

# How Chinese airlines can brace for impending turbulence





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**The coming years could prove challenging for Chinese airlines, which are already battling economic losses. They should focus on five opportunities.**

Steve Saxon, Qiao Xie, Zhi Wei Sok, and Zi Chen

Chinese airlines have grown rapidly. From 2009 to 2018, demand grew at 14 percent year-on-year,<sup>1</sup> fuelled by strong domestic travel and outbound tourism that came with the growing Chinese middle class. By 2018, China was the world's second-largest domestic market and largest outbound tourism market. Over this period, the "Big Three" carriers—Air China, China Eastern, and China Southern—managed the single largest capacity addition ever seen, all while improving safety and customer experience.

Despite a favorable regulatory environment, Chinese airlines did not return the cost of capital for this expansion. In fact, from 2009 to the end of 2018, they accumulated \$29 billion in economic losses. The Big Three

contributed almost all of these losses (Exhibit 1). Looking ahead, it's only going to become more difficult for the airlines to succeed: capacity growth is on track to outpace natural demand growth, and impending regulatory changes will increase competition domestically and globally.

To manage these pressures, Chinese carriers should take five actions: improve productivity and closely monitor costs, pursue ancillary (non-ticket) revenue opportunities, differentiate their products, secure spots in main hubs and increase the number of connecting flights they offer, and consolidate. By acting now, incumbent Chinese airlines can brace themselves for the coming turbulence.

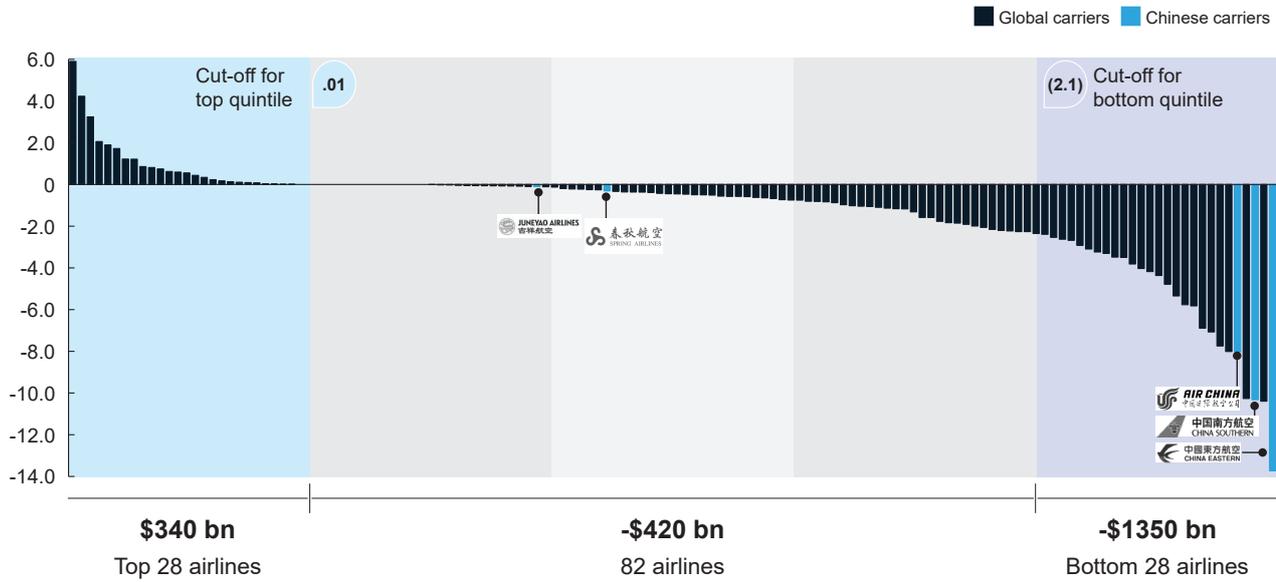
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<sup>1</sup> As measured by revenue passenger kilometres (RPK).

