DEREGULATORY REFORM OF CHINA'S AIRPORTS: ATTRACTING NON-STATE INVESTORS

YANG Xiuyun & YU Hong

EAI Background Brief No. 527

Date of Publication: 13 May 2010

Executive Summary

1. An increase in the demand for diversification of airport services and airport construction funding, and the desire to accelerate airport development by attracting non-state investment have pushed the Chinese government to deregulate the airport industry.

2. In general terms, China's airport deregulation has taken place in four stages, with each involving different combinations of airport ownership and management structures, as well as governance structures.

3. The first stage began in 1980 and ended in 1986. Airports were separated from the military and the Civil Aviation Authority of China (CAAC) was founded in 1980. A three-level administration system was formed. Nevertheless, both airlines and airports remained in the tight control of the central state.

4. The second stage, from 1986 to 1992, concerned regulation of airport administration. The aim was to separate domestic airport from other airline operation, and develop them into independent units. Local governments were permitted to invest in the airport industry. However, the CAAC was solely responsible for running all civil airports in China.

5. The third stage, which started in 1993 and ended in 2001, introduced "limited relaxation" in regulation of administration. Joint-equity reform was the key of this deregulation. This period saw new efforts to attract non-state investment in airports.

6. The changes to airport ownership have led to the emergence of a new regulatory structure, led by the CAAC, in which local governments participated.

7. From 2002, deregulation of China's airports has entered a new era of limited economic regulation. The state has further loosened its regulatory controls

over the airport industry to speed up the development of equity ownership and commercialization of airports.

8. Through implementing the new policies, liberalizing airport charges, decentralization and granting the Fifth Freedom, the government provided more investment opportunities for the non-state sector. Private investment is essential for sustainable airport development.

9. The CAAC no longer acts as the owner or manager of airports; it has been transformed into an independent and professional regulator in charge of policy-making and enforcement.

10. However, the average ratio of non-state involvement in total airport investment was only 10% from 2000 to 2007. This is an important issue the Chinese government must deal with in the future.

DEREGULATORY REFORM OF CHINA'S AIRPORTS: ATTRACTING NON-STATE INVESTORS

YANG Xiuyun & YU Hong*

Changes in the Operational Environment of China's Airports

1.1 In 1986, China started to deregulate its airport industry. Its main objectives were to diversify airport investment, reduce the burden on the government and improve industrial efficiency. There were several key factors underlying such a move.

1.2 Firstly, the operational environment for the international airport and aviation industries has changed. Since the 1980s, it has become common for the state to deregulate airlines and push for the implementation of 'open sky' agreements. These moves have led to a reduction of regulatory restrictions and airline companies becoming "freer" in their decision-making processes.

1.3 In line with clients' demands for high quality connections, short transfer times, lower fares and high frequency of flights, the civil aviation market has become more unstable and greater competition has emerged among airports.

1.4 The second factor was China's airline deregulation. The state began to deregulate local airline companies from 1986. By 1994, 6 state-owned airlines and 11 regional carriers had been founded. After 2002, three large airline groups were established and the government deregulated flight prices and imposed a price-cap. Increasing competition in the airline industry led the airlines to make more effort in cost-saving and demand better value for money

* Dr Yang Xiuyun is Associate Professor of the Economics and Finance School, Xi'an Jiaotong University and Visiting Research Fellow at the East Asian Institute, National University of Singapore. Dr Yu Hong is Visiting Research Fellow at the East Asian Institute, National University of Singapore. They would like to thank Prof John Wong and Dr Sarah Tong for going through the drafts and providing helpful comments.

from airports. These airline reform measures put pressure on airports to react to the new environment by providing a more comprehensive range of customer-focused services.

1.5 The third factor, that of the emergence, in 2005, of low-cost carriers has further changed the traditional operational practices of China's airports. By 2009, 11 low-cost airlines had been established.[1] In order to satisfy their demand for maximum aircraft utilization, fast turnaround times and lower operational costs, domestic airports had to provide fast and efficient service at lower prices.

