

The Pursuit of Small Government to Rebuild Infrastructure Businesses and Create New Growth Industries

**—Suggestions based on the experiences of the UK
and Australia—**

Shingo MOCHIMARU and Tomoki KITAZAKI

Nomura Research Institute

The Pursuit of Small Government to Rebuild Infrastructure Businesses and Create New Growth Industries —Suggestions based on the experiences of the UK and Australia—

Shingo MOCHIMARU and Tomoki KITAZAKI

- I Significance of “Small Government” in a Mature Country
- II “Small Government” Efforts and Achievements in the UK
- III “Small Government” Efforts and Achievements in Australia
- IV Suggestions for Japan in View of the Experiences of the UK and Australia

In the UK, the privatization of infrastructure services such as those in the water and sewerage, electricity and gas sectors, which began in the early 1980s, led to switching the government role from one of a “service provider” to one of a “service commission” that is responsible for regulating and supervising service providers. As a result of the privatization, the infrastructure market has been opened up to a variety of providers from both the UK and overseas, leading to vitalization of the market and improvement of the levels of service.

Since the 1990s, Australia has also undertaken the privatization of infrastructure services such as power generation, road networks and airports. Privatization has contributed to the enhancement of infrastructure with a lower financial burden on the part of the government, and has also led to the creation of a number of companies engaged in infrastructure services such as operating companies and investment management companies, which have eventually become well versed in infrastructure services. Some of these companies have grown to take part in the development and operation of infrastructure projects overseas, particularly in Europe.

Japan is faced with the need to operate and manage a vast amount of infrastructure with a total value of social capital stock in excess of JPY 700 trillion. To meet such a need, it is necessary to attract and select service providers that can operate infrastructure in the most efficient way while maintaining a constant level of service and minimizing the financial burden on the populace. For this purpose, the government should restrict its role to applying the minimum necessary amount of regulation and supervision. At the same time, by establishing explicit rules and opening up the market to companies from around the world, the government should nurture infrastructure businesses as industries so that infrastructure can be managed and operated as efficiently as possible.

I Significance of “Small Government” in a Mature Country

Japan is currently plagued by a sense of stagnation in its markets due to a fall in the growth rate, which is caused by factors such as the aging population, the declining birth rate and a fall in the country’s population. Some people go so far as to consider that growing markets can only be found in emerging Asian economies. In addition, the financial standing of Japan’s government continues to deteriorate, with the ratio of the sum of central and local government debt to gross domestic product (GDP) being 214 percent, which is the worst in the developed world—a pressing issue that must be addressed quickly.

However, this situation is not unique to Japan and could occur in any of the developed countries. Not a few of these countries have moved to alleviate the issue. One of the measures adopted in response to the situation is what we refer to as “small government.” The term “small government” being discussed in this paper is not the one that pursues lower taxation, lower welfare standards and self-responsibility based on so-called neo-liberalism. Rather, it refers to the concept of reducing the scope of services that the government provides directly to people, instead transferring such roles to the private sector as much as possible.

With the exception of the United States, all mature developed countries are experiencing low birth rates and aging populations to varying degrees, which are leading to the maturing of their domestic markets. Another point that is basically common to all these countries is that every existing industry has to look to overseas markets for growth opportunities. If government policies (lower taxation and higher welfare standards) that had been adopted when domestic markets were expanding have remained unchanged even under such a situation, these policies lead to an imbalance between government revenues and expenditures, resulting in increasing government debt. To reiterate, this is not unique to Japan, but is a common problem among mature developed countries.

Under these circumstances, the concept of pursuing small government as a means of creating new industries within a country, while alleviating government debt, has been proved effective. That is, the services that were traditionally provided by governmental bodies are instead handed over to private industry, whereby the government can simultaneously achieve two objectives, i.e., reducing its debt and creating new industries.

For example, in the past, Japan has seen the privatization of the Japanese National Railways (JNR). Through such privatization, service was successfully shifted out of government hands and into the private sector. In general, with the “privatization” of government operations,

the most common concern tends to be that the quality of service provided would be degraded as a result of the need to pursue profit. However, at least in Japan, it is thought that such concerns would not likely become reality. With the obvious example of the transition from JNR to the Japan Railway Group (JR), the private operators who provide public services in this country are generally of a high level to the extent that we could even say that they are devoted to their mission.

Because Japan does have such a national character, it would be reasonable to assume that, relative to other countries, the effect of small government on the reduction of government debt and the creation of new industries could be considerable.

This paper introduces cases in other countries in which governments were able to detach themselves from the provision of services and the financial burden that such services incurred, and opened up these services to the private sector markets. Through these efforts, they were successful in creating and fostering the growth of new industries. In addition, this paper attempts to identify the ideas that could be applied to Japan.

Chapter II looks at the efforts of the United Kingdom. In the UK, with the goal of realizing small government, the government made some of its operations available to the private sector and went on to sell off its assets. After undertaking so-called “off-balance-sheet financing” activities, the country was able to achieve long-term economic growth. Of course, merely conducting off-balance-sheet financing activities was not in itself sufficient to achieve success; however, there is no doubt that it was a major factor in doing so.

