China's continuing boom in air traffic has led to its airlines booking record orders over the past two years. Despite recording large losses, China's carriers are still attracting external financing. Yong Qiu examines the aircraft financing options available.

The challenge of financing China's $19 billion aircraft

Of all the aircraft orders in recent years, the most prominent are those placed by Chinese carriers. In 2004 five major Chinese airlines grouped together to order 60 787s, laying a solid foundation for the Boeing dreamliner's viability and success. In 2005 China Aviation Supplies Import and Export Group ordered 150 A320 family aircraft on behalf of the Chinese airlines. In 2005 and 2006 the Chinese government booked 150 737NGs on behalf of all established airlines.

The three Chinese majors, Air China, China Eastern and China Southern, now have a combined total of 205 aircraft on order with a book value of $19 billion. With the high growth rate of the Chinese airline industry benefiting the aircraft manufacturers, how are Chinese airlines financing aircraft delivery?

Financial situation

The aircraft financing methods available to an airline mainly depend on its financial situation. The general financial strength of China's airlines in recent years has raised doubts as to whether they can sustain such large orders for aircraft.

In 2005 China Southern reported a net loss of RMB1.85 billion ($231 million), while China Eastern made a net loss of RMB 432 million ($54 million). Hainan Airlines, China's fourth largest airline, and Shandong Airlines, a middle-sized airline, reported net losses of RMB210 million ($26 million) and RMB270 million ($34 million). The only exception to this history of losses is Air China, which made a net profit of RMB3.6 billion ($450 million).

All the airlines reporting losses blamed soaring fuel prices, although they did admit that internal management, such as unimplemented integration, was also partly responsible. Fuel prices, which are expected to exceed last year's rates, continue to keep the airlines in financial difficulties.

China Eastern reported an unprecedented loss of RMB960 million ($120 million) for the first quarter in 2006, while China Southern reported a financial loss of RMB650 million ($81 million). There are also fundamental problems underlying the losses. China Southern, for example, had loans of RMB16.2 billion ($2.02 billion) in 2005, an increase of 43% from RMB11.5 billion ($1.44 billion) in 2004.

Motivations

The financial distress of these airlines brings into question why they ordered so many new aircraft. Historically Chinese airlines, which have experienced the ebbs and flows of air traffic, the volatility of fuel prices, and the underlying risks of airline business, have understood the risks of placing large aircraft orders and preferred to order aircraft in smaller groups.

Chinese airlines are constrained by their government's need to balance foreign trade and meet diplomatic demands by ordering aircraft. With exports to the US and EU surging, China had a foreign trade surplus of $202 billion in 2005. To mitigate anger from Washington, China had to purchase a large volume of commodities from the US. China is embargoed by the US and EU from purchasing weapons and high technology commodities for reasons of national security. Boeing and Airbus aircraft top the list of limited commodities from which the Chinese are free to choose.

Chinese airlines' enthusiasm for placing aircraft orders is also derived from the expectation of continual high growth. Normally the air traffic growth rate is twice the GDP growth rate. China is expected to maintain an average GDP growth rate of about 7% for the next 20 years, so air traffic is forecast to grow at an annual rate of 15% or more. This expected growth means that more than 2,500 aircraft will be required by Chinese airlines in 2020.

To capitalise on growth, China's airlines are trying to expand their fleet and capture more of the market. The impetus for them to acquire new aircraft comes from the maintenance cost savings and fuel efficiency of new types, and the opening of new routes and services.

The majority of the Chinese carriers' fleet comprises 737 Classics, A320 family aircraft, and the 757/767. The rising maintenance costs of older aircraft are another incentive for Chinese airlines to acquire new aircraft. China Eastern, for example, reported maintenance costs of RMB1.38 billion (172 million) in 2005: 60.9% higher than in 2004. The cost of fuel has also become unbearable.

Nevertheless, the international market presents Chinese airlines with unprecedented strong demand and high passenger yields. The yields on China Southern's international routes, for example, increased by 21.7% to RMB0.56 (7 cents) per revenue passenger kilometre (RPK), and the carrier's load factor also increased by 0.5%. Chinese airlines are inspired by the surging international passenger market, and would like to open new international routes with new types of aircraft, such as the 787 and A380.

Chinese airlines' demand and high growth rates therefore play a fundamental role in determining the size of their aircraft orders, while political considerations catalyse this demand. The airlines and government will consequently have to share the responsibility of financing these aircraft if Chinese airlines default on payments.

Financial source

Normally airlines finance 20% of their aircraft purchases with their own capital, which includes internally generated cashflow. The Chinese airlines' financial requirements for all their aircraft orders are clearly too large to complete without any external sources. Seeking external capital has become the carriers' first priority.

