

10 Conclusions and institutional learning

10.1 Introduction

At the turn of the century, traditional downtowns are no longer the only centres of economic activity. Centres develop where infrastructure, people and economic activities meet: they are introduced as cityports. Airports are rapidly developing in terms of passengers and therefore likely to become more important nodes and part of the entire city-region fabric. The focus here is on the airport and the vicinity of the airport to limit the scope of the research, but other types of centres can also be distinguished. Spatial and economic developments are rapid in general, and established actors' institutions are expected to catch up and adjust to new realities. Actors are the players that set the playing field of the urban development arena and form coalitions in order to develop the wider airport area as a cityport. Jointly the actors set the rules of this 'game', with suitable and less suitable institutions as a result. Actors in the case studies can learn from themselves and from each other in the fitness of these institutional arrangements.

This dissertation discussed the position of the airport as a cityport in the city-region. Out of the three research questions, two have been answered thus far. The first question refers to the spatial-economic position and the second one refers to the institutional position of the airport as a cityport in the city-region. This chapter summarises the conclusions of the steps taken and goes beyond the conclusions drawn by each chapter. Finally, the third research question will be addressed: which institutional changes are required to adjust to the changed spatial-economic realities? These lessons can only be drawn after thorough analysis and reflection, and institutional learning fits in the broader theoretical reflection on meaning and sense making of international comparisons of institutional arrangements. Therefore, first we redraw the conclusions of the case study analysis. This provides the full answer to the main research question:

What are the spatial-economic and institutional positions of airports as cityports in the city-region, and if necessary, which institutional changes are required to adjust to the changed spatial-economic realities?

1. *What is the spatial-economic position of airports as cityports in the city-region?*
2. *What is the institutional position of airports as cityports in the city-region?*
3. *If necessary, which institutional changes are required to adjust to the changed spatial-economic realities?*

These research questions are defined and split up in sub-questions in order to answer them in a conscientious and eclectic manner. Section 10.2 answers the first research question that covers the spatial-economic analysis of chapters 2, 3 and 4. This focuses first on the development and integration of the city-region entity that competes with other city-regions in the globalizing world. Second, the spatial development, in particular cityport development, is framed for the case studies. Finally, a narrower focus is on the airport as a particular kind of cityport.

Section 10.3 answers the second research question, covering the institutional analysis of chapters 5-9. First, actors are introduced in the framework of the actor coalitions they are in. In particular this focuses on the anti-growth and growth coalitions concerned both on the level of the airport and the airport region. Then, conclusions are drawn on the socio-cultural, financial, economic, governance and legal institutional frameworks that determine the actors' and actor coalitions' playing field.

Section 10.4 discusses which institutional changes are necessary and where institutional learning can take place for the airport as a cityport in the city-region, and thus answer the third research question. Institutional learning for actors both within and between the case studies is discussed. Also, the possibilities and limitations of institutional learning and lesson drawing are put forward. Paragraph 10.5 reflects on these possibilities and limitations of the case studies themselves, and reflects on the theoretical framework, which was applied for the analysis. Required and recommended further research on the discussed issues sets the future research agenda here.

10.2 The spatial-economic position of the airport as cityport in the city-region

1. What is the spatial-economic position of the airport as a cityport in the city-region?

1a. What is the economic performance and regional embeddedness of the city-regions, and to what extent does this match the development of globalizing city-region?

Dynamic metropolitan economies such as London and Tokyo are regularly able to reinvent their economic sectors and make them more competitive and diverse. Other regions such as Walloon and the Ruhr area get stuck in a path-dependent mindset for a longer time; once their economic sectors were highly competitive, but they are so no longer, and change is hard. In order to come to a dynamic and diverse metropolitan economy, the city-region needs continuous economic integration enforced by increase of scale, caused by decreasing transportation- and information costs. In the competitive city-region an attractive urban climate with creative and motivated employees and business managers are therefore essential.

This integration towards a metropolitan economy is a challenge for polycentric city-regions in particular. Competition between city-regions is however no longer limited to the global cities such as Tokyo alone. Increasingly, medium-sized polycentric city-regions as Frankfurt Rhein-Main and Randstad are competing on a global level. This competition is not a zero-sum game but a matter of comparative advantages. Different city-regions specialise and develop in a particular direction. Therein, not only the institutional arrangements of the *liberal market economies* of the U.S., Australia or the U.K are successful or dominant. *Coordinated market economies* such as those of Japan, Germany and the Netherlands have a long track record of successfully adjusting to new economic realities in a later stage. This coordinated setting favours cooperation between specific economic sectors and governments that require a specific regional embeddedness. As the city-region is becoming the appropriate scale for social and economic activities, regional actors are becoming relevant for improving this regional embeddedness and enhancing the competitiveness of the city-region.

In order to understand the performance and roots of the institutional arrangements in the city-region's economy, a benchmark for the case studies Randstad, Frankfurt Rhein-Main and Tokyo Metropolitan Area is conducted. The benchmark consists of two parts: (1) measuring *economic performance*, referring to past and present, and (2) estimating the *investment climate* and regional embeddedness, indicating future developments in the city-region.

In terms of economic performance all case study city-regions have higher growth rates and production levels than their size and position in the national economies would suggest. This can be explained by the importance of the service sector. The Randstad is successful in transport, attracting European headquarters, financial and business services. Frankfurt Rhein-Main's excellence is found in transport, international banking and conventions. Tokyo became the international hub for Japan, and is a home to many global corporate headquarters, banks, and innovative business services. Furthermore, Tokyo and Frankfurt still have a substantial share of high-tech manufacturing in economy. It is obvious that Tokyo plays in a higher league than Frankfurt Rhein-Main and Randstad, with more economic command functions and a larger domestic market. The structure of the economic sector and performance in Tokyo and subsequently Frankfurt Rhein-Main are more differentiated than in the Randstad, which can be explained respectively by the large consumer market and the regional (tax) competition.

In the near future, the case study city-regions will continue to grow economically and demographically in contrast to the decreasing development speed of their hinterland. The main reason here is that the city-regions have an attractive labour market and urban qualities. This is not limited to the traditional downtown centres of the city-region, but increasingly includes polycentric regions with a variety of new working and living places.

Tokyo's competitive qualities are not only the labour market, but also high-quality consumers demand and rail infrastructure. Lack of access to the market for newcomers and deficiencies in airport infrastructure are seen as less attractive elements of the Tokyo business environment. In contrast, Rhein-Main's and Randstad's competitive edges are airport infrastructure and market openness, including financial markets. In the European cases studies the quality and attitude of labour and housing is more problematic than in Tokyo. In Frankfurt Rhein-Main the tax climate is considered as problem number one, in particular competition for corporate tax between municipalities.

