

Toward Airport Privatization in Korea

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1. Introduction

Generally, privatization refers to shifting governmental functions and responsibilities to the private sector, in whole or in part. The definition and meanings of airport privatization reviewed by empirical cases can include various concepts, such as: (1) change of ownership from public to private sector (2) change of ownership from central to local government (3) change of legal status from autonomous governmental authority to public corporate (4) expansion of the private sector entities' participation in airport operation without ownership; and private sector financing. Motivation for airport privatization generally has three major bases. First, it is there is some limitation on governmental fund to expand airport capacity to meet air transport demand which is rapidly increased in total volume and has a trend to concentrate on hub airports, it is necessary to induce private sector fund; secondly, by inviting the private sector in airport operation, it may be possible to increase economic efficiency which results in airport revenue and profit performance improvement. In some cases, the airport privatization is initiated according to political decisions to privatize overall public organization. Thirdly, the airlines became to have more freedom in choosing hub airport for their flight service networking, according to recently developed deregulation or open-sky policy of international air transport industry. Until now, the airlines were forced to use a certain

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airport as a hub or base caused by some business environments which are constructed by rigid bilateral agreement of international air service. However, in near future, the airline may be in the position to choose the base airport or hub airport focussing on economical reason, with less consideration of regulatory agreements between governments. Therefore, the airport operators should have the objective to make their airports attractive to airlines, and to address this objective, it is necessary to go toward privatization. The marketing oriented mind could hardly be secured within the public sector organization. We could say that the processes to privatize the airports in order to achieve those three objectives are already initiated around the world.

2. Methods of Airport Privatization

The definition of airport privatization may be various depending on the countries where it is used. It can be ranged from the sale of whole airport to private sector by floating on stock market to the change of the control related to airport operation from central government to local government. According to several previous case reviews, the methods of airport privatization can be summarized as follows;³⁾

Public sales by Flotation

Public sales of existing airport by floating the shares on the stock market is the most fundamental way of privatization. It is agreed that the British government's conversion of the British Airports Authority(BAA) into a private company is the best example of airport privatization by this method. Whole shares of BAA which had owned by British government was floated by a public stock offering on the London Stock Exchange in 1987. Copenhagen and some other airports

3) Ashford and Moore, AirportFinance, VanNostrandReinhold, 1992

also sold their shares partially through stock market. When this method is adopted, the government should devise the way to reserves the right to control the airport operation for the protection of public function and safety.

Trade Sales

The advantage of airport privatization through trade sales is that the benefit of privatization can be profoundly obtained while possessing the necessary control by government. The most large scale and recent example of trade sales is the case of privatization of Federal Airports Corporation of Australia. The federal government of Australia completed phase 1 sales of three airports, Melbourne, Perth and Brisbane, in 1997. It was the sale of long-term leases of 50 years plus a 49 years option. Foreign ownership was limited to 49% while 5% ownership limit was also placed upon airlines. The winning consortia included BAA, Amsterdam Schiphol, and Airport Group International as airport operator.

Contract Operation

This is the easiest and most popular way to invite private sector to airport operation. The selected services are contracted to operate by private company or almost all of the whole airport operation can be contracted. The best known U.S. example of a large airport being operated by a private firm is the Burbank Airport in California. The airport has been operated since 1978 by Lockheed Air Terminal, with remaining ownership by an airport authority of the cities of Burbank, Glendale, and Pasadena. BAA plc won a contract to manage the retail activities at Pittsburgh airport and took over the management of the Indianapolis airport system.

Build-Operate-Transfer (BOT)

The BOT means that a government contract with a private consortium to finance, design, build, and operate a major facility, with title eventually reverting to the government once the investment has been paid for. Toronto's terminal 3 was the first major project of this type. In Turkey, a Lockheed-led team including several Turkish firms, developed a terminal at Istanbul Airport with the expectation to operate it.

