                   |
| 17   | Brasilia-São Paulo vv      | 100                  | 43.6                   | Shanghai-Shenzhen vv       | 142                  | 8.8                    |
| 18   | Hanoi-Ho Chi Minh City vv  | 101                  | 32.9                   | Istanbul-Izmir vv          | 140                  | 48.1                   |
| 19   | Kuala Lumpur-Singapore vv  | 100                  | 58.5                   | Shanghai vv                |                      |                        |
| 20   | Dublin-London vv           | 98                   | 88.0                   | Guangzhou-Shanghai vv      | 134                  | 7.5                    |
| 21   | Seoul-Tokyo vv             | 98                   | 1.7                    | Denpasar-Jakarta vv        | 132                  | 59.8                   |
| 22   | Hong Kong-Shanghai vv      | 98                   | 20.1                   | Beijing-Guangzhou vv       | 123                  | 5.0                    |
| 23   | Jeddah-Riyadh vv           | 97                   | –                      | Dublin-London vv           | 121                  | 41.3                   |
| 24   | Beijing-Guangzhou vv       | 96                   | –                      | Beijing-Chengdu vv         | 121                  | 4.2                    |
| 25   | Atlanta-New York vv        | 93                   | 16.0                   | Jakarta-Medan vv           | 121                  | 48.3                   |

Notes
1. The values shown are for both directions on a route combined (“vv” means “and vice versa”).
2. The bold print city-pairs were located in emerging markets as defined by this book.
3. The capacity figures show aggregate flights at all airports serving a particular city (e.g., Viracopos/Campinas International Airport, São Paulo–Congonhas Airport, and São Paulo–Guarulhos International Airport in the case of São Paulo).
Data from OAG. (2008). OAG Max. February. CD-ROM; OAG. (2018). Customized datafile containing detailed worldwide schedules for all airlines for April 2018.
| Rank | Airport                              | Scheduled airline seats per week (000) | LCC share of seat capacity (%) |
|------|--------------------------------------|----------------------------------------|--------------------------------|
| 1    | Beijing Capital Intl Apt              | 1218                                   | 1.5                            |
| 2    | Atlanta Hartsfield–Jackson Intl Apt   | 1199                                   | 14.7                           |
| 3    | Dubai Intl                            | 1112                                   | 19.7                           |
| 4    | Tokyo Intl (Haneda)                   | 1016                                   | 15.2                           |
| 5    | Los Angeles Intl Apt                  | 1003                                   | 26.9                           |
| 6    | London Heathrow Apt                   | 970                                    | 2.3                            |
| 7    | Chicago O’Hare Intl Apt               | 914                                    | 7.1                            |
| 8    | Shanghai Pudong Intl Apt              | 880                                    | 10.8                           |
| 9    | Hong Kong Intl Apt                    | 875                                    | 11.6                           |
| 10   | Frankfurt Intl Apt                    | 871                                    | 9.9                            |
| 11   | Jakarta Soekarno–Hatta Apt            | 865                                    | 39.1                           |
| 12   | Istanbul Ataturk Apt                  | 834                                    | 9.0                            |
| 13   | Paris Charles de Gaulle Apt           | 828                                    | 12.3                           |
| 14   | Guangzhou Baiyun Intl Apt             | 803                                    | 8.5                            |
| 15   | Singapore Changi Apt                  | 799                                    | 31.1                           |
| 16   | Amsterdam                             | 792                                    | 21.8                           |
| 17   | Bangkok Suvarnabhumi Intl Apt         | 786                                    | 10.5                           |
| 18   | Indira Gandhi Intl Apt (Delhi)        | 785                                    | 44.3                           |
| 19   | Dallas/Fort Worth Intl Apt            | 753                                    | 5.2                            |
| 20   | Seoul Incheon Intl Apt                | 747                                    | 28.5                           |
| 21   | Kuala Lumpur Intl Apt                 | 746                                    | 61.3                           |
| 22   | New York J. F. Kennedy Intl Apt       | 717                                    | 26.5                           |
| 23   | Denver Intl Apt                       | 685                                    | 44.5                           |
| 24   | Madrid Adolfo Suarez–Barajas Apt      | 663                                    | 19.2                           |
| 25   | San Francisco Intl Apt                | 653                                    | 21.5                           |

Data from OAG. (2018). Customized datafile containing detailed worldwide schedules for all airlines for April 2018.
configuration, seats 214 people (Mecham, 2005). And then in 2011, with President Obama watching, Rusdi and Boeing agreed to the purchase of 230 additional Boeing 737s (a mix of -900ER and the even newer Max versions) (Leithen, 2012). The order was the largest ever in Boeing’s history in terms of the number of aircraft and their total value (approximately USD 22 billion at list prices, though large customers like Lion Air rarely pay full price). Then in 2013, Lion Air stunned the aviation community again with an even larger order: USD 24 billion for 234 Airbus A320 and A321 jets (Clark, 2013). Together the Boeing and Airbus orders turned Lion Air, an airline that at the time was just over a decade old, into one of the aircraft industry’s biggest customers.