1.6 The fourth factor was the demand for diversification of airport services and for increased levels of investment in airport construction. This provided the impetus for airport industry deregulation. The Chinese central government had to ease its strict entry requirements in order to raise capital to fund airport construction and development.

Reforming the Management and Regulation of China's Airports

2.1 Airport deregulation has been implemented in four main stages, aimed at attracting more non-state investment from both foreign and domestic sources. Each stage was intended to provide new opportunities for foreign and private investment and was characterized by a different combination of airport ownership and management structures and hence, a different pattern of regulatory governance (see Appendix 1).

2.2 The first stage of deregulation took place from 1980 to 1986. In order to abide by the "opening-up" policy and change the management structure of state-owned enterprises within the civil aviation industry, civil airports were separated from and no long controlled by the military with the founding of the Civil Aviation Administration of China (CAAC) in 1980.

[1] CAAC, 2009. "Statistical Data on Civil Aviation of China", *China Civil Aviation Press*.

2.3 Six regional branches and 31 provincial branches of the CAAC were established, representing the CAAC in the management of local civil aviation affairs. An airport administration system with three levels was formed. Nevertheless, domestic airports, which remained in the tight control of the CAAC and under the direct supervision of the State Council of China, were merely dependent administration units.

2.4 The second deregulation stage, from 1986 to 1992, concerned airport administration regulation. In July 1986, the "Interim Measures on Management of Civil Airports"[2] were issued and the first airport enterprise, Chengdu airport, was set up. Airport administration was separated from civil aviation administration. From 1987, China's airports were permitted to charge landing and takeoff fees, and passenger service fees from airlines. By 1989, four airport enterprises, Chengdu Airport, Beijing Airport, Shanghai Airport and Xi'an Airport, were under the control of the local CAAC. A new system of contract management responsibility was applied to these airports.

2.5 The spillover effect of airport development to local economic growth became apparent; local governments were eager to invest in airport construction and expansion and were permitted to invest in the airport industry from 1987. For example, the CAAC transferred the governance of Xiamen Airport to Xiamen government in 1988.

2.6 A total of 4.42 billion *yuan* was spent in the upgrading, expansion and construction of 46 domestic airports between 1986 and 1992.[3] However, regardless of whether investment came from local or central government, airports were still owned by the central government. This gave rise to a kind of airport administration regulation which was more responsive to political than commercial needs.

---

2 <关于机场归口管理的暂行规定>, Civil Aviation Administration of China (CAAC), 1986. The provision became defunct in 2001 (http://www.caac.gov.cn/B1/B6/200612/t20061220_926.html).

3 *Yearbook of Transportation and Communication*, 1993. *Year Book Bureau of China Transportation and Communication*.

2.7 The CAAC was solely responsible for running all civilian airports in China. It concurrently acted as the owner, investor, policy maker and regulator in overseeing the management of China's civilian airports. As a consequence, the airports' mission was relatively straightforward: to provide aviation services to local regions by maximizing flight connections. Their lack of commercial responsibilities frequently resulted in relatively high operational costs.

2.8 The third deregulation stage was one of "limited relaxation" of airport administration regulation carried out between 1993 and 2001. In order to implement "The Ordinance for Changing State-owned Industrial Enterprises' Operating Mechanisms"[4] in the civil aviation industry, cut the costs of airline companies and improve service, the climate of airport investment gradually loosened, and the scope of airport business operations expanded. "The Implementation Measures for Changing State-owned Civil Aviation Enterprises' Operating Mechanisms"[5] and "Interim Measures for Civil Airport Operation Management"[6] were issued by the CAAC in 1993.

2.9 China's airports were then corporatized and their services marketized. This third stage also witnessed the government's first efforts to attract non-state investment in airports. The first obvious sign of deregulation of investment was marked by the publishing of "The Notice on Foreign Investment Policy in the Civil Aviation Industry"[7]. Xiamen Airport was listed on the domestic stock exchange in 1996, and Shanghai Airport and Shenzhen Airport were listed in 1998, when they raised 2.56 billion *yuan*.