Exhibit 1

## In the last decade, many Chinese airlines sustained economic losses, but the big three topped the list

**Cumulative economic profit for global airlines, 2009-18**  
USD billions



Source: McKinsey airline value chain analysis

# Turbulence ahead: excess capacity, intensified competition, and pricing pressures

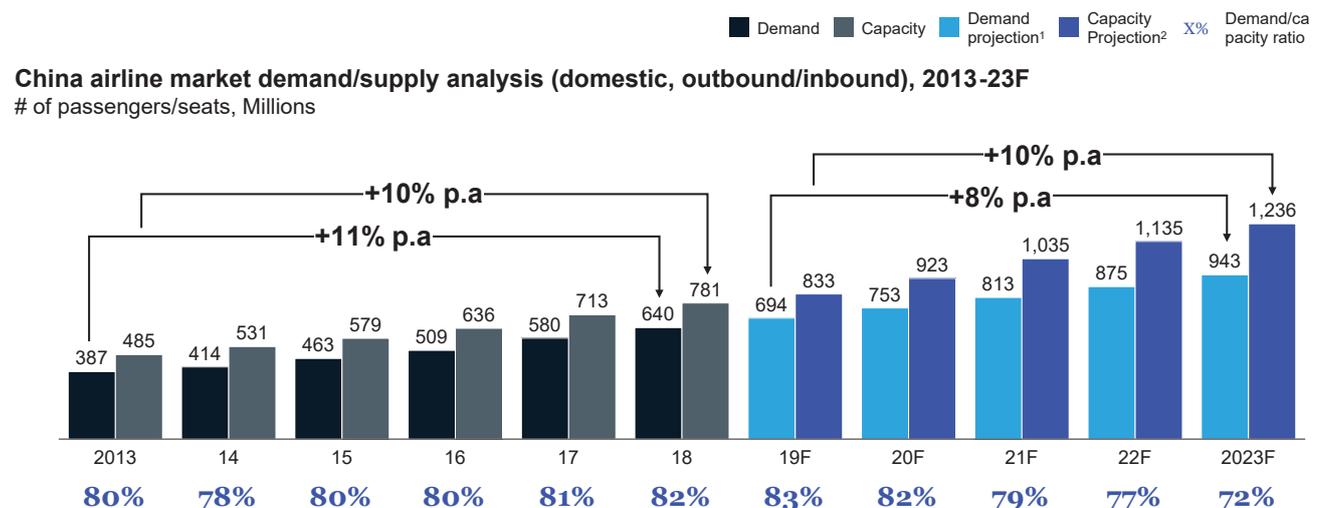
Chinese carriers seem set for a bumpy ride from the economy. Chinese GDP per capita growth has been projected to drop from 6.3 percent in 2019 to 5.4 percent in 2023; this economic slowdown in China, coupled with a similar slowdown globally, will likely have a negative impact on air travel demand and consumer spending. As such, we expect growth to decelerate in the Chinese travel market to 8 percent year-on-year from the 11 percent year-on-year it experienced from 2013 to 2018 (Exhibit 2).

However, the Chinese airline industry shows no signs of slowing its capacity growth. Based on known aircraft orders, Chinese carriers continue to add capacity at about 10 percent year-on-year. With supply growing faster than demand, carriers will feel pressured to drop prices to stimulate demand for the excess seats. To exacerbate the yield pressure,<sup>2</sup> incumbent carriers will face increased competition from low-cost carriers (LCCs), foreign carriers, and each other, driven by recent—and anticipated—easing of regulations.

2 A key measure of airline profitability, yield is the amount of revenue earned per passenger mile.

Exhibit 2

## Looking forward, supply is likely to grow faster than demand in China



1 Based on Euromonitor, IATA and GDP growth prediction  
 2 Based on aircraft order, assuming rented /owned ratio remains unchanged  
 Source: Paxls, Euromonitor, IATA, OAG, Fleet Analyzer

From 2008 to 2017, the Civil Aviation Administration of China's (CAAC) position on new entrants, including LCCs, seesawed. In 2014, the CAAC loosened regulations for starting new airlines. This led to the proliferation of start-up carriers, including Jiuyuan Airlines, Loong Air, and Donghai Airlines. Later, in 2016, CAAC retightened control over new carriers by restricting license issuance, limiting slots allocated to new entrants, and holding back approvals for new aircraft purchases. Ultimately, these moves benefitted the Big Three.

CAAC has also historically prevented direct competition on international routes by restricting traffic rights on these routes to a single Chinese carrier. The market used to have price limits (fares were allowed to float between 25 percent above and 45 percent below the standard regulated price). Tightly controlled rules on ancillaries deterred product innovation and hampered LCC growth.

Today, the CAAC is cautiously relaxing its

stance to encourage more competition. It has already removed regulated pricing on 375 domestic routes and will open up a further 302 routes, including the major business route from Beijing to Shanghai, for market-based pricing. It is also easing its restriction of one carrier per long-haul route.