Many research studies and assessments have been made concerning the reforms undertaken in the UK between the 1980s and 1990s. In particular, the privatization has proved to be effective to some extent in consideration of the results for those fields in which there have been similar reforms in Japan, such as railway and postal businesses.

Chapter III deals with Australia. Since the 1990s, Australia has privatized infrastructure services such as power generation, road networks and airports. In recent years, “infrastructure funds” as a means of financing the maintenance and operation of infrastructure businesses has received considerable attention.

Among these infrastructure businesses, this paper considers the areas of water and sewerage services and airports, in which the above-mentioned technique of off-balance-sheet financing is expected to be effective in Japan as well.

Because the 2011 amendment of the Private Finance Initiative (PFI) Law (the official name of the PFI Law in Japan is the Law relating to Promotion of Development of Public Facilities Using Private Funds) reduced the barriers facing the government in undertaking off-balance-sheet financing in the areas of water and sewerage services and airports, the participation of the private

sector is expected to increase. In particular, in the area of airports, a bill is expected to be submitted to the Diet to allow the management of national airports to be outsourced to the private sector, which will lead to greater involvement of the private sector.

While many initiatives are being pursued around the world, this paper describes the approaches adopted in two successful cases, that is, water and sewerage services in the UK and airports in Australia, as well as the results that were obtained. Based on these successes, suggestions for Japan are discussed.

II “Small Government” Efforts and Achievements in the UK

The reforms undertaken by the UK in the 1980s provided the world with a model for small government. The model hinges on the concept that, in developed countries where economic infrastructure such as water services and airports has already been developed and reached more than a certain level, the government no longer has to play the role of developing, operating and maintaining the infrastructure, which starts with the need to procure funds. Rather, the government’s role should be switched to the role of regulating and supervising such projects, thereby creating new industries within a country. As a result of the reforms in the 1980s, the Major government and the Blair government, which were in power for 15 years from the 1990s to the 2000s, enjoyed economic growth as the country’s GDP grew steadily and unemployment fell.

In discussing the UK’s structural reforms in the 1980s, attention tends to be directed towards the achievement of small government alone through reducing the assets held by the government, such as through the privatization of many well-known state-owned enterprises and

the sale of shares held by the government. However, it is important to note that, as shown in Figure 1, to attain the intended results, efforts were simultaneously made to fundamentally reform the then-rigid labor market and reform the capital market so as to facilitate the supply of external growth funds, and that the sale of the government assets was only one element of the entire set of structural reforms. In other words, because the mechanisms, whereby funds and human resources (that are necessary for new industries and services created through the privatization of state-owned enterprises and the sale of government assets to be put on the right track and grow) are appropriately supplied, were established simultaneously as part of the structural reforms, the UK’s structural reforms led to the creation of new growth industries, rather than merely reducing government debt.

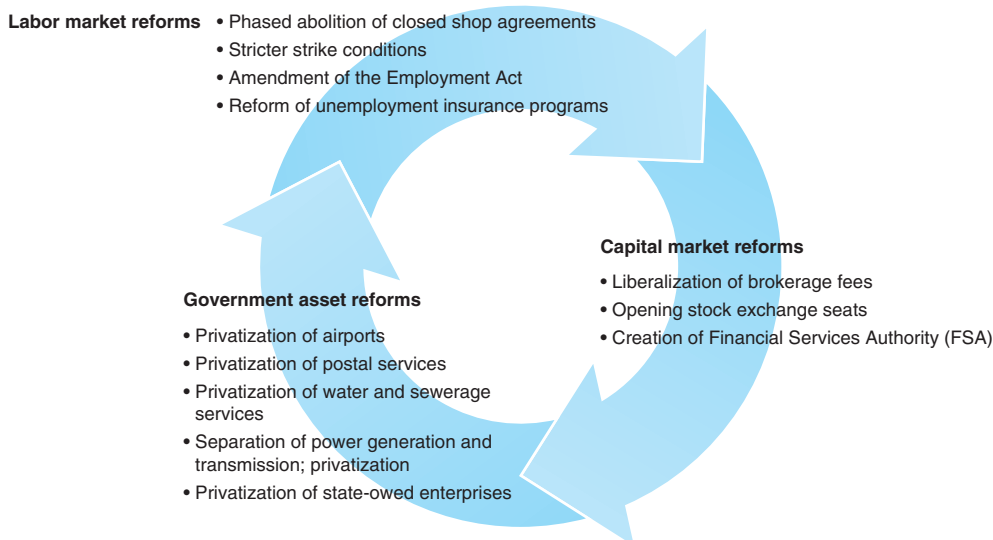
With these background factors in mind, the following section examines the privatization of water and sewerage services in the UK.

1 Background of the privatization of water and sewerage services in the UK

In England and Wales, water and sewerage services were privatized by using a method of transferring regional water authorities into limited companies.