[4] <《全民所有制工业企业转换经营机制条例>, The State Council of PR China, 1992. State Council file Num.103.

[5] <全民所有制民航企业转换经营机制实施办法>, Civil Aviation Administration of China (CAAC), 1993. The provision was defunct in 2005. http://www.caac.gov.cn/B1/B6/index_8.html

[6] <民用机场运营管理暂行办法>, Civil Aviation Administration of China (CAAC), 1993，The provision became defunct in 2005. http://www.caac.gov.cn/B1/B6/index_8.html

[7] <关于外商投资民用航空业有关政策的通知>, Civil Aviation Administration of China (CAAC), 1994. http://fdi.gov.cn/pub/FDI/zcfg/tzxd/hyxd/P020060619621161719859.pdf

2.10 To encourage investment of air transport enterprises in airports, "The Interim Measures for Domestic Air Transport Enterprises Investing in Civil Airports"[8] were introduced in 1998. Hainan Airlines was the first airline to be approved of its investment in Haikou Meilan Airport.

2.11 This milestone event was then superseded by the listing of Beijing Capital Airport on the Hong Kong Stock Exchange in 2000. Both private and foreign capital started to flow into the airport industry via capital markets. China's airport ownership metamorphosed into a mixed form. Nevertheless, the central and local governments still held their roles as the largest group of bankrollers and managers of airports at this stage.

2.12 Another sign of deregulation was the liberalization of ground services. Traditionally, ground services at respective airports were wholly undertaken by airport managers. Beginning from the early 1990s, however, some medium- and large-sized airports started to outsource certain ground services to external operators, including check in, maintenance and airline catering. For example, Shanghai Hongqiao International Airport Co., Ltd. set up a professional ground handling services division in 1993; Guangzhou Baiyun Airport detached part of its ground support functions to form independent ground service companies in the late 1990s.

2.13 The changes to airport ownership led to the emergence of a new CAAC-led regulatory structure in which the local governments participated. The CAAC was responsible for formulating and implementing airport regulation, and managing 90 airports owned by the central government. However, a lack of functional separation, especially between policy formulation and regulation, greatly restricted further commercialization of airport services, and resulted in relatively low operational efficiency.

2.14 With low airport commercialization at this stage, the main regulatory approaches adopted were based on costs and a simple weight-based

[8] <国内航空运输企业投资民用机场的暂行规定>, Civil Aviation Administration of China (CAAC), 1998. Year Book of Transportation and Communication,1999

aeronautical fee to ensure some kind of real rate of return on the airports' assets.

Reforms and Private Investment Opportunities since 2002

3.1 After 2002, China's airports have entered a new era of limited and more relaxed economic regulation. The government has further loosened its regulatory controls over many aspects of the airport industry to speed up equity ownership reforms and commercialization of airports. Through implementation of a series of policies, more opportunities for non-state investment have appeared in the airport industry.

3.2 "Measures for Reform of the Civil Airport Management Administrative System"[9] were implemented in 2003, and with the exception of Beijing Capital Airport and airports in Tibet, the management of all the other 93 airports were transferred to local governments. Provincial branches of the CAAC were abolished and administration of airports was simplified from three levels to two.

3.3 By implementing the "Provisions for Foreign Investment in the Civil Aviation Industry"[10] and the "Provisions for Domestic Investment in the Civil Aviation Industry",[11] the state lowered the barrier against private investment in domestic airports. It has not only allowed private and foreign capital to take greater shareholding in airport management and enter a wider operational area, but also widened investment opportunities to include a range of airport facilities and services.

---

9 <民用机场管理体制和行政体制改革实施方案>, The State Council of PR China, 2003. State Council file No. 93.