Most notably, restraints on airport terminals and slot capacity that have hindered growth will ease. Chief among these is the new Beijing Daxing airport, which opened at the end of September 2019. Daxing is expected to serve 72 million passengers per year by 2025 and 100 million passengers per year by 2040, doubling capacity in Beijing. All of the Big Three and the fourth-place Hainan Airlines are set to compete with large-scale hubs in the Beijing market.

The combination of excess capacity, intensified competition, and pricing pressures may result in increasing economic losses if Chinese carriers continue a business-as-usual approach.

# Five ways Chinese airlines can manage compounding pressures

It's not too late for incumbent Chinese airlines to change course. Five actions can help them effectively navigate the coming turbulence.

## Improve productivity and tightly manage costs

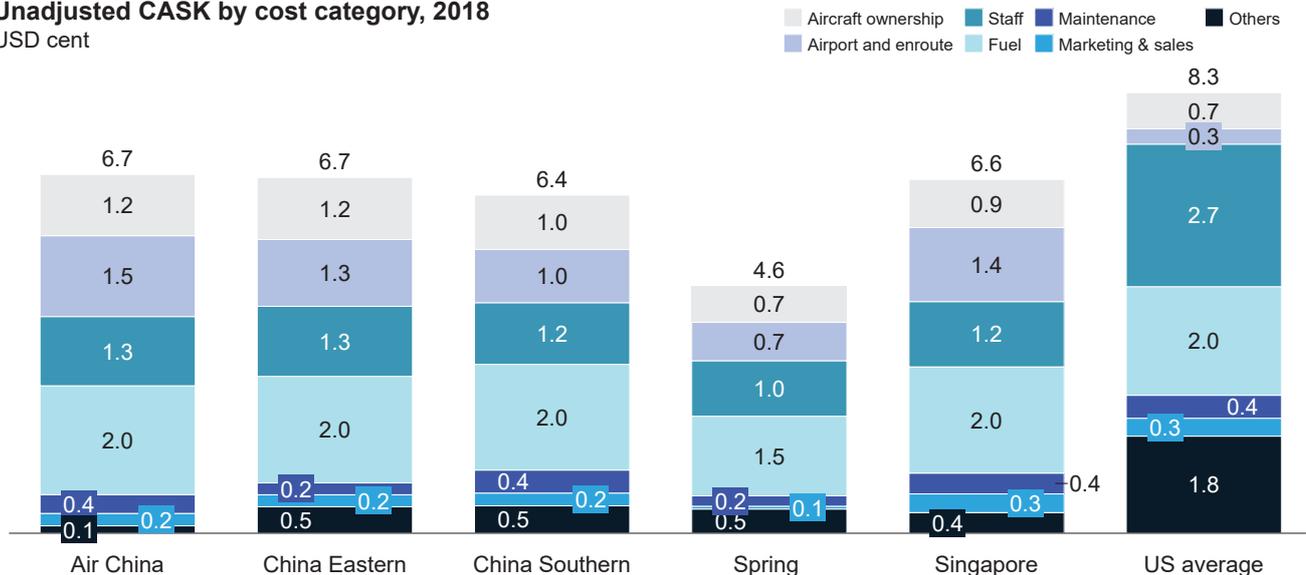
As of 2018, Chinese carriers' overall unit cost (the cost per available seat-kilometer, or

CASK) was low compared with global peers' apart from two cost categories—labor and aircraft ownership (Exhibit 3). In 2018, the Big Three's staff CASK was slightly higher than Singapore Airlines, despite enjoying much lower labor rates in China. And aircraft ownership costs 60 percent more for Chinese carriers than for those in the United States.

Exhibit 3

## Compared with peers around the world, Chinese carriers' overall unit cost is generally low

Unadjusted CASK by cost category, 2018  
USD cent



SOURCE: The Airline Analyst; annual reports

The comparison with Spring Airlines—the leading LCC in China—is also illustrative. As a newer entrant, Spring has many unit costs, including pilot and staff salaries, that are higher than the Big Three carriers'. However, because of Spring's more efficient operations, it has a 30 percent lower unit cost.

One cause of large Chinese incumbents' high cost of labor is the complex holding and organizational structures that they've built up over the years. For example, the Big Three carriers have many regional branches that are set up as distinct entities. This separation has led to both significantly higher labor costs and lower productivity (measured by the passenger-to-staff ratio) when compared with industry peers. The Big Three carriers on average served only about 1300 passengers per employee in 2017, while each employee with Hainan, another Chinese airline, served about 2900 passengers each.