The 1973 Water Act established ten new Regional Water Authorities based on the ten major river basins that would manage water and sewerage services in England and Wales on a fully integrated basis. Prior to the integration, in these areas, there were about 200 private and public water supply bodies, while sewerage services were managed by about 1,300 local authorities. With the exception of some water and sewerage companies, the 1973 Water Act led to the creation of the Regional Water Authorities that would manage water and sewerage

Figure 1. UK’s structural reforms in the 1980s



Sources: Compiled based on various publications.

services in an integrated manner. About 75,000 staff members of local authorities were transferred to the Regional Water Authorities, such that local authorities would essentially no longer be directly involved in water and sewerage services. While 29 relatively large water and sewerage companies survived the reform, they became subject to the same regulations, such as financial requirements, as those imposed on the Regional Water Authorities.

Subsequently, the 1989 Water Act transferred the existing ten Regional Water Authorities into the new water and sewerage companies that undertake water and sewerage services on an integrated basis in their respective regions based on the river basins. At this time, in order to ensure the stable operation of these new companies for a certain period, the government retained a “golden share” in each company with a special right of veto. The government held these shares until no later than 1994, at which point its entire interest was sold to the public, thus making the companies fully privatized. At that time, the government assumed the approximately £7.6-billion debt load of the new companies, and also granted them tax relief for a certain period of time, all of which helped the companies establish stable operations.

When we look at the flow of the above off-balance-sheet financing in the UK’s water and sewerage sectors, we notice a distinctive characteristic in that the centralization from local governments to the central government was effectively undertaken.

In Japan, there is a well-entrenched idea that “infrastructure services that would directly affect the lives of residents such as water and sewerage services should be provided by municipalities in a way that reflects the needs and interests of the residents.” Therefore, the idea of these roles of municipalities being integrated into a government agency would be difficult to accept. However, the issue is whether this way of thinking remains appropriate for infrastructure services once the construction of facilities has been completed and when the facilities have entered the maintenance and operation stage. This is because when the core task is shifted to maintenance and operation, there is little need to coordinate the interests among residents, such as determining places where services are provided. Rather, it becomes more important to perform work efficiently and stably over wide areas. That is, to enable efficient operations, the functions required at this stage should be transferred from local governments to a body covering broader areas. In other words, the concept of centralization could be considered effective.

Furthermore, when an emphasis is placed on efficiency, there is no need for the national government or local governments to operate such services. The transfer of these functions to the private sector makes more sense.

If we follow this way of thinking, the UK’s water and sewerage services, which were first centralized and then privatized, provide a good example of how mature

developed countries should deal with their infrastructure services.

2 Stricter regulations on water and sewerage services

The newly established Office of Water Services (OFWAT) (although the name has since been changed to the Water Services Regulation Authority, the original abbreviated name, OFWAT, remains in use) has become responsible for the comprehensive regulation and supervision of water and sewerage companies, which were established in England and Wales under the circumstances described in Section 1.

The scope of OFWAT’s regulation and supervision is very wide-ranging. It not only oversees the prices charged by water and sewerage companies, but also requires them to create and submit investment plans and levels of capital investments for the forthcoming 20 years. Based on financial statements and other reports submitted every year by each company, OFWAT also examines in detail how infrastructure investment made for that year could improve customer services and oversees the service performance of each company.

As shown in Table 1, each company’s performance is published every year. If there are some areas that OFWAT considers unacceptable for a given period, OFWAT has the authority to revoke the business license of the subject water and sewerage company.

Although not described in detail here, in addition to company performance as mentioned above, water and sewerage companies are subject to regulations relating to water quality (environmental protection) and pricing (consumer protection) such that their management does not enjoy a high degree of freedom. Nevertheless, given the injection of large amounts of private capital, including foreign capital, it appears that there remains room to make profits by coming up with various ideas to improve management.

Around half of the ten large-scale water and sewerage companies (WaSC), each covering a major river basin area, whose predecessors are Regional Water Authorities, were listed on the stock exchange immediately after the privatization. However, currently, three companies are wholly owned subsidiaries of foreign companies and are not listed. Since privatization, significant changes of ownership have occurred and the majority of companies are now unlisted (Table 2). For example, Wessex Water, which provides service to Bath in South West England, was delisted after it was acquired by the Malaysian conglomerate YTL, which is primarily engaged in construction. Of ten water and sewerage companies, Severn Trent Water is the only company that is listed.

While free equity participation in water and sewerage sectors is difficult to imagine in Japan, it has been the norm in the UK since the 1980s when the principle of small government was adopted. That is, for those

Table 1. Results of evaluation of water and sewerage companies' performance by OFWAT (Companies' performance 2010 – 11)