10 <外商投资民用航空业规定>, Civil Aviation Administration of China (CAAC), 2002. http://www.caac.gov.cn/B1/B6/200612/t20061220_918.html

11 <国内投资民用航空业规定>, Civil Aviation Administration of China (CAAC), 2005. http://www.caac.gov.cn/B1/B6/index_3.html

3.4 Under the framework of the Closer Economic Partnership Agreement (CEPA), Hong Kong and Macau investors enjoy the benefits of reduced restriction as they are permitted to independently acquire concessionary management rights in medium-sized and small airports, provide airport management consultation services, and invest in ground services.

3.5 Whilst large and medium-sized airports remain under state control, domestic and private capital may now be invested in these airports, and purchase and operation of small airports and engagement in infrastructure construction, management and operational activities are all allowed.

3.6 To further enhance the appeal of investing in China's airports, the state has also taken steps to liberalize airport charges. The "Civil Airport Charges Reform Plan"[12] was approved in December 2007. It aims to give more freedom to airports to price their services according to the nature of the business, and airport charges are price-cap regulated. These moves have greatly accelerated the growth of the airport industry. These airport charge reforms were expected to decrease overall costs of mainland airlines by 2% -3%.[13]

3.7 In seeking to offer a more open and conducive investment climate, China has signed bilateral cooperation agreements and established coordination mechanisms on air traffic rights and services with 42 countries and regions in Asia Pacific, North America and Europe, and has experimented in regional aviation liberalization with the Association of Southeast Asian Nations (ASEAN).

---

12 <民用机场收费改革方案>, Civil Aviation Administration of China (CAAC), 2007. http://www.caac.gov.cn/dev/ghfzs/WJK/YJXX/

13 "The reform of airport charges enable airlines to reduce costs", http://www.topcj.com/html/1/CJXW/20080226/137875.shtml

3.8 The Chinese government has also opened up air traffic rights by granting Fifth Freedom Rights to 10 domestic airports.[14] The introduction of more foreign carriers into the market and the establishment of new international flight routes are expected to strengthen the structure of China's nascent aviation network, gaining the industry more international recognition.

3.9 Localized airport reform, diversification of airport ownership and deregulation of market entry have achieved the separation of roles between owners, managers and regulators; likewise, distinctions between airport management, policy formulation and industrial regulation have become clearer. A relatively independent regulatory institution has gradually emerged as a main feature during this stage. Administrative controls by the state have gradually given way to more professional regulatory practices.

3.10 As deed owners, local governments are responsible for approving airport projects and securing investment funds. The airport groups, as part of their affiliation to the provincial governments, have taken on management and operational responsibilities. The CAAC no longer acts as the owner or manager of the airports; it has been transformed into an independent and professional regulator in charge of policy-making and enforcement, coordinating with other governmental bodies, and serving as an information node for the industry.

3.11 To encourage airports to expand their commercial activities, pricing has deviated from the previous cost-plus principles to become increasingly incentive-based. This approach also aims to make domestic airports more attractive to capital investors by guaranteeing airports and their investors a reasonable rate of return. Airports have been given relative freedom to set

[14] The fifth right means an airline of a country or region has the right to stop at an airport to carry or load passengers and goods and then fly to the third country. The 10 airports are Shanghai Pudong International Airport, Wuhan International Airport, Chongqing International Airport, Tianjing International Airport， Hainan International Airport, Nanjing International Airport, Xiamen International Airport, Kunming International Airport, Sanya International Airport, and Guangzhou International Airport.

prices within price caps set by the CAAC, thus maximizing profits and efficiency.

3.12 Under new pricing policy, both aeronautical and "important" non-aeronautical fees[15] are now determined by negotiation between airports and their client-users; non-aeronautical fees not belonging to the first category are set according to market demand to encourage further commercialization of extended airport services.

3.13 Airports are defined as public infrastructure through the "Management Ordinance of Civil Airports".[16] The function of airports is to provide management of services. Their management mode will include production management in the flight area and asset management in the terminal area. As franchises are expected to be the main operating mode, professional airport management companies are now permitted to engage in airport operation in China.