The ability and ambition to create actor coalitions that 'boost' the city-region's competitiveness in relation to other city-regions vary between the cases. In Tokyo, not international competition, but the threat to relocate the government outside Tokyo, including the important political-bureaucratic complex, was a major reason for the Tokyo Metropolitan Government to develop strategic urban projects in the Tokyo bay area and to continue internationalisation. More recently, large project developers are planning to assure Tokyo's economic position with new high-quality cityport redevelopment projects in Tokyo. In Frankfurt Rhein-Main, economic agents and media are leading in establishing a regional identity, economic competitiveness, and a public transport network all of which contribute to a further integration of the city-region – wrangling governments that could not agree on common strategies for city-region building. In the Randstad however, even the name 'Randstad' itself is not widely accepted for the city-region. First of all, there is a dominant awareness that daily life of most citizens takes place on a lower spatial scale, a north wing and a south wing in the Randstad. Furthermore, a metropolitan

ambition raises fear of metropolitan problems of poverty and congestion, super-urban blocks, and a potentially too powerful city-region that covers almost half of the country.

1b. Which cityports can be distinguished inside the city-region and to what extent do these cityports contribute to the economic development of the city-region?

Before the spatial-economic position of airports in the city-region is fully understood, understanding the internal geography of the city-region is quintessential. In this internal geography of the city-region different old and new centres are found. Bertolini's (2005) node-and-place model makes us aware of the important infrastructural and urban dimensions. The dimension of infrastructure consists of the connections and directions of different modes of transport, key-assets of the region that co-determine investments in urban projects. The urban dimension measures the number of inhabitants and jobs that determine the critical mass in the city-region. In addition, here we emphasize the importance of the (kind of) economic activities as a critical factor in the process of new urban centre formations in the polycentric city-region. Since space productivity per square kilometre on the local level could not be measured in the case studies, rent levels are taken as the indicator for the economic dimension of the cityport. These *economic, urban and infrastructure dimensions* taken together represent the cityport model for analysing the internal geography of the city-region.

The urban centres in the polycentric city-regions vary in nature and size and can be distinguished in *types of cityports*. Hall's (2001) categorization of traditional downtown centres, new business centres, internal edge cities, external edge cities, specialised subcentres and remote edge cities is used to understand spatial-economic developments within the city-regions that is not limited to the traditional centres anymore, but is becoming increasingly polycentric in shape. Analysis of cityports in Randstad, Frankfurt Rhein-Main and Tokyo Metropolitan Area has shown that a greater differentiation of cityport types is necessary.

On the one hand, transport, auction trade, and R&D-intensive manufacturing can still be highly productive if these urban concentrations are added to the cityport model as greenports, cargo centres and R&D centres. In the Rhein-Main area, R&D intensive manufacturing sites are even the areas with the highest productivity levels. In the Randstad, air transport at Schiphol airport and sea transport at the harbour of Rotterdam are even considered the 'mainports' of the national economy. On the other hand, in highly urbanised city-regions such as Tokyo, subcentres specialise more and more and these specialised subcentres can be further differentiated. We distinguish leisure centres (Disney resort, Odaiba), commercial centres (Shibuya, Shinjuku), culture centres (Ueno, Asakusa) and science cities (Machida, Tsukuba) as well.

Last but not least, airport areas are becoming new centres in the internal geography (of city-regions) and are added as a particular kind of cityports. Schiphol attracts all kind of economic activities to the airport and the city of Amsterdam and develops itself as a *monocentric airport city*. Strict planning for a location in the city's forest, a well-developed regional infrastructure network, and urban specialisation in the airport area, make Frankfurt Airport a *polycentric airport city*. Regarding Tokyo's airport a spatial-economic development towards a cityport was not found. Haneda is an *isolated airport island* in the Bay of Tokyo surrounded by water and older manufacturing sites in Kawasaki and Ota, with few urban developments. Narita did attract

economic development, but this did not lead to cityport development: it can best be seen as a *sprawled aerotropolis* in Tokyo's countryside.

One of the findings is that the case studies vary strongly in the domains of infrastructure accessibility, urban densities and rent levels. In general, better accessible locations require higher rents and (therefore) higher productivity levels. In Tokyo and Frankfurt Rhein-Main the traditional downtown centres are still the best accessible locations with the highest rents. However, airport areas are catching up with top rent levels and accessibility, with the highest office rents in the Randstad paid at Schiphol. Despite the limited economic activities and remoteness of Tokyo's airports, rents are still relatively high compared with the best downtown office locations.

Accessibility of locations in the Randstad varies more than in Tokyo and Frankfurt Rhein-Main. The Tokyo Station area and Frankfurt's downtown have the best accessibility, and many locations are well connected due to the excellent rail infrastructure networks. The cityports in the Randstad however have less infrastructural access, which can partly be explained by the planned nature of their centres rather than the organic development of accessible locations. It is however surprising that this does not lead to greater, but to smaller regional differences in rent levels and labour productivity compared to the other case studies. This implies that cityports in the Randstad have less of an urban orientation with higher car dependence, and less willingness to pay for a highbrow urban working environment.

1c. What is the spatial-economic position of airports as a type of cityport in the city-region?

After understanding the development of cityports in the globalizing city-regions, the spatial-economic position of the airport as a particular kind of cityport can be analysed. The airport as a cityport can be understood by analysing the *airside*, *airport*, *landside*, and *airport region*.

In terms of airside development, the case studies vary in type: Schiphol, Frankfurt, and Haneda are major hub airports where many passengers transfer flights. Haneda is a hub for domestic flights in Japan, and Schiphol and Frankfurt are intercontinental hubs. Narita is an origin-destination airport for international travellers heading for Tokyo, with few transfers. In general, Japanese airports are too expensive, inward-oriented and lack distinct airport strategies to compete with hubs such as the new international airport cathedrals built in East Asia, in particular in Shanghai, Seoul and Hong Kong.

On the landside of the airport, international airports in Japan are future-oriented since creating airport islands on remote locations solves noise- and safety problems. It does however cause financial burdens and airport islands have more difficulties to generate economic spin-off than airports that are located in the heart of metropolitan areas, where proximity is an essential competitive advantage, as (is the case) in Frankfurt and Schiphol.

Along with airline competition, airports are increasingly challenged to compete in commercialisation, globalisation and privatisation. As a result, ownership structures are changing from public to private and airports are becoming more dependent on non-aviation revenues, in particular real estate, parking and business services.

The spin-off of the airport as a generator of economic activities and jobs in the wider airport region varies among the cases. In general, labour productivity in liberal market economies' airports is higher than in the coordinated market economies of the case studies, as a result of the market specialisation and subcontracting. Higher productivity can however also indicate less jobs and less regional embeddedness, but not necessarily so. The coordinated market economy cases show mixed results.

After a period of protecting the site from urbanisation, Schiphol and surrounding municipalities started to exploit the airport area as a pioneer in the 1980s, despite public ownership. The future thread of Schiphol is the classical problem of airport exploitation of the *monocentric airport city* that can be ruined by her own success. First, the airport needs a second terminal and therefore can become less efficient and more expensive. Second, traffic jams are the result of further urbanisation of the airport area.

