8 Financial and economic institutions

8.1 Introduction

The analysis of the spatial and economic developments in the airport area and the introduction of the actors involved in the development process, raised questions concerning the rules of the game. Chapter 7 offered the context to understand the institutional varieties amongst the case studies. This and the following chapter continue with an in-depth institutional case study analysis. The addresses research question 2b 'What are the financial and economic institutions that determine the playing field for the actors involved?' and 2c: 'If so, where do inefficient institutions, path-dependent behaviour and institutional lock-ins lead to obstacles in the spatial-economic development of airports as cityports?'

This chapter focuses on the financial and economic institutions in the airport area development process. The financial institutions are the incentives for market investment offered by governments, in particular taxes and subsidies and strategic investments in airport areas in the form of public works. The economic institutions are the conditions motivating market actors to invest in spatial development in cooperation with public actors such as governments. These financial and economic institutional arrangements are not fixed but changing over time in new arrangements. They contribute to the institutional competitiveness of the city-region that is an essential element of economic competitiveness of the airport as a cityport in the city-region (see chapter 2).

Alexander (2001a, 2001b) distinguishes six stages in his generic model of the land development process: (1) land purchase and assembling; (2) financing; (3) land preparation and development; (4) land disposition; (5) construction; and (6) property transfer. Financial and economic institutional analysis in this chapter focuses on these stages of the development process of the airport as a cityport as presented in Figure 8.1. We start with introducing the fiscal structure of each case study and the effects it has in section 8.2, and airports as public works as a generator of private investment as foregoing stages of the land development process (financial institutions). Economic institutions are discussed in sections 8.4-8.7.

Figure 8.1 Stages of the airport area development process

Section 8.4 includes Alexander's stage of land disposition, discussing supply and demand of land, public and private landownership and coordination problems of the land market. Property development is discussed in terms of quality, density and mixed land use incentives in section 8.5. Institutional arrangements in the construction sectors, in particular illegal collusion, bid-rigging and other tendering problems are discussed in 8.6. Finally, the management of the airport areas is analysed in the perspective of generating a competitive airport area that is part of the entire city-region metropolitan economy (8.7). Therein, the focus is in particular on the airport privatisation and regional monopolies. Conclusions on financial and economic institutions are drawn in 8.8.

8.2 Financial institutions: fiscal structure

The distribution and redistribution of taxpayers' money within states – that can partly be applied for public work investments in airports – can range from centralised to decentralised. This section will discuss the consequences of centralised and decentralised fiscal structures first in terms of theory, and then in terms of the effects of these financial institutional arrangements on the case studies.

Theories on (de)centralisation of fiscal structures

Terhorst and Van der Ven (1997) see the structure of the tax system as the backbone of society, where an optimum balance between centralized and decentralized can only exist in theory. Centralisation as well as decentralisation has advantages and disadvantages and the best outcome is dependent upon the particular local situation. Major advantages of fiscal centralisation are macro-economic growth and equal redistribution of taxes. The main advantage of decentralisation is that the local level is the most suitable and most informed level for allocation of public services. In their comparison of the centralised fiscal structure in Amsterdam and the decentralised fiscal structure in Brussels, Terhorst and Van der Ven (*ibid.*) concluded that the fiscal and territorial system and not the planning system, is the main reason for the structured and compact development of Amsterdam compared to sprawl in Brussels. The Brussels model shows the disadvantages of fiscal decentralisation in terms of tax competition, tax export and disharmony in the sprawled spatial development.

On the other hand one can argue that in the era of globalizing city-regions, a more decentralised fiscal structure can provide the city-region instruments and more possibilities to put in place the right incentives in order to attract investors in area development. Airport areas can be funded as national projects in order to generate economic and spatial developments in backward areas, but can on the other hand also provide tax revenues for redistribution elsewhere.

Peterson (1981) goes beyond the centralisation-decentralisation dilemma by distinguishing governmental spending by its three functions in the policy arenas: allocation, redistribution, and development. Allocation of public services for citizens is the function that local governments can perform best, because decentralisation allows a closer match between supply and demand of public services. Redistribution, more specifically the redistribution of tax income for social benefits, should, according to Peterson, not be a heavy burden on the local government's income structure. The more a local community engages in redistribution, the more the marginal benefit/

tax ratio for the average taxpayer declines, and the more the local economy suffers. Minimum standards of living should be guaranteed by income redistribution.

Developmental policies – e.g. airports as public works that is central issue of debate in 8.3 – should according to this line of reasoning be a shared responsibility of all levels of government. In the case of economic downturns, national governments should apply fiscal and monetary instruments; a local government applying these instruments will see any positive effects of its actions disappear into the larger environment. This is referred later as the negative consequences of regional tax competition. Other developmental policies may have more specific local consequences, and in these cases local governments are able to commit their own resources. Peterson mentions highway construction and utility services distribution but airports as public works can be included here. Although for cities the economic need and ripple effect of development projects is obvious, problems might raise in the suburbs. In surrounding towns economic and status interests might bifurcate and communities split up in 'pro-growth' and 'anti-growth' factions:

"While some express concern for the economic base of the community, others argue that the community should hold out against urbanisation or attempt to survive as a residential enclave apart from the centres of commercial and industrial activity" (Peterson 1981:149).

Fiscal structures in the case of the Randstad

The Randstad does not have a long history of tax centralisation and fiscal redistribution. Even before the era of the seven United Provinces (1581-1795), independent cities had their own local taxes. The relatively large surface of Amsterdam and a slow population increase are according to Terhorst and Van der Ven (1997) the main historical reasons that in the Randstad no tax competition exists. The abolishment of local taxes and a self-fulfilling prophecy of central financing of the social welfare state, including national public works construction in the 19th century (see chapter 7), local provision structures and fiscal centralisation in the 20th century led to more homogenous spaces (*ibid.*).

The problem of fiscal centralisation is that local governments can hardly influence the income and expenses flows and therefore cannot be responsible for creating a profile in international competition (WRR 1990:31). Therefore, the Government Scientific Advisory Council (WRR) argued for making the local level in the Netherlands, in particular the major cities, more sensitive for their revenue structure. The government attitude had to change from a 'receiving' culture to a more responsive governmental culture. The 'golden financial strings' that turned the cities into puppets directed by the national government were to be cut, in particular in the case of social housing corporations. Cities should become more responsible for attracting their own tax revenues (WRR 1990). Local taxes rose and financial independence increased slightly in the 1990s.

However, financial dependence on local taxes is still comparatively low; own local income is currently near eighteen percent. The largest source of income for municipalities are specific grants (44%, for instance for urban renewal), a source of income that is diminishing (Korthals Altes 2002). Extra revenues created by the municipal land supply system compensate this (see section 8.4). The third source of income is general grants from the Municipal Fund, based on size and income of the municipalities (38%). As Korthals Altes argues, paradoxically, it is the

dependence on this general grant, which local governments are free to decide how to spend, that makes Dutch municipalities relatively independent (*ibid.*). Towns and cities do not have to compete on taxes on the one hand, but also do not have to lobby for most of their income at the regional or national government levels. Interviews in the Schiphol area confirm that taxes are not a reason for entrepreneurs to relocate businesses within the airport area or further into the Randstad city-region. Airport revenues are no direct income tax base for the municipalities near the airport, but rising land prices are. These problems will be further analysed in 8.4 and 8.5.

Fiscal structures in Tokyo Metropolitan Area

The fiscal structure in Japan is a different example of centralisation. Tax redistribution on the national level is a major issue in large countries with remote areas as Japan and Germany, more than in the Netherlands. In terms of fiscal allocation, the national government has a strong role of distributing taxes the poorest and richest prefectures (Hill and Fujita 2000). As a result, some poorer prefectures are after equalisation better off than other richer prefectures.[1] Currently, only the city-regions of Tokyo Metropolitan Area, Aichi-Nagoya, Shizuoka, Osaka, Hyogo-Kobe and Kyoto pay for the tax grants in 38 other prefectures (Ogawa 2002:198). Due to the economic situation in the Kansai area, particularly the problematic financial status of Osaka, it is currently the National Capital Region that is the net-payer for all other regions. The net-payer problem might affect the continuous support amongst the regions in Japan. Hill and Fujita (2000) concluded that despite polarisation caused by globalisation, Japan's egalitarian system does not show the typical changes like inequality among local governments, decline in state spending and privatisation of public activities.

More recently however there are signs of gradual change of tax allocation caused by rapid population ageing and increasing public debts in Japan. For instance, the Koizumi administration cut MLIT's budget by 3% each year, leaving less money available for employment-generating public works in the Japanese countryside. Although MLIT bureaucrats oppose the budget cuts proposed by the Ministry of Finance and Cabinet Office, bureaucrats combine budget reduction with a decentralisation policy (to be discussed in chapter 9). This decentralisation of policies and a budget stop, in the context of the municipalities that have a mindset of dependency created since the Tokugawa period (1600-1868), makes the situation for local governments hard to manage.

Mr. Benes (American Chamber of Commerce Japan): *"The current attitude is: 'OK, if you want decentralisation, we will decrease our subsidies and leave it up to you'. That is like a child never taught to walk suddenly has to walk by itself."*

An additional problem is that cities are able to double their local taxes, but hesitate to do so in order to avoid losing local competitiveness to tax competitors. It creates a lock-in situation for fiscal institutional arrangements on the local level that can be unlocked by the first municipality willing to raise local taxes. This means that Japanese cities and city-regions are openly competing despite fiscal centralisation. They do not compete on taxes, but on public works that might generate private economic activities in the near future (see section 8.3).

In contrast to the Netherlands and despite fiscal centralisation, Japanese airport towns and cities directly benefit from airport taxes. The City of Narita is heavily dependent on airport-related tax

revenues as source of income, rising from 16% in 1978 to 40% in 1999 (NAA 2000). National tax redistribution takes the advantages of an airport into account and lower grants are given from central to the local government. Although all towns surrounding Narita airport see an increase of airport revenues, their airport-related income is very limited, ranging between one and five percent share of total tax income (*ibid.*). These numbers are not known for Haneda and because of limited economic spin-off (see chapter 4) probably negligible for Ota and Kawasaki.

Fiscal structures in Frankfurt Rhein-Main

The assumption in the Frankfurt Rhein-Main case is that German tax decentralisation increases the possibilities of regional and local governments in the city-region to provide incentives for spatial and economic developments. Particularly within the globalizing economy, bottom-up opportunities to develop and promote the region are more adequate, and subsidy dependence on the federal governmental levels is limited. The central question asked was: are the financial instruments of the city and the region adequate for supporting spatial-economic activities in Frankfurt Rhein-Main? Actors agreed on the insufficient functioning of these instruments, but mainly disagree on what direction to choose for solving the urgent problem. The two main problems of financial institutional arrangements are ineffective fiscal redistribution between states and within states (*Finanzausgleich*) and corporate tax competition (*Gewerbesteuer*).

