

## INDUSTRY OVERVIEW

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### GROWTH TRENDS

China's aviation transportation market is one of the fastest growing and largest in the world. Between 1994 and 2003, passenger traffic of Chinese airlines measured by RPKs grew at a compound annual rate of 9.6%, increasing from 55,158 million RPKs in 1994 to 126,319 million RPKs in 2003. Over the same period, cargo traffic of Chinese airlines measured by RFTKs grew at a compound annual rate of 13.5%, increasing from 1,858 million RFTKs in 1994 to 5,790 million RFTKs in 2003. As a result, the total air traffic of Chinese airlines measured by RTKs grew at a compound annual rate of 12.7% between 1994 and 2003. In 2002, China's aviation market was the world's fourth largest in terms of passenger traffic in RPKs and the world's fifth largest in terms of total air traffic in RTKs.

The table below sets forth certain operating data of Chinese airlines (inclusive of operations in China and other parts of the world) from 1994 to 2003:

<u>Year</u>	<u>Passengers Carried</u>	<u>Passenger Traffic (RPKs)</u>	<u>Cargo and Mail<sup>(1)</sup> Carried (tonnes)</u>	<u>Cargo and Mail (RFTKs)</u>	<u>Total Traffic (RTKs)</u>
	(in millions, except percentages)				
1994 .....	40.4	55,158	0.8	1,858	5,841
1995 .....	51.2	68,130	1.0	2,230	7,144
1996 .....	55.6	74,784	1.2	2,493	8,061
1997 .....	56.3	77,352	1.2	2,910	8,668
1998 .....	57.6	80,024	1.4	3,345	9,297
1999 .....	60.9	85,728	1.7	4,234	10,611
2000 .....	67.2	97,054	2.0	5,027	12,250
2001 .....	75.2	109,135	1.7	4,372	14,119
2002 .....	85.9	126,870	2.0	5,155	16,493
2003 .....	87.6	126,319	2.2	5,790	17,079
<b>Compound annual growth rate: 1994-2003 .....</b>	<b>9.0%</b>	<b>9.6%</b>	<b>11.9%</b>	<b>13.5%</b>	<b>12.7%</b>

(1) Beginning in 2001, the CAAC no longer combines baggage tonnes data together with statistical data relating to cargo and mail tonnes.

Source: CAAC Annual Statistical Reports, 2004.

We believe that China's air passenger and cargo markets present opportunities for further growth. The air passenger market remains significantly under-penetrated when compared to more developed markets such as the United States or Europe. For example, in 2002, the Chinese airline industry handled only 0.067 air trips per capita compared to 1.94 air trips per capita in the United States. The air cargo market is relatively undeveloped compared to more developed markets. According to the *World Air Cargo Forecast 2003* by Boeing, China is projected to be the fastest-growing air cargo market in the world over the next 20 years.

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We believe that the main drivers for growth have been, and will likely continue to be, the following factors:

- China's economic growth;
- expansion of international trade;
- growing demand for tourist travel; and
- shift in transportation preferences.

### *China's Economic Growth*

We believe that China's air traffic should grow substantially over the next several years in line with China's forecasted economic growth. Historically, China's air traffic growth has been positively correlated with the country's economic growth. Between 1994 and 2003, China's real GDP grew at a compound annual rate of 8.5% while China's air traffic measured by RTKs grew at a compound annual growth rate of 12.7% over the same period. The Economic Intelligence Unit has forecasted China's real GDP to grow at a compound annual rate of 8.0% from 2004 to 2008, making China one of the world's fastest growing economies, which we believe should further drive China's air traffic growth. Moreover, since much of air travel is discretionary, economic growth and corresponding per capita income growth should make air travel more affordable and should contribute to air passenger traffic growth.