Both Frankfurt and Schiphol generate high numbers of jobs near the airport and in the wider region. Political battles lead to trade-offs between the airport and its surrounding in Frankfurt Rhein-Main. The airport continues to grow, but forests surrounding the airport limit further monocentric urbanisation, supported by regional rail- and road infrastructure networks and competition between towns and cities. The airport area of Frankfurt can therefore best be described as a *polycentric airport city*.

Violent opposition led to the inability to use expropriation, and the consequent trauma created a precedent in Japan: since the withdrawal of the expropriation commission, the instrument is not being used and the problem was avoided by building airports in sea, where no expropriation was needed. Although riots and political clashes were at stake at Narita, no spatial-economic trade-off as in Frankfurt could be generated. The Narita area could economically develop, but the lack of planning led to a *sprawled aerotropolis* of warehouses and hotels in the vicinity of the airport. Furthermore, the government's ambition of developing manufacturing sites rather than distribution sites was a main cause; so that the few planned sites remained vacant.

Haneda generates few jobs and has few economic exchanges with bordering cities of the airport island. Although its nature as a domestic airport is an important explanatory factor in this, one would expect more activities near Asia's largest airport.

The more recently planned airport islands at Kansai, Nagoya and Kobe offered space for airport economic spin-off. The spatial and economical developments are however limited also in these cases. The quintessential question rises then, what are the main reasons that Schiphol and Frankfurt airports could develop as cityports, while Japanese airports could not, despite their infrastructure-oriented development tradition and high real estate prices. Therefore, we need to understand the institutional arrangements of the actors involved.

10.3 The institutional position of the airport as cityport in the city-region

2. *What is the institutional position of airports as cityports in the city-region?*

2a. *Who are the strategic actors for the formation of spatial development coalitions in airport areas as cityports in the city-region?*

Institutions are seen as the rules of the game in the development process of the airport as a cityport. Although institutions are persistent features and tend to be path-dependent, they are considered as dynamic, since actors and actor coalitions are able to change the institutions by collective action. Therefore, actors and actor-coalitions are seen as the key players that create and reconstruct institutional arrangements. Actors in airport area developments are differentiated in *national, regional, and local governments, airport operators and airport users, commercial actors* (project developers and investors, asset managers) and *advisory organisations*.

Governmental structures in airport planning in the Netherlands can best be categorized as unitary decentralised, in Japan as centralised, and in Germany as decentralised with a principle of subsidiarity. National ministries in charge of transport, land use and finance in the Netherlands and Japan play an active role in airport area development. In particular the transport ministries in the more centralised case studies play different roles at the same time, in particular regarding development and control. This is in contrast with Germany's federal level, whose role is carefully limited to laying out juridical and technical guidelines, as urban and regional planning is not a federal task.

Both Japanese prefectures and Dutch provinces are not responsible for airport airside infrastructure planning itself, which is again different from German state level planning. The main airport area planning instruments on this regional level in the Netherlands and Japan are limited to regional land use plans and tools for coordination between local and national plans. Airport expansion in Germany is decided on the state level with decision-making powers, spatial development plans and planning procedures as main instruments.

The role and influence of local governments' land-use and structure plans vary between the cases. Frankfurt's airport is located within the municipality and is partly owned by the city of Frankfurt, so that local planning is strong. Schiphol is located in Haarlemmermeer, and Amsterdam's informal influence as an airport shareholder (and consequently within coordination platforms) is strong, but limited in terms of formal land use planning. Haneda is located in Tokyo but land use planning is controlled on a higher level, as the airport is managed and owned by the national government. Narita is located outside of Tokyo and local planning is formally in the hands of the city of Narita and Chiba prefecture.

Schiphol Group and Fraport AG are business groups that operate and develop more independently than airport authorities at Haneda, Kansai International and, until recent privatisation, Narita. Joined by commercial actors the airport authorities are becoming involved in planning outside the airport territory. In Schiphol and Kansai, public-private area development companies were set up. Recently, joint development companies of the city of Frankfurt and Fraport are being established. For various reasons airport areas near Narita and Nagoya lack these public-private partnerships. The home carriers KLM, Lufthansa, and ANA and JAL are the main airport users, but their role is limited because of airport governmental regulations. In Frankfurt however, Lufthansa's role is changing as airport shareholder with a distinguished terminal.

Airport coalitions are distinguished on the level of the airport as such, and on the level of area development surrounding the airport. At the level of the airport, airport growth coalitions face severe opposition from environmental coalitions. Environmental coalitions consist of

environmental groups and local towns that are affected by noise pollution. Airport growth coalitions however vary in composition: they include airports and home carriers, as well as airport owners. In the case of Schiphol, the Ministry of Transport and Water Management is a sustainable partner of the growth coalition, but is recently reconsidering its role here, due to the contradictory roles of both aviation supervisor and mainport project developer. The Japanese Ministry of Infrastructure and Transport's civil servants, Liberal Democratic Party parliamentarians and construction companies favour further development of (airport) infrastructure. Since the Japanese Ministry of Infrastructure and Transport is only allowed to focus on the airside infrastructure and not on the landside, a mismatch of landside and airside development is institutionally embedded. The roles of ministries in the airport growth coalition of Frankfurt are less apparent, but overall they support the expansion and development of the airport.

2b. Which socio-cultural, financial, economic, governance, and legal institutions determine the playing field for the actors involved?

2c. If so, where do inefficient institutions, path-dependent behaviour, and institutional lock-ins create obstacles in the spatial-economic development of airports as cityports?

The strategic actors, the planning tools and changing positions set the rules of the game and the size of the playing field for developing the airport as a cityport in the city-region. These rules of the game are differentiated in *socio-cultural, financial, economic, governance, and legal* institutions. As these institutions are considered dynamic, it is necessary not only to frame the institutions, but also to look at their development and obstacles in development. This includes lock-ins, path-dependencies, free-riders and rent-seeking behaviour, uncertainties and political conflict. Therefore, research questions 2b and 2c will be answered in combination.

Socio-cultural institutions

Socio-cultural institutions are local cultural characteristics and specific embeddedness, based on historical roots of institutions and national policy models and styles or state regimes. In particular, rule formulation, nature of the rules and implementation and enforcement as elements of the regulatory regime are analysed.

In terms of rule formulations, all cases are examples of corporatism. Societies and unions play a profound role in regulating and codetermining policymaking and maintenance in the states. Dutch corporatism has deep and broad roots in society, with associability, subsidiarity, collegiate governance and consensualism as its main features. Elements of the regulatory model where central state tasks were privatised can even be found today in the Schiphol case study, e.g. in the role and involvement of the airport in regional planning. The German model is somewhat less corporatist than the Dutch model. Sectorism is more dominant, and because of the country's size and federalist system, regional actors play a more important role. Japan combines state regulation with corporatism. The comprehensive and centralised state intervention works since it is carefully limited and pluralistic, with politically passive unions and societies. In the case of airports however, we conclude that state regulation is dominant. The role of large business conglomerates of banks, business units, contractors and subcontractors in the construction industry should however neither be underestimated.