Moving forward, carriers need to reevaluate their structures and streamline their operating models. This change will not be easy due to legacy structures and local interests. However, carriers should further centralize control over their subsidiaries, increase shared functions, and make more efficient use of pilots and cabin crew through better coordination across subsidiaries. Such efforts will also help increase aircraft utilization.

Chinese carriers can also make better use of their assets by, for example, equipping each aircraft with more seats, which can support lower costs and fares for consumers. Air China has already reconfigured its Boeing 738s with 176 seats, compared to 171 seats for the average Chinese carrier. In this competitive market, every seat counts.

Beyond better cost management, the next wave of productivity will come from digitization. Opportunities abound in ground operations, flight operations, and cabin services. American Airlines, for example, adopted mobile solutions to improve its aircraft mechanics' productivity through better information and data flow. In flight opera-

tions, Chinese carriers have already begun to implement digital tools such as electronic flight bag for pilots—an electronic device that aids in flight-management tasks. Carriers can explore additional opportunities around automating crew scheduling, maintenance management systems, fuel calculation, and weight- and balance checks. Finally, innovative digitization in cabin services can both reduce cost and improve customer service. Delta Airlines, for example, is equipping its first A220-100 with the new wireless IFE system to improve on-board customer experiences while saving cost. The wireless streaming technology enables the reduction of about one pound of wiring per seat when installed on an aircraft.<sup>3</sup>

To pursue these digital improvements, Chinese carriers must attract the right talent. This has historically been challenging for state-owned enterprises, which have not been able to attract top digital talent due to relatively lower salaries and stodgy work cultures. They should experiment with workarounds such as setting up market-based digital companies.

## Promote ancillaries and direct sales

As more routes are subject to market-based pricing, Chinese carriers must further develop their pricing and revenue-management capabilities. This will mean more fare buckets, more dynamically managed. And Chinese carriers can lead a shift to fully dynamic pricing through New Distribution Capability, a new International Air Transport Association program aimed at facilitating more-efficient distribution systems for airlines.<sup>4</sup>

Chinese carriers also trail behind global peers in ancillary revenues per passenger. Historically, this lag has been due to CAAC's restrictions on ancillary offerings and pricing. However, the agency is loosening its regulations.

Recent relaxations in regulations allow

<sup>3</sup> Source: <https://news.delta.com/3-ways-delta-flight-products-revolutionizing-aircraft-interiors>.

<sup>4</sup> Source: <https://www.iata.org/whatwedo/airline-distribution/ndc/Pages/default.aspx>

Chinese airlines to charge for seat selection on both international and select domestic flights. Carriers should unbundle these components of their products and explore differential pricing for seats. Carriers should also push to capture more on-board sales of ancillary products, for which, unlike food and beverages, there are no regulatory restrictions. Again, digital capabilities can help airlines create fully functional apps and mobile websites to allow pre- and in-flight orders.

Airlines should also continue to engage regulators on other ancillary-related initiatives that are still restricted, such as enforcing baggage fees and charging for seat selection on remaining domestic flights.

Finally, airlines should increase direct sales. To accomplish this, airlines should increase incentives for buying through their online channels, including their app and website. Compared to global carriers, Chinese carriers have a high share of ticket sales through mobile and web channels, but a low share through their self-run channels. The online travel agency (OTA) is king in China. While OTAs can help customers package multiple products in a single journey, airlines should aspire to own more customer relationships themselves. Direct sales reduce the likelihood that customers will shop among competitors, increase an airline's ability to generate ancillary sales, and reduce distribution costs.

### **Differentiate the product, starting with how delays are handled**

Today, the Big Three Chinese carriers are quite similar. The onboard service is comparable, they use the same airports, and many planes even have exactly the same business-class seats.

To brace themselves for lower-cost competition, Chinese carriers will need to sharpen their product proposition to boost customer satisfaction and loyalty. Our experience with carriers around the world reveals that there's

more impact in reducing the negatives than, for example, improving product design. Chinese carriers should start with the largest negative of the airline experience: delays.

Among countries globally, China has the most flight delays.<sup>5</sup> This issue is largely outside the carriers' immediate control and stems from factors such as airspace restrictions and conservative air traffic control rules. However, carriers can improve how they handle delays with their customers.