The brand new fleet ought to have eased safety concerns inasmuch as newer aircraft are safer aircraft; yet safety concerns have continued to dog the airline, especially after a 2013 incident in which an aircraft missed its runway and crashed in the ocean (Cochrane, 2013). No one was killed but the carrier’s sixth accident in 11 years raised alarms.

In fact, there is evidence that the safety record of the Indonesian airline industry has improved, but the rapidity of Lion Air’s growth and that of the country’s other LCCs has strained other aspects of Indonesia’s aviation safety infrastructure. The supply of pilots, mechanics, engineers, and inspectors has struggled to keep pace with demand. For instance, it was reported in 2013 that in all of Indonesia there were just 200 aviation safety inspectors despite the feverish growth of traffic (Cochrane, 2013).

Will safety problems eventually stem the growth of the Indonesian airline industry? Perhaps, but one Indonesian airline expert noted that Indonesians have a history of continuing to ply buses and ferries after catastrophic accidents. Danang Parikesit, president of the Indonesia Transportation Society, commented about his fellow citizens, “They are very insensitive to accidents. It’s more on their perceptions of the value of life and the perception that the accident happened because it was meant to happen, like it’s fate.” (quoted in Cochrane, 2013). In any case, that insensitivity is likely not just an Indonesian characteristic. After all, Indonesia’s high airline accident rate in recent years was approximately the same as in the United States in the

5 Another version of the plane flown by Lion Air seats 10 in business class and 196 in economy.

6 In the carrier’s worst accident, 25 people were killed when a Boeing 737 overran a runway at Surakarta in 2004.
mid-1970s, a time when safety was hardly an impediment to the growth of the American airline travel.⁷

A more intractable obstacle to further airline growth in Indonesia may be the inadequacy of airport infrastructure, especially at Soekarno Hatta International (Teo, 2015). In 2016, a new Terminal 3 was opened, raising capacity to 63 million passengers per year (Karmini, 2016), which by coincidence is the same as the number of passengers who used the airport in 2017 (Jakarta Post, 2018). The state-owned airport operator, Angkasa Pura II, plans to build a third runway by 2020 and fourth terminal by 2022 and refurbish the two older terminals at the airport, which together will increase capacity to 100 million (Susanty, 2017). Yet the experience of Terminal 3 suggests that the expansion will take longer. Ground was broken on the new terminal in 2012, but then the project became mired in red tape and difficulties in acquiring land for the expanded airport. Progress resumed with the election of Joko Widodo to the presidency. Jokowi, as the president was more commonly known, had been governor of Jakarta before becoming president and made the airport a top priority (Koyanagi & Suzuki, 2016).

Ultimately, the fate of Lion Air and especially the broader Indonesian LCC sector depends on the health of the country’s economy. Economic growth, buoyed by commodity exports to China, propelled millions of Indonesians into the middle class during the same period in which air travel soared. But GDP growth has slowed since 2010 (The Economist, 2016a). One of the chief impediments to stronger performance is weak infrastructure. Jokowi’s commitment to breaking down that barrier through massive investment has mixed implications for aviation and LCCs in particular. Although the president’s focus is on the sea (he said in his inaugural address, “We have to work as hard as possible to turn Indonesia into maritime nation again.”), Jokowi’s government also aims to build 15 new airports and to lengthen the runways of existing airports across the archipelago (The Economist, 2016b). The longer runways will ease the expansion of LCCs since they are intended to accommodate aircraft as large as the Boeing 737 (i.e., the size class instrumental to most budget airline fleets) in communities across mainly peripheral areas of the country (Natahadibrata, 2014). For instance, several of the longer runways will be in the relatively impoverished Maluku Islands in eastern Indonesia.

⁷ For the period 1973–77, the fatal accident rate for certificated carriers in the United States was 1 death per 1.2 million passenger enplanements (Bureau of the Census, 1980).
The new airports should help to further even out the distribution of airline capacity in Indonesia. Already, budget airlines are ahead of their FSNC counterparts in moving beyond Jakarta and Denpasar (Bali). The main airports serving these popular destinations (Soekarno–Hatta International and Ngurah Rai International Airport) had about 30% of LCC seat capacity in Indonesia in early 2018 versus about 40% of non-LCC capacity (OAG, 2018). Conversely, budget airlines were disproportionately important in secondary cities such as Medan and Balikpapan, and LCCs accounted for all scheduled flights at more than 20 airports across the country (Fig. 8.2).