Japan and the Netherlands combine corporatism with elements of centralism that leads to integration of policies. Centralism dates back to the era of public works uniting and connecting the Dutch provinces in the 19th century. Tokugawa ruling in Japan (16th-19th century), and public works to stimulate the national economy in the 20th century, served similar purposes and also strengthened centralism and the role of transportation bureaucrats. With a variety of shires, electorates and manors in the 16th-19th century, Germany did not integrate this far, and the decentralised socio-cultural institutions were reinforced again after World War II with the introduction of the federal state system. The variety of competing electors from Darmstadt and Kassel and from the trading city of Frankfurt is also an explanatory factor for understanding the lack of regional cooperation, which is enforced by a later administrative split up of Frankfurt Rhein-Main over the states Hessen, Rheinland-Pfalz and Bayern.

Although all cases are examples of consensualism, the required degree of consensus is higher for the Dutch in their common attempt to keep their head above the water and the Japanese need to cooperate in order to produce and share rice. Consensualism in policy making and pragmatism in policy maintenance in the Netherlands and Japan are backgrounds for understanding the tendency to create, accept and rarely prosecute construction industry cartels, collusion and bid rigging. Furthermore, in the case of Schiphol a patchwork quilt of public and public-private coordination platforms, a feature not common the Japanese cases, expresses consensualism. Not pragmatism, but moderate legalism in policy maintenance is more common in Germany. Market pressure in Frankfurt's office market however led to bribery of asset managers and real estate developers.

Financial institutions

The financial institutions are the incentives for market investment created by governments. These are on the one hand redistribution by taxes and subsidies and, and on the other hand strategic investments in airport areas as public works.

The fiscal structure of states, ranging from decentralised to centralised, co-determines spatial-economic developments in the city-region. Decentral financial institutional arrangements force communities in Frankfurt Rhein-Main to compete on corporate tax in order to attract businesses. Despite a sense of urgency, actors cannot agree upon a fair model of regional financial cooperation. This is caused by hidden costs for new solutions (losing a competitive advantage), uncertainty (the effect of a new model is not yet proven) and political conflict (past experiences of failed regional cooperation models).

In the centralised fiscal structure of Japan, tax competition is absent and local communities hesitate to increase the limited local taxes in fear of losing competitiveness. A dependency mindset however makes cities in Japan compete for public works to attract investors instead, mainly paid by the national government.

In the Netherlands, competition between municipalities is less apparent. The main reason in terms of financial institutions is the balance between centralised and decentralised fiscal structures: the Municipal Fund guarantees both income and free decision over local government spending, based on population. As local tax, airport revenues are crucial for the cities of Frankfurt and Narita. In the case of Schiphol, tax revenues are far less important for Haarlemmermeer as location and for Amsterdam as a shareholder; it is nevertheless essential for the business climate of the city-region.

Economic institutions

Economic institutions are the conditions for the market actors to be willing to invest in spatial development in cooperation with public actors such as governments. Although tax competition is severe in Frankfurt Rhein-Main and considered to be the most problematic element in the investment climate, it is also a major reason for local economic specialisation in the city-region. Large and small municipalities are aware of the kind of economic activities their community can attract and set the corporate tax level. This further enhances the identity of the communities in the region. Competition between Japanese cities is not absent, but is based on public works, in particular roads, airports, bridges, and convention centres in order to attract businesses. This model contributed in particular to economic development in the 1950s and 1960s, but later failed with several bankrupt or failed public works.

Instead of competition for taxes or public works, Dutch municipalities compete on public land supply for offering industrial and office sites to entrepreneurs. Land supply is an institutionalised task without a legal obligation, and is made possible due to the dominant land ownership of municipalities. This regularly leads to oversupply of cheap land and a lack of recycling of industrial sites, but market pressure and business park management in the Schiphol area show signs of more coordination. Established real estate developers and asset managers appreciate the cooperation in harmony with local authorities, since they run less financial risk and can become free riders. The Schiphol Airport Development Company (SADC) illustrates this model: local governments bring in land in a land pool, and prepare for development. Then, real estate investors develop the land and hire constructors to build buildings and finally sell it to asset managers. In the end, SADC checks the airport-relatedness of the economic activities.

Land supply and property development in Frankfurt Rhein-Main and Tokyo Metropolitan Area contrasts with the harmonious model of the Randstad. The large size of the domestic market has the advantage of hosting a variety of developers able and willing to develop large-scale projects such as the AIRRAIL centre in Frankfurt and airport islands in Japan.

A larger market does however not necessarily mean a more open market. In Japan, privileged developers and landowners are part of an iron triangle of politicians, civil servants and constructors that favour public works development for their own interest. In the Netherlands, collusion between transportation ministry bureaucrats and constructors was common, but here politicians were not structurally involved. Even after collusion became illegal in the 1990s, in both Japan and the Netherlands illegal practises remained institutionalised. This is partly caused by the fact that governments do not make clear bidding regulations and are unable to enforce these regulations, which shows the pragmatic attitude in policy maintenance and the problematic sides of corporatism in institutions for breaking up cartels and old-boys networks. Recent tenders and bid-rigging incidents show how path dependent and locked-in the bidding process still is, but do show small signs and efforts of institutional change. Institutional change is slow in Japan in particular. Not current projects but only new projects such as Nagoya's new airport can, with a different approach, in case of success lead to new common practises. The tendency to 'divide' and 'balance' the construction market is not only found in case of collusion and bid-rigging, but also in a more liberal construction market economy such as that of Frankfurt Rhein-Main. Here, indications and indictments for bribery between project developers and asset managers were found in the dynamic office market.

As a result of further commercialisation, airport ownership is under discussion. Privatisation might bring improved efficiency, increased competition, and reduce governmental tasks and the need for public sector investment. It can however also lead to airport overcharges, poor standards of service, and lack of consideration for externalities. A harder problem to tackle is the monopolistic nature of most airports. In Europe, cultural differences make it a hard task to establish a level playing field of competing airports, while breaking the monopolies, with all the informal and varied institutional arrangements involved.

Privatisation in Japan has not only made airports more efficient and generated higher profits; it also dismantled the established monopolies since airports in Japan have to compete with each other. It remains to be seen whether airport privatisation in Narita can also improve the disturbed regional relations. The privatisation approach of Nagoya's new airport also show signs of increased efficiency and broken monopolies, which might become an example for the future development of the publicly owned Haneda airport. In the case of Frankfurt, privatisation of a minority of the airport shares generated extra income for airport infrastructure investment; the effects on the institutional position of the airport in the city-region have however thus far not changed considerably. The key argument for privatising parts of Schiphol is a better role differentiation between airport authority, airport owners and supervising ministries. It is likely that if the airport authority is held accountable for her acting, it contributes to self-responsibility and might improve the relationship with other actors in the airport area. The question remains however, if selling a minority of shares is enough to reach this goal, which becomes increasingly urgent as an institution of governance.

Institutions of governance

Governments increasingly set the rules of the planning game in co-production with market actors and advisory organisations: a situation often referred to as governance. Therefore, governance institutional arrangements are not only analysed as vertical coordination problems (between national, regional and local governments) and horizontal coordination problems (between sectors), but also as public-private created networks in the institutional arena.