### *Expansion of International Trade*

An increase in China's overall trade volume with its trading partners should also contribute to air traffic growth. China's international trade has grown significantly in recent years. Between 1994 and 2003, China's export and import volumes grew at compound annual growth rates of 15.4% and 15.2%, respectively. China's overall trade volume may benefit from China's entry to the World Trade Organization and regional trade initiatives such as the Closer Economic Partnership Agreement between the mainland of China and Hong Kong and the Framework Agreement on Comprehensive Economic Co-Operation between China and the Association of South East Asian Nations. Such trade initiatives, combined with the expansion of China's manufacturing base, may increase China's overall trade volume and generate greater demand for business travel and cargo services.

### *Growing Demand for Tourist Travel*

Growing demand for domestic, outbound and inbound tourist travel should also spur passenger traffic growth. The increase in per capita disposable income and supportive government policies have significantly contributed to the rise in Chinese leisure travel. In addition, the gradual relaxation of tourist visa requirements for Chinese nationals to certain destinations, coupled with rising income levels, have contributed to the recent increase in outbound tourist travel. In 2003, the PRC central government and the Hong Kong Special Administrative Region government agreed that Chinese citizens who are residents of certain cities are eligible to obtain travel permits to visit Hong Kong. In February 2004, certain European Union member countries agreed to simplify visa requirements for Chinese tourist groups traveling to Europe pursuant to the Memorandum of Understanding on Approved Destination Status between China and the European Union. We believe that the 2008 Beijing Olympic Games, the 2010 Shanghai Expo and the 2010 Asian Games in Guangzhou should raise China's profile as an international sports and cultural centre and further attract inbound tourist travel.

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### *Shift in Transportation Preference*

Air transportation has become a preferred alternative form of transportation for China's growing middle class due to the increasing importance of shorter travel time and the narrowing gap between the price of domestic air tickets and train tickets. As a result, China's air passenger traffic grew at a faster rate relative to rail or highway traffic. Demand for air cargo services has increased, reflecting growth in the transport of time-sensitive, higher-value products. Development of air transportation services has also been influenced by the slower growth, strained capacity and quality of rail and highway transportation in China.

The table below sets forth additional information regarding passenger and freight traffic in China from 1994 to 2003:

Year	Rail		Highway		Air	
	Passenger Traffic (RPKs)	Cargo Traffic (RFTKs)	Passenger Traffic (RPKs)	Cargo Traffic (RFTKs)	Passenger Traffic (RPKs)	Cargo Traffic (RFTKs)
(in millions, except percentages)						
1994	363,610	1,247,140	422,030	448,630	55,160	1,859
1995	354,570	1,304,950	460,310	469,490	68,130	2,230
1996	334,760	1,310,620	490,880	501,120	74,780	2,493
1997	358,490	1,326,990	554,140	527,150	77,350	2,910
1998	377,340	1,256,010	594,280	548,340	80,020	3,345
1999	413,600	1,291,030	619,920	572,430	85,730	4,230
2000	453,260	1,377,050	665,740	612,940	97,050	5,027
2001	476,680	1,469,410	720,710	633,040	109,140	4,372
2002	496,940	1,565,840	780,580	678,250	126,870	5,155
2003	478,860	1,724,670	769,560	709,950	126,320	5,790
<b>Compound annual growth rate: 1994-2003</b>	<b>3.1%</b>	<b>3.7%</b>	<b>6.9%</b>	<b>5.2%</b>	<b>9.6%</b>	<b>13.5%</b>

Source: China Statistical Yearbook, 2004.

### **FLEET**

The number of China's commercial transportation aircraft has grown in the last ten years. According to the CAAC, the entire fleet of Chinese commercial airlines increased from approximately 406 aircraft as of December 31, 1994 to 661 aircraft as of December 31, 2003. During this period, China's commercial fleet has been modernised and generally includes newer aircraft models. The average utilisation rate for Chinese airlines has also improved in recent years, increasing from approximately 6.8 hours per day in 1996 to approximately 7.8 hours per day in 2003.

### **ROUTES**

The number of routes has also grown in the last ten years. According to the CAAC, there were 84 international, 630 domestic and 13 Hong Kong routes in 1994 compared to 194 international, 918 domestic and 43 Hong Kong and Macau routes, respectively in 2003. Domestic air traffic in China is highly concentrated on several primary routes such as the routes between Beijing, Shanghai and Guangzhou.