Indeed, Jokowi’s broader infrastructure initiatives may force the airlines to develop new markets (domestically and internationally). Improvements in the highway networks (and perhaps even in ferry services) could divert some of the short-haul traffic upon which the LCCs have relied. For instance, one priority project is the Trans-Sumatra Highway which will link the largest cities on Indonesia’s large western island (Antara News, 2018).

Fig. 8.2 LCC operations in Indonesia. Lion Air and other budget airlines are widespread in Indonesia, helping to tie the archipelagic nation together. The 25 largest airline destinations are shown here indicating that LCCs are important across the country, but generally more important in the richer west and center of the country than the east. (Data from OAG. (2018). Customized datafile containing detailed worldwide schedules for all airlines for April 2018.)
Another longer-term challenge to the primacy of low-cost aviation is the development of high speed rail. A Chinese-Indonesian joint venture has been contracted to build a link between Jakarta-Bandung with services to commence in 2019 (Chew, 2016). The 142-km intercity distance is too short to be suitable for air travel and so the new HSR connection does not threaten the country’s airlines, but the further elaboration of the rail network could. And yet, rail and highway projects are beset by some of the same problems that have confounded airport development in the country. The Jakarta-Bandung link, for instance, has been hobbled by resistance in the country’s legislature, where lawmakers contend the project is a betrayal of Jokowi’s promise to focus on developing infrastructure in provinces outside of Java (Chew, 2016).

For now, then, the outlook is for slower growth of budget airlines in Indonesia and for that growth to remain concentrated in the lucrative, dense markets of the center. Growth is likely to be slower, however, as the economy moderates, as the new restrictions on airline size stymie the formation of new entrants, and as the established players—especially Lion Air—consolidate their position after a decade of furious growth. A Maasai proverb says, “A lion can run faster than we can, but we can run farther.” To go the distance, Lion Air’s explosive sprint—and that of Indonesian aviation more generally—must now give way to a more measured pace.

### 8.3 BREAKING INTO FORTRESS SINGAPORE: LCCS IN SOUTHEAST ASIA’S PREMIER HUB

In 1941, Singapore, then a British colony, was portrayed as an “impregnable fortress” that would withstand the onslaught of Japanese expansion in Southeast Asia. But within 10 weeks of the Japanese first bombing Singapore (early in the morning of December 8, 1941, almost simultaneously with the attack on Pearl Harbor\(^8\)), the fortress had fallen. In the end, the island’s defenses were not so strong after all. Its giant guns could only repel an attack by sea from the south, not the Japanese land invasion across the causeway linking Singapore and what was then called Malaya to the north. The air forces assigned to protect the island were antiquated. A British battleship and cruiser were sunk shortly after the air raid. Even the uniforms and boots of the Allied forces were a liability, being too heavy for the tropical climate. As the days passed, the defenders retreated within an ever-shrinking

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\(^8\) It was December 7th on the other side of the International Date Line.
perimeter in the city’s southeast, and finally the British surrendered on February 15, 1942. The collapse of the bastion was a watershed moment in the war and in the history of Southeast Asia, signaling the beginning of the end of the European imperialism (Leasor, 1968).

Decades later, Singapore seemed impregnable in a different way. It was the home base of the world’s most profitable airline9 (Bowen, 2007) and according to many industry experts the best-run airline.10 SIA and its wholly owned subsidiaries were the only commercial airlines registered in Singapore and grew from strength to strength, helping to propel the city-state’s Changi Airport high in the ranks of the most important hubs. Earlier than most other places in the world, Singapore adopted a liberal “open skies” aviation policy and that very openness further strengthened SIA’s position (Bowen, 2000). The competition exposed the carrier to foes from across the world while simultaneously giving the airline from tiny Singapore reciprocal traffic rights in dozens of markets. At home, however, SIA faced no Singapore-based rival and none seemed in the offing. While SIA had been partially privatized in the mid-1980s, the carrier remained mostly state-owned and was an important instrument of government policy (Raguraman, 1997). Under these circumstances, SIA seemed relatively invulnerable to the depredations of LCCs even as budget carriers rapidly captured market share from FSNCs elsewhere—including SIA’s partners in the Star Alliance—in the 1990s.

Furthermore, Southeast Asia generally seemed inhospitable to the budget carrier phenomenon, at least to some observers. Jones (2002) highlighted several impediments in the region including a lack of the secondary airports often favored by LCCs, a protectionist regulatory environment, and a relatively small market. Even those authors who saw potential in the region, such as Kua and Baum (2004), argued that the liberalization of the region would be very slow and that the incumbent flag carriers—especially SIA—were much better positioned to fend off the LCCs than their counterparts in other markets. SIA leaders were quoted in local media saying that LCCs could come to the Singapore “if they are foolish enough” (Walker, 2003—quoted in Kua & Baum, 2004) and that if it was threatened by such

9 During the period 1994–2004, the most profitable airlines (based on cumulative net income) were: (1) SIA (USD 6.9 billion); (2) FedEx (USD 4.7 billion); (3) British Airways (USD 4.6 billion); (4) Southwest Airlines (USD 3.9 billion); and (5) Lufthansa (USD 3.7 billion) (Bowen, 2007).