Vertical institutions of governance vary from decentralised to centralised. Despite decentralisation policies in the Netherlands and Japan, these cases are examples of centralisation: the national government plays a decisive role in the airport and airport area development, either with respect to finance, policy-making or jurisdiction. Germany's system of a federal state and vertical governance institutions based on the principle of subsidiarity guarantees that there is hardly any intervention from the national government in airport planning. This can be described as 'decentral where possible and necessary,' except for explicitly defined policy fields in the legal constitution.

The current paradigm in the Netherlands is 'decentral where possible, central where necessary', which is more ambiguous and leaves space for political debate and interpretation. Schiphol is considered as a key element in the national economy (mainport) and therefore direct and active involvement of the national government is involved.

In Japan the vertical institutions of governance in international airport and airport area planning lead to direct jurisdiction of the Ministry of Land, Infrastructure and Transport (MLIT). MLIT and the Ministry of Finance in the end pull the (financial) strings. In the case of Haneda, MLIT directly manages the airport and therefore no regional cooperation is established

(since the only relevant actor is MLIT) and no development of the airport as a cityport can take place (airport area development focuses solely on airside infrastructure). This hierarchy combined with a path-dependent mindset of local and regional governments leads to the conclusion that institutional arrangements of governance in this case can be seen as ‘central whatever is possible.’

The tuning of policies across government sectors, *horizontal institutions of governance*, regularly leads to coordination problems. These institutional arrangements are analysed on the national and regional level. In the state Hessen, merging sectors that belong together reduces interdepartmental segmentation: economy, transport, and land use planning. This might however create new borderline cases in other policy fields.

At the national level, cross-sector coordination leads to severe problems in the Netherlands and Japan. In Den Haag four ministries are involved in spatial and economic development policies with their own priorities. In the case of Schiphol this is reflected by the environmental noise contours policies of the Ministry of Housing, Urban Planning and the Environment (VROM); the role of the Ministry of Transport and Water Management in defending the interests of airport infrastructure and aviation; the role of the Ministry of Economic Affairs in regional economics; and last but not least the role of the Ministry of Finance’s plans for airport privatisation. Currently, interdepartmental coordination platforms aim to solve these horizontal coordination problems.

Cross-sector coordination problems between ministries in Japan led to ‘tribe wars’ in Japan in the past. Merging the Ministries of Land and Infrastructure helped to kill two birds with one stone. On the one hand, sector-orientation of bureaucrats was reduced, in particular at the former Ministry of Transport. On the other hand, political dominance of bureaucrats that plan public works with doubtful economic and environmental effects could be reduced, in favour of the Ministry of Finance.

Schiphol is, more than all other case studies, involved in *public-private institutional arrangements* in the airport region. The institutional arrangement Schiphol Area Development Company (SADC) which was set up to develop the Schiphol area can be described as an initially successful institutional innovation with coordination and a joint land supply company. This led to co-production of policy-making which is formally expressed by the membership of the Schiphol Group of the ‘Bestuursforum Schiphol’ for pre-determining new industrial and office locations, and intervening in the municipal land pool as shareholder of SADC. These engagements create a competitive advantage for Schiphol and indirectly for Schiphol Real Estate compared to other area developers and landowners in the airport region, since Schiphol itself is at the decision table for preparing land use plans. In the case of project developer Chipshol, Schiphol demanded a building ban for the Groenenberg area in the runway-approaching route for safety reasons. This ban was later withdrawn, as there were no safety problems. A normal material damage fee had to be paid, and the safety concerns of the air traffic controller could not be proven. This legal battle with Chipshol is one case, but entangling of interests in this unique institutional arrangement that has been set up to coordinate the airport area development, can easily appear again, as many industrial and office sites are planned. This is however not to say that the other airport case studies similar to Schiphol use informal institutions such as coordination platforms, political connections, and economic power to influence the policy-making process. Furthermore, the

decision making power of most coordination platforms in the patchwork quilt of the Schiphol region is also limited to consultation and negotiation.

Legal institutions

Last but not least legal institutions are analysed. Legal institutions are the legally embedded rules of the game of actors, as an outcome of institutions of governance, in – amongst other plans – legal procedures and property development. Here, analyses of legal institutional arrangements are distinguished on the international, national and local-regional level.

At the international level institutional changes are apparent on both the airside and the landside of the airport. Liberalisation and deregulation of the aviation market lead to changes in the position of the airport, since bilateral contracts are replaced by open skies in the case of Schiphol and Frankfurt. This challenges the airports to compete internationally and directly affects the position of the airport as a cityport. The aim of EU policies is therefore to create a level playing field, not only for airports but also for airplane noise contours. Informal institutions however hamper this trend. On the national level, connections between transport bureaucrats and the aviation sector are still strong. A similar conclusion on ingrained institutions can be drawn for the EU wide tendering process in the construction industry, where in the end local project developers are rewarded with orders. In Japan and East Asia, however, institutions are more ingrained and to a certain degree governments therefore miss opportunities. The aviation market is still based on politically sensitive bilateral contracts, which hamper the aviation network development. Furthermore, foreign developers are allowed to enter the Japanese market and might offer alternatives for the established construction market, but informal institutions hamper access to the bidding process.

Legal institutions – on the national level in particular – focus on noise contours. These contours vary between the cases and are difficult to compare. In general however, residential areas in the Randstad and in particular of Frankfurt Rhein-Main are affected by aviation noise. The more remote international airports in Japan affect few citizens. Protection from aviation noise varies from isolation in all cases to buying out in the case of Frankfurt Rhein-Main and Tokyo. Until today, buying out citizens is a political sensitive topic in the Netherlands. It is however remarkable that house prices and local economies do not show negative impacts of direct aviation noise. The use of noise contours is however limited. First of all, it differs from the experienced noise pollution. Second, it is a non-transparent and a technical issue, with narrow political margins. Few understand the noise contours and citizens regularly feel cheated by the policy makers.

Land use planning regulations near airports vary between the cases as well. The case of Frankfurt shows the legalistic style of policy maintenance in Germany: the Frankfurt forest surrounding the airport should be protected from urbanisation. More recently older industrial sites and former military fields do however show opportunities for redevelopment. The pragmatic interpretation limits the effects of the strict test on airport relatedness of land use on paper in the case of Schiphol in the Randstad. This contributes to further concentration and congestion in the monocentric airport city. At Haneda, MLIT still focuses on airside infrastructure and does not allow other developments on the airport island. In Narita, any industry is allowed but legal conflicts, image and the remote location hamper spatial-economic developments until today.

Actor coalitions in the institutional arrangements

By drawing the conclusions on the spatial-economic and institutional position of the airport as a cityport in the city-region, it becomes possible to make an overview of the institutional arrangements in Table 10.1 and a typology of the actor coalitions by case.