| | Consumer experience | | | | Reliability and availability | | | Environmental impact | | |
|--|----------------------|----------------------|---------------------------|----------------|------------------------------|--------------------------|---------|------------------------------------|---------------------|-------------------------------------|
| | Custmar satisfaction | Supply interruptions | Drinking water compliance | Sewer flooding | Serviceability | Security of water supply | Leakage | Measuring greenhouse gas emissions | Pollution incidents | Satisfactory disposal of wastewater |
| Water and sewerage companies | | | | | | | | | | |
| Anglian Water | ○ | ○ | ○ | ○ | x | ○ | x | ○ | ○ | ○ |
| Dŵr Cymru | ○ | ○ | ○ | ○ | ○ | x | x | ○ | x | ○ |
| Northumbrian Water (north east) | ○ | ○ | ○ | ○ | x | ○ | x | ○ | ○ | ○ |
| Northumbrian Water (Essex and Suffolk) | ○ | ○ | ○ | — | ○ | x | ○ | ○ | — | — |
| United Utilities | ○ | ○ | ○ | ○ | x | ○ | ○ | ○ | ○ | ○ |
| Southern Water | ○ | ○ | ○ | ○ | x | ○ | x | ○ | ○ | ○ |
| Severn Trent Water | ○ | x | ○ | ○ | x | x | x | ○ | ○ | ○ |
| South West Water | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | x |
| Thames Water | ○ | ○ | ○ | x | ○ | ○ | ○ | ○ | ○ | ○ |
| Wessex Water | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Yorkshire Water | ○ | ○ | ○ | ○ | x | x | x | ○ | ○ | ○ |
| Water only companies | | | | | | | | | | |
| Bristol | ○ | ○ | ○ | — | ○ | ○ | ○ | ○ | — | — |
| Cambridge | ○ | ○ | ○ | — | ○ | ○ | ○ | ○ | — | — |
| Dee Valley | ○ | ○ | ○ | — | ○ | ○ | ○ | ○ | — | — |
| Portsmouth | ○ | ○ | ○ | — | ○ | ○ | ○ | ○ | — | — |
| Sembcorp Bournemouth | ○ | ○ | ○ | — | ○ | ○ | ○ | ○ | — | — |
| Sutton & East Surrey | ○ | ○ | ○ | — | ○ | x | ○ | ○ | — | — |
| South East | ○ | ○ | ○ | — | ○ | ○ | ○ | ○ | — | — |
| South Staffs | ○ | ○ | ○ | — | ○ | ○ | ○ | ○ | — | — |
| Veolia Central | ○ | ○ | ○ | — | x | ○ | ○ | ○ | — | — |
| Veolia East | ○ | ○ | ○ | — | ○ | ○ | ○ | ○ | — | — |
| Veolia Southeast | ○ | ○ | ○ | — | ○ | ○ | ○ | ○ | — | — |

Key: ○: OFWAT has no concerns about a company's performance. x: OFWAT, or other regulators, have some concerns about a company's performance. —: An area relates to sewerage services, which are not provided by the company.

Source: Compiled based on the OFWAT website (http://www.ofwat.gov.uk/regulating/prs_web201110perf_summ, as of August 7, 2012).

businesses whose productivity had been suppressed by traditional regulation and labor market problems, the entry of outside participants (both capital and human resources) was made possible for the purpose of improving levels of productivity and customer service. As described at the beginning of Chapter II, in the UK, the term “small government” does not merely imply the sale of government-owned assets, but is based on the idea that the sale of government-owned assets is integral with labor market and capital market reforms.

3 Results of “small government” promotion

Closer examination of the case of UK's water and sewerage sectors reveals that small government does not merely involve “reducing the size” of government, but rather “redesigning the role” of government. In other words, this means that the role of government switches from a “service provider” that directly provides residents with infrastructure-related services to a “service commission” that regulates and oversees the companies that provide residents with these services.

In addition to water and sewerage sectors, the UK has also undertaken privatization in its electricity, gas and airport industries, with the pursuit of reforms being virtually accompanied by a substantial tightening of regulations. Generally, since the time of the Thatcher regime, the impression has been one of small government leading to ever-increasing deregulation. However, the reality is that the infrastructure companies in the private sector to which the government outsourced services are conversely subject to much tighter regulations. In the case of water and sewerage services, OFWAT was newly established to regulate and supervise water and sewerage companies. As described in Section 2, in order to ensure the management stability of these companies, OFWAT has the authority to request the disclosure of a greater degree of information than what would normally be required of a listed company, as well as set the required level of capital investment.

That is, for those businesses that have exclusivity (within a given area, another organization cannot do business in the same field) and public nature (both

Table 2. Ten water and sewerage companies (WaSC) in England and Wales

| Company | Owner (parent company) | Country | Type of owner | Comments |
|--------------------|-------------------------------------|-----------|--------------------|---|
| Anglian Water | Osprey/AWG | UK | Unlisted | Jointly owned by consortium of three funds including 3i |
| Northumbrian Water | Cheung Kong Infrastructure Holdings | Hong Kong | Unlisted | Owned by infrastructure fund in Hong Kong |
| North West Water | United Utilities | UK | Unlisted | Owned by United Utilities, which is the UK's leading infrastructure service company |
| Severn Trent Water | Severn Trent | UK | Listed | |
| Southern Water | The Royal Bank of Scotland | UK | Unlisted | |
| South West Water | Pennon Group | UK | Unlisted | 30% owned by five financial investors |
| Thames Water | Macquarie Group | Australia | Unlisted | Owned via Kemble Water |
| Welsh Water | Glas Cymru | UK | Non-profit company | Owned by non-profit company in which the government made investment |
| Wessex Water | YTL | Malaysia | Unlisted | Owned by Malaysian company |
| Yorkshire Water | Kelda Group | UK | Unlisted | 7% owned by two funds |

Source: Compiled based on various publications.



citizens and industries rely on services extensively for day-to-day needs and economic activity), which are considered as typical characteristics of infrastructure businesses such as water and sewerage services, the profits that such businesses earn are subject to reasonable regulations. As such, small government is based on the concept of opening up businesses to the private sector and enhancing regulation in an integrated manner.