10 For instance, SIA won Condé Nast’s Best Airline in the World award in 28 of 29 years to 2016 (Singapore Airlines, 2016).
new entrants, SIA was advised by its former chief executive officer, Cheong Choon Kong, to “Go for the knock out.” (Straits Times, 2003). Cheong also expressed skepticism about the whole idea of LCCs, asserting that there were only two such airlines in the world that had been successful: Southwest Airlines and Ryanair.

In 2003, however, the market and SIA’s view of the proliferation of no-frills airline segment changed quickly. In June, a former SIA executive and other well-connected investors applied for an air operator’s certificate to form a new carrier called Valuair (Lee, 2003). The leaders of the new enterprise cast their venture as complementing rather than threatening SIA. Nevertheless, the emergence of Valuair and movements by Qantas to form a Singapore-based LCC compelled SIA to shift gears and begin exploring the development of its own budget subsidiary.

By 2003, Singapore already had a second airline that could serve nearby regional markets with smaller jets than SIA: SIA’s subsidiary Silkair. At the beginning of 2003, Silkair flew to 25 destinations in 10 nearby countries with a fleet comprising Airbus A319 and A320 aircraft (SIA, 2003). But the little airline was no LCC. Its average flight frequency was just under five flights per week per destination; it offered both economy and business class service; and it only began allowing customers to book tickets at its online site in late 2003.11

The disparities between Silkair and the LCC model were cast into sharp relief by the early successes of AirAsia, Lion Air, and other new entrants; but Singapore, the region’s most important air transport hub, had no budget airline contender of its own. Given the centrality of aviation in the city-state’s economic development (Bowen, 2000), it seemed imperative that an opening be created to allow this component of the industry to gain a foothold. Yet Singapore still approached the matter cautiously, taking nearly a year to approve Valuair’s application for an Air Operator’s Certificate. Having raised more than USD 17 million in capital from shareholders, the carrier finally launched its first flight, to Bangkok, in early May 2004 (Sreenivasan, 2004). By the end of the month, with an initial fleet of just two A320s, it also had flights to Hong Kong and Jakarta.

Valuair was not purely an LCC, modeling its operations on those of “semifrills” jetBlue in the United States. In contrast to other budget airlines

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11 AirAsia, a regional pioneer in the use of the Internet to reduce distribution costs, opened its online portal in May 2002, and by mid-2003 online sales already accounted for nearly half of bookings (New Straits Times, 2003b).
in the region, Valuair offered assigned seats, larger seats, and some meal service onboard. On the ground, it aimed at a turnaround time of 45 minutes (versus the LCC standard of 20 minutes) to facilitate air cargo unloading and loading. Air cargo was largely eschewed by other budget airlines. Even the company’s co-founder and chairman, 71-year-old Lim Chin Beng, was viewed as breaking an LCC mold into which the youthful Tony Fernandes fit easily (Ng, 2004).

Meanwhile, Lim’s former colleagues at SIA were also recognizing the writing on the wall and moved to form an LCC of their own. In December 2003, tieless and wearing a collarless t-shirt and jacket at a pub in trendy area of downtown Singapore, SIA’s chief executive announced the formation of Tiger Airways (Sreenivasan, 2003) (Fig. 8.3). The carrier was a joint venture with SIA holding 49% of shares, US-based Indigo Partners holding 24%, Irelandia Investments (an Irish investment firm formed by one of the founders of Ryanair) with 16%, and Temasek—Singapore’s government-linked investment company and majority owner of SIA—controlling the remaining 11%. By the time of Tiger’s launch there were quite a few examples of failed LCC subsidiaries within flag carriers (Morrell, 2005), but the new entrant claimed it would be different. To begin, Tiger Airways would

Fig. 8.3 Lions and tigers. A Lion Air Boeing 737-900 taxis as a Tiger A320 lands at Changi Airport in Singapore, June 2008. In the decade since this picture was taken, AirAsia has continued its dramatic growth but Tiger Airways (later Tigerair) was folded into another Singapore Airlines LCC subsidiary called Scoot in 2017. (Courtesy: AirTeamImages by permission.)
not be hobbled by some of the labor union constraints that affected its American counterparts. Additionally, Tiger’s key backers included Ryanair and among its early leaders were Ryanair veterans (Sreenivasan, 2003).

