

2 Competitiveness of city-regions

2.1 Introduction

The notion of competitiveness of city-regions has dominated economic geographers' debates in the 1990s and 2000s. The discussion on regional competitiveness in general brought back the relevance of geographers into economic science. It became not only subject of intensive academic discussion following Porter's *The Competitive Advantage of Nations* (1990), it also is increasingly used as a policy tool. This chapter discusses both effects: first, a brief theoretical overview on the current insights on the importance of competitiveness for city-regions (2.2), followed by the discussion of competitiveness as a policy tool and benchmark consequences (2.3). In paragraph 2.2, the competitiveness of firms and industries is discussed, with a highlight on the economy of firms and inter-firm relations. It is obvious that these firms compete and cooperate on the inter-firm level, but the question is posed whether this competition and complementarities can also be found on the level of the city-region itself.

The theoretical discussion is followed by empirical research based on benchmarks. These benchmarks are applied to case studies in the Randstad in 2.4, the Frankfurt Rhein-Main in 2.5, and the Tokyo Metropolitan Area in 2.6. In these paragraphs, the discussion will focus on past and present economic performance. The goal is not to analyse and include all economic trends in the city-regions, but to outline the city-region's development trends over a longer period of time. To understand the strengths and weaknesses of the city-region for the future, the investment climate for future investments of the areas mentioned above is examined in paragraph 2.7.

One of the crucial issues of future competitiveness of these globalising city-regions is the city-region's response to integration and developing strategic projects, discussed in chapter 2.8. These benchmarks will answer research question 1a, which deals with the economic performance and regional embeddedness of the city-regions and the extent that this fits to the development of a globalising city-region. This is the first stage of assessing the spatial-economic position of airports as cityports in the city-region. The conclusion to this question can be found in paragraph 2.9.

2.2 Competitiveness of city-regions

In this section we will discuss briefly how firms and industries become competitive in the globalising economy, and how this relates to the competitiveness of city-region. First, however, we need to define competitiveness itself. There is no consensus over the exact meaning, despite the general acceptance of the importance of competitiveness (Boschma 2004). Porter (2001) mainly emphasises the importance of productivity growth as a key element of competitiveness.¹ Here we understand competitiveness of places with Storper as:

“...the ability of an (urban) economy to attract and maintain firms with stable or rising market shares in an activity while maintaining or increasing standards of living for those who participate in it.” (Storper 1997:20).

Globalisation needs a regionalisation counterpart in order to become locally embedded.² This was widely discussed in economic geography literature in the 1980s and 1990s. Piore and Sabel (1984) explored the new trends in the organisation of production and the behaviour of enterprises. However, in the era of new technologies and more foot-loose production, Peter A. Hall and David Soskice (2001) found that they overestimated the importance of governments and labour unions as institutional embeddedness. Scott (1986) and Storper (1997) therefore focussed more on the real economy and found that the urban agglomeration itself is an endogenous source of economic dynamics. The agglomeration can be attractive due to its economies of scale based on a critical mass, and economies of scope based on diversity and specialisation. Krugman and Porter explained the attractiveness of the agglomeration, but could not explain exactly what the necessary conditions for agglomeration of production activities are (Storper 1997). Storper (*ibid.*) developed a theory where the relational assets between enterprises and the regional embeddedness are considered crucial for actors in the global economy.³

Storper's model fits to the current academic insights of evolutionary economics.⁴ Behaviour of actors is there seen as embedded in regional structures, and changes gradually over time. Actors themselves have an evolutionary impact on the structures in the longer term (Nelson and Winter 1982). New developments and new technologies are therein not always perceived as new methods of production and the common routines guide the current decisions, a phenomenon that is called path dependency and is crucial in evolutionary economics (Lambooy and Boschma (2001). Despite path dependencies, actors have a role to play and increasingly firms are considered as co-determining the selection process, in order to generate increasing returns. The competitiveness of the firms in a globalising economy is therefore a combination of intra-organizational resources (as routines and competences) and extra-organizational assets (as complementary knowledge and relational capital) (Boschma 2004).

Similar to Ricardo's theory on comparative advantages, there is no rat-race of competing city-regions, but the variety of models can stimulate several city-regions to benefit and specialise: the comparative advantage of city-regions. The awareness has grown that there is no single or best model for the city-regions to create an institutional embeddedness, but a variety of models co-exist (Simmonds and Hack 2001, Salet *et.al.* 2003).

Hall and Soskice (2001) found that the different developed economies show a remarkably similar result in economic performance in the last decades for both liberal market economies such as in the US, UK, and Australia, and for coordinated market economies of Germany