3. Airport Systems and Atmosphere Related to Privatizing Airports in Korea

Korean Airport Systems, Ownership and operation

In Korea, there are 16 airports that offer scheduled air transport service, four international airports and twelve domestic airports. The ownership of all those airports belongs to central government. The Ministries responsible are the Ministry of Construction and Transportation and the Ministry of Defense. The biggest one which handles more than half of total traffic is Kimpo International Airport, which belongs the system of civil airports. Table-2 shows the summary of Korean airports' ownership and scale (number of annual passengers handled).

The autonomous governmental organization, KAA(Korean Airports Authority) are responsible for the operation and management of civil airports without ownership. The airport operational works commissioned to KAA are ranged as follows.⁴⁾

- (i) Maintenance and operation of landing field, including runway, taxiway, and ramp area for aircraft movement;

4) Article 7 of "The Law of Korea Airport Authority"

- (ii) Management of passenger and cargo terminals;
- (iii) The works concerned with airport security, fire fighting and accident handling;
- (iv) The operation and maintenance of Instrument Landing System, Air Navigation facilities, and communication systems;
- (v) The works concerned with environmental protection, including noise problem, water and air pollution.

Almost all of the works related to airport operation commissioned to KAA are conducted directly by the KAA employees or airlines. The duty free shopping is mainly operated by the Korean Tourism Authority, which is also governmental organization, and only immaterial portion of duty free shopping and the commercial activities in the passenger terminals are conducted by private sector entrepreneur.

Table-2 Ownership and control of Korean Public Airports

Rank	Airport	Ownership & Control	Passenger volume (thousand)
1	Kimpo Int'l	MOCT(Ministry of Construction and Transportation)	36,489
2	Kimhae Int'l	Air Force	9,956
3	Cheju Int'l	MOCT	9,819
4	Kwangju Domestic	Air Force	2,862
5	Taegu Domestic	Air Force	2,173
6	Ulsan Domestic	MOCT	1,691
7	Pohang Domestic	Navy	1,125
8	Yeosu Domestic	MOCT	982

9	Chinju Domestic	Air Force	967
10	Kangung Domestic	Air Force	900
11	Kunsan	US Air Force	457
12	Sockcho Domestic	Army	437
13	Yeochon Domestic	Air Force	390
14	Chungju Int'l	Air Force	371
15	Mockpo Domestic	Navy	298
16	Wonju Domestic	Air Force	122

Source: Korea Civil Aviation Development Association, AviationStatistics, Seoul Korea, 1998

The military airports are operated by appropriate military units, and the use agreement between the Ministry of Construction and Transportation and the Ministry of Defense, was established for the civil use of military airport. The airlines or civil aircraft operators pay some charge to the Ministry of Defense for using military airport facilities, building and land. The aircraft landing fees for airline aircraft is charged by the Ministry of Construction and Transportation. However, the revenue collected by landing charge must be used for the landing field maintenance and operation. The passenger and cargo terminal and accompanying facilities to be used for the ground handling of civil traffic are constructed and maintained by the Ministry of Construction and Transportation. KAA and airlines are responsible for the terminal operation.⁵⁾

5) Article 4,5,7,11 of "Agreement for the civilian use of military aerodrome", Korean Government, 1998

Now, Korean government is constructing New Seoul Airport, which is named as Incheon International Airport (IIA). According to dramatic increase of air transport demand in 1980's, the Korean government recognized the urgent need to expand the airport capacity for Seoul area. However, the existing Kimpo Airport has the limitation to be expanded. The master plan for the development of the IIA was announced in 1992 and followed by the ground breaking in the same year. Korean Government established the autonomous governmental organization, named Korea Airport Construction Authority (KOACA) in 1994 in order to facilitate the construction process of IIA. After the completion of the first phase I of construction in late 2000, the airport will have an annual capacity of 170,000 flights and 27 million passengers and 1.7 million tons of cargo. On completion of the last phase in 2020, IIA will be capable of handling 100 million passengers using four runways. It is estimated that the Phase I of construction will cost 5.3 trillion Korean Won (US\$4.4 billion). The Korean government investment is planned to be 3.3 trillion Korean Won (US\$2.7 billion). The remainder, 2.0 trillion Korean Won (US\$1.7 billion) is planned to be raised from domestic and overseas capital market.⁶⁾