Air China issued a statement in early 2006 that it intends to issue 2.7 billion shares in China's domestic stock market, to raise more than RMB6 billion ($750 million) to finance its 45 aircraft deliveries over the next three years, including 20 A330-200s, 15 787s and 10 737-800s.

China Eastern also made a blueprint to have two of its subsidiaries issue initial public offerings (IPOs) this year. China Southern is making efforts to obtain Chinese financial regulatory approval to issue bonds in the domestic capital market. Among all these efforts, however, the most prominent is selling significant shares to foreign strategic investors. China Eastern is reported to be negotiating with Singapore Airlines (SIA) about purchasing 20% of China Eastern's shares. Although the two carriers face a huge regulatory hurdle in that 51% of an airline's ownership must be controlled by Chinese domestic companies, China Eastern might be able to get an exemption on the grounds of its financial distress and the strong relationship between China and Singapore.

If China Eastern's efforts generate a positive outcome, more ownership transactions might take place between the Chinese carriers and well established foreign carriers or strategic investors. The change will have a profound impact on Chinese carriers' aircraft financing and fleet planning.

One last way to generate cash is to sell ageing aircraft. After merging smaller airlines in 2004, the three major carriers have a huge and complex fleet that includes two or three aircraft that were designed for the same purpose. Examples are the use of both the A340 and 777, or the A320 and 737-800. Simplifying aircraft fleets is one of the merger objectives, and the financial distress of these carriers gives them an incentive to sell their ageing aircraft as quickly as possible. China Southern, for example, has announced its intention to sell 11 MD-82s to relieve its financial distress and optimise its fleet.

Financing methods

The methods available to finance aircraft deliveries normally include commercial loans, finance leases, operating leases, and sale and leaseback transactions. An airline's selection depends on the comparable benefits that each method can generate, and what it can afford.

On the lender and lessor's side, an airline's credit is the key factor in deciding which methods are available to it, and how the lessor or lender will charge the airline. The potential benefits, costs and risks for both or multiple parties in an aircraft leasing deal constitute the dynamic of Chinese aircraft financing. "Foreign banks and lessors still look at major Chinese airlines as good credit customers, even though they reported a financial loss last year due to high fuel prices," says Paul Ng, head of the China desk at Freshfields in Shanghai. "Since the high fuel price is a common problem for the global airline industry, the Chinese airlines should not be blamed much for their losses. The banks and lessors are confident that the airlines will return to profit in the long term. Compared to their North American

Success flies on the CRJ900

China Southern reported a net loss of $231 million in 2005; the highest loss of all Chinese airlines. China's carriers have had to cope with high fuel prices and increased competition in recent years, but are still regarded as good credit customers by foreign banks and lessors.

counterparts, the Chinese airlines have stronger credits and a brighter future. This prospect partly constitutes the ground for the lenders to do deals with the airlines. The foreign banks and lessors' general attitude is positive, as indicated by the recent spate of foreign-driven asset-based aircraft financing in China, which has been happening without the security of a guarantee by Chinese domestic banks.

"The consensus is that China is where the business is and that the Chinese government can be trusted to protect the market by keeping an active hand in organising the industry," says Ng.

Peter Murray, aviation lawyer at Ince & Co, Shanghai, concurs: "In fact, some believe that this trend among foreign lenders is spreading, and that the Chinese airline industry is set to see a tremendous amount of growth because of it. Comparisons are often made with the development of the airline industry in India, but China appears to be ahead on a number of fronts, including the fact that its airport infrastructure is more advanced."

"Risk assessment is one of the most important parts of our business," says Scott Weiss, vice president at Pegasus. "We have evaluated the Chinese airlines' risk carefully and do not think that they will be in danger of default. To minimise the risk, however, we not only choose a creditable airline, but also select aircraft that have a wide customer base and are easily deployable. We provide operating leases, sale and leaseback, which includes fleet management, and cargo conversion financing to the Chinese airlines. We have reached deals of more than $500 million with them in recent years."

Commercial loans remain the most conventional and direct method with which to finance aircraft deliveries. Having abandoned their previously cautious attitude towards foreign debts, Chinese carriers have strong enthusiasm for borrowing US$s, with the expectation of the RMB's continuous appreciation. The RMB appreciated by 2.1% on 21 July 2005, breaking a long established regime of pegging the RMB to the US dollar at 8.2 to 1.0. Chinese airlines are among the few companies benefiting from the appreciation due to their huge foreign loan denoted in US$s and Japanese Yen. China Southern, for example, reported a net profit of RMB1.2 billion ($150 million) as a result of the appreciation. The airline is expected to report another gain of RMB362 million ($45 million) if the RMB appreciates by another 1%. With the expectation that the RMB will continue to appreciate, Chinese airlines have been borrowing more loans denoted in US$s to finance their aircraft deliveries.