3.14 Airport deregulation has led to a gradual diversification of airport ownership in China. Liberation of the airport investment climate has also helped to develop a diversified range of capital financing methods: boosting the capitalization process and development of infrastructure.

Entry of Non-state Investors to China's Airports

4.1 Investment from non-state sectors is essential to the sustainable development of China's airport sector. This includes investment from domestic private and foreign sources, as well as domestic institutions.

4.2 Foreign airport investors are important non-state investors. They may enter China's airport industry in three ways: buying airport equity via direct

---

[15] Those considered "important" non-aeronautical charges in China include first-class and business-class lobby rent, office rent, ticket desk rent, check-in desk rent and ground service fees.

[16] <民用机场管理条例>, Civil Aviation Administration of China (CAAC), 2009. http://www.caac.gov.cn/B1/B5/

investment, buying shares through the stock market and investing in non-aeronautical business.

4.3 Hong Kong International Airport invested 19.8 million *yuan* and obtained 55% equity to establish the Hong Kong-Zhuhai Airport Management Co., Ltd. and manage Zhuhai Airport with the Zhuhai government in 2006.[17] Hong Kong International Airport Authority formed a joint venture with Hangzhou Xiaoshan International Airport in December 2006, taking 35% equity of the airport. Also, the Lufthansa group signed a contract with Xi'an Airport in March 2007, committing some US$63 million to acquire 25% equity in the airport.

4.4 Singapore's Changi Airport signed a contract with Nanjing Airport in January 2007 to invest 0.9 billion *yuan* for a 29% share of Nanjing Airport. In July 2007, Changi Airport established a joint venture with Shenzhen Airport, taking 49% equity to invest in and manage 50 airports in China.[18] In the early 1990s, Beijing Capital Airport set up BGS, AMECO and GAMECO joint venture ground service companies with Singapore Changi Airport Terminal Corporation (SATS).

4.5 In 2004, Singapore Keppel Integrated Engineering formed a joint venture with the Ground Service Company of Guangzhou Airport, acquiring a 25% shareholding to setup a company which manages and maintains the operating system of Guangzhou Airport.[19]

4.6 Meanwhile, foreign investors have entered the Chinese airport industry through buying equity from the stock market. When Beijing Capital Airport was publicly listed on the Hong Kong stock exchange in 2000, Paris Airport

---

17 "Hongkong Airport Invest 0.2 Billion to take over Zhuhai Airport", *First Finance Daily*,2006-8-3

18 "Shenzhen Airport Cooperate with Changi Airport" http://business.sohu.com/20070719/n251146462.shtml

19 "Singapore Keppel Integrated Engineering Invested in Guangzhou Baiyun Airport Logistics", http://news.sina.com.cn/o/2005-01-08/11484760523s.shtml

Management Company took about 10% of equity shares; Wellington Fund and the Road Fund also bought about 2% and 5% of equity respectively. Copenhagen Airport bought a 20% share of Hainan Airport from the Hong Kong stock market in 2002, and transmitted its share to Oriental Patron Resources Investment in 2007.[20]

4.7 By the end of 2008, UBS AG and GOLDMAN, SACHS & CO. possessed 1.96% and 0.73% of equity respectively of Guangzhou Baiyun Airport. Oriental Patron Financial Group Limited and four other foreign investors accounted for 35.67% of equity of the Haikou Meilan Airport. Three Taiwan companies invested in Xiamen International Airport Cargo Terminal Limited, each accounting for a 14% share.[21]

4.8 In addition to foreign institutional investors, domestic firms and individuals have started to invest in airports. For example, Wang Xuewen, who is commonly known as the first private investor in Chinese civil aviation, invested 60 million *yuan* in the construction of Suifenhe Airport in 1998. This airport began operations in 2003. Another private investor, Wang Junyao, invested 350 million *yuan* to buy Yichang Airport and spent a further 250 million *yuan* to rebuild the airport in 2003.[22]