Atmosphere related to privatizing airports in Korea

Almost all the area in Korean economic systems are undergoing renovation motivated by IMF(International Monetary Fund) control started from late 1997. The Planning and Budgeting Board, which is newly established in order to take charge of the renovation, has devised to formulate the policy and the law for dramatic renovation of Korean economic system. The Board made the laws to privatize the public enterprises and the law to corporatize and privatize airport systems is one of them. It has been generally recognized that the current system

6) KOACA, Introduction to Incheon International Airport Project, 1997

of airport operation in Korea is very inefficient and the level of service quality is extremely low. The only Kimpo international airport have recorded profit and the other airports have been suffering not a little deficit continuously. Even in Kimpo, the portion of non-aeronautical revenue among total revenue is very low, which means that the financial performance of airport operation cannot be considered desirable.⁷⁾

The Korean government has been tried to promote the investment of private sector funds to public facilities, with the incentives that the investor can operate the facilities and earn profit. The participation of private sector for the funding and operating public facilities may lead to the improvement of economic efficiency. This concept of policy is being applied to airport systems. The cargo terminals, fueling systems and electric power systems for IIA, are being constructed by private sector investors. The terminal building and car park facilities for local domestic airports are also considered as the facilities to attract private investors.⁸⁾ In addition, Korean Government changed the legal status of KOACA from governmental authority to public corporation and named it "IIA Corporation" in February 1999, in order to facilitate the privatization process of the airport. IIA Corporation is endowed to operate the IIA as well as keep going construction.

Korean central government is also currently trying to change the legal status of KAA to another public corporation in order to speed up the privatization process of existing airports. Even though the government has not finalized its detailed proposal, the conceptual outline of the idea for the KAA corporatization can be summarized as follows:⁹⁾

- (i) KAA's legal organizational status is changed from autonomous governmental authority to public corporation, temporarily named

7) KAA, FinancialReport,1998

8) KOACA, IntroductiontoInchon International Airport Project, Seoul, Korea, 1997

9) Korean MOCT, ADraftoftheLawRelatedToKAACorporatization,Seoul, Korea, April, 1999

“Korea Airport Corporation(KAC)”.

- (ii) The capital of KAC is composed of Shares.
- (iii) KAC will be allowed to issue the corporate bond.
- (iv) KAC will be allowed to commission the right of airport operation to other organizations.
- (v) KAC may be allowed to utilize international debt financing.

4. Airport Privatization in Korea - *Policy*

The airport privatization should be pursued devising the way to maximize the advantages and minimize the risks. The advantages and risks related to airport privatization are comprehensively summarized in section two of this paper. The aspect concerned with advantages and risks of airport privatization might be carefully considered and selected in Korean context. For the existing civil airports systems which are operated by KAA, the improvement of the economic efficiency and level of service should be main objective of privatization. The efficient use of facilities might be considered as the prime concern for the military airport. For IIA, the endeavor should be focussed on inducing investment fund from private sector.

Privatization policy for existing civil airports systems in Korea

There are four existing public airports in civil airports system in Korea, two international airports and two domestic airports (refer to table-2). They are operated and managed by KAA, which is an independent governmental organization. The objectives of privatizing these airports should be directed to improving economic efficiency. This means minimizing cost and maximizing revenues, with improving service quality, and developing air transport demand. In order to strengthen the advantages of the privatization, it is desirable to separate

these four airports and privatize each of them as an independent airport. The separated airport may compete each other and this will lead to more efficient operation and more improved service level. The Ministry of Construction and Transportation should coordinate with local government where the airport is located, for the detailed planning concerned with the airport privatization as an independent entity. Of course, this based on the assumption that partial ownership of the civil airport has been transferred to local government (refer to section 5 of this paper).

As a privatization method, the authors suggest a selective contract operation for the privatization of these airports. Public sales by floatation or trade sales can generate two many problems concerned with public interests and safety protection. At first, the national defense system requires public control of the airport facilities, which might be undermined by the privatization utilizing Public sales by floatation or trade sales. In addition, the monetary valuation for Public sales by floatation or trade sales is not easy with the financial data obtained from current accounting system.