First, tax redistribution is a problematic financial institutional arrangement. Tax redistribution can be found on the level of the states (*Länderfinanzausgleich*) and is primarily focused on levelling down the income inequalities between the states. Furthermore tax redistribution is done on the level of municipalities (*Kommunale Finanzausgleich*) in order to make municipalities able to provide their public services. This fiscal redistrubution on the federal level is considerable; Hessen for instance pays annually €371 per inhabitant in 1999, roughly the same amount of money that Berlin receives (Freund 2002). Actors agree on the need of a distribution for social reasons, however the system is under pressure. The aim of the Länderfinanzausgleich is not to offer long-term subsidies, but incentives to change economic structures (*ibid.*). Only Bayern changed from a net-receiver to a net-payer, joining net payers Baden-Württemberg, Hessen, Nordrhein-Westfalen and Hamburg. The redoubling effect of fiscal redistribution is a second objection. Berlin, for instance, can use the financial support it receives to attract businesses from competing cities as Hamburg, München and Frankfurt by offering various advantages to managers.[2]

Kommunale Finanzausgleich within Hessen state provides a more indirect redistribution from southern communities to the north. Based on the economic structure, rich counties contribute to the poorer ones. In Hessen, 36% of the citizens live in Southern-Hessen and pay 48% of the taxes. In return, Kassel in Northern Hessen has, at 10%, the highest percentage of social welfare receivers in former Western Germany. This leads to increasing tensions within Hessen as a result (Interview Müller 2003).

Corporate tax is the second major problematic financial institutional arrangement in Frankfurt Rhein-Main. The discussion on corporate tax can be seen as a discussion of Finanzausgleich at the local level since the largest portion of the city's revenue is *Gewerbesteuer*, a local corporate tax. *Gewerbesteuer* is more important for cities with have industrial activities, whereas

Einkommensteurer (income tax for residents) is more important for villages in the Rhein-Main city-region that are predominately focused on housing (Interview Schultheiss 2003).

Frankfurt's expenses for social welfare and cultural facilities are higher than other towns and villages in the region, and indirectly this leads to a higher tax rate in the urban area. Other municipalities in Rhein-Main city-region however have lower costs and compete with Frankfurt on lower corporate tax. An often-made comparison is the lower *Gewerbesteuer-hebesatz* of 300 in Eschborn compared to 495 in Frankfurt. Not only Eschborn, but also other towns in the ring around Frankfurt compete on corporate tax, giving the nickname *Speckgürtel* to the Rhein-Main region. Since surrounding communities cherrypick, Frankfurt bases its income structure on the corporate airport tax.

Figure 8.2 shows that 9/11 has not only affected airport and airlines, but also the city of Frankfurt.. In 2003, Frankfurt received €900 million on corporate tax, a decrease of almost a third compared to the fiscal peak in 2000. In the interviews, in particular urban planners and the city of Frankfurt consider the corporate tax as an inadequate financial incentive for regional economic development under the current conditions. The main argument is that as a result of corporate tax competition, the green belt between Frankfurt and surrounding towns becomes rapidly built-up, which has a negative impact on the quality and variation of the polycentric region. Tax-politics become urban politics here, since financial institutions directly affect urban development. The *Speckgürtel* communities are free-riders of the services that Frankfurt offers for the region.

On the other hand certain arguments made by economists and town representatives in the region focus on the effects of corporate tax as an important incentive for regional economic development. First, there is a group of employers' organisations that joined the discussion in order to achieve abolishment of *Gewerbesteuer* in order to decrease general tax pressure or a tax shift from entrepreneurs to citizens in general. Wirtschaftsinitiative and the Chamber of Commerce (IHK) want to abolish or shift local corporate tax, since it is a unique German phenomenon that

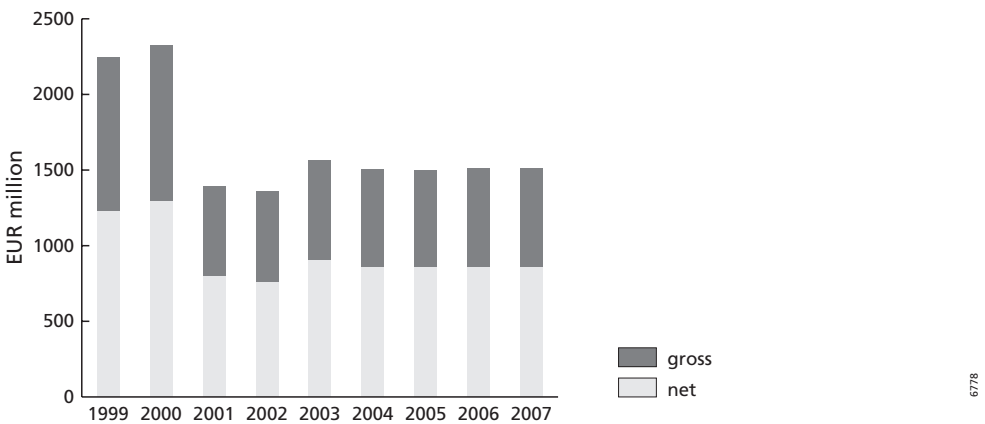

Figure 8.2 Corporate tax revenues City of Frankfurt (Source: Frankfurter Rundschau 25.11.2003)

cannot be found elsewhere in Europe and is a tax burden for entrepreneurs. As an alternative, IHK Hanau proposes a rise of income tax instead.

Another group of actors considers the discussion as an exaggeration of the problems. In case corporate tax laws are not changed, market economists expect a natural balance in the region (Interview Weiss 2003). It is normal that the centre is more expensive than the periphery, as it is a more attractive location for business settlement.

Mr. Schien, Neu-Isenburg: *"Almost all location factors are more important than the corporate tax – social-economic structure, image, telephone number and accessibility – only specific sectors focus on corporate tax. But we don't want these low-quality branches in our town anyway."*

Mr. Buchholz, Frankfurt: *"At a business meeting managers were complaining about the corporate tax. Someone proposed to read the list of actual corporate taxpayers, with the cameras running. Then, suddenly, the meeting room was silent."*

A third major argument that opposes the problems of *Gewerbesteuer* is tax competition as an incentive for economic performance and the opportunity for towns and cities to gain an own economic profile and image. The municipalities are not the same, but vary in hierarchy and economic structure. As chapter 2 has shown, these profiles have path-dependent development with a specific institutional setting and historical roots. The national and international corporations are able and willing to pay for the centre of Frankfurt. Bordering towns focus on the back offices. Taunus villages attract smaller business services, and communities near the airport specialise in distribution and manufacturing.

The fiscal institutional arrangements in Frankfurt Rhein-Main show clear inefficiencies, in particular in terms of urban development, but actors disagree on the urgency of the problem of corporate tax. The regional towns are free-riders and the decentralised tax structure offers incentives for the regional economy, with polycentric and unique development of towns and cities. This fits the profile of competing towns that has historical roots. It is uncertain what a new institutional arrangement of fiscal redistribution will offer to Frankfurt and Rhein-Main. The focus on local taxes and responsible accounting dominate the regional debates. The risk is a lack of wider political debate without considering other important elements in the regional cooperation (Salet 1990). There is a growing sense of urgency in Frankfurt Rhein-Main, wherein the lack of regional cooperation, not tax competition, is considered a problem in need of an innovative institutional solution that is acceptable for the entire region. This kind of problem is also a problem on the suitable level of the city-region. Because of the states involved the problem of corporate tax is a problem that mainly needs to be discussed on the federal level.

In sum, the case studies' fiscal structures show large differences. In the Randstad, local governments are relatively independent in income and especially in spending. They cannot directly benefit from the airport in terms of local tax, but benefit in terms of increasing land prices. In Tokyo, fiscal centralisation makes local communities puppets on a string competing on public works. However, in the case of airports local communities can directly benefit from airport tax. Frankfurt Rhein-Main is characterised by direct tax competition. The airport is an

important source of revenues for Frankfurt, while Rhein-Main attracts more movable business with lower taxes.

8.3 Financial institutions: airports as public works

The financial institutional arrangements for the continuous spatial-economic development of the city-region fall into two categories: inducements to private investors and direct public investments. The former category was discussed in 8.2 so here we focus on direct public investments. The business community see these investments as vital to regional competitiveness, as chapter 3 showed, but it is in general impossible to extract profits directly. Therefore government's financial institutions are required to execute public works like waterworks, harbours, rail and road infrastructure and airports, and can contribute to cityport development in the city-region.

The specific characteristics of financial institutional arrangements in the case of airports as public works need to be stressed from the effects these investments have. This includes the benefits and cost relationship; not merely in terms of budgets, but in a wider context, the contribution to the competitiveness of the city-region. First, a theoretical exploration will show that this is a central issue of current academic debate. Then, the theoretical approach of the airport as a public work institutional arrangement is applied to the case studies.

Costs and benefits of airports as public works

Despite recent attention, the issue of the extent to which public works contribute to the regional competitiveness and what cost level would make these worth public investment, has a long history. The main reason is that costs tend to overrun continuously and are underestimated, while revenues tend to be overestimated.

In 1975, Peter Self criticized his planning colleagues that determine the policy decision-making process by cost-benefit analysis and labelled them 'econocrats.' Applied cost-benefit analysis is hard to verify and assumptions and calculation methods are arguable. Self criticized the decision makers for instance in the case of building London's third airport, that was later considered a 'planning disaster' by Peter Hall (1980).

Flyvbjerg *et.al*. (2003) have similar critiques on large public works. Flyvbjerg (*ibid.*) made an international comparison of costs and revenues of 258 infrastructure projects as tunnels, bridges and airports. In 90 percent of the cases, infrastructure projects lead to cost overruns and overestimation of economic spin-offs for the region, they concluded. The actors involved have often underestimated costs deliberately and politically motivated behaviour was supported by lack of transparency, Flyvbjerg argued. The conclusions of Self and Flyvbjerg emphasise inefficient financial institutional arrangements in the case of public works. Once the decision is taken to construct the bridge, tunnel or port, there is no way back and a path-dependent route is taken. Changing or stopping the current path is almost impossible since there have been heavy investments in research and construction preparation, or even construction itself.

Altshuler and Luberoff (2003) give an overview of other project cost overruns and income overestimation studies. These American studies also underline that non-technical errors, honest mistakes and inadequate methods (e.g. cost-benefit analysis) are the main reasons. In 80 percent of the cases, unforeseen mitigation costs, decisions to use new technologies, and perverse

incentives built into public financing systems were also to blame. Forecasts had to be "fudged" in order to be dramatic enough to gain federal support, or were kept low deliberately to keep pressure on project managers. Therefore, consistent mis-estimation is for Altshuler and Luberoff (2003) an example of the 'tragedy of the commons': short term success of constructed works lead to long-term undermining of public confidence in government.