Today, the situation is dire. Delays are frequently not announced until passengers are at the gate, even when the airline knows the incoming flight is late. Many delays are only announced on a handwritten poster at the departure gate. Airline staff manage rebooking, meal vouchers, and hotel accommodation manually, which results in long lines of weary passengers.

Improvements in this area hinge upon investments in digital capabilities. Analytics can better predict delays, and automated systems are capable of managing passenger accommodation. Rebooking, meal vouchers, and hotels can all be dispensed through apps and mobile websites. Our customer satisfaction research in the US market shows that a well-handled delay can actually create a more positive customer experience than an on-time flight.

### **Secure their presence in main hubs, while building a strong connecting network**

While Chinese carriers have hubs, they are nothing like US hubs. The market share of the largest airline within each of China's 15 largest airports averages 33 percent, significantly lower than the US average of 52 percent in its 15 largest airports. With the opening of Beijing Daxing and four carriers competing in the Beijing market, better managing connections will be more important than ever for Chinese airlines.

<sup>5</sup> In August 2019, the top 10 Chinese airports' on-time performance (OTP) was 67 percent and 76 percent in the US. Among 1200 airports, Beijing Capital International Airport (PEK) ranked 903, Shanghai Pudong Airport (PVG) ranked 999, Shanghai Hongqiao International Airport (SHA) ranked 1100, and Guangzhou Baiyun International Airport (CAN) ranked 937.

Source: <https://www.oag.com/august-2019-airlines-on-time-performance>

Carriers should seek to develop a stronger connecting network with more privileged origin-and-destination pairs (O&Ds). The current state highlights significant opportunities for improvement: the Big Three carriers have only around 20 percent of passengers connecting in their hubs, while their global peers have captured a much larger share. Delta Airlines leads the pack: 74 percent of passengers in its main hub, Atlanta, take connecting flights.<sup>6</sup> Of course, Beijing is a larger city than Atlanta, with more local passengers, but many seats on Chinese carriers still go unfilled; strategic use of connecting O&Ds can fill these seats.

Chinese carriers can benefit from designing their schedules with improved banks of connecting flights, aiming for short connecting times on key O&Ds. They could also work with their hub airports to improve the connecting experience, which is currently a source of frustration for customers. For example, China requires even international-to-international connecting passengers to pass immigration, and in some cases to reclaim baggage. Some customers have to check in for connecting flights twice; most international carriers would provide all boarding passes at the first check-in. Transfer desks and channels for transfer passengers don't exist in many Chinese airports, and, where they do, they are often closed.

While pursuing these opportunities, Chinese carriers need to balance network presence and profitability on international routes. Local and national governments encourage Chinese carriers to expand internationally. The pace of international expansion has accelerated with the introduction of One Belt, One Road policies. Local governments are especially keen to achieve international connectivity, which has led to the launch of niche routes such as Shenzhen to Seattle and Chengdu to Helsinki. Even with subsidies, these routes are hard to make profitable. For

flights that are strategically important but unprofitable, carriers should improve loads by capturing more connecting traffic and reducing capacity with new long-range, narrow-body aircraft. Carriers can also explore cost-effective code-share partnerships with other carriers to support these opportunities.

## **Consolidate—both domestically and internationally**

Despite individual efforts, the Chinese airline market will eventually require capacity consolidation. Since government deregulation in 2014, the growth of smaller players and new entrants has led to increased market fragmentation in China, with the Big Three's capacity share decreasing from 54 percent to 46 percent. This fragmentation contrasts starkly against other geographies that have higher levels of consolidation. The US airlines market, for example, went through a long process of consolidation; today, around 60 percent of US capacity is concentrated among American Airlines, Delta Airlines, and United Airlines, the top three carriers. Only 12 US airlines operate internationally, compared with 29 Chinese carriers. As in the US, consolidation in the Chinese market will likely take time and will require regulatory support.

Chinese carriers have already started building global partnerships through network joint ventures (JVs): China Eastern has JVs with Qantas and Japan Airlines, Air China with Lufthansa, China Southern with Air France KLM. Such partnerships help the airlines expand their networks, and Chinese carriers should continue building global cooperation.

Chinese carriers can be more proactive in international consolidation as well. Today, some have either taken or been the recipient of foreign airline minority investment. For example, Delta owns 3.22 percent of China Eastern, which in turn owns 10.3 percent of Air France KLM overall.<sup>7</sup> Such minority equity

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<sup>6</sup> Source: Paxis by IATA.