### **AIRPORTS**

The high air traffic growth has created significant demand for airport services in China. The PRC government has made substantial investments in the development of China's commercial

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airports and other aviation infrastructure over the last ten years. During this period, numerous airports in China have been constructed, expanded or renovated. As of December 31, 2003, China had 143 commercial airports.

The table below sets forth additional information relating to the top five airports in China for 2003:

<u>Airport</u>	<u>Number of Landings and Take-offs</u>	<u>Percentage of Total</u>	<u>Passenger Throughput</u> (in millions)	<u>Percentage of Total</u>	<u>Cargo Throughput</u> (in thousand tonnes)	<u>Percentage of Total</u>
Beijing Capital . . . . .	233,776	11.0%	24.3	13.9%	663	14.7%
Guangzhou Baiyun . . . . .	142,283	6.7	15.0	8.6	454	10.1
Shanghai Pudong . . . . .	134,276	6.3	15.1	8.7	1,189	26.3
Shenzhen Baoan . . . . .	119,523	5.7	10.8	6.2	354	7.8
Shanghai Hongqiao . . . . .	109,403	5.2	9.7	5.6	209	4.6
Other Airports . . . . .	1,379,529	65.1	99.4	57.0	1,648	36.5
<b>Total . . . . .</b>	<b><u>2,118,790</u></b>	<b><u>100.0%</u></b>	<b><u>174.3</u></b>	<b><u>100.0%</u></b>	<b><u>4,517</u></b>	<b><u>100.0%</u></b>

Source: CAAC Annual Statistical Report, 2004.

### JET FUEL

The import of jet fuel is regulated in China, and only government-approved entities can import jet fuel to China. See the section headed “Regulation — Regulation of the Chinese Airline Industry — Jet Fuel.” The table below sets forth, for the periods indicated, the average price of crude oil as reported in New York, the benchmark Singapore jet fuel price as published by Platts and domestic jet fuel price published by the PRC government:

	<u>New York</u> <u>Crude Oil Price<sup>(1)</sup></u> (US\$ per barrel)	<u>Singapore</u> <u>Jet Fuel Price<sup>(1)</sup></u> (US\$ per barrel)	<u>Domestic Jet Fuel Price<sup>(2)</sup></u>	
			(RMB per barrel)	(US\$ per barrel)
1st quarter 2001 . . . . .	28.71	29.45	408.9	49.40
2nd quarter 2001 . . . . .	27.95	30.54	397.0	47.97
3rd quarter 2001 . . . . .	26.61	29.78	397.5	48.02
4th quarter 2001 . . . . .	20.49	23.53	358.2	43.28
1st quarter 2002 . . . . .	21.63	23.53	313.9	37.93
2nd quarter 2002 . . . . .	26.33	27.23	361.2	43.64
3rd quarter 2002 . . . . .	28.25	29.84	369.6	44.66
4th quarter 2002 . . . . .	28.23	31.35	416.9	50.37
1st quarter 2003 . . . . .	33.80	36.14	427.0	51.59
2nd quarter 2003 . . . . .	28.91	28.35	411.8	49.76
3rd quarter 2003 . . . . .	30.21	31.52	372.6	45.02
4th quarter 2003 . . . . .	31.16	35.67	392.8	47.46
1st quarter 2004 . . . . .	35.25	38.23	430.4	52.00
2nd quarter 2004 . . . . .	38.28	43.26	479.7	57.96

Sources:

(1) Bloomberg.

(2) Published domestic jet fuel purchase price set by the PRC government.

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### DEVELOPMENT OF THE CHINESE AIRLINE INDUSTRY

The Chinese airline industry has undergone significant reform and restructuring in the past 25 years. The first phase of reform occurred between 1980 and 1987. During this period, the PRC government directed the six regional administrative bureaus of the CAAC (namely, Beijing, Chengdu, Xi'an, Shenyang, Guangzhou and Shanghai) to operate as separate units that were responsible for their own profits and losses to improve the operating efficiency and profitability of the Chinese airline industry. A key reform measure was the introduction of incentives linking performance with management and labour compensation.