"From 2002 onward, China's local banks became more cautious about lending to Chinese airlines, partly due to the increasing bad debt from the airline industry. Foreign banks, however, have comparably small exposure to the Chinese airlines on their balance sheet, so they are willing to loan to the airlines," says Ng. Ng has been acting on behalf of foreign banks, lessors, and Chinese airlines, such as China Eastern and China Southern since 2001.

Finance leases, the second conventional financing method, have become more attractive for Chinese airlines. "Finance leases as well as operating leases tend to be two popular financing options," says Murray. "We think finance leases are slightly more popular, because they provide Chinese airlines with the ability to take a longer-term view and to indicate to the lessor the make and model of the aircraft the airline wants. The most popular of the various finance lease structures available is the French optimised tax lease, which emerged in 2005 and can reduce the owner's taxable income, thereby cutting the lessee's monthly lease rentals by more than half. China Southern, is expected to pay about 30 to 40 basis points over the London interbank offered rate (LIBOR) on a smaller $400 million loan that will finance the purchase of 13 aircraft. Without a French tax lease, the carrier would have paid about 80 basis points, or 0.8%, over LIBOR for the loan.

Air China plans to spend $881 million to buy six Airbus A330-200s, five A319-100s and three 737-700s. HSBC France co-ordinated the two-part 10-year Air China loan, since it was able to employ the French tax lease method. Air China was expected to get a cheaper price than China Southern, as the former has a better credit. "Probably the most interesting development in the area of aircraft financing is the increasing number of commercial financings taking place without guarantees from state banks. An excellent example is the recent spate of French leases, a product of the Sino-French Double Tax Treaty which allows French banks to pass back tax savings to the Chinese airline lessees. Always prepared to take a pragmatic approach, the airlines appear to be happy to accept the arrangement, even without understanding the structure that well. We understand that a fairly large number of these leases are pure leases lacking guarantees," says Murray.

An operating lease is shorter than a finance lease, and is characterised by its flexibility. Chinese operating lease deals, however, deviate from the conventional wisdom, since most of them have terms in excess of 10 years, and even as long as 12 years. When the duration reaches more than 10 years, the lease is similar to a finance lease. Unlike a finance lease, however, this kind of lease does not grant the lessee the right to buy out the aircraft when the tenure terminates. "The benefit of a long duration for a lessee is that it may get the lowest rental together with a completely new aircraft, while the lessor assumes the residual risk," explains Weiss.

Chinese airlines prefer operating leases to finance leases, partly due to the advantage of financing aircraft with an off-balance sheet technique. If the lease rentals for the finance lease were added to their balance sheet debt, the airlines' balance sheet strength would be weakened, scaring potential lenders and investors with worse credit. "Last year's Citigroup financing deal, using a Japanese operating lease, is another example of the trend to allow for major aircraft financing deals, without the added safety of local guarantees. It is obvious that the major international lenders have taken note that there is an unrivalled business opportunity in China. It is also a credit to the Chinese government that the world's major lenders have faith that it will actively and correctly guide the growth of this essential industry," says Murray.

Sale and leasebacks will emerge as another popular aircraft financing method for airlines. A recent example is Hainan Airlines' sale and leaseback deal with four 737-800s and four A319s. The carrier has more than 20 aircraft on order. Hainan's ratio of debt to asset reached a high of 88.7% in 2005. In such a difficult position, the airline had to consider selling some assets, mainly aircraft, to sustain its operation. Its dilemma was that it was not willing to sell quality assets to outsiders at a low price. Hence the best choice was selling the aircraft to Yangtze River Leasing Company, a subsidiary of Hainan Airlines Holding Company, and then leasing them back. The deal was valued at RMB3.2 billion ($400 million). Hainan Airlines has to pay monthly rentals of $2.4 million in 2005 and 2006, and then rentals of $3.9 million from 2007 to 2014. The deal lowered the carrier's debt-to-asset ratio by 1.3%, and will significantly relieve the carrier's cashflow pressure. "We provide operating leases and sale and leasebacks to Chinese airlines. Sale and leaseback deals with Chinese customers are quite attractive to us. We focus on 10-year-old aircraft," says Warren Willets, vice president at AAR Corporation.