It should be noted however, that the apparent cost-overruns can become investments with increasing returns on the longer run. Furthermore the question is, whether airports are representative examples of these public works that run out of hand. Although their construction costs are considerable, they can also generate high direct revenues, and create jobs in the wider city-region, as chapter 4 has shown. Therefore now the case studies' financial institutional arrangements are explored.

Schiphol as public work

Flyvbjerg, Bruzelius and Rothengatter's *Mega projects at risk* (2003) exerted great influence on the temporarily parliamentary commission on infrastructure in the Netherlands. This commission chaired by Mr. Duivesteijn (2005) was installed after major cost-overruns and disappointments in expected revenues in the case of the high speed train connection Amsterdam-Brussels (HSL-Zuid) and the freighter train connection Rotterdam-Ruhr area. Similar problems were expected for the high-speed train connections to the north (Groningen, the Zuiderzeelijn) and to the east (Germany, HSL-Oost). Partly because of the Commission's report, Dutch parliament tends to cancel or postpone the latter two projects and look for cheaper alternatives.

The conclusions of the report are according to Duivesteijn also applicable to the airport planning process. According to him and similar to the railway projects, there is in the Schiphol case, no clear parliamentary go/no-go moment for new runway construction (Elsevier 2005). The fact that there is a runway land use reservation however does not mean that a sixth runway can be constructed at opportune moments; aviation law has to be changed for that (see chapter 9). Although informal institutions are at work to create support for airport expansion, still formal institutions include a political decision moment.

Second, according to Duivesteijn in the case of new runways and terminals there is a lack of continued information from the Ministry of Transport to all actors involved. Flyvbjerg (*et. al*. 2003) calls this to the lack of involvement and exclusion of stakeholders from the core of the development coalition. This exclusion of other stakeholders that are not part of the development coalition is a returning theme in debates between parliament and government, as we saw in chapter 6.6. The question is, whether the parliament needs all information or the most relevant information considering the public work in progress.

The Dutch national government has invested in the expansion and relocation of the airport to its current location in the 1960s. These investments have been recovered by the shareholder profits of the public airport owners. However, there have not been substantial governmental investments in the runways or the terminals in more recent decades (Ministry of Transport and Water Management 2005). The Schiphol Group invests in its airport infrastructure and contributes to the construction of national motorways near the airport.[3] With the high profits of the airport, the main reason for this is its institutional position as a company with public duties (Interview Mast and Schaafsma 2005). Schiphol can therefore not be seen as a public work with exceptional cost overruns; it is profitable business, not a public investment disaster. It fulfils

Flyvbjerg's conditions of successful projects: serious infrastructure capacity and a combination of infrastructure investments plus making use of the potential in the area surrounding the airport (Flyvbjerg *et.al.* 2003).

This however does not imply that no there are no cost overruns in the Schiphol area. Former SADC manager Trommels for instance, acknowledges that cost overruns for e.g. local infrastructure occasionally occurred, and that this mainly for two reasons. First, forecasts have to fit in the accountings of the Ministry of Transport and Water. Second, increasing costs due to interest rates are not included (Interview Trommels 2006). Both arguments are in line with the reasons for cost overruns Altshuler and Luberoff (2003) pointed out earlier.

Frankfurt International Airport as public work

The financial institutional arrangement of Frankfurt airport is very similar to the experience of Schiphol. Both airports are dominant for the economy and infrastructure in the region and generate sufficient revenues to pay the necessary investment and expansion. The historical development is similar in terms of airport expansion paid by the airport itself, a decrease of public investments, and income revenues for the public shareholders of the airport. In Germany, the share of airport companies in airport investments increased from 66 to 83% in 1993-1995, mainly paid by landing slots and ground transportation revenues (Dehn *et.al.* 1998). In the same period, Hessen limited its share in airport investment from 21% to 9%. The federal level even almost wiped out its contributions, from 5% to 1% between 1993 and 1995. The local level limited its participation from 7% to 3% in the same period.

The most recent large-scale expansion of airport terminal and buildings is however financed by a minority stock transfer from the public sector to the private sector. The limited budget invested by governments on the airport, does not accord to the picture of excessive cost-overruns of public works. The main reason for profitable airport infrastructure at Schiphol and Frankfurt is the continuous growth at the current location. In the case of large-scale relocation, cost come into question, as in the case of airports in Japan.

Japanese airports as public works

In contrast to Schiphol and Frankfurt, airports and associated infrastructure in Japan are major governmental investments. The Ministry of Land, Infrastructure and Transport plays an important role in airport construction costs and has a dominant share in the airport stocks and financing. According to Japanese Airport Development Law, in case all ministerial directives are implemented:

- MLIT pays all construction costs of international airports;
- MLIT pays 60 to 70% of the construction costs of regional airports; and
- MLIT pays 50% of construction costs of local airports.[4]

Law sets the contribution of investments in airports as national public works. The final governmental costs and income structure of the airport varies from case to case. Asia's largest airport, Haneda in Tokyo, is considered a cash cow for the national government. The airport taxes are necessary to continue MLIT investment in Haneda airport capacity. Due to the chosen financial arrangement without separate budgets it is unclear how much is invested in Haneda. Since it is an airport in the bay of Tokyo with current runway expansion on a floating runway, these costs are considered considerable. Haneda construction has cost €10.4 billion (McGormack

1996). Due to Narita's runway problems, until 1991 US$1 billion was spend and has hardly led to increase of airport capacity (De Neufville 1991:8).

Kansai airport is the leader of cumulative loss projects in Japan (see Table 8.1, Bongenaar 2001). Until 1999, Kansai International Airport Co. has made €1429 million loss. The costs of the smaller Centrair airport in Nagoya are €4550 million in 2004 prices, 20% lower than the expected costs (Interview Ueda and Tsuchiya 2004). However, similar as in Kansai, the coastal Rinku towns have additional costs that discourage investors and are mainly public investments. Earning back the €2270 billion costs of the recently opened Kobe airport island will be a major headache for the Kobe local government (Asahi Shimbun 30.1.2006).

Tokyo's most loss making public work projects are three projects that are also part of the waterfront islands development: Waterfront (€325 million cumulative loss in 1999, exchange rates 1999, and see Figure 8.3), Takeshiba (€205 million) and Teleport Centre (€190 million; Bongenaar 2001). Further examples of excessive cost for public works are TransBay Highway (€10.3 billion), Yokohama Minato Mirai 21 (over €18 billion) and Makuhari New City. Haneda and Tokyo Waterfront are the main projects and have caused a reduction of the bay size of one fifth compared to 1868 (McGormack 1996).

The practice of inefficient high spending of Japanese governments on public works, including airports, is rooted in the centralisation of financial institutional arrangements, where most investments are done and regulated at the national level. Although national budget restraint is a problem that turns out to be a solution – or a 'blessing in disguise' – the current smaller budgets are not applied more efficient (Interview Benes 2004). Local governments know that some planned public works are useless but are trapped in a dependency mindset, realize that refusing national government investments will lead to no investments in their town or city at all.

The failures and deficits of investments in public works in the past have forced Japan to change the financing system into more independent public bodies with own responsibilities. More independent than before, the Development Bank of Japan decides upon granting loans based on future profitability, with less government pressure to provide these loans.[5] One other way of making financing PPP's more transparent and accountable, is the Private Finance

Table 8.1 Cumulative loss of public private ventures in Japan (fiscal year 1999)

Rank	Company	Location	Loss (€ million)
1	Kansai International Airport Co.	Osaka	1429
2	Phoenix Resort Ltd.	Miyazaki	1108
3	Asia and Pacific Trade Center	Osaka	344
4	Tokyo Waterfront Development	Tokyo	325
5	World Trade Center Osaka Inc.	Osaka	245
6	Kitakyushu Urban Monorail Co.	Fukuoka	240
7	Tokyo Bay Takeshiba Reg.Dev.Co.	Tokyo	205
8	Kobe New Transit Co.	Kobe	195
9	Tokyo Teleport Center Inc.	Tokyo	190
10	Tokyo Fashion Town Co.	Tokyo	176

Source: Bongenaar (2001)

Initiative (PFI). The Private Finance Initiative (PFI) is a British idea that alleviates the long lasting burden on public budgets and transfers parts of the public sector (risks) to the private sector. An essential condition is a level playing field with competition for concession rights – a situation that did not exist in Japan. Recent studies in the UK show that despite start-up problems, PFI is working.[6] In Japan-style PFI, the initiative is not only introduced to cut costs for local governments, but also to change the way facilities are managed.

In summary, Schiphol and Frankfurt are profitable airports that can afford to pay for necessary infrastructure investment by themselves, since they have not been relocated for decades. In the case of 'airport islands' in Japan, however, cost can easily overrun and artificial islands are in the top ranking of loss-making projects. The main reasons are as theory suggested, Japan's ambition to use new and expensive technologies, like artificial islands, and perverse incentives built into public financing systems, in particular a subsidy dependency mindset of local governments. The Japanese airports are the best examples to underline the theory of 'mega-projects at risk.' Once a decision is taken to construct the airport, there is no point of return or alternative path, despite the higher costs and lower revenues. This can even lead to the decision to currently construct an unnecessary second runway for Kansai International Airport, since the national government already intended to build this from the beginning. Although the paths selected in current public works in Japan cannot be changed, a puzzling process of institutional innovations is taking place, as the cases of DBJ loans and PFI financing have shown.

8.4 Economic institutions: land market

The first stage of the final development process of airport areas is obtaining the land. Our focus is in particular on the specific situation in the Randstad and in Japanese airport areas since the role of public actors in the land market is larger and more active than in Frankfurt Rhein-Main. The latter can however offer an alternative, more market-driven, land market model. The land market will be discussed in terms of land supply, coordination problems between municipalities and financial risks.

We can identify two forms of land ownership: full ownership and emphyteusis (a contract granting possession of land for long period on certain conditions, a kind of long-term lease different from the Anglo-Saxon tradition, close to the *erfpacht* system in the Netherlands). In the case studies both ownership and emphyteusis are common, depending on the municipalities and locations involved. Airport lands are commonly owned on leasehold since the governments do not want to lose control over the public airport infrastructure managed by the airport authorities. Land market provision in the airport vicinity however varies from case to case.

The land supply in the Netherlands is unique in comparison to other countries. Dutch municipalities own most of the land for industrial and office locations, and commercial developers own only a small share of the land (Segeren, Needham & Groen 2005). Most of the land in the Schiphol area vicinity is owned by the municipalities of Haarlemmermeer, Amstelveen, Aalsmeer and Uithoorn, private landowners, Schiphol and their common land pool SADC (Nyfer 1999). Nevertheless, also commercial property developers are taking land positions. Chipshol and Smits

Bouwbedrijven were one of the first to buy farmland near the airport since they expected future urban development earlier than municipalities.