<sup>7</sup> Delta owns 3.22% of China Eastern, Delta and China Eastern both own 10% of Air France KLM respectively.

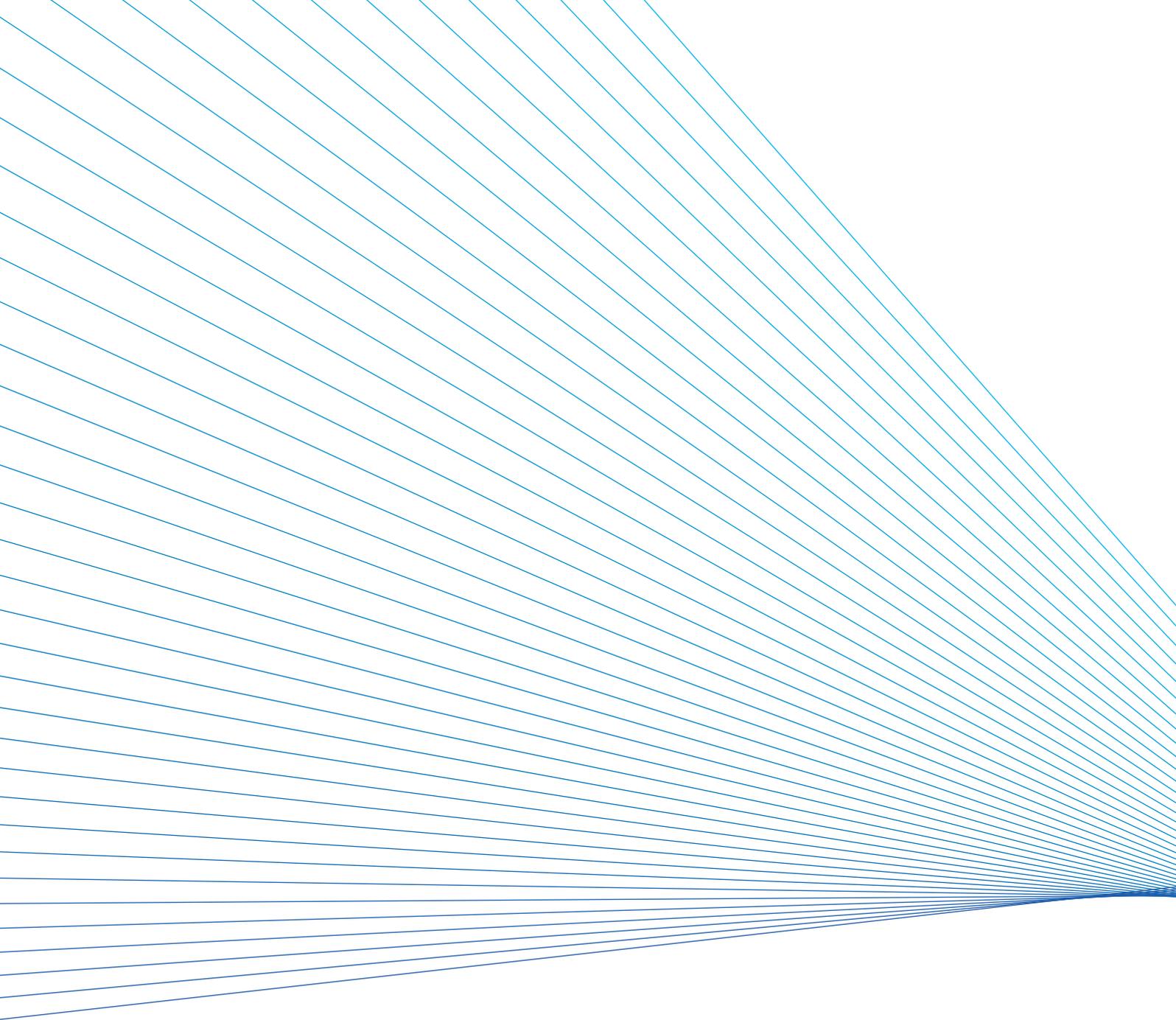
stakes help cement the JVs. But beyond passive minority stakes, Chinese carriers could seek more control in international airlines. Such activities could be financially advantageous and help improve Chinese carriers' standing in the international market, aligning with One Belt, One Road initiatives.



We are at an inflection point in the Chinese aviation market. The next few years may be challenging, with excess supply and looser regulations leading to greater competition. But by pursuing the five measures above, Chinese carriers will be better equipped to steer through the turbulence. ■

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