The constellations of actors in the airport growth coalitions show differences and similarities in the case studies. In general, airport authorities, dominant airlines and national governments, in particular transportation authorities are at the core of the coalition. In the case of Schiphol, there has been a long tradition of cooperation between Schiphol airport, KLM and the Netherlands Ministry of Transport. This has been a tradition of political indecision to relocate or expand the airport. The main causes are uncertainties in costs and aviation growth, and necessarily followed the economic reality. In the end, indecision therefore is a decision in favour of the airport growth coalition.

The consensus of growth under conditions of safety and noise reduction for balancing the growth and environmental coalitions was successful in strict terms but has undermined the trust and confidence in the airport and governments since it created newly affected areas and (again) avoided political decisions. It was the aviation sector that – for the time being – again could hide behind the back of transport bureaucrats and political consensus making. The growth coalition in the case of Schiphol can therefore be described as a *semi-contested silent growth coalition* with a focus on the short-term. As the number of flights can currently increase, the growth coalition is in a passive mode. In the mean time, national ministries reconsider the role they play in the growth coalition, in particular the entangling roles of the Ministry of Transport and Water Management in stimulating and controlling the growth of the airport at the same time.

A growth coalition of national and regional government bureaucrats, airport and airlines, is at the heart of international airports in Japan as well, complemented with politicians and constructors. In contrast to Dutch indecision, in Japan public works are strategically planned on the long-term by the national government. In the case of Narita, the governors of Chiba and Tokyo and the Minister of Transport decided the location by among themselves. At the time of Narita's airport construction, local actors were not involved in this top-down process.

The ignorance of local actors and violent opposition in the end however has had effect: expropriation as a planning tool can no longer be used and partly therefore new airport island are build on artificial islands in sea, avoiding political conflict. Communities near the new airport islands are seduced by promising economic spin-off and thus the planning concept of the airport city in a coastal 'Rinku' town is developed. These promises can nevertheless not always be fulfilled. The actor coalitions in Japan can therefore be seen as *conflict-avoiding growth coalition* with a focus on long-term solutions.

In the case of Frankfurt Rhein-Main, the growth coalition consists of the airport, airlines and business interest groups. Here the growth coalition is the most contested coalition due to a strong opposition from the environmental coalition of environment and citizens groups. The conflict is played hard and open. Local municipalities are, similar as in the Schiphol case, torn apart by environmental problems and economic benefits. The growth coalition repeatedly has to proof the added value of airport expansion for the city-region. Because of the sensitivities, politicians and bureaucrats do not participate actively in the growth coalition and have a more mediating

Table 10.1 Overview of institutional arrangements and growth coalitions in the case studies

Institutions	Schiphol/Randstad	Frankfurt/Rhein-Main	Haneda and Narita/Tokyo
Socio-cultural	Consensualism and pragmatism tone down interventionalism and integration of planning	Federalism and corporatism tone down interventionalism and planning ambition	Japanese corporatism, conflict avoidant consensualism and pragmatism tone down centralism and formalism
	Planning depoliticised	Planning politicised	Planning depoliticised
Financial	Centralised but relatively independent	Decentralised with tax competition	Centralised with dependency mindset
Economic	Active government in land supply and planning; withdrawal	Active government by tax competition; stable	Active government by public works; withdrawal
	Cartels, collusion, old boys network; opening	Open market mechanism, bribing, cartels reduced by legalistic policy enforcement	Closed networks, bid rigging, old boys network; slowly opening
Governance	Decentralised unitary; Decentralisation finances Centralisation of planning	Decentralised; stable, lock in	Centralised; Decentralised finances Centralisation of planning
	Sector competition; reduced by job rotation and coordination platforms	Merged ministries, legal bureaucrats; integration	Merged ministries; integration
	Airport actively involved, unclear roles, policy making patchwork quilt	Airport getting more involved, clear roles	No airport involvement, lack of local cooperation
	Airport public, monopolist	Airport public-private, increase in competition	Airport competition after privatisation
Legal	Late tendering regulation, moderate self-correcting mechanism	Clear tendering regulation Law enforcement	Late tendering regulation, poor self-correcting mechanism
Coalition	Semi-contested silent growth coalition, focus on short-term	Contested open growth coalition, focus on medium-term	Conflict avoiding growth coalition, focus on long-term

and facilitating role. In the end however, the mediation committee on airport expansion could not obviate a political discussion based on the logical and consistent argumentation of both growth coalition and environmental coalition. Airport expansion is foreseen with negotiated trade-offs for the affected groups, for instance in a ban on night flights. The case of Frankfurt airport development can best be described as a *contested open growth coalition* on the medium-term, driven by economic interests.

10.4 Institutional learning

Conclusions on the spatial-economic and institutional position of the airport as a cityport in the city-region, can finally lead to answering the third research question on institutional learning within the cases and between the cases. We focus here on the most problematic institutional arrangements in the case studies, where institutional change is urgently needed and institutional learning is required or already taking place. The theoretical framework for this institutional change and learning has been introduced in chapter 5.

3. If necessary, which institutional changes are required to adjust to the changed spatial-economic realities?

3a. What institutional learning takes place within the case studies?

Randstad-Schiphol

In the case of Schiphol in the Randstad city-region, the most problematic institutional arrangements are: the economic institutions of cartel formation, horizontal coordination problems at the national level, the role differentiation as public-private institution of governance, the monopoly and embeddedness of the airport, as well as regional coordination.

In the discussion of cartels and bid-rigging on the Dutch construction market, signs of institutional change are found. Although these institutions were ingrained as informal institutions, public debate and new bidding regulations made the bidding process more transparent. Although construction companies are probably still meeting regularly, the interviews indicate that there is no longer a systematic approach for bidding and the era of bribing civil servants with wining and dining is probably a thing of the past. Institutional change here has been a matter of raising awareness of the illegal practises and moral standards, a learning process by fits and starts.

In terms of horizontal coordination, an institutional learning process is taking place. Interdepartmental coordination commissions improve the situation of 'tribe wars' between national ministries of infrastructure, urban planning, economic affairs and finances that are involved in spatial and economic planning. The question however remains, how sustainable this solution will prove in the future, and if other policy fields will also be equipped with similar coordination commissions.

The institutional innovation where public and private actors cooperate in airport area development was successful for a long time. However, institutional change is urgently needed in the case of role differentiation in public-private governance. The roles of Schiphol in policy-making and the role of the Ministry of Transport and Water Management in both developing and controlling the airport lead to a situation where other actors' compromises become suspicious and appearances are against the growth coalition partners. A clear re-arrangement of positions and roles can open the policy arena for the required political conflict and outcomes rather than political indecision and short-term solutions.