However, this concept gives rise to the question of “what is the implication of promoting privatization, which is based on the assumption that private-sector companies can operate freely.” If businesses are those for which the government must strengthen regulations and that must be closely supervised, people may be inclined to think that the government should just undertake the role itself.

However, conversely, the authors believe that the privatization that requires such a high level of regulation would be of value for Japan to undertake in the future.

Specifically, in addition to the level of service (outcome), the investment needed to maintain the required level of service is also subjected to regulation and supervision so that management discipline is maintained. If a company (a management entity) does not have a sufficient management competence even under such regulation and supervision, the government replaces it in order to maintain an acceptable level of service. In other words, if the government were to provide service directly, the option of being able to replace a management entity would be lost, and the incentive to continue to improve the level of service by maintaining management discipline would be difficult to attain. On the other

hand, because private-sector companies are well suited to rationally pursue improved levels of service, privatization can be expected to produce significant improvements in the level of service.

From the perspective of a private-sector company that provides service, because the management rights for water and sewerage services have been liberalized in the UK, anyone can participate through the acquisition of shares in a company. However, because management is supervised by OFWAT, despite being open, the market nevertheless presents an extremely severe situation in that a company would find it difficult to attain profit or would be forced to leave the market if highly efficient management is not feasible.

On the other hand, from its perspective, the government can expect to attract some of the world’s best players (companies) to compete in the market, i.e., what is known as the “Wimbledon effect,” such that the levels of operational efficiency become very high. In addition, the results derived from privatization would include that water and sewerage services can be provided by the revenue generated from charges alone without depending on tax subsidies.

Of course, compared to Japan, water charges per unit in the UK are more expensive. In addition, there is dissatisfaction among customers in the suburbs who must pay higher rates than those in London and other major cities due to more efficient city distribution networks. Nevertheless, when we think of water and sewerage services in Japan, we find that a large amount of tax money is injected in these services, making it difficult to determine the total amount of money that customers

pay for water and sewerage services on an integrated basis. This means that any incentive to improve management efficiency for water and sewerage services on an integrated basis is low in Japan. Compared to the situation in Japan, in a sense, the charge system in the UK is rational.

When we consider these small government efforts in the UK, we can say that these efforts enabled achievement of the world's highest levels of management efficiency for infrastructure services.

III “Small Government” Efforts and Achievements in Australia

Much like in the UK, in the late 1980s, Australia was faced with the need to undertake administrative and financial reforms to address long-lasting budget deficits as well as with a lack of funds to meet the growing demand for the development of infrastructure. To deal with these issues, Australia chose to privatize many areas including power generation, road networks, railways, water and sewerage services, airports and communications.

Among these areas, airports have been attracting particular interest recently because their business value increased greatly after their privatization. The following sections examine the circumstances leading up to the privatization of Australia's airports and the results that were obtained, as well as the effects attained through a “small government” approach.

1 Background of the privatization of the airport business in Australia

Up until the early 1980s, the federal government owned and operated approximately 500 airports across the country. Despite increased demand for air travel at the time, a budget deficit meant that there were insufficient funds for airport expansion. Therefore, with the aim of improving airport management, the Federal Airports Corporation (FAC) was established in 1988. The 23 airports with the highest passenger loads were transferred from the federal government to the FAC, while the other airports were transferred to the local governments. In the ten years after 1988, the FAC increased passenger traffic and the amount of cargo handled, and increased airport revenue by about 10 percent.

Subsequently, in 1996, the Airports Act was amended. Under the Airports Act 1996, it was decided that the airports managed by the FAC would be sold off on a long-term lease arrangement. The federal government imposed three major conditions on the sale, namely:

- 1) The lease term is 50 years (with the option to extend 49 years)

- 2) Foreign ownership is restricted to 49 percent
- 3) Aeronautical revenue (such as landing fees and parking fees) is subject to a price cap (an upper limit is placed on fees based on the consumer price index, etc.)

Based on this policy, 1997 saw three airports—Melbourne, Brisbane and Perth—sold off, followed by another 14 in 1998 including Adelaide, Darwin and Canberra. In 2002, another five airports including Sydney were sold.

In selecting lessees, the federal government used a three-stage tender process—(1) the expressions of interest stage, (2) the request for indicative bids and (3) the request for binding bids—to maximize the tender price. Selection was not based purely on the highest bid price, but also considered the “content and persuasiveness of the proposal,” the “clarity and assurance of the proposal,” the “financial and management ability of the bidder,” whether the bid was “in line with all laws and policies related to the airport,” that it would ensure “fair and equitable treatment of employees” and whether it exhibited a “commitment to the effective development of the airport services.” As a result, many airports came to be taken over jointly by domestic investment management companies and overseas airport operations companies (Table 3).