Like Valuair, Tiger Airways entered the market on the already crowded Bangkok route along with the tourist resorts of Phuket and Hat Yai, also in Thailand (Kaur, 2004). Its entry fare of one Singapore dollar (USD 0.58), valid for the first week of operations in mid-September 2004, drew such a massive response that its online booking system crashed. Thai Air Asia responded with an even lower fare between Bangkok and Singapore, selling 5000 seats for 11 Thai baht (USD 0.26) over a month.

And then at the end of 2004, a third new Singapore-based carrier entered the fray. Qantas’s LCC subsidiary Jetstar Airways established a Singapore joint venture, Jetstar Asia. Qantas owned 49% of the venture, Temasek 19%, and other Singaporean investors controlling the balance (Creedy, 2004). In contrast to two other new LCCs, Jetstar Asia focused on densely trafficked Northeast Asian sectors, including Hong Kong and Taipei along with nearer destinations including Phuket, Manila, Surabaya, and Jakarta.

The flurry of LCC ventures happened in the aftermath of a severe crisis in Asian aviation caused by the spread of severe acute respiratory syndrome (SARS) in early 2003. The disease had spread from southern China to much of East Asia and various other parts of the world, with air travel playing a clearly instrumental role in the speed and pattern of diffusion (Bowen & LaRoe, 2006). In response, airports became key containment points in the effort to curtail the further spread of SARS and air travel volumes fell sharply. The crisis pushed surplus jets onto the market and so lowered the costs of getting airborne.

And on the ground, moves were afoot to ease the LCCs’ path. In particular, with low-cost aviation on the rise, Singapore’s airport administrator, the Civil Aviation Authority of Singapore (CAAS), announced the construction of a new budget terminal at Changi (Quek, 2004). With Tiger Airways as its first tenant, the new terminal was intended to reduce per passenger costs by 20% over the adjacent and much larger Terminals 1 and 2. The stripped down facility would have few frills (e.g., no travelators) and

12 SARS originated in southern China in late 2002 and spread slowly before reaching Hong Kong in February 2003. Upon reaching one of the world’s foremost hubs, the disease spread within days to Australia, the United States, Canada, and the United Kingdom (though the number of cases was small). By the time the outbreak ended in mid-2003, the disease had spread to 26 countries and Taiwan, infected more than 8000 people, and killed nearly 800. The majority of cases occurred in China (Bowen & LaRoe, 2006).
would consequently address one of the chief impediments to the rise of LCCs in the region—the lack of low-cost secondary airports. It was to be the first such budget terminal in Asia and was aimed both at Singapore-based LCCs and those serving the city-state from other countries.

Yet even before the new terminal opened, the consolidation of Singapore’s LCC sector began with Qantas acquiring a controlling share in Valuair. As a carrier with substantial foreign investment, Jetstar Asia was denied traffic rights to operate from Singapore to Indonesia and China (Rochfort, 2005). Qantas’s chief financial officer lamented, “We’ve done absolutely everything by the book up there. Yet the countries Singapore has negotiated rights with have denied rights to a legitimate Singaporean-based carrier and there appears to be nothing they are prepared to do about it.” (quoted in Rochfort, 2005). Buying Valuair meant gaining its more readily available traffic rights (Wisenthal, 2005).

By early 2008, LCCs accounted for 11% of outbound seats in Singapore versus about 40% in both Malaysia and Indonesia (OAG, 2008). The Singapore share was small but striking in a place where only a few years earlier budget airlines had seemed a distant prospect. In 2004, Singapore’s senior minister and the defining personality in the country’s brief history, Lee Kuan Yew, wrote about the LCC phenomenon in The Straits Times, “As a child, I sat in a bullock cart to go to my grandfather’s rubber estate on a clay, rutted track. As PM [prime minister], in the 1970s, I flew supersonic by Concorde from London to New York. […] It is a matter of time before mass air travel spreads to Asia” (Lee, 2004). Just a few years later, the region was well on its way toward that future, but for once Singapore was a step behind its nearby rivals in the region.

By 2018, Singapore’s Changi Airport had a higher concentration of LCC services than all but a handful of other airports (see Table 8.3). In the region, Kuala Lumpur International and Soekarno Hatta remained far ahead in this respect but that was partly attributable to their role as hubs for significant domestic markets (especially in the case of Jakarta) while Singapore lacked a domestic hinterland. Further, Singapore is among the world’s most important world-cities, the command-and-control centers of the global economy, and in that role it is a magnet for business traffic (especially on long-haul flights) in a way that Kuala Lumpur and Jakarta are not. The Globalization and World Cities Network ranks world cities every few years based on the distribution of advanced producer services firms (e.g., advertising agencies, consultancies, accountancies, law firms, etc.) (GaWC, 2017). In its 2016
assessment, London and New York ranked first and second and were the only “Alpha++” cities, but Singapore was next—ranked 3rd overall and the first “Alpha+” city. Kuala Lumpur and Jakarta were in the “Alpha” class and ranked 24th and 25th overall. Singapore’s stature is directly related to the high proportion of business class seats in the city’s airline services and the long average stage length compared to its Southeast Asian rivals (Table 8.4).