Amsterdam and Schiphol use emphyteusis arrangements for land supply, but Haarlemmermeer sells the land to the open market. Although emphyteusis would make possible a permanent public financial incentive to increase the value and quality of land, in practise there are few differences since the leaseholder is buying off leaseholds for 45 years at Schiphol, with a leasehold adjustment clause every 15 to 20 years. The criticism is that with both the land sale and the emphyteusis there is no economic incentive to maintain a high quality in the business parks or industrial sites after areas are developed; municipalities tend to create new business parks elsewhere. Schiphol however, implements park management since there is scarcity of land and clear economic interests at stake for all actors involved.

In the case of Schiphol, emphyteusis is understandable since the airport needs elbow-room for reservations on future airport development lands. ProLogis therefore leases the land at Schiphol, develops and manages asset, mainly warehouses. The interviewed actors in the Schiphol case study are satisfied with these emphyteusis systems of land that airports.

Frankfurt's airport territory has a similar liberal emphyteusis system as Amsterdam and Schiphol (Interview Peters 2005). The situation in the airport vicinity is unique because of the land formerly owned by the American military. In the case of the southeastern airport territory and the Gateway Gardens redevelopment, American air force returned the land to the city of Frankfurt. Therefore, Frankfurt supplies these lands. However, most of the land in Rhein-Main region is private ownership. In the institutional analysis, no serious problematic institutional arrangements in Frankfurt Rhein-Main land supply systems came to fore.

In Japan, land ownership has a specific cultural meaning and leasehold systems are not common. Land ownership is not merely an economic attribute; it has deep cultural roots based on succession rights (Sorenson 2002). Therefore, the Japanese farmers in particular are not willing to sell their land, not even for a high price. This is one of the main reasons for the problematic expropriation of farmers near Narita airport, and is discussed as legal institution in chapter 9. The island of Haneda is owned and developed by MLIT and therefore has no specific institutional characteristics in land supply that need to be discussed.

Innovations in institutionalised land supply practises are found in the case of the land strip in coastal Rinku Town near Kansai and Chubu International Airports. The inability to sell the expensive reclaimed land in the Rinku town in Kansai for almost a decade forced the prefectural government to change the usual economic institutional arrangements. Since buying the expansive reclaimed lands in a market with volatile and sinking land prices remained unattractive for the real estate developers and end-users, Osaka prefecture decided to supply the land in leasehold for ten to fifteen years (Interview Takayama, Futatsumata and Tenda 2004). This enlarged the institutional playing field with the ability to change the locked-in institutional rules that would have resulted in devastating loses. This led to a slow revival of interest for real estate development in Kansai's Rinku town.

This institutional innovation might be applied later in similar problematic areas in Chubu's Rinku town and the airport island of Kobe, since also in these cases the government provides the land. The costs are too high and the required repay of investment led to high land prices. These prices are too high for either hotels, offices, warehouses or other industrial activities and make

it increasingly difficult for the land supplier to find interested developers. The result is deserted land plots ready for development and even abandoned buildings (see Van Wijk 2005). The airport authority of Centrair is however, in contrast to their colleagues in Kansai, able to supply land on the airport island for willing project developers and investors, since they are specialised in land- and property development.

Although in most countries the land market is a private actors' market, Dutch municipalities consider it their duty to supply sufficient amounts of land for the market. This is not a legal task, but an institutionalised common practise (Segeren, Needham & Groen 2005). This interpretation of the public task of municipalities fits in a broader context of active involvement in area development: active land policies, participation in land supply companies and agreements with private land owners in private law besides the land use plans and other public law instruments (Korthals Altes 2006). The active role in land supply can furthermore be understood by its financial importance for municipalities. Most municipalities have their own profit-oriented land agency, whose activity is a major source of income (Korthals Altes 2002).[7]

Segeren, Needham & Groen (2005) argue that this active role of Dutch municipalities in land supply can lead to substantial financial risks (1), imbalance in the land market (2), lower land prices (3) and extensive single land use (4). The consequences of the institutional system in terms of land use are discussed in a broader context in section 8.5; here we discuss the first three possible effects.

First, the active role in land supply in Schiphol is considered in the interviews as a financial risk for local governments. Mr. Migchelbrink of NIB Capital (Interview 2005) considers the financial risks for office and industrial land supply higher than risks in real estate development, especially since the development time span is longer than in England for example. In the end of the 1980s, landowners and developers started being interested in the land near the airport and local governments, Schiphol and NIB Capital founded the SADC land pool in order to plan and coordinate land use near the airport.[8] The public financial risks of land supply for Haarlemmermeer are however not considered as problematic due to the attractiveness of the location, rapid economic growth, the size and experience of Amsterdam and the backing of a market-oriented approach of NIB Capital and Schiphol. The chosen model was successful in financial and economic terms for all actors involved in the region and all public and private actors are satisfied with the coordinating and communicating role of SADC.

Second and third, risks of public land supply, the involvement of municipalities might lead to a relative oversupply of industrial land in the land market and lower land prices, concluded Segeren (*et.al.* 2005). The land supply model of towns and cities is in close cooperation with VROM, Economic Affairs and the Chambers of Commerce that overestimate the demand in order to provide the right number of office and industrial locations in the Randstad city-region in the end. Dutch municipalities do not merely focus on profits, the supply of land in the market is higher than in the case of private land owners and developers would dominate the market causing a relative oversupply of land for industrial development as Segeren *et.al.* argue (2005:113). Korthals Altes (2006) asks whether this actually is the case, since even in the Randstad land costs are just a small faction of the actual costs of the build up area. This situation is very different from airport area development in Japan, where land costs force not only offices, but also distribution

and warehouses to build four stories at least, in contrast to the preferred one or two stories in the Schiphol airport vicinity (ProLogis interviews Tanizami and Kumuda 2004, and Peters 2005).

In the Schiphol case study, there was no continuous oversupply of land available for development in the way that Segeren, Needham and Groen argue. The public supply of land nevertheless does affect the market balance of available land and land prices. The office locations turned out to be more attractive than industrial land, with higher land prices, more prestige and expected economic spin-off. However, since 2003 the province Noord-Holland has cancelled all new planned office locations in the region due to severe vacancy of offices and the traffic congestion these office locations create. Office rents dropped dramatically but the municipality keeps land prices up to avoid more office development.

The market of industrial locations shows a different picture then the office market. There is in particular scarcity of locations that allow more hindrance to the local environment. Despite the economic recession and the effects of 9/11 on aviation, the distribution sector continued to grow steady and rapidly. Due to this growth, prices for industrial sites keep rising, but are still below offices and housing market prices. Because of the higher land revenues for offices and houses, and the more prestigious urban profile, planners and local governments prefer offices rather than manufacturing and distribution.. This is a major reason for the scarcity of industrial sites and not only found in Schiphol, but also in Narita.[9] In both cases of industrial and office market, there is a continuous imbalance between demand and supply, without a smooth development pattern. This situation is less apparent in Frankfurt, with the more distinct differentiation of locations in the Rhein-Main region due to market pressures.

In sum, a variety of land supply systems and public and private land owning are common in the case studies. These economic institutional arrangements were no serious issue of debate in Frankfurt Rhein-Main. In the Netherlands, emphyteusis and full ownership coexist. In general, actors in area development do not make use of all opportunities both systems offer and municipalities even take financial risk and give incentives for oversupply in the case of Schiphol in the Randstad. In this case these institutional problems are due to economic pressure; Schiphol is an a-typical case in terms of land-supply. Japan's cultural and historic importance of land ownership created large problems in the case of Narita expropriation and land sale in the Rinku Towns. A severe lock-in and financial loss however forced the system to innovate by providing long-term land leases in the latter case.

8.5 Economic institutions: area development

After the land is supplied, area development is the next stage of the development process. The patterns of land use and area development are analysed below in a broader context of economic institutions of market actors. The land supply institutional arrangement however can seriously affect the area development plans. As Segeren *et al.* (2005:126) concluded, there is no legal need for the governmental land supply and there has not been discussion on the relationship of government and businesses in the Netherlands. The institutional arrangement has simply grown in that direction and both local governments and developers are satisfied with the current situation with a founded relationship based on reciprocal trust, not on market prices

with maximum profits. This path dependent common practise, as an institutional arrangement, is however conflicting with policies for higher quality, mixed and intensive land use (*ibid.*). The reasons for these problematic economic institutional arrangements are ranging from public to private and differ from case to case.

First, the current economic institutional arrangement of area development in the Randstad does not support high quality and sustainable use of industrial and office sites. As Segeren, Needham and Groen (2005) found, after land is developed,, the municipality hardly cares about the site. It is easy to move to new sites provided by the local government, which implies a lack of financial incentives for quality investments and maintenance of the current industrial and office sites in the longer run. Public actors as the ministry of Economic Affairs and municipalities themselves then have to rejuvenate the older industrial sites.

In the Schiphol region, long-term site maintenance by the municipalities is a problem due to the fact that public profits of land sale or lease flow into the general reserves of the municipal bank account. SADC however invests some of the profit of land sale in business park management, since there are direct economic interest at stake e.g. in the infrastructure fund and landscaping. Nevertheless, the chosen construction of SADC with a role at the beginning (sharing a land pool) and a role at the end of the development process (the airport-relatedness test and marketing and sales), does not guarantee a continuous interest in increasing the returns from industrial land. In addition, until recently municipalities as Haarlemmermeer allowed building plans that do not match the intended land use quality standards in the time period between the land supply and the land use test, (Interviews Bijvoet 2005, Trommels 2006). SADC is thus not involved in real estate development; the board of commissioners' argument was that real estate development is a specialised market activity. More traditional developers as Mainland and AMB are looking for land to buy in the airport area, develop and sell it to asset managers or end-users.

Mr. Migchelbrink, NIB Capital: *"Although the financial risks of land supply are higher than in real estate development, SADC has never been involved in real estate. Land development balance sheets are considered as a core competence of the local government, and real estate is a market activity. The political risks of involvement in real estate development are too high – imagine the impact of vacant buildings developed by the municipality."*

With hindsight, SADC could have made more money and might have been better in coordinating land use and establishing quality standards if it had been involved in real estate development (Interview Trommels 2006). In the case of Schiphol, one can expect that it is rewarding to keep the land and buildings as assets for continuous profits. In contrast to SADC, project developers as Chipshol and Schiphol Real Estate are involved in the entire development process with continuous cash flow and long-term interest in the sites. The airport puts land on account of the Schiphol Group, real estate development takes place under Schiphol Real Estate and asset management is brought in by investment funds as ACRE and asset companies of the airport. Chipshol similarly bought the land already in the 1980s, could develop offices and warehouses, invests in business park management, and presently benefits from rents.