For example, Melbourne Airport, which was sold off in 1997, was acquired by AMP Capital, which is Australia's largest life insurance-based investment management company, and the UK's BAA, which manages and operates Heathrow Airport. Meanwhile, Brisbane Airport was taken over jointly by Queensland Investment Corporation (QIC), which is a state government-owned investment management company, and Schiphol of the Netherlands, which manages and operates Amsterdam's Schiphol Airport.

Perth Airport was acquired jointly by Hastings, which is one of Australia's private equity investment management companies, and BAA. Sydney Airport, which was sold off in 2002, was successfully bid jointly by MAP Airports, an airport investment management company established by the Macquarie Group, Australia's largest investment bank, and HOCHTIEF AirPort, which is a subsidiary of HOCHTIEF, a German construction company, and which is experienced in managing and operating overseas airports.

2 Results of airport privatization

In Australia, the infrastructure funds established by Hastings hold the stakes in many airport companies. Hastings offers three listed funds that invest in infrastructure including airports and railways. These are:

- 1) Australian Infrastructure Fund, about 90 percent of whose assets are airports (established in 1997,

- AU\$1.1 billion, invests in infrastructure other than airports)
- 2) The Infrastructure Fund (established in 1998, AU\$680 million)
- 3) Utilities Trust of Australia (established in 1994, AU\$2.3 billion)

These funds are depicted in Figure 2.

The trends in EBITDA (earnings before interest, taxes, depreciation and amortization) for the airport companies owned by Hastings indicate that in about ten years after privatization, those for Australia Pacific Airports, which manages Melbourne Airport, increased about four-fold while those for Airport Development Group, which manages Darwin Airport, increased around ten-fold (left-hand side of Figure 3). In addition, market capitalization has also increased about two to three times since the airports were acquired (right-hand side of Figure 3).

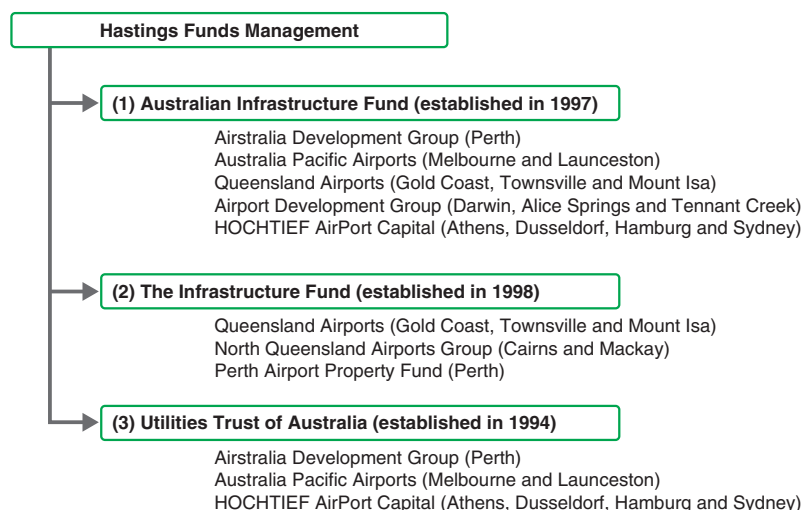
This major increase was attributable not only to the appearance of low-cost carriers (LCC) and the resulting increase in passenger traffic, but also to a range of initiatives implemented by airport operating companies to increase their earnings. For example, after privatization, many companies were very active in investing in diverse programs that would increase their earnings and that make use of state government subsidies and tax incentives. These programs include attracting LCCs to build their base facilities (such as those needed for aircraft maintenance and crew training), replacing tenants in the commercial space of the airport, increasing the commercial space, expanding the size of passenger terminals and parking lots, developing hotel and office buildings on the surplus land around the airport and building new airport access roads. As a result of these efforts, Melbourne Airport, for example, derived revenue from both aviation and non-aviation businesses that surpassed the growth of passenger traffic (Figure 4).

Table 3. Sale of top five airports in Australia in terms of passenger traffic

| | Sydney Airport | Melbourne Airport | Brisbane Airport | Perth Airport | Adelaide Airport |
|---------------------------------------|--|--|------------------------------|------------------------------------|-------------------|
| 2009-2010 passenger traffic | 34.46 million | 25.92 million | 18.90 million | 9.99 million | 7.02 million |
| Year of privatization | 2002 | 1997 | 1997 | 1997 | 1998 |
| Bid price (Australian dollars) | 5.58 billion | 1.31 billion | 1.39 billion | 0.64 billion | 0.36 billion |
| Successful bidders | MApp Airports and HOCHTIEF AirPort | AMP Capital and BAA | QIC and Schiphol | Hastings and BAA | UniSuper |
| Managing company | Southern Cross Airports Corporation Holdings | Australia Pacific Airports Corporation | Brisbane Airport Corporation | Australia Development Group | Adelaide Airport |
| Operating company | Sydney Airport Corporation | Australia Pacific Airports Melbourne | | Westralia Airports Corporation Pty | |
| Affiliated company | | Australia Pacific Airports Launceston | | | Parafield Airport |