Nevertheless, Singapore is a key center for low-cost aviation as well, but with at least one key difference: the only LCCs based in the city in 2018 were subsidiaries of FSNCs—Jetstar Asia Airways and Scoot. Jetstar Asia’s ownership is split 51/49 between Westbrook Investments, a Singapore-based firm, and Qantas Group (Jetstar, 2018). Scoot is a wholly owned subsidiary of SIA Group. Scoot was established in 2012 as a long-haul LCC complementing SIA’s older budget airline subsidiary Tigerair. In Singapore’s fiercely competitive environment, however, neither LCC

| GaWC class | City          | Business class seat share (%) | Average stage length (km) | LCC seat share (%) |
|------------|---------------|------------------------------|---------------------------|-------------------|
| Alpha+     | Singapore     | 8.6                          | 3415                      | 31.1              |
| Alpha      | Kuala Lumpur  | 4.5                          | 2129                      | 60.7              |
| Alpha      | Jakarta       | 3.7                          | 1425                      | 38.0              |
| Alpha-     | Bangkok       | 4.7                          | 2243                      | 43.9              |
| Beta+      | Manila        | 4.2                          | 2179                      | 47.5              |
| Beta       | Ho Chi Minh   | 4.4                          | 1400                      | 49.1              |
| Beta-      | Hanoi         | 5.2                          | 1571                      | 42.1              |
| Gamma-     | Yangon        | 4.3                          | 1218                      | 19.9              |
| High sufficiency | Johor Bahru | 0.9                          | 694                       | 81.9              |
| High sufficiency | Phnom Penh | 4.0                          | 1156                      | 19.0              |
| Sufficiency | Penang       | 1.9                          | 663                       | 69.7              |
| Sufficiency | Surabaya     | 1.7                          | 919                       | 64.0              |
| Sufficiency | Cebu         | 2.6                          | 1082                      | 57.6              |

Notes
1. The GaWC class is based on the analysis of the distribution of the offices of 175 advanced producer services firms across 707 cities around the world.
2. The three numeric variables in the table above are for all airports serving a city combined. Kuala Lumpur, Jakarta, and Bangkok each have two airports.
Data from OAG. (2018). Customized datafile containing detailed worldwide schedules for all airlines for April 2018; GaWC [Globalization and World Cities Network]. (2017). The world according to GaWC 2016. http://www.lboro.ac.uk/gawc/world2016t.html (Accessed 23.08.18).
was consistently profitable. Partly because of that, they were merged under the Scoot brand in 2017 with the goal of achieving greater economies of scale and having the flexibility to adjust the all-Boeing 787 fleet that Scoot had operated and the all-Airbus A320 fleet of Tigerair among the two carrier’s combined networks (Van der Beek, 2017). In early 2018, SIA was the largest carrier at Changi Airport with 29% of capacity, Scoot was second with 13%, SIA’s full-service regional subsidiary Silkair was third with 8%, and Jetstar Asia was fourth with 6% (OAG, 2018); the remainder was on foreign airlines, including almost all of the LCCs based in Southeast Asia (e.g., 6.5% of capacity was on AirAsia and its affiliates).

At Changi Airport in 2018, Scoot operated from Terminal 2 along with SIA itself and Silkair, but the other LCCs were divided among the remaining terminals—including Terminal 4. In 2012, the Budget Terminal was closed to make way for Terminal 4 whose completion in 2017 increased the airport’s overall capacity from 66 million to 82 million passengers per year (Changi Airport Group, 2012; Kaur, 2017a). Among the airlines assigned to Terminal 4 were the members of the AirAsia Group. While the AirAsia had been among those displaced when the Budget Terminal closed, Tony Fernandes lavished the new T4 with praise, especially its high level of automation and attendant lower costs (Kaur, 2017b). Hailing the facility as a model for budget airlines, Fernandes said, “In 16 years, I have never praised any airport, so this is a big step for me and a huge endorsement for Changi, […] Changi should be applauded for listening to its airlines.” (quoted in Kaur, 2017b).