The method of contract operation is easy to apply, because it is possible only with the evaluation of the operating costs and the revenues. This method can contribute to the improvement of efficiency though. If the airport operations are divided into various operational area and contract them by each individual area, it may be simple to estimate the value of the assets and the performance improvement can also easily secured by inviting competent private entrepreneur appropriate to each area within the airport. However, if it is necessary to add capacity in the future for existing airports, we can consider BOT method to solve the problem related to get enough money overcoming the limitation of public sector fund.

Privatization policy for military airports

It is impossible to privatize the airside facilities of military airports

with the current legal constraints and atmosphere. Therefore, we can introduce the privatization concepts for the landside operation only, and selective contract operation is the only feasible way to apply for the privatization of military airports. The operation of passenger and cargo terminal, and ramp service for civil aircraft can be contracted to be operated by private entities.

Privatization policy for Incheon International Airport (IIA)

The Korean government could not invest all the cost required to construct IIA. The Phase I of construction will cost 5.3 trillion Korean Won (US\$4.4 billion). The government investment is planned to be 3.3 trillion Korean Won (US\$2.7 billion) and the remainder, 2.0 trillion Korean Won (US\$1.7 billion) is planned to be raised from domestic and overseas capital market, as stated in section 3. Consequently, Korean government will own 63% of the total shares of IIA, transferring 37% of the ownership to private sector, and it can have the power to control the direction of IIA operation and to protect public safety and interests. Therefore, it is realistic to consider the partial privatization for IIA.

The human resources to operate a hyper scale international airport are also not enough in Korea, especially we do not have sufficient quantity of experts or business people who have profound knowledge and experiences in airport operation. Consequently, the privatization of IIA should be pursued to solve funding problem as well as airport operating problem.

It is necessary to invite some consortia that have the ability in funding capital required and in operating and managing airport. Fortunately, there are some foregoing examples of these kinds of consortia formulated and succeeded in winning bid of airport privatization program. The consortia composed of international airport operators and financial partners won the bid for three Australian airports privatization process in 1997. These consortia included BAA,

Amsterdam Schiphol, and Airport Group International of the US, as airport operator. The corporatization of governmental controlled entity should be accomplished prior to initiate bidding to invite such consortia to fund and operate the IIA.

5. Legal Aspect Concerned with Airport Privatization

Ownership and control

According to current statute of Korean Domestic Aviation Law, the whole ownership and control of civil airports belong to central government. This might be the main cause of inefficiency of airport operation. The only minimum level of ownership and control of civil airports required to protect public interests and national defense should be remained on central government, and maximum portion of power concerned with airport operation should be transferred to local government and private sector. The overall matters related to airport operation should be under the control of the local government and local government should try to invite the private sector to improve the efficiency. This is because local government has more significant economic impact oriented by the prosperity of the airport. In addition, the competition between local governments may stimulate the airport operational organization to improve the efficiency. Therefore, it is necessary to revise the law to introduce the transfer of substantial proportion of the ownership and control of existing civil airports from central government to local government. However, the central government may reserve the right to take over management of any airport in the event of war or any national crisis and also reserve the right to limit the change of airport land use. For the allocation of landing slots in the international airports, the central government should also reserve the controllable power. These are necessary to efficiently

meet the provisions in the bilateral agreements of air services and to protect public interests.

The same philosophy could be applied to IIA that is under construction process. Currently, the central government has whole ownership and control power for IIA too, and after partial privatization, public participant for IIA ownership and control solely limited to central government, according to the current law and plan. This might lead to less optimistic policy development than the case of local government's participation. The local government, Incheon city for IIA, might have greater interests concerned with the prosperity of IIA in some aspect than central government. Therefore, it is necessary to revise the law concerned with this matter, securing the participation of Incheon city through allocating some portion of investment by the city government. The authors suggest that Incheon city should have much more shares than central government because central government's shares are for national defense and public interests protection and Incheon city's shares are for the economic efficiency and prosperity of IIA. However, central governments may reserve the right to take over IIA in the case of national crisis and the right to limit the change of airport land use. The power to control the allocation of landing slots should also be reserved to the central government. This is because the central government must have the power to control the utilization of the gateway airport facilities for national security and international relations in aviation area.