The second phase of reform occurred between 1987 and 2000. The CAAC transferred its aviation operations to nine newly established airlines, namely Air China International Corporation, China Southern Airlines, China Eastern Airlines, China Southwest Airlines, China Northwest Airlines, China Northern Airlines, China Yunnan Airlines, China Xinjiang Airlines and China General Airlines. The CAAC maintained its regulatory and policy functions and partially relinquished its role as an operator of airlines.

During this phase of reform, the CAAC promoted competition in the industry and simplified the approval procedures for granting new domestic routes. Many Chinese provincial and municipal governments established smaller regional airlines to expand air links between their respective regions and key economic centres of China in order to stimulate economic growth and facilitate travel. These regional airlines expanded their fleets aggressively in an attempt to achieve economies of scale to compete with the larger airlines formerly operated by the CAAC and offered steep discounts on airfare to capture market share.

The third phase of reform was initiated in October 2002. As industry regulator, the CAAC has shifted its focus to the formulation of industry policies and guidelines, monitoring market development, managing competition, improving safety of flight operations and enforcing industrial standards and international practices. The PRC government encouraged industry consolidations and merged the then-existing nine major Chinese airlines into three major groups. The goals of these efforts were to increase the three major Chinese airline groups' market share, create economies of scale and efficiency and better prepare them for international competition.

Pursuant to the Reform Plan of Civil Aviation approved by the State Council, the airline consolidation was implemented as follows:

- The former Air China International Corporation merged with CNAC (PRC) and China Southwest Airlines to form CNAHC;
- China Eastern Group merged with China Northwest Airlines and Yunnan Airlines to form China Eastern Aviation Holding Company; and
- China Southern Group merged with China Northern Airlines and Xinjiang Airlines to form China Southern Aviation Holding Company.

The PRC government encouraged regional airlines, though not directly involved in the consolidation plan, to join the three major Chinese airline groups.

The consolidation further strengthened the market position of the three major Chinese airline groups. Prior to the consolidation, Air China International Corporation, China Eastern Airlines and China Southern Airlines were already the three largest Chinese airlines and together accounted for approximately 62.8% of the total traffic measured by RTKs handled by Chinese airlines in 2001. After the consolidation, the three major Chinese airline groups together handled approximately 83.0% of the total air traffic of Chinese airlines measured in RTKs in 2003, with CNAHC, China Eastern Aviation Holding Company and China Southern Aviation Holding Company handling

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approximately 30.4%, 23.3% and 29.2%, respectively, of China's total traffic measured in RTKs in 2003.

### **DEREGULATION OF THE CHINESE AIRLINE INDUSTRY**

The PRC government has in recent years gradually and orderly deregulated many aspects of China's domestic airline industry and allowed international and regional passenger, cargo and airline-related service providers greater access to China's aviation market. This deregulation trend is expected to continue in the foreseeable future. Although we believe that the deregulation of China's airline industry is beneficial to the industry and presents market opportunities, deregulation may result in more competition.

#### *Market-Entry*

The CAAC has implemented a number of reforms aimed at improving the efficiency, transparency and competitiveness of China's domestic airline market. The CAAC has eased market-entry restrictions for regional feeder airlines and privately funded airlines, which may include low-cost carriers, granting approval for such airlines to begin operations, and has permitted such airlines greater access to capital. The PRC government has indicated that it may gradually reduce or waive certain fees levied on regional feeder flights to decrease such airlines' operating costs. Moreover, the CAAC will open certain domestic markets to additional competition. Beginning in the summer of 2005, all Chinese airlines will be permitted to operate domestic flights originating from and/or stopping over in Shanghai. Under current CAAC policy, Chinese airlines are generally granted the rights to operate mainly from their principal bases, and flights within a particular region are expected to be served by airlines based in that region.