8.4 MAKING ASEAN A REGION: THE PROLIFERATION OF SOUTHEAST ASIAN LCCS

In 1967, the leaders of Indonesia, Malaysia, the Philippines, Singapore, and Thailand met in Bangkok to form the ASEAN. It was a tumultuous time in Southeast Asia, with the Vietnam War underway, Communist insurgencies on the march, and ethnic conflicts raging in numerous outbreaks across the region. Political wounds were still raw, with Singapore have been expelled from Malaysia just 2 years earlier, and the Philippines and Malaysia still entangled in a dispute over a large expanse of resource-rich Borneo (New York Times, 1969). The myriad differences among the members meant that for decades ASEAN made little headway toward achieving its goals of economic integration. In 1979, for instance, almost all international flights to, from, and within Southeast Asia involved one of the region’s five
key hubs (Singapore, Bangkok, Kuala Lumpur, Jakarta, and Manila); Hanoi’s only international connection within the region was to Bangkok and Rangoon’s only link was to Singapore (Bowen, 2000). Altogether only 23 cities in the region then were gateway cities, meaning places with at least 1 scheduled nonstop international flight per week.

Even as the region’s violent upheavals receded into the past, the protectionist posture of most governments in the region remained a key impediment to a harnessing aviation for broader regional economic development. Certainly, protectionism was prominent in the airline industry (Bowen & Leinbach, 1995). In the mid-1980s, the region’s main airlines were almost all 100% state-owned and faced almost no rivals on domestic routes and typically tightly circumscribed competition on international routes. Flag carriers were “chosen instruments” of the region’s relatively new governments (Raguraman, 1997), which jealously protected their favored airlines.

But then the liberalization tide which had originated in the United States in the 1970s began to lap at the region’s shores. Flag carriers, including SIA, Philippine Airlines, and Malaysia Airlines, were at least partially privatized; domestic monopolies were broken as new carriers were permitted to enter the market; and more liberal air service agreements created new bilateral opportunities (Bowen & Leinbach, 1995). The liberalization of Southeast Asian aviation was not solely due to the global movement toward freer aviation markets. The region’s own governments pursued deregulation and privatization as a pragmatic tool of economic development generally (Bowen & Leinbach, 1995) and as an emergency response to the Asian financial crisis in the late 1990s in particular.

The new entrants that emerged then were not LCCs. They took the form either of niche operators focused on small markets or specialty tourist destinations or of full service airlines that tried to directly take on the state-affiliated incumbents. The former included carriers like Pelangi Air in Malaysia and Bangkok Airways in Thailand. The latter included Sempati Airways in Indonesia and Cebu Pacific Airways in the Philippines. Some of the niche players continue to fly. Bangkok Airways, which describes itself as “Asia’s boutique airline,” got off the ground with services to an airport it developed (and continues to own) on the resort island of Koh Samui, and beach destinations remain vital to its success.

Conversely, few of the full-service new entrants survived for long. In the Philippines, for instance, Grand Air became the first carrier to take advantage of the 1994 domestic deregulation in that country. The new carrier offered
hot meals and promised consistent services, a sharp contrast in a market where the dominant player’s acronym was derisively said to stand for “plane always late.” Grand Air built up a small domestic network and was designated to become the second Philippine carrier to fly to Taipei and Hong Kong, especially lucrative markets. But it made hardly a dent in the markets in which it operated and remained airborne for just 4 years before collapsing under the weight of its debts (Austria, 2000).

Only one of the Philippines new entrants in the 1990s has enjoyed lasting success. Cebu Pacific Airways, which was launched in 1996, has become the Philippines largest airline, but that stature is mainly a reflection of the carrier having successfully recreated itself as an LCC in 2005 (Schofield, 2015). In an archipelagic country where only a tiny fraction of people traveled by air, Cebu Pacific targeted city-pairs that were popular with the country’s cheap but very slow ferries as well as intercity bus routes. On the eve of its conversion, the carrier operated a mixed fleet of old DC-9s and Boeing 757s (Air Transport World, 2005). Within a few years, consistent with the LCC model, it had shed the old jets and brought on new Airbus A319s and A320s.

The rebranding of Cebu Pacific as an LCC, like the similar repositioning of AirAsia a few years earlier and the emergence of Lion Air and a handful of other budget airlines in the meantime, comprised what would ultimately prove to be the biggest force for breaking down the protectionism of the past and drawing the region more closely together. In the case of the lucrative Kuala Lumpur-Singapore sector, for instance, the aviation correspondent for the Straits Times observed in 2006, “[B]udget airlines such as Malaysia’s AirAsia and Singapore’s Tiger Airways and JetStar Asia have done such a good job the past two to three years, bringing fares down in markets where they compete, that governments are finding it increasingly difficult to justify to travellers why other markets are still so tightly regulated.” (Kaur, 2006). The notion of an ASEAN Open Skies agreement had been discussed since the mid-1990s (Ahmad, 1995), but only with the catalyst of the LCCs did the idea gain political momentum.