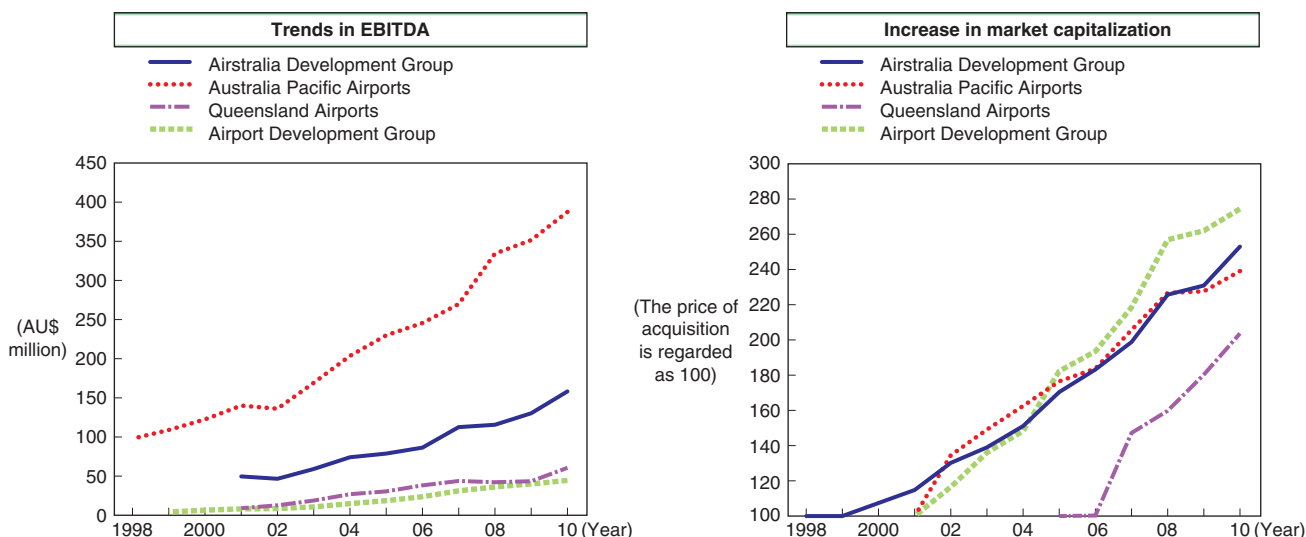
Source: Compiled based on material published by each airport operating company.

Figure 2. Infrastructure funds owned by Hastings and investments in airports



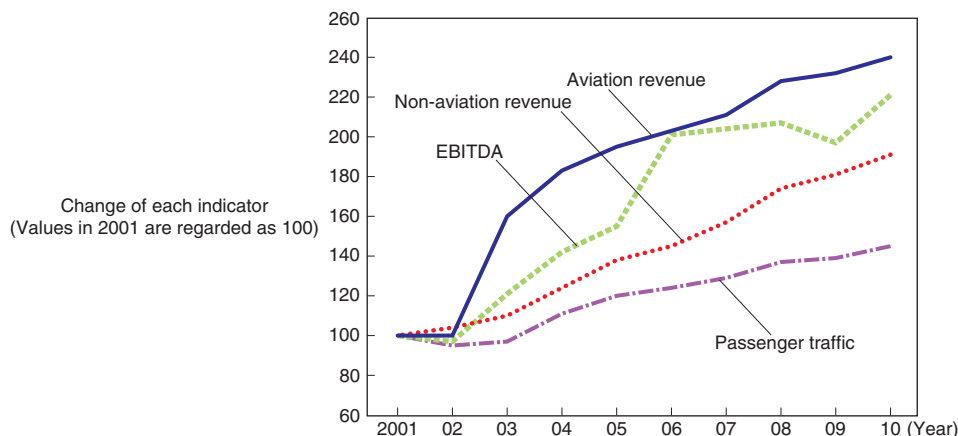
Note: Airports indicated in parentheses are managed and operated by the indicated company.
Source: Compiled based on material published by Hastings Funds Management.

Figure 3. Trends in EBITDA and market capitalization of airport operating companies owned by Hastings



Source: Compiled based on material published by Hastings Funds Management.

Figure 4. Passenger traffic and revenue-related indicators in Melbourne Airport



Source: Compiled based on material published by Australia Pacific Airports.

3 Results of adopting the “small government” approach

In recent years, Australian investment management companies, which have acquired management expertise from their overseas airport operator partners, have been aggressively investing in overseas airports, with an emphasis on Europe.

For example, Hastings, in cooperation with HOCHTIEF AirPort, invested in Tirana Airport in Albania in 2005 and then, in 2007, in Athens Airport in Greece and Budapest Airport in Hungary. MAp Airports, jointly with the Macquarie Group, invested in Denmark’s Copenhagen Airport in 2005 and then in Belgium’s Brussels Airport in 2006.

In Japan, given the expected rise in passenger traffic with the expansion of Haneda Airport, many people would still remember that in 2007, the Macquarie Group acquired a near 20-percent stake in Japan Airport Terminal Co., Ltd., which manages the Haneda Airport’s

terminal building. (However, the company subsequently sold its shares in 2009.)