4.9 Furthermore, domestic airlines and other institutional investors are equally keen to invest in airports. China Southern Airline invested 630 million *yuan* in joint-ventures to construct an aviation cargo station at Baiyun Airport in 2004. It further invested in a new terminal in the city of Dongguan in 2005. China Southern Airline, holding 45% of shares, established a joint venture with Shenyang Airport and Sinotrans Air Transportation Development Co. Ltd to

[20] "The largest foreign shareholder of Meilan Airport has sold its 20％ equity" http://news.stockstar.com/info/Darticle.aspx?id=JL,20070607,00052250&columnid=2483

[21] Three Taiwan companies invested in Xiamen International Airport Cargo Terminal http://www.fj.xinhuanet.com/hyzx/2003-08/14/content_815955.htm

[22] X. Y. Yang, S. K. Tok, and F. Su, "The privatization and commercialization of China's airports," *Journal of Air Transport Management* 14, pp. 243– 251, 2008

set up Shenyang Airport Logistics Co., Ltd in 2009.[23] It also invested 510 million *yuan* to expand Nanyang Airport in Henan province.[24]

4.10 Hainan Airlines is currently the majority shareholder of Haikou Meilan Airport. It has also invested in Sanya Airport (Hainan province), Weifang Airport (Shandong province), Yichang Airport (Hubei province), Yingkou Airport (Liaoning province) and Hailaer Airport (Inner Mongolia Autonomous Region) to boost its passenger catchments.

4.11 By the end of 2007, except for the airports in Tibet, all airports had undergone equity reform. Private capital has entered many airports. For example, Hunan Airport Company Limited was established in July 2007, with Hunan Investment Holdings Limited, Changsha City Trust & Investment Co. Ltd and Hunan Trust & Investment Co. Ltd as its main shareholders. Also, Jinan Airport Company Limited was launched by investors from ten organizations in June 2003. In December 2009, Sichuan Development Holding Co. Ltd. invested 3 billion *yuan* and obtained 27.23% of shares to speed up airport construction in Sichuan province.[25]

4.12 During the process of airport deregulation reform, the central government has issued a series of policies to remove entry barriers and offered more opportunities to the non-state investor. Nevertheless, the average share of the non-state sector in total airport investment was only 10% between 2000 and 2007.[26] How to further boost non-state investment in the airport industry will be an important issue with which both the central and local governments will have to deal in the future.

---

[23] Liu Jin and Chen Yang, "TaoXian Airport, China Southern Airlines and Sinotrans Logistics Joined Together to Build a New Model of Shenyang Airport", *Air Transport & Business*，26:21, 2006

[24] "The new terminal of Nanyang Airport, an airport wholly owned by China Southern Airline was built", http://news.carnoc.com/list/147/147682.html.

[25] Sichuan Airport Group was Found after Reform and Restructure http://www.cdrb.com.cn/html/2010-01/01/content_795134.htm

[26] Calculated based on data obtained from *Year Book of Transportation and Communication* 2001-2008.

APPENDIX 1 THE FOUR STAGES OF CHINA'S AIRPORT DEREGULATION

Stage	Ownership	Governance Structure	Pricing Method
Civil airports separated from the military (1980-1986)	Central government ownership	Airports became dependent administrative units of the CAAC	N/A
Airport administration regulation (完全的行政管制) (1986-1992)	Central or local government ownership	The CAAC concurrently acted as the owner, investor, policy maker, regulator as well as the management supervisor of China's civil airports	The simple weight-based aeronautical fee
"Limited relaxation" of airport administration regulation （典型的行政干预管制） (1993-2001)	Diversification of airport ownership, with the monopoly control of central government	A new regulatory structure led by the CAAC, in which the local governments participated.	The cost-based regulation method and a simple weight-based aeronautical fee.
Limited relaxation of economic regulation （有限度的经济管制） (since 2002)	Airport ownership diversification	Local governments are responsible for approving airport projects and securing investments. The CAAC is no longer the owner or managers of airports; it has been transformed into an independent and professional regulator.	Price-cap

Source: The authors' own compilation based on various sources