China's booming air freight business brings a small change to the traditional financial methods. All carriers intending to develop their freight business are facing a shortage of suitable widebody freighters. A compromise is to convert the current passenger aircraft to freighter, as demonstrated by China Southern, which is converting six of its A300-600s. These airlines, however, are unable to convert the passenger aircraft on a large scale due to the considerable conversion cost. Consequently a new method of cargo conversion financing has come to the market. "We are keen to provide cargo conversion financing services to Chinese airlines,"says Weiss. "We can buy Chinese airlines' passenger aircraft, convert them to cargo aircraft, and then lease them back to their freight divisions. The targeted aircraft types are the 747, MD-11 and 757."

Government role

With the airlines' financial losses mounting, the Chinese government's support is increasingly required by the

Air China is an exception to most other Chinese airlines, and recorded a net profit of $450 million in 2005. Air China has been able to benefit from the generous tax benefits of French tax leases in some of the aircraft it has financed.

industry due to the semi-political nature of the aircraft orders. The government will definitely get involved in helping the airlines out of their financial problems, but the form that its support will take is uncertain. Considering the government's enormous income and foreign currency reserve, some insiders hope for direct subsidies to the airlines. The government, however, is obviously reluctant to consider this due to the obvious fact that Air China recently reported strong profits. The government's solution is to terminate some long-existing taxes that the airlines have had to bear for a long time. The Chinese airlines have to pay various taxes, among which the obviously unfair are a withholding tax of 17% and an import value added tax of 7% for aircraft acquisitions. The two taxes, which were introduced in the 1980s when the airlines were profitable, make aircraft acquisition more expensive and increasingly unbearable. The airlines also have to pay a fee of 5% equal to their domestic revenue and 3% of their international revenue to the Civil Aviation Infrastructure Fund, a government-controlled fund aimed at investing in aviation infrastructure in remote areas. Pressure from airlines is mounting on the government to terminate the taxes and fees, thereby allowing them to immediately return to profitability.

Start-up airlines

Chinese start-up airlines have attracted worldwide attention. So far only four, United Eagle, Spring, Okay and East Star Airlines, have begun operations, although more airlines are in the progress of applying for certificates. A striking feature of these start-up airlines is that they are financed by private companies, most of which are travel agents or air cargo agents. The tie with the air transport industry means that the start-up airlines easily grip the market. "Based on its parent company's network and reputation in the market (Spring Travel Group), Spring Airlines could fill 20 A320s with passengers if it had the aircraft. The shortage of pilots, however, hampers our further development," says Wang Zhenghua, chairman at Spring Airlines. Spring Airlines operates six A320s leased from GECAS.

Although these start-ups have strong potential, China's risk-averse major banks prefer to finance aircraft for the established airlines. Spring Airlines had planned to purchase three A320s from Airbus in 2004. European Import-Export Bank intended to provide a loan of 70% of the total purchase cost, but required a guarantee from the Chinese banks, which baulked at the deal, thereby deferring the purchase indefinitely. Most of the start-ups therefore have to get aircraft on operating leases with the capital from their shareholders and internally generated cashflow. The Chinese start-ups, however, are benefiting from the US airline industry's over-capacity, and are getting favourable quotes from lessors that have to transfer their aircraft from American carriers under Chapter 11 bankruptcy protection. Wang makes it clear that Spring Airlines' A320s leased from GECAS were acquired at significantly lower rates than from other lessors.

East Star Airlines, a Chinese start-up that launched in May 2006, has also benefited from the situation in North America, and concluded the first finance lease deal among all Chinese start-ups. The airline signed a contract with GECAS and Airbus to finance lease 10 A320s from GECAS, and purchase 10 A320s from Airbus, over the next five years. The airline will get three A320s each year in 2006 and 2007, four in 2008 and five each year in 2009 and 2010. The confidence of the lessor and lessee to conclude the deal came from the financial strength and business prospects of the airline's parent company, East Star Group, which is operating tourism and real estate businesses, and has reported an average profit of RMB500 million $62.5 million) per year.

Chinese start-up airlines have to grow their fleets by all means. The airlines can hardly issue IPOs or bonds in the capital market, until they convince it with a healthy balance sheet. The most effective way of acquiring more aircraft is to sell shares to a well-established foreign airline and acquire aircraft from the incumbent.

Summary

Although established Chinese airlines have said goodbye to the era of high growth and high profit, and may struggle to report a profit in the foreseeable future, they are still able to finance aircraft deliveries due to the diversity and variety of aircraft financing methods, although they may be more expensive. Foreign lenders and leasing companies, however, might be able to yield considerable, even significantly higher, profits due to some carriers' weakening credit, from financing aircraft for Chinese airlines, although they may assume higher but still calculated financial risks. Start-up airlines still have to finance aircraft deliveries with their own capital and internally generated cashflow. The financing methods available will remain limited for them until they present a strong balance sheet to the foreign and local lenders and lessors. AC