A repositioning of actors in the Schiphol area can be supported by withdrawal of government as airport owner, and creating a European level playing field of competing airports, in order to break down the local airport monopolies. Therein, institutional change is urgently needed, in particular in order to improve the regional embeddedness of the airport. The case of Schiphol shows the typical characteristics of the inability of 'hybrid' organisations (i.e. an accumulation

of institutional arrangements) in learning. The conclusion of Stevens (1997) on the institutional position of harbours therefore fits in with conclusions of institutional learning in the case of Schiphol:

“Hybrid organisations are extraordinary capable of solving specific problems within their existent frameworks. At first they are considered as extremely ‘smart’. This is not surprising, since they are able to change their mask, and prevail their own goal-oriented starting points in interactions if necessary. On the long run however, they are reproached with opportunism and unreliability, and many outsiders cannot appreciate this kind of being smart. (...) At first the hybrid organisation is reproached with unreliability, but on the long term risks are rolled off to society in general. The costly ad hoc steering will not be of much use for the long-term. At last, because of the impalpable nature, one can expect isolation and inadequacy to respond to incentives from others.” Stevens (1997:38-39)

Although we underline the development pattern of these hybrid organisations as Schiphol, it would be most interesting to know how to deal with these organisations for the long-term. Based on the analysis in the second part of this thesis, we would suggest that their initial success should be cherished and these kind of institutional innovations made possible, but finite and later to be corrected by focussing on clear role differentiation between the government as a supervisor rather than a project developer, the airport as airport authority and a limited number of coordination platforms with clear jurisdiction.

Finally, the case of Schiphol in the Randstad city-region is an example of creating new institutions without tackling the problematic older and unfit institutions. A patchwork quilt of coordination platforms with limited legislative powers covers both the Schiphol airport region and the Randstad city-region. Newly established platforms become ‘hot’ for coordination until decisions have to be made; when there is no consensus, new platforms are set up. This can create institutional innovations, and enhance the connectivity in the city-region, but can also lead to political indecision. Changing the structure of national government, provinces and municipalities regularly failed in the past. Within those governmental frameworks institutional changes, with a defined jurisdiction and limitation of actors’ roles, is urgently needed. Insiders however argue that the issue is too complicated to unravel and that it works passably, despite its shortcomings.

Frankfurt Rhein-Main

In the development process of Frankfurt International Airport as a cityport in the Rhein-Main city region, there are lock-ins in the financial and governance arrangements that require institutional change and learning.

The lack of regional cooperation has a long history and despite several attempts could not be solved. It does however not only lead to negative results in terms of urban sprawl, but (it) also has a positive effect in terms of municipal specialisation in the Frankfurt Rhein-Main city-region. The problematic history of regional cooperation also created alternative coordination platforms. As market and non-governmental organizations found that governments are unable to change these institutions of governance, their own initiative and willingness to contribute to the competitiveness of the city-region are growing. Then an institutional lock-in becomes a blessing in disguise for new institutional arrangements that involve third parties and which

contribute to the connectivity in the city-region. The question is however, to what extent these new coordination platforms will work out without any legislative or governing instruments.

In terms of financial institutional arrangements, corporate tax competition is severe. Despite the contribution to a more colourful pattern of cityports in the city-region, this harms the business climate as well. As there is no learning process in the city-region going on in this respect, the other cases might offer models for institutional learning here; see below.

Tokyo Haneda and Narita

Severe problems in the institutional arrangements surrounding Japanese international airports are in particular apparent in terms of economic institutions (construction and selection of public works) and vertical institutions of governance.

Close cooperation between LDP politicians, MLIT bureaucrats and construction companies in order to establish public works was an innovative institutional feature of the developmental state model in the 1950s, 60s and 70s. However, for a longer time now, it becomes clear that this institutional arrangement needs reconsideration, because it leads to an economic and environmental burden. Institutional change could take place for two reasons: first, governmental spending on public works had to be reduced, with the economical standstill as a blessing in disguise. Secondly, the Ministry of Transport and Ministry of Land merged and decreased in political power, and also broadened its view to other policy sectors than infrastructure alone. This is however institutional change initiated by outside force rather than internal learning itself; the system could not learn from the raised problems, and the institutional arrangement might not be able to deal with similar problems in the future without this outside help.

It should be noted that Japan's airport planning focuses on long-term solutions with expensive airports that learn to one's cost, rather than choosing short-term expansion models. The surroundings of the airport however show typical institutional problems for developing the airport area as a cityport in Japan. In particular the centralisation of institutions of governance are problematic here and need further change. National and regional/local governments cannot break through the current lock ins. On the one hand, the central government decides and appropriates decision-making power, while it is not always the appropriate level of decision-making. On the other hand local and regional governments are willing to accept more decision-making power, but in the end face the problems of their institutionally ingrained dependency mind-set.

3b. What institutional learning experiences can be projected on the other case studies?

In case institutional learning does not take place in an evolutionary manner, or institutional change is not executed by outside force such as economic realities, institutional learning from other cases can be taken in consideration. This interregional institutional learning can either take place by copying (copy and impose a model), or bricolage (fit a model to the local circumstances).

The theory and practises on this institutional transplantation do however temper the ambitions and expectations. In particular, in practise copying often failed, and bricolage failed regularly. Interestingly, out of fourteen international cases, only Dutch infrastructure planning was found as a success in copying, made possible through an already existent group of supporters of a unitary model in the beginning of the 19th century (De Jong *et.al.* 2002). But this thesis has

shown that the model of this Ministry within the entire governance model is also not without its problems either – the ‘state within the state’ model even becomes increasingly problematic (cf. De Jong 2002a).

In general, specific legal frameworks or procedures are more problematical to adopt than more general and abstract policy lessons, ideas and ideologies. This conclusion sets the playing field of institutional learning here: alternative models and ideas will be pointed out, but the ambition of introducing a specific model for solving institutional problems should be restrained. Finally, reformers do best when they are prepared for oncoming windows of opportunity, with the right political momentum, and save energy to act at such moments.

For these reasons, we limit the projection of the learning experiences to general notions that can be considered more in detail in debates over the case studies' problematic institutional arrangements. It would not be without hazards to introduce one element of a specific institutional arrangement into another. It might be even wiser to limit to general notions on successful institutional models for an institutional design of a promising model.

Financial institutions:

- Rhein-Main can learn from Randstad in terms of fiscal redistribution and avoiding tax competition on the local and regional level;
- Tokyo and Randstad can learn from Rhein-Main in terms of socio-economic profile and an independent mind-set;
- Japan can teach Randstad and Rhein-Main how infrastructure-related and initially loss-making public works can be developed with a consideration for the long term.

Economic institutions:

- Japanese airport areas can learn from Schiphol in terms of creative public land supply models and the role of private developers' interest;
- All cases can learn from Anglo-Saxon development models that involve stakeholders from the beginning (land ownership) to the end (business park management) with constant returns on investment;
- Schiphol can learn from Frankfurt's model of intensive land use and a polycentric pattern of urban development;
- Schiphol/Randstad can learn from the self-imposed limitations and clear roles of actors in the case of Frankfurt Rhein-Main;
- The Japanese construction market can learn from the enforced and self-cleaning of the Dutch construction market's bid-rigging; both can benefit from the German legalistic style of dealing with cartels.
- For long-term solutions of an airport in the North Sea, the Netherlands can learn from the experiences of cost-overrun in the case of Kansai International, and more recent economic successes of Chubu International;
- The EU can for her level playing field in aviation learn from the recent shifts in airports, charges, monopolies, and efficiency in Japan after privatisation;
- Schiphol can learn from the effects of a minority share privatisation of Frankfurt.