For the military aerodromes that are co-used with civil air carriers, the control and ownership for airside facilities could not be transferred to civil authority because of national defense problems. However, it is necessary to legislate the law in order to secure that the landside facilities for civil utilization should be under control of appropriate civilians. The law and regulation concerned with the operation of airside facilities and space should also be revised to make it possible to reflect civilian users' opinions easily and timely. The relevant

statutes of current law stipulate that the agreements between the Minister of Defense and the Minister of Construction and Transportation are indispensable even for trivial operational change. This has led to untimeliness of action taken and caused inefficiency. There are quite a few aviation experts in Korea who insist the creation of the authority which have the power to control the both civil aviation and military aviation like FAA in USA, especially for more efficient national airspace utilization.

Abusing monopolistic status

Concerned with airport privatization, the abusing of monopolistic position for the private interests are one of the most anxious matters. Especially, for airport user charge, it may necessary for the central government to intervene in order to protect public interests from abusing monopolistic pricing behaviour. The UK government, for example, has controlled the level of aeronautical charges, that is aircraft landing and passenger fees expressed as revenue per passenger. It allowed the privatized three London airports to raise aeronautical charges each year by an amount equivalent to no more than the increase in the retail price index (RPI) minus 1 per cent. These airports may also be examined every five years by the UK Monopolies and Mergers Commission. The UK Civil Aviation Authority (CAA) can investigate complaints against airports of discrimination or abuse of dominant position when made by airports users.

It is necessary to legislate for the prevention of abusing monopolistic position by privatized organization that participates in airport operation. In order to control the monopolistic pricing, it may be necessary at first to establish the regulation which requires to produce much more detailed accounts than is normally required under the Companies Acts. The appropriate governmental department should formulate regulating scheme against monopolistic pricing, based on examination and analysis of these accounting data.

Needs of Legislation for the Financial Integrity of Airport System

Some of the civil airports do not have sufficient amount of air traffic demand. For example, Yeosu and Ulsan could not generate the revenue enough to cover the costs required to operate them. On the other hand, Kimpo International Airport is positioned to generate not a little profit, and Cheju International Airport may have the ability to generate the revenue to meet the total operating costs, by considering the level of traffic demand. Therefore, it is necessary to transfer appropriate portion of revenue generated from Kimpo International Airport to Yeosu and Ulsan airports. To address this problem, the authors suggest the legislation for revenue pooling system of aeronautical charges or aeronautical revenue transfer systems among the airports mutually agreed upon where necessary and available.

6. Conclusions

The trend of the airport privatization around the world does not have long history but is widely being developed, applying various methods depending on the situations related to airport's legal status and operational characteristics. The major advantages of airport privatization are the possibility to access to private sector capital and the improvement of the economic efficiency in operation. However, the privatization of the airport may undermine the public interests. We can point out the matters concerned with the national defense and safety, or the matters related to the integral balancing of transport system, or the matters on equitable use of airport facilities, or maintaining appropriate level of service quality, or the matters related to abusing monopolistic position.

The national defense is still the major issue in Korea. The airport

privatization also cannot go forward without consideration of the constraints related to national security problem and safety protection matters. In addition, the economic valuation of the airport facilities in Korea is not easy because most part of airport operations have been conducted directly by KAA. With the consideration the situation in Korea, this research suggests the realistic and basic methods of airport privatization at the initial stage, selective contracts and BOT(Build-Operate-Transfer). These methods can secure the improvement of economic efficiency, by inviting the private sector entrepreneurs. In addition, the paper recommends that the ownership and control power of civil airports should be gradually transferred from central government to local governments, with separating the current consolidated operational responsibilities of KAA to each independent airport operational organization. This will make each airport to be competitive and also be incentive for the local government to try improve the efficiency and effectiveness of the airport operation concerned.