A second problematic economic institution is the detailed land use plans, which hamper the flexible usage of buildings and land. These land use plans are most detailed in Frankfurt Rhein-Main. The Netherlands developed a tendency towards less detailed land use plans in the last decade (Interview Joosten 2003). However, although economic changes force for institutional adjustment of land use regulations, and sometimes conflict with other land use policies, these rules in the Netherlands have been unchanged for almost 60 years (Needham and Louw 2006). In contrast, the Japanese local land use plans are well-known for their flexibility. More important than mixed and intensive land use, is that rough zoning enables the built-up area to flexibly and smoothly adjust to the changing social and economic realities, and could be used as an inspiration for a more flexible approach towards land use planning in the Netherlands (Chorus 2002).

Third, the type of project developers also contributes to the density, mixture and quality of land use. In the case of Frankfurt, the main economical actor-institutional reason is the strong specialisation in the real estate developers' market. The office and housing markets have different cycles, the structure of financing is different and asset managers minimize risks by specialising. Developers therefore focus on their core competences, although sometimes alliances with other specialists are formed (Interview Joosten 2003).

Mixed, intensive and high quality area development in Japan was made possible by combining a bank, developer, asset manager and end-user in one *keiretsu* business conglomerate, in particular Mori Building, Mitsui-Fudosan and Mitsubishi Estate. Due the problems of bad loans, one of the main causes of economic stand-still in the 1990s, Japan introduced the American system of securitization (*shokenka*), the system of the board and control of the board as well as the structure of less inter-twined business units and cross-company shareholders structures. These trends increase specialisation and might have an impact on the type of area development in the near future, since all business sectors have to become directly profitable (Interview Tada and Yoshimura 2004).

Finally, the economic incentives for sustainable quality, intensity and mixed land use in area development can also conflict with the interests of the end-users. Distribution and warehouse owners as ProLogis and AMB see infrastructure and accommodation in business parks as the main contributors to a more qualitative area development. Despite the profitable logistics businesses, it is considered not the right location for investing in architectural design and mixed land use.[10] Design, facilities and decoration might harm the core business activities of efficient goods transportation that needs single floors, wide roads and free sight. Nevertheless, as land prices rise and goods become less bulky and more specialised, the case of Narita and in particular Hong Kong shows that it is a matter of time before these locations become more intensively used as sustainable real estate.

In sum, economic institutions in area development have a mixed influence. Available incentives and policies for mixed, intensive and quality development of airports as cityports do not always have the intended policy results. One area developer involved in the entire process from land ownership to land management, as found in Anglo-Saxon examples (Ball 2003), seems to be a more promising institutional arrangement for the long-term quality of land development than participation in only one or two stages of the development process and strict planning regulations.

8.6 Economic institutions: construction of public works

The next stage of the area development process (see Figure 8.1) is construction of public works. In the case of the airport as cityport, a particular focus is on the public and public-private actors' cooperation and characteristics of these public works, facilities and infrastructure. Section 8.3 has provided insight in the financial institutions in the case of public works. The high investments found in Japanese public works including airports, combined with the limited economic spin-off of the airports as cityports (chapter 2 and 3), are indicators of poor performance of the actor coalitions. A further analysis of economic institutions of the actors involved in the construction and planning of these public works helps to understand the apparently inefficient institutional arrangements.

Japan as construction state: exclusion in tendering

The public works-centred finance structure is one of the fundamental pillars of the Japanese political-economic system, the modernization of which began before the Second World War and ended in the 1990s era of economic decline. The need for construction in the post-war era forced the Japanese government to increase expenses for public construction works. Parliament effectively passed legislation for more roads, rail, public buildings, ports and airports in the 1960s and 1970s. Special earmarked budgets were appointed and construction corporations were set up: the Urban Development Corporation (1955) and the Japan Highway Public Corporation (1956).

In the beginning, this state development model contributed to economic growth and a strong increase in employment in the construction industry (Sakakibara 2003). While the national budget for construction remained high (over five percent of GDP), the economic effect of public works however substantially diminished.[11] Today, the share of GDP for public works is almost double compared to the US and EU. Former minister of Finance Sakakibara (2003) therefore calls Japan a construction state (*koken kokka*), a system that is in particular of interest to the construction industry and politicians aiming to maintain the established economic institutional arrangement for political reasons. Even though structural reform of the construction sector is one of Prime Minister Koizumi's main policies, political reality has shown that further structural reforms are extremely difficult as long as the party-bureaucracy complex dominates decision-making, argues Sakakibara (*ibid.*). For understanding these public investments and the decreasing economic effects, we have to understand the roles and the positions of the actors involved in detail, best described by McCormack:

"The Ministry of Construction allocates contracts to firms that belong to officially recognized cartels (dango). *These firms are assured regular contracts and do not have to worry about competition. The prices, initially inflated allow generous profit margins, even after the creaming off of a levy, usually between one and three percent, which goes to maintain the political system at local and national levels. In due course, the construction companies provide comfortable sinecures for retiring bureaucrats from the ministry, or help in campaigns to elect such men to the National Diet or Local Assemblies, thereby sealing the magic circle of shared business-bureaucratic-political benefit.* (…) *The system is one of collusion between political bosses, businessmen, bankers, bureaucrats and occasionally gangsters* (yakuza), *who rub shoulders and exchange bundles of cash."* McCormack (1996:33-4)

Politicians, construction industries and bureaucrats were thus bound in an 'Iron Triangle' of benefit and influence (see Figure 8.3). Corruption makes the construction sector uncompetitive and too expensive: constructing a road costs four times less in Germany and nine times less in the US (McCormack 1996). The 'construction state' model largely explains the financial losses made in the public works discussed in chapter 8.3, in particular Kansai International Airport and artificial islands in the Bay of Tokyo. Expenses in public works were even increased by American pressure to stimulate the Japanese domestic economy in the 1990s.

McCormack argues that the role of bureaucrats and politicians is often discussed, but the role of the construction industry itself is seldom addressed. The iron triangle in the 'construction state' however does not explain the state's responsiveness to interest groups and support for small business and other groups. According to Sorensen (2002) new patterns of policy making in the 1970s and 1980s led to a penetration of interest groups into the political-economic system. The LDP's strategy of remaining in power allowed new groups in its 'circles of compensation' (*ibid.*). These circles of compensation include doubtful public works in Japan's periphery to satisfy voters and to give prestige to local LDP politicians. Van Wolferen (2004) sees this incorporation of the enemy or embrace and take-over of enemies' ideas as a fundamental strategy of the Japanese political-bureaucratic coalition to survive and stay in power since the Second World War, with the exception of 1993-1994.

The institutional arrangement of the construction state was efficient in 1950s and 1960s in terms of economic spin-off and public purposes, but the path dependent orientation of the political-economic complex has become more inefficient over time in terms of economic spin-off and state expenses. Public works became goals in themselves, no longer aiming at safety or economic development. Intended policy changes have not been effective in stopping institutional inertia and search for new directions of economic development. The actors involved in *dango* are free-riders of the iron triangle system and have major individual advantages.

In the 2000s, legal rules of collusion and bid-rigging in construction became stricter and are enforced by the Japanese anti-trust board. Open bidding is compulsory, but creates uncertainty and higher costs without a certain return on investment. Despite the legal regulations, it turns out that collusion, bid-rigging and even intimidation are still existing (Asahi Shimbun 11.11. and 30.12.2005). A recent case testing whether not only formal institutions but also informal ones changed in airport area development is the tendering process for Haneda's fourth runway. MLIT opted for an open international bidding process, where only two Japanese consortia applied:

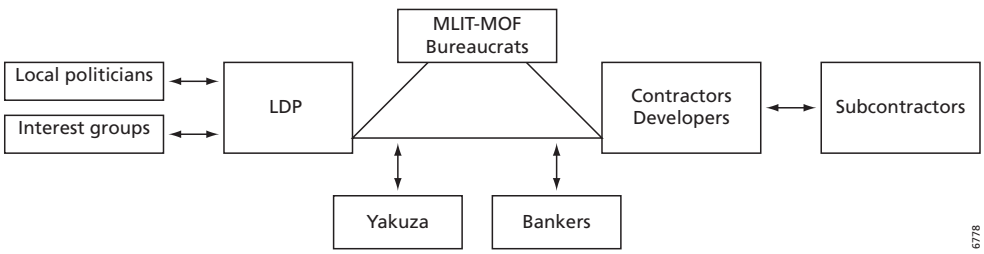

Figure 8.3 The Iron Triangle in the construction state Japan

Mitsubishi Heavy Industries and Kajima.[12] After one group of steel-industry related bidders led by Mitsubishi withdrew suddenly, and only the Kajima consortium related to the concrete-industry was left and therefore automatically won the bidding (Japan Times 13.12.2003). It is unclear why no other companies joined the bidding and why Mitsubishi withdrew. MLIT points out that this is a very complicated project that can only be built by large and specialised constructors. This case illustrates the tendering hurdles for outsiders and the powers involved behind the curtains. Therefore, in airport area development, informal practises remain for the actors involved dominant over the new formal rules of the game.

Collusion and bid-rigging in the Schipholclub

In the Netherlands, governments have a primary responsibility in facilitating infrastructure of roads, water and rails. Furthermore, local governments are close partners in developing public utilities as schools, hospitals and community centres. Until recently, price agreements, work sharing and expenses allowances were common in the construction stage of the development process in the Netherlands. Until 1992, it was common practise and allowed for constructors to collude in dividing work and setting prices for constructing public projects. The European Commission introduced the open internal market and explicitly banned collusion and bid-rigging since 1993, despite Dutch opposition arguing that the harmony in the efficient Dutch construction market would be disturbed.[13]

The main argument for the constructors' collusion is to compensate for the costs made in lost biddings and to stabilise the Dutch construction market. It turned out that the tendering process was institutionalised and continued; illegal price agreements practises and too high prices were paid for public works between 1993-2003 (Tweede Kamer 2003). After the revelations about a former construction company manager in a television documentary, a national parliamentary inquiry committee was installed to investigate collusion in the construction industry.

In short, Dutch construction collusion and bid rigging in the 1990s works as follows (see Figure 8.4). The government needs to build public infrastructure, e.g. a tunnel, bridge or school and have to ask constructors in the EU to tender. The constructors know which constructors are joining the bidding process and can bribe a civil servant picked from a secret list of corrupt Ministry of Transport's Public Works bureaucrats (Tweede Kamer 2003). In exchange for wining and dining, the civil servant informs the constructors what is the maximum prize the Ministry is willing to pay for the project. Then, the constructor whose turn it is to build is selected, the bid is set just below the maximum price, and the difference with the lowest bid is shared amongst the construction companies. The turns and budgets of the constructors are documented in a black book-keeping (see Figure 8.4). Accountants are unaware and ignorant of these black books and the *Nederlandse Mededinging autoriteit* (NMa) anti-trust agency plays a passive role. The effect of the institutionalised practises is a closed construction market with a limited number of players and too high prices, accepted by ignorant and inexpert governments (Tweede Kamer 2003). Although the parliamentary inquiry focused on infrastructure, later it became clear that similar collusion and bid-rigging were common in utility construction as well (Cobouw 2004)

The booming construction market made collusion and bid rigging also possible in the Schiphol area, with the Ministry of Transport, Schiphol Airport and the NS Dutch Railways involved. Here, for institutional reasons we can distinguish the construction projects in the Schiphol area (*Schipholclub*) and the specific case the *Schipholtunnel*.