#### *Domestic Airfare Pricing*

The pricing of domestic airfares has also been partly deregulated by the PRC government. Under the new policy, which became effective on April 20, 2004, the PRC government no longer directly sets domestic airfares but instead sets benchmark airfares and allows the actual airfares to fluctuate within a certain range. Benchmark airfares are based on several factors, including average operating costs, supply and demand and the ability of customers to pay. Under current pricing guidelines, benchmark airfares are calculated based on the average airfare of RMB0.75 (US\$0.09) per passenger-kilometre. See the section headed "Regulation — Regulation of the Chinese Airline Industry — Airfare Pricing — Domestic Airfare."

#### *Traffic Rights*

The PRC government has gradually opened the Chinese aviation market to international and Hong Kong- and Macau-based airlines by increasing the number of carriers permitted to operate passenger and cargo flights to and from the mainland of China and increasing the frequency of such flights. The gradual opening of the Chinese aviation market may result in more opportunities and competition to Chinese airlines, including us. For example, in 2003 the PRC government granted on a trial basis third-, fourth- and fifth-freedom traffic rights to international airlines operating flights to and from Hainan province. Additionally, China and the United States signed a new air services agreement in July 2004 that significantly expands air services between the two countries. The new agreement increases the number of carriers permitted to operate flights between China and the United States from four to nine and the frequency of flights from 54 flights per week to 249 flights per week over a six-year phase-in period. Additionally, the agreement gives Chinese and U.S. airlines greater flexibility in choosing destinations and forming codeshare arrangements on certain routes between China and the United States.

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In September 2004, the PRC government and the government of the Hong Kong Special Administrative Region entered into a new air services arrangement significantly expanding air services between the mainland of China and Hong Kong. The new arrangement raises the limit on the number of passenger flights per week by 30% to 1,600 and the number of cargo flights by 100% to 84 and lifts the current restriction on the number of airlines registered in the mainland of China and Hong Kong permitted to operate flights between the mainland of China and Hong Kong. Moreover, the arrangement expands the rights of Chinese airlines to load and unload passengers and cargo in Hong Kong en route to a third destination by increasing the number of permitted destinations and capacity. The arrangement will be implemented in phases beginning with the winter schedule of 2004/2005.

In November 2004, the PRC government and the Macau Special Administrative Region government entered into a new air services arrangement significantly expanding air services between the mainland of China and Macau. The new arrangement increases the number of mainland China destinations from 31 to 37 and increases the number of passenger and passenger/cargo combined flights permitted each week by 82% to 539 flights per week and the number of cargo flights permitted each week by 100% to 50 flights per week. Additionally, beginning with the 2004 winter schedule, China and Macau can each designate two airlines to operate passenger and cargo services on each route (excluding Beijing, Shanghai and Guangzhou).

### *Air Cargo Sector*

The PRC government has indicated that it intends to further deregulate China's air cargo sector. The CAAC has announced that it plans to simplify approval procedures for purchasing freighter and granting air cargo route rights. The deregulation of the air cargo sector could result in more international air cargo companies operating in China's air cargo market and/or approval of more Sino-foreign air cargo joint ventures. As part of its reform plan for the air cargo sector, the CAAC has encouraged the establishment of regional air cargo hubs in order to expand cargo transport links in China. According to the new air services agreement between China and the United States, effective January 1, 2007, qualified air cargo carriers of one country will be allowed to establish cargo hubs in the other country. In addition, the agreement allows the United States to designate an additional all cargo carrier and China to designate an additional combination carrier or all cargo carrier to operate on U.S. – China routes in 2004.

### *Foreign Ownership Restrictions*

The PRC government has raised the ceiling of foreign ownership in Chinese airlines. Under the current policies of the CAAC, ownership of a Chinese airline by non-PRC persons and Hong Kong, Macau or Taiwan persons in aggregate must be less than 50% of the airline's issued share capital. In addition, no single non-PRC investor (including its affiliates) is permitted to own more than 25% of the issued share capital of a Chinese airline. The easing of China's foreign ownership restrictions should give Chinese airlines better access to foreign capital. We have been informed by Haiwen & Partners, our PRC counsel, that no reforms relating to the restriction on ownership of Chinese airlines are currently scheduled.