As such, Australia’s airport privatization not only gave the country a means of using private funds to expand its airports in the face of increased demand for air travel but, by partnering with overseas airport operators, also provided a means of attaining a high level of efficiency in airport operations and management by leveraging partners’ expertise. In addition, it gave rise to a new industry in the form of world-class airport operators and airport investment management companies.

IV Suggestions for Japan in View of the Experiences of the UK and Australia

The experiences of the UK and Australia provide Japan with two major suggestions.

First, infrastructure services themselves were bolstered by encouraging the participation of a wide range of interested parties including overseas companies in infrastructure services. Diverse market participants led to increased levels of services, which have then benefited the populace.

Second, new infrastructure service industries were created. In the UK, the privatization of water and sewerage services gave rise to a type of industry that previously did not exist, i.e., companies providing water and sewerage services in an integrated manner. Water supply services had been available in the form of businesses in the UK's cities since the 19th century. However, because of privatization, comprehensive water service companies were established that also provided sewerage services such as sewerage treatment and storm water drainage in addition to water supply services. Furthermore, some of these companies were listed on the stock exchange. Similarly, Australian airport privatization led to the creation of a new type of industry in the form of airport operators and airport investment management companies.

Greece, which is still struggling with large budget deficits, is planning to sell many state-owned assets and state-run businesses. However, the sale of these assets and businesses will only reduce the country's debt load by 5 percent. Therefore, it is reasonable to assume that the main reason for the sale is not to reduce debt, but rather to revitalize local industry by bringing in overseas capital and companies.

The situation that Japan currently faces is not the same as that being faced by either Greece now or the UK in the 1980s. In addition, because specific infrastructure services in which the government is involved differ from country to country, it would not be appropriate to apply the suggestions offered by these cases directly to Japan.

Nevertheless, we need to take note that these efforts resulted in the improvement of the levels of services and the creation of new industries. It is essential to ensure the best public interests such as the safety and reliability of Japan's mature infrastructure services. Upon ensuring such public interests, the important point is the perspective of converting these infrastructure services into growing industries by bringing in private-sector companies that can manage these services as efficiently as possible.

This perspective is directly linked to the concept of small government. As the authors repeatedly state in this paper, the idea of small government centers on the role

of the government switching from being a service provider to a service overseer to ensure that consumers gain the maximum possible benefit. That is, the government becomes responsible for inspecting services to ensure optimum service implementation at the most appropriate rates. Small government facilitates the transfer of the role of service provider to the private sector, thereby creating new industries.

Furthermore, small government also means "switching the role of the government of a mature country, which is required to improve productivity such as by means of enhancing infrastructure that has already reached a certain level, to the role of a commission to develop growth industries."

As Japan's population continues to dwindle, the operation and maintenance of infrastructure services and facilities that are worth more than JPY700 trillion in the total stock of social capital will inevitably require that the cost for using these services and facilities will have to be increased. Therefore, the aim should be to find an entity that can operate these services and facilities as efficiently as possible in order to minimize the financial burden on the public, including taxes, while maintaining a constant level of service.

To that end, the government should restrict its role to applying the minimum necessary amount of regulation and supervision. At the same time, by establishing explicit rules and opening up the market to companies from around the world, the government should nurture infrastructure businesses as industries so that infrastructure can be operated and managed as efficiently as possible. In addition, the government should strive to raise the levels of service to enable operating companies to deploy their services globally.

In view of the experience of Europe, which has suffered a sovereign debt crisis prior to a population decline, Japan, which is on the verge of entering an era of a major population decline, should present a "new image of small government" to the world.

Shingo MOCHIMARU is a senior consultant in NRI's Public Management Consulting Department. His specialties include public-private partnerships and infrastructure financing. **Tomoki KITAZAKI** is a consultant in NRI's Public Management Consulting Department. His specialties include supporting policymaking in the fields of urban planning, real estate and infrastructure, and supporting the establishment and implementation of business strategies.

As a leading think tank and system integrator in Japan, Nomura Research Institute is opening new perspectives for the social paradigm by creating intellectual property for the benefit of all industries. NRI's services cover both public and private sectors around the world through knowledge creation and integration in the three creative spheres: "Research and Consulting," "Knowledge Solutions" and "Systems Solutions."

The world economy is facing thorough structural changes led by the dramatic growth of IT industries and the rapid expansion of worldwide Internet usage—the challenges of which require new concepts and improvement of current systems. NRI devotes all its efforts to equipping its clients with business strategies for success by providing the best in knowledge resources and solutions.

NRI Papers present selected works of NRI Group's 7,000 professionals through its worldwide research network. The mission of *NRI Papers* is to contribute new ideas and insights into business management and future policy planning, which are indispensable for overcoming obstacles to the structural changes in our society.

All copyrights to *NRI Papers* are reserved by NRI. No part of this publication may be reproduced in any form without the prior written consent of NRI.

Inquiries to: Corporate Communications Department
Nomura Research Institute, Ltd.
E-mail: nri-papers@nri.co.jp