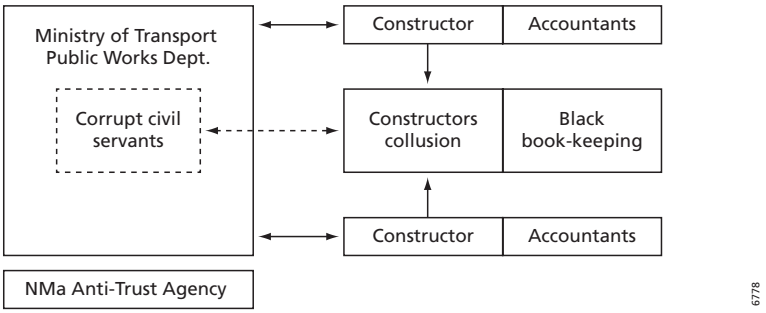

Figure 8.4 Collusion and bid-rigging in Dutch infrastructure and utility construction

First, the *Schipholclub*, also known as *Noord-Holland-8* consisted of eight major national construction companies[14] that divided the Schiphol area development market between them. The Public Works sector of the Ministry of Transport more or less accepted the collusion and considered itself as not able to change market conditions (Tweede Kamer 2003:251). As long as there were no major differences with the expected costs or irregularities in tendering there was no reason to assume illegal collusion of the Schipholclub and there were few signs for this. Furthermore, the Ministry was passive in consulting the NMa, the anti-trust authority whose accountants were naive and passive as well. The commission concluded that regularly there was extra work for the constructors, without a new tendering process, making prices higher than on a competitive market. The Schipholclub agreed to pay a €100 million fine plus settle for €73.5 million with local, regional and national governments (Haarlems Dagblad 5.7.2005). The Schiphol Group also paid for some of the 15 major public works in the airport region and airport facilities, but could not join the public sector settlement. The claim of Schiphol was recently settled with a construction company's donation of €500.000 in the airport charity fund (Parool 8.12.2005).

Second, the characteristics of the Schipholtunnel project are different from the Schipholclub, but were also part of the construction fraud parliamentary research on collusion in the construction industry. In 1989, NS Dutch Railways choose not to tender the Schipholtunnel project but to cooperate with a consortium of constructors, the *Kombinatie Schiphol Spoortunnel* (KSS). At that time, this kind of non-tendering was legal because of time-pressure (Tweede Kamer 2003). KSS, founded by Strukton, a subsidiary corporation of the national railway company NS and BAM (then called HBG), was later joined by Ballast Nedam to construct the Schipholtunnel. The province Noord-Holland never formally acknowledged the participation of Ballast Nedam. The advantage of the chosen construction is less time-loss since there is no bidding process required, the risk is higher prices. However, the project did not lead to higher prices. Quite in contrast, this project had lower costs caused by purchase and efficiency discounts due to the repetitive character of the tunnel construction. These discounts, up to twenty percent, were however kept secret amongst the constructors, leaving the principal unaware. The Ministry of Transport subsidized NS by granting €23 million and successive ministers were naïve in allowing the chosen construction consortium to continue (*ibid*. p.218). When the case became known in the media, the Minister withdrew the subsidy granted, by arguing that NS as principal had failed in its role towards the construction companies. The case was settled by a fine of €4.5

million paid by each constructor; in exchange the constructors would not be placed on a black list of constructors, which would in fact mean a death penalty for the firms involved.

The Dutch Parliamentary committee pleaded not only for a lawsuit and further anti-trust law enforcement, but also for a more rational business culture of relationships between the government and the constructors in the future. The fact that the collusion culture is institutionalised is not only underlined by the pre-consultation rounds in infrastructure, later it turned out to be common practise in utility construction as well and there are other cases found of false invoices.

Although there are no excuses for the illegal cartels of constructors, Van Damme (2002) found that governments are also to blame in the tendering process and put the collusion and bid rigging in a broader perspective. Since 1993 collusion is illegal, but until 2001 the government failed to introduce new tendering regulations. The problem of construction industry tendering fits in a context of difficulties in tendering and auction of the national government in the Netherlands.[15] Without new clear market rules and legal enforcement it is not surprising that institutionalised common practises continue to exist. Path-dependencies are not broken since the established institutional arrangements guarantee expense allowances and regular orders for the constructors involved. On the other hand, principals are not aware or not active in changing the inefficient institutional arrangements into more efficient ones, since they can be free riders at the individual level. If not ignoring or free-riding, it might have taken time to puzzle for suitable new legislation. With the introduction of new formal institutions as new tendering regulation, the challenge is to gradually change the deep-rooted informal institutions of common practises, values and norms as well.

Suspected bribery in the Frankfurt office market

Economic rules of the game in Frankfurt Rhein-Main construction are problematic in different ways then in the Japanese and Dutch cases. The construction industry market in Germany is more open to competition, so market fluctuations hit the market harder from time to time.[16]

The competition in the construction industry in the period of economic stagnation or slow growth forced construction companies to put all effort in obtaining orders, either public or private works and produce at low prices. The imbalance in the construction and development industry can also invite illegal practises, in particular bribery. Since the role of the local government is less active, as yet bribing is limited to illicit commissions paid between private actors. The common pattern in a series of bribing in Frankfurt's office market is shown in Figure 8.5. The

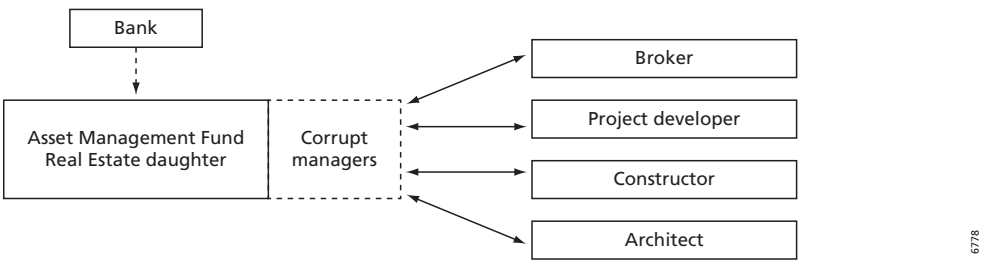

Figure 8.5 Suspected bribery for contracts in Frankfurt's office market

asset management funds, subsidiaries of major banks, have construction, maintenance or renewal orders for the constructors and developers. Architects, brokers, developers or constructors make now the managers of the investment funds and pay illicit commission to convince the managers to let their company do the work. In other cases, these managers are bribed in order to put a completed project in their companies' asset management portfolio.

Germany's formerly largest construction company Philipp Holzmann became involved in a downswing of cartel, bribery and financial scandals in the end of the 1990s. In an U.S. financed public construction project in Cairo, Egypt, illegal cartel formation and price agreements resulted in Holzmann having to pay US$30 million fine to the American anti-trust agency in 2000 (Hüschelrath 2002). This fine contributed to the losses the construction firm already made because of overcapacity in the German market and non-profitable investments in reconstruction projects in former East Germany. The Holzmann group had grown too large and too far away from the core activity of project development, and run into losses (Interview Klärner 2003).

The bankruptcy and selling of valuable Holzmann company subsidiaries to competing construction companies cleared the German market only partly from overcapacity (FAZ 21.3.2002), which became apparent again in another bribery case in Frankfurt's office market more recently. The city of Frankfurt and the Federal ministry of Finance investigate cases of bribery between investment funds and construction companies. The coming-out started with a Deutsche Bank Real Estate manager that is accused of accepting €500.000 from a well-known architect in Frankfurt in return of construction orders (FAZ 5.9.2004). In the mean time, not only managers at Deutsche Bank Real Estate, but also Deutsche Bank Asset Management, a subsidiary of Gothauer Life Insurance, Deka as a daughter of Sparkassen Gruppe, and Jones Lang LaSalle as a broker are suspect of 150 cases of bribing in total (FAZ 14.11.2005). Amongst other, the construction and maintenance works of Trianon, IBC, and Japan Centre skyscrapers are investigated.

In respect to Frankfurt airport area development, the case of the *Holzmann Gelände* is striking. Philipp Holzmann's offices were located between Neu-Isenburg and the airport. Holzmann, Deutsche Bank and DHF agreed upon a sale and lease-back construction long before Holzmann went bankrupt. Therefore, banks currently own the area and plans are made for redevelopment. The first plans for offices, hotels and congress facilities failed. Recently the focus shifted towards intensive airport related logistics on the 53-hectare area (FAZ 15.6.2004). Despite a study on possible increased traffic impact that would not harm the town, Neu-Isenburg opposes such a low-quality redevelopment, afraid that a distribution area harms the image of the town (Interview Schien 2003). Because of this long-term disagreement, no land-use plan has been made yet.

Neither is collusion and bid-rigging unique for the Netherlands and Japan, nor is bribing in Germany. The construction sector, together with vitamins and graphite is topping the list of U.S. anti-trust board fines (see Hüschelrath 2002). Collusion also takes place in highway construction in the US. The case of a French political party involved in Paris school construction is most similar to the Japanese case, where not only civil servants and constructors are involved, but also politicians. The fact that in the Netherlands politicians or political party funding was structurally not involved in construction fraud distinguishes the Dutch cases from the French and Japanese 'triangles'.[17]

In sum, Japan and the Netherlands have in common that the consensus orientation and demand for a stable construction market with continuation of work and revenues might be economic stabilizing factors contributing to the situation. The Dutch case shows institutionalisation of a formerly accepted common practise, which worsened when it became an uncontrolled illegal practise. In the 'construction state' Japan, small improvements after interdiction are seen. The case of Frankfurt's office market bribery shows the unclear effects of changing the institutional arrangement into a more open and competitive market; the nature of the devastating real estate market cycles causes companies to seek stable buying and selling with the help of bribing and shows the disadvantages of that institutional arrangement.

8.7 Economic and financial institutions: airport management

The final stage of the area development process is management. This section primarily focuses on the management of the airport itself, in particular the discussion on airport privatisation. Management of the wider airport area in terms of business park management has been discussed in sections 8.4 and 8.5. As chapter four has shown, airport commercialisation and airport ownership contributes to the economic spin-off of the airport as a cityport in the wider city-region. Airport privatisation can be considered as the next step in the evolutionary process of airport commercialisation. Rapid growth of the aviation sector, large investments and the shift from a public utility to a commercial enterprise are the push factors for the privatisation process, which started in the 1990s. This section discusses the types of privatisation and the advantages and disadvantages from a theoretical perspective, and the practical experiences in the case study areas.