Institutions of governance:

- A large country such as Japan can learn from the benefits of decentralised planning in a federal state like Germany;
- The Netherlands can learn from the effects of merging ministries that are involved in spatial and economic planning as well as infrastructure;
- Introducing an interdepartmental coordination platform is a temporarily alternative from the Netherlands for dealing with horizontal coordination in Japan and Germany;
- Rhein-Main show the opportunities of non-governmental cooperation platforms for the city-region as a substitute for governmental acting, relevant for the Randstad;
- The patchwork quilt of coordination platform in the Schiphol region can inspire problematic airport-region relationships in Japan in order to come to a consensus.

Legal institutions:

- Japan can learn from the advantages of international open markets for aviation and the construction industry in the E.U. and the U.S. International agreements can increase the size of the market, which can lead to greater choice and lower prices;
- Schiphol can learn from unorthodox tools such as buying off homes and paying compensation money, common in Japan and Germany;
- In general, the Netherlands and Germany can learn from the flexible zoning in Japanese land use plans, as policy goals can conflict with used land use planning tools;
- In the specific case of airport planning however, Japanese land use planning can be more permissive to other land uses than airside infrastructure, as is common at Schiphol.

Although these possibilities in institutional learning can function as a mirror and a perspective, they however should not be seen without their regional embeddedness. Less tax competition in Frankfurt Rhein-Main might lead to less specialisation of towns and cities in the long run. Cartels in the construction industry were banned in Germany successfully; in Japan and the Netherlands they however also contributed to the era of industrial catch-up after 1945. As this catch-up has been established now, legal enforcement of breaking cartels and collusion can be an effective tool to break the inefficient institutions.

Interregional learning can contribute to expected problems and current political debates. In particular the political debate over Schiphol airport privatisation on the one hand and fear of Air France – KLM making this airport a smaller hub in the future, can learn in particular from Frankfurt. It is too early to conclude, but the shareholders' position of Lufthansa in Fraport can increase the embeddedness of the airline on the one hand, and expresses a more dominant role of airlines in the airport-airline relationship, with dedicated terminals of the airport user. In the end even the EU can learn from approaches to break the monopolies of airports as not only found in Japan, but also in the U.S.

Finally, if institutional learning is yet a bridge too far, this thesis indicates by the spatial-economic analysis lessons for policy-making with a shorter time horizon. In particular the benefits of sustainable and substantial infrastructure planning as well as infrastructure-related planning in the airport region of Frankfurt Rhein-Main and Tokyo can inspire the rapidly urbanizing Schiphol area. Schiphol in the Randstad shows characteristics of being 'penny wise, pound foolish' by considering the returns on investment and future uncertainties of every road and rail constructed in this area, but also in airside investment for decades.

10.5 Reflection and discussion

Now that conclusions and lessons in learning have been drawn, it is possible to reflect on the research questions, the applied theories and methodologies briefly. In particular, this includes learning processes, institutional analysis, new institutional economics, and benchmarking.

The first and most general question that can be put forward is: what is the use of an international comparison at all? The point of departure was to explore different responses to common challenges, and to learn where possible. One of the indirect aims of this book was to see what the usefulness of an international comparison is. The cases have been compared in depth, but interregional learning is limited because of the limitations in successfully copying or bricolage of (parts of) other institutional arrangements. The benefits of international comparisons should thus not be found in introducing institutions such as a *Fremdkörper* to other cases. International comparison can however contribute in two ways. First of all, it offers a mirror to the 'own' case study; challenges are similar but vary in the details, and approaches are different. Secondly, international comparisons are useful to explore new directions and strategies. They can provide eye-openers for the cases involved.

Where interregional learning provides a mirror and eye-openers, in particular the process of intraregional learning needs further research. Actors in the cases were partly able to learn institutionally, but often outside-force (incidents, calamities or occupation) led to institutional change rather than smart organization of the learning process. This internal or deuterio learning provides the best 'solutions' for dealing with institutional lock-ins and path-dependencies, as actors are more aware of and familiar with the self-imposed and accepted alternatives. In addition to interregional and intraregional learning, it might be possible to set up a kind of institutional design that offers the best conditions for developing the airport as cityport in the city-region. The problem is however, that the every design faces a specific regional embeddedness and therefore requires a specific fit to become effective in practice.

The applied actor-oriented institutional theory in the second part of the book has shown to be very useful for studying the cases. The strengths of the methodology have been in particular the flexibility in using it. It makes case study research with large differences in size, culture and context possible, as applied here for the Randstad, Frankfurt Rhein-Main and the Tokyo Metropolitan Area. This flexibility at the same time can be the major disadvantage of using institutional analysis. In particular, it is difficult to set the limitations: rules of the game for what, how and when exactly? This argument also holds for the terms used in institutional analysis, such as path-dependency, rent-seeking, free-riding and lock-in of institutions. In sum however, the wide variety of case studies could only be studied with general characteristics that give it the broad and open character it has.

One of the problems in institutional analysis is the nature of institutions themselves. One can build an argument on the path-dependent and ingrained nature of institutions, and the difficulties in changing in particular the informal rules of the game. One might almost conclude policies and strategies for changing often fail and become meaningless. But then, suddenly, institutions can change by an incident or calamity, and at a political opportune moment, timing that is impossible to predict. On the other hand, these windows of opportunity would not open without the drive for institutional change either. Therefore, in the end, institutional analysis is

more suitable for descriptive problem analysis as been done in this study in detail, than for more explorative studies over possible future change.

In the first part of the book, benchmarking was used to compare the case studies in terms of spatial and economic dynamics. Benchmarking is criticized in the sense that best practises from case studies with other milieus would lead to mist before one's eyes. In this case, however, benchmarking was a useful tool to analyse the case studies. Both benchmarking and institutional learning offered a mirror and a context for the case studies, without arguing to copy elements of best practises.

It is unfortunate that not all data in the spatial-economic analysis are comparable. This is considered as a typical and inevitable feature of international comparative research. Nevertheless, the analyses of cityport dimensions show some data comparison where better comparable data might bear fruit. In the node/place model, it is rewarding not only to measure the node values, but also to frame the place values. This would provide better insight in the development and balance of node and place, in particular for the discussion of an evolutionary development of well accessible locations with urban functions (such as train stations in Japan) versus the planned development (such as new towns in the Netherlands). Furthermore, the economic dimensions of the cityport could not be elaborated as intended, due to a lack of data on productivity at the location. Measuring space productivity (added value per square kilometre), as done in the Netherlands, might not only bring forward interesting results and differences in general, it might also give a better understanding in the specific economic (sector) development on the very local cityport level rather than the city or city-region level.

Finally, academic debates include the discussion over the use of institutional economics in urban and regional planning. Traditionally, new institutional economics focus on economics. This book attempts to show that new institutional economics can also be applied to urban and regional planning. Although a further elaboration of new institutional economics for planning needs to be done, it provides relevant insight into the importance of economic developments before planning is considered at all.