In November 2004, the same month that AirAsia made a blockbuster initial public offering on the Bursa Malaysia (formerly the Kuala Lumpur Stock Exchange), transport ministers from ASEAN member countries (which by then included the original five countries plus Brunei, Vietnam, Laos, Cambodia, and Myanmar) met in Phnom and agreed to a decade long Action Plan for ASEAN Air Transport Integration and Liberalization (Tan, 2013). Two important milestones along the road from Phnom Penh were
the 2009 Multilateral Agreement on Air Services (MAAS) and the 2010 Multilateral Agreement for Full Liberalization of Passenger Air Services (MAFLPAS), which together sought to supplant the narrowly restrictive bilateral air services agreements of the past. The MAAS aimed at deregulating market access at two kinds of cities—the region’s capital cities on the one hand and marginal places in the region’s periphery (e.g., the weakly developed area comprised of Mindanao, Borneo, and other smaller islands near them) on the other hand. The MAFLPAS then sought to “mop up” the remaining cities (e.g., key secondary cities such as Surabaya in Indonesia) to bring them under the umbrella of liberalizing reform. Not every ASEAN member signed on to both agreements, and even some of those who did limited their impact by restricting the cities to which their various protocols applied. By 2015, the target date for a Single Aviation Market, the Philippines had not agreed to the MAAS and neither Indonesia nor Laos had yet signed on to the MAFLPAS (Bowen, 2016).

The ASEAN Single Aviation Market is far from the degree of integration and freedom afforded airlines in Europe (see Chapter 5). Still, the degree to which the region has been opened to competition is significant. Malaysia-registered AirAsia does not have the freedom to base aircraft and crew in Indonesia the way that Hungary-registered Wizz Air can in Poland, but AirAsia and other ASEAN airlines have circumvented remaining restrictions through a remarkable proliferation of affiliates. AirAsia, Lion Air, and Scoot (or their parent companies) all have minority stakes in commonly branded airlines based in other ASEAN states, and Australia’s Jetstar has two ASEAN affiliates as well (Table 8.5).

AirAsia’s family of airlines was unsurprisingly the largest, bringing to fruition the “federation of AirAsias” envisioned more than a decade earlier. AirAsia portrayed itself as the “truly ASEAN” airline (Fig. 8.4), but it was hardly the only carrier (or group of carriers tying the region together). In 1979, there had been 23 cities with nonstop international services in Southeast Asia; by 2018, there were 72 and a dense skein of international flights within the region tied it together more closely than ever before. More than 800 flights per week crossed borders in the region without touching down in Singapore, Bangkok, Kuala Lumpur, Jakarta, or Manila, and a third of them were on LCCs (OAG, 2018).

By 2018, the reach of the region’s budget airlines extended far beyond Southeast Asia (Fig. 8.5). In particular, the AirAsia Group included three long-haul affiliates: AirAsia X Malaysia, AirAsia X Indonesia, and AirAsia X Thailand. In 2018, their networks stretched from Honolulu to Tehran and from Jeddah to Sydney. Scoot’s network stretched even farther (from
Table 8.5 Low-cost carrier families in Southeast Asia and beyond

| AirAsia group          | Lion Air group | SIA group | Jetstar group |
|------------------------|----------------|-----------|--------------|
| Indonesia              | AirAsia Indonesia | Lion Air Wings |               |
|                        | AirAsia X Indonesia |       |               |
| Malaysia               | AirAsia Malaysia X | Malindo |              |
| Philippines            | AirAsia Philippines | Scoot | Jetstar Asia Airways |
| Singapore              | AirAsia Thailand | Thai Lion Air |              |
|                        | AirAsia X Thailand | NokScoot Airlines |         |
| Thailand               | AirAsia Thailand X |               |              |
| Vietnam                | AirAsia Japan | Jetstar Pacific Airlines |            |

Other Regions

| Australia | AirAsia India | Jetstar Airways |
|-----------|---------------|-----------------|
| India     | AirAsia Japan | Jetstar Japan   |

Data from airline websites.

Fig. 8.4 AirAsia’s “truly ASEAN” Livery. A Thai AirAsia Airbus A320 takes off from the airport at Phuket, Thailand bedecked in a livery celebrating ASEAN. The symbol in the middle of the ASEAN logo represents stalks of paddy (rice) tied together which is meant to signify the unity of ASEAN’s 10 members. In 2008, AirAsia flew to all 10 countries. (Courtesy: AirTeamImages by permission.)
Athens to Honolulu), and Lion Air operated dozens of long-haul flights to Saudi Arabia, catering to the many Muslim pilgrims from Southeast Asia. Many of these carriers’ long-haul services used mixed-class aircraft and broke away from the LCC model in other ways too.

The development of long-haul budget operations from Southeast Asia signals both the region’s deep integration into the global economy but also the maturation of its LCC sector. Have spread throughout (and perhaps exhausted) much of the market within Southeast Asia, the region’s budget airlines are moving beyond it.

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