There is a variety of types of privatisation, ranging from full privatisation to partial privatisation. Graham (2001:19) distinguishes five categories: share flotation, trade sale, concession, project finance privatisation and management contract.

In the case of share flotation, the airport company's capital is issued and traded on the stock market. The government will give up (partial) ownership, while transferring risks and effective control to the new shareholders. This type of privatisation will reduce the need for state involvement in the airport financial affairs. A major precondition is that airports make profit so that their shares are attractive for the market. The major case study related examples are Germany's public offering of 29% of Fraport shares in 2001, and close to 49% in 2006. In the Netherlands, the national government intends to offer a minority share of 49% of Schiphol Group shares to the market (Ministry of Transport and Water Management 2003). Japanese airports vary from case to case. Haneda remains publicly owned. The Japanese national government is privatising Narita International Airport with a public offering of all shares from 2007.

The second type of privatisation, trade sale, is closely related to share floatation. Parts of the airport are sold to a trade partner or consortium of investors. Trade partners are mainly strategic partners such as established airport operators. In the case studies, trade sale practices are also apparent. A consortium of constructor Hochtief and Air Rianta own 50% of Düsseldorf's airport and 36% of Hamburg's airport. Fraport bought 30% of Hanover airport shares. Kansai International Airport has a large number of very small shareholders, in particular construction

firms (Bongenaar 2001). In the USA, private ownership of airports is common, with a major role played by airlines in dedicated terminals. De Neufville however recommends local and regional authorities to keep a majority of ownership in public hands because of the public interest of the airport as infrastructure (De Neufville 1999).

Third, in the case of concessions, an airport management company or consortium will purchase a concession or lease to operate the airport for 20 to 30 years. This type of privatisation is mainly found in Latin-America, where amongst others TBI and Schiphol Group have concessions. The concessionaires take full economic risk and responsibility for operations and investments, but the government maintains a greater degree of control with the later return of the airport.

The fourth type of privatisation is project finance privatisation. In this scenario, a company will build, operate and transfer the facilities to the government owner.[18] With the increasing importance of home carriers and airlines alliances with dedicated terminals, project finance can become an attractive option for airline alliances. In the case studies project finance constructions are also common. Fraport financed the third terminal of Manila for 25 years, where Schiphol Group invested in the JFK arrivals terminal for twenty years (Graham 2001).

The last and least radical form of privatisation is management contracts. The government remains owner of the airport and investor, where the contractor manages the airport and pays a management fee to the government. This can be more politically acceptable and is applied in several African airports and island states.

Although airport privatisation discussions of advantages and disadvantages should be seen in a regional embeddedness context, theoretical arguments are well known and discussed in depth (see e.g. Jackson and Price 1994). Graham (2001:12) summarizes the advantages and disadvantages as:

"Privatisation will reduce the need for public sector investment and free access to commercial markets. It will reduce government control and may increase an organization's ability to diversify. It may bring about improved efficiency, greater competition, and wide share ownership. On the other hand, it may create a private monopoly with overcharges, delivers poor standards of service, invests inadequately and gives insufficient consideration of externalities such as controlling environmental impacts and maintaining social justice. Less favourable employment conditions may be adopted and redundancies may occur."

Despite future share floatation in the case of Narita, and improved economic efficiencies, the Japanese Ministry of Transport is not losing control over airport development issues. MLIT is creditor of Narita's €5,2 billion running dept and with that position can influence Narita's development (NAA 2003). In the case of Haneda, MLIT uses the exception status of the airport amongst the international airports of category A as the main argument not to privatise Asia's largest and very profitable airport. Haneda is an entire government investment and MLIT worries that privatisation will lead the income flow towards commercial actor's pockets. Even if privatisation generates more income in total for all, MLIT still does not consider it her task to generate more income revenues (Interview Obuchi and Kuniwake 2004).

An often-stated argument for not privatising Haneda is the many jobs involved in developing and managing Haneda at MLIT. Privatisation might lead to a direct loss of jobs

at this ministry. Perverse incentives come here furthermore in play by the legal obligation that MLIT bureaucrats are in charge of designing airside infrastructure. This can not be outsourced to the final constructors and leads to a situation of many semi-permanent consultants working at the ministry.[19]

In 1995, discussion on privatising Schiphol started in Dutch parliament within a broader policy context of railway and energy sector privatisation. This led to the cabinet's intention for minority share floatation. The Dutch Social Democrats withdrew its support in 2000 in the light of other failing or struggling privatisation processes. [20] In 2004 the cabinet decided a minority stock exchange quotation and the plans have recently been discussed in parliament that has the final say. The main arguments for the cabinet's privatisation plans are the clear role differentiation of the government as shareholder, controller and legislator on the one hand and increased airport competition on the other hand (Ministry of Transport and Water Management 2003). In the Netherlands, opponents of privatisation fear that share floatation will lead to fewer grips on the airport in terms of environmental policies, land use and coordination. Quite in contrast, governmental intervention remains important and a privatised airport has to deal with even more regulations and higher transparency standards required from a private company with limited liability (CPB 2000).

In airport area planning, privatisation of airports is an important tool for making economic institutions more efficient. Since privatisation started, Narita's airport authority could cut costs for operation by ten percent and reduce expected costs for constructing terminals by seven percent (Interview Namekata 2004). The applied Toyota model, procurement of cheaper subcontractors, and cheaper materials from China are the main reasons that construction costs for Chubu International Airport of €750 million could be reduced with at least one sixth (Interview Ueda and Tsuchiya 2004). Financial independence forces airport authorities to spread risk and to consider other economic activities than the core activity of managing the airport. For example, Narita is discussing a managing role for cargo companies in airport cargo handling.

The argument of economic efficiency can be applied in the case of Schiphol only to a limited extent. Due to competition airlines cut costs, but if Schiphol's costs rise it simply asks higher landing fees. Privatisation might force the airport to become more sensitive of the carriers demands. Nevertheless, as chapter 4 has shown, Schiphol is already one of the most efficient airports in the world.

The second argument for privatisation is related to investment opportunities of international corporations in privatised airports. According to the Transport Minister of State it is a well-known secret that the Schiphol government-owned company could not buy the government-owned company of Zaventhem airport near Brussels within a liberalised European market (HFD 6.5.2005). On the other hand, Aéroports de Paris is a state owned company and is successful in buying (parts of) other airports all over the world (Interview Veldman 2005). Recently however, French national government decided to list a minority share of stocks at the Paris stock exchange.

According to Graham (2001), the third argument for privatising airports after improved efficiency and increased competition is wide share ownership. In that case, actors ranging from interested

individuals to pension funds in the city-region can buy airport shares. Individuals affected by the airport can get involved in and co-determine the airport development direction.

In the case of Kansai airport, local constructors are pushing for runway expansion and new contracts, by using their position as shareholders. For privatising Schiphol, a plan to sell to pension funds and other institutional asset managers is under discussion as a compromise (Ministry of Finance 2006) in order to reduce concerns over the short-term orientation of private share holders. In order to avoid shortsightedness, CPB (2000) recommends specific and temporarily concessions and further regulation. The Advisory Council of the Ministry of Transport prefers a model that does not lead to personal benefit of the current Schiphol management (Raad V&W 2003).[21]

No matter whether wide or limited share ownership is chosen, it is argued that privatisation can increase access to the capital market. This access is a major argument for share flotation in Frankfurt and Schiphol. In Frankfurt, parts of the airport were brought to the stock exchange in the 1990s with limited effect. The main reason for Frankfurt's stock quotation was raising funds for investments in airport expansion. Airport privatisation did not improve of worsen regional embeddedness; local opposition is still contesting dominant economic interests of Frankfurt Airport.

The access to cheap loans is used as an argument for privatising Schiphol. According to Schiphol, large investments are planned for future runways and a new terminal at the northwest side of Schiphol. Insiders however argue that the current Standard and Poor's AA creditworthiness rating and the public ownership guarantee low rents and sufficient access to capital for investment (Interviews Migchelbrink 2005 and Smilde 2005).

A final argument for privatisation used by both economists and environmentalists is that Schiphol is treated as a private company with all the conditions, restrictions and accountability this entails (Nyfer 1999, CPB 2000). Positions of the actors become clearer in the case of a private company with limited liability (BV) and only corporate targets. Furthermore, the government has a controlling function and not a developing one and the parliament is not constantly involved in corporate business management:

"Parliament is not the right place to decide upon the number of passengers using the airport, the direction of take-offs and landing and the exact number of decibels produced by every flight." (Nyfer 1999:31)

The major argument against privatisation is the monopoly position of airports. A shift from a public monopoly to a private monopoly can affect the regional and institutional embeddedness of the airport in the city-region. A private monopoly is considered worse than a public monopoly. However, without clear indications it is hoped that the cooperation between airport coalition and environmental coalition in the case of Narita airport privatisation might improve. The major cause is the clearer role differentiation of the owner, controller and legislator, as well as the need for a private company to cooperate with its neighbours.

Currently, actors that are not part of the airport development coalition describe Schiphol Group as "arrogant monopoly" due to its institutionalised structure and management. The question is whether this situation will improve or worsen with privatisation. Schiphol is however not the only monopoly in airport area development. It is said that the aviation sector is managed

by five monopolies: KLM as dominant user of the airport, Schiphol, air traffic controllers of LVNL, and the ministries of transport and environment (VROM) (Interview Bussink 2005). Ministries are held responsible in parliament. KLM and Schiphol are held accountable by the shareholders, for KLM in public, and Schiphol behind closed doors. LVNL air traffic controllers are a public entity that is not held accountable to the outside world; despite the major role LVNL plays in managing airport capacity. It is very difficult to change the monopolistic institutional arrangements, even with privatisation or an EU instigated level playing field, since there are always dominant actors involved (Niemeier 2002).[22]

In summary, airport privatisation has many appearances and both advantages and disadvantages. In the case of Narita and Chubu, privatisation led to greater efficiency and breakdowns of monopolies. Frankfurt could access additional financing for investing in a new terminal building. In the case of Schiphol privatisation is less urgent as the airport is already efficient and competes internationally, but insiders agree that a clearer role differentiation between airport and governments should be one of the main reasons. In the end it is in particular the position of the airport as a regional monopoly that is the main cause of inward looking behaviour.

8.8 Conclusion

In this chapter, economic and financial institutional arrangements of the case studies airport area development were discussed in the sections on land supply, the development and construction process of infrastructure and buildings, public works and the risks of developing the airport as a cityport, and finally airport management. We addressed for the case study areas, the research question considering the economic and financial rules that co-determine the playing field, actor behaviour and actor coalitions in the development of airports as cityports

The decentralised fiscal structures in Frankfurt Rhein-Main forces local communities to compete on corporate tax. Despite the sense of urgency, actors are not able to agree on new institutional arrangements for dealing with tax competition in relation to regional financial redistribution. The sunk costs for new solutions (towns might lose their competitive advantage), uncertainty of new solutions (effectiveness of equal corporate tax is not yet proven and an incentive for competition is taken away) and in particular political conflict (caused by past experiences and city versus suburbs) lead to a lock-in situation in terms of financial institutions.

Fiscal competition is absent in the centralised fiscal structure of the Tokyo Metropolitan Area and the Randstad. Although regions in Japan do not compete on taxes, they do compete on public works to attract businesses. Fiscal and political centralisation created subsidy dependency and investments in public works were inefficient in the 1970s and 1980s. In the case of the Randstad, competition between municipalities is less developed than in Frankfurt Rhein-Main and the Tokyo Metropolitan Area because a general grant from the Municipal fund guarantees both income and free decision on spending. On the other hand, this relative independence lack of local competition is one of the explanations why towns in the Schiphol area have a less profound social-economic profile.

Instead of tax advantages or public works, the local governments in the Randstad improve their competitiveness and investment climate with an active role in area development. In particular

land supply is an institutionalised but not legally required governmental task. Developers appreciate the cooperation with the governmental landowners, as they take on less financial risk. Municipal land agencies can generate some extra income (or losses) by taking these financial risks. Municipalities therefore seem to focus more on sufficient land supply than on directly attracting jobs and businesses. In the Schiphol area, regional cooperation has been an unique and effective tool for coordinated area development in the airport vicinity. In particular cooperation with the market-oriented SADC common land pool is widely appreciated by end-users, developers and asset managers. In economic terms the area development around Schiphol is successful, but there are some negative effects in institutional terms: intervention in the market balance of supply and demand, and less incentives for mixed and intensive land use since new sites are already available and no continuous returns are generated for the industrial and office sites. These planning policies contribute to the variety of office and industrial sites in the airport area, but the airport area does not become as colourful as Frankfurt Rhein-Main, were market pressure and infrastructure force locations to specialise.

The Randstad model stands in contrast to the land supply and property development model applied in the airport vicinity in Rhein-Main and Tokyo. The latter cases have the advantage of a larger domestic market, with a wider variety of developers able and willing to develop large-scale projects as airport islands and the AIRRAIL Center. A larger market in Japan however does not mean a more open market. The major privileged developers and landowners stay in power positions and are part of an iron triangle. Sunk costs of change, uncertainty from opening the market to competition and political conflict are the main reasons for the institutional lock-in. This is partly caused by the fact that governments do not make clear bidding rules and/or are able to enforce and inspect these rules. After collusion became illegal in the 1990s, institutionalised practises continued in both the Dutch and Japanese construction industry. As similar bid-rigging and collusion is regularly fined by anti-trust boards, one can ponder if collusion practices are in the nature of the construction industry.

Recent tendering cases show how locked-in and path dependent the bidding process is, making the institutional arrangement hard to change, in particular in Japan. It is closely related to the socio-cultural institutions ingrained in the corporatist model, where these practises are maybe longer tolerated then in the U.S. or France, with strict protection against business groups' interests. In Japanese planning institutions, path dependency turns out be strong – as can also be seen in the discussion on privatising Haneda airport and constructing the second runway of Kansai International Airport – and changes can only by made in new projects – for example the new airport of Nagoya. Although most interviewees see the revolutionary experiment with the new airport in Nagoya as an exception, a success might lead to a new common practise, where airports are more embedded in the region and contribute to competitiveness of the city-region.

The difficulties of changing the institutional arrangements are also evident in the section on the airport monopoly in the region. Arrogance, inefficiency and exclusion of actors are characteristics of a monopoly, which cooperates with other monopolists running the aviation sector in the EU. These turn out to be more crucial issues than the current political debate of privatising the airport. A greater challenge is thus a EU-wide level playing field of competing airports. Many actors are worried that a privatised monopoly is worse than a public monopoly, but it is unsure if selling the shares to private shareholders really makes much difference. The great economic

efficiency improvements obtained in Narita and Centrair cannot be expected in the airports in Amsterdam and Frankfurt, since they already function as efficient private companies in practice. It can however lead to clearer role differentiation between the government as supervisor and the airport as operator. For Haneda, airport privatisation can however contribute to efficiency in airport management, both at the airport as at MLIT.

In terms of economic and financial institutional arrangements, the limited number of players involved due to a lack of openness of the market and exclusion from actor coalitions and the undefined roles of the actors is a returning theme. This was found not only in the analysis of airport vicinity area development, but also in the development and construction process and the institutional nature of large infrastructure projects. Furthermore, unclear rules set (or not set) by the government are a returning institutional problem. The next chapter on institutions of governance and legal institutions will discuss this in dept.

Notes

1 Ogawa (2002) studied the efficiency of tax redistribution, and concluded that in the 1980s metropolitan areas were overprovided, and after 1990 rural prefectures were overprovided with grants. After 1993, the optimal transfer should have been in favour of the metropolitan prefectures again.

2 Free pubic transportation, personal grants and kinder gardens are offered to managers if they decide to shift their businesses to Germany's capital. The result is a move of the European headquarters of Axel Springer publishers, Universal Music, MTV and Coca Cola to Berlin, indirectly financed by the richer states in southern Germany (der Spiegel 24.11.2003).

3 For instance, Schiphol is willing to contribute €30 million to the bypassing of the A9 at Badhoevedorp and contributed to the costs of building the tunnel of the new A5 motorway (Interview Mast and Schaafsma 2005).

4 According to Japanese Airport Development Law, available at: http://nippon.zaidan.info/seikabutsu/1996/00607/mokuji.htm [May 2006]

5 Currently, Kansai and Chubu International Airports have Development Bank of Japan loans. Tokyo's airports are financially strong enough to invest themselves (Interview Oki 2004). CJIAC is a financially healthy company that is expected to return the loans with interest. KIX is an exception for DBJ, since there will always be additional investments of the government required. The political and local pressure for a second runway in Kansai International Airport is a political problem; the profitability is questionable. Therefore, DBJ proposes national governmental to contract a loans to locals, by-passing DBJ, in order to make the investments possible (*ibid.*).

6 In Private Finance Initiative, 89% of the projects were delivered on time or early, 80% of the projects came in on budget compared to projects paid for the conventional way only 17% did (Economist 18.12.2004). Currently, in Japan there are few PFI projects; the national projects as Kansai International Airport are national projects in a special purpose enterprise (SPE), not PFI (Interview Oki 2004).

7 The share of income can show the financial dependence from the land market in suburban new towns as Houten (50%) and medium-sized cities as Amersfoort (30%, Kolpron Consultants 2001).

8 SADC was set up to coordinate land positions and land use in the airport area, in order to avoid a tragedy of the commons and aim for a higher quality of development. The idea of the municipalities was, that a common land pool would be better able to decide which project developers should enter and which land uses

are allowed. This is in order to avoid office development as in Schiphol South-east, where local governments intended only industrial land. At the time of establishing SADC however, land positions where already taken by amongst others Chipshol and Smits Bouwbedrijven. These land owners sold the former agricultural land as industrial land to SADC, including profits (Interview Trommels 2006). The supply of land on the market, as a result of the system, is increasingly regulated by regional cooperation of local governments. The question raised, whether this lead to unacceptable public monopolies in land use. The anti-trust board NMa has explored a few situations of cooperation and approved the supply and price agreements of local governments and abuse of the market monopoly is rarely found.

9 The source is an interview with Tanizami and Kumuda of Prologis Japan in 2004. The lack of industrial locations in the Schiphol region however might be solved, since in recent plans the capacity for the next 35 years is assured (Interview Peters 2005).

10 Interviews ProLogis (Tanizami and Kumuda 2004 and Peters 2005), and AMB (Wade 2005)

11 Government spending on public works was 5.73% of GDP in 1997 and 5.29% of GDP in 1975 (Sakakibara 2003). For instance, for continuously developing northern Hokkaido, one tenth of labour force works in the construction industry. The economic multiplier coefficient of 0.247 in 1950s went down to 0.094 in 1975, and 0.059 in the beginning of the 1990s (*ibid.*).

12 For the first time in airport airside construction, an open international bidding process was held. MLIT learned from previous projects not only to consider the costs of construction, but also to include to costs of maintenance, a major problem at Kansai International Airport.

13 Letter from former prime-minister R. Lubbers to European Commission chairman J. Delors, dd. 31-1-1992, available at www.cobouw.nl/file/pdf/briefi.htm [access 18-8-2005]

14 The Schipholclub consisted of Ballast-Nedam, KWS, Heijmans, Ooms, BAM, Koop Tjuchem, HBM and Dura Vermeer. Amongst various incidents, at December 17, 2004 it was proven that civil servants accepted a 'jubilee reception' from the constructors' coalition illegally for building the Zuidtangent (Cobouw 2004).

15 Former secretary-General of Economic Affairs Geelhoed considers the problems with auction and tendering as the main problem of the second Cabinet Kok (Volkskrant 30.4.2002). Van Damme (2002) discusses the problems in the auction of radio, UMTS, and cell-phone frequencies and petrol stations.

16 For instance, De Vries (2004) shows that the asphalt tendering market is more competitive in Nordrhein-Westfalen then in the Netherlands.

17 This is not to say that construction companies in the Netherlands are not involved in politics at all. The right-wing LPF party is financed by construction companies, amongst others Ed Maas (NRC-Handelsblad 27.07.2002)

18 The most common type is build-operate-transfer (BOT); other methods are build-transfer (BT), build-rent-transfer (BRT) or design-construct-manage-finance (DCMF, Graham 2001).

19 Interviews are the main source, with anonymous citations.

20 One of the arguments against privatising the airport that is still a matter of debate, is the problematic privatisations of the Dutch railways and energy suppliers. Already in 2000 the CPB concludes that this kind of comparison is irrelevant, since Schiphol has more competition than the railways, the quality of the network is for the airport of great importance and commercial and public interests of the airport are more parallel than in the case of the railways privatisation (CPB 2000:52). Nevertheless, the transportation minister shows understanding to the cold feet and argues to have learned from the failures in the past (Het Financiële Dagblad 6-4-2005).

21 The interviewees are not worried about shortsightedness, since the airport management will always primarily focus on the core of business, operating the airport.

22 According to Mr. Bussink (Netherlands Ministry of Transport) and Mr. Veldman (Stratagem), for instance if Schiphol becomes too expensive, KLM might move to Paris. However when Paris-Charles de Gaulle becomes too expensive, Air France will lobby and push politicians in Paris to change landing fees. Monopolies and dominances will continue to exist, even in the case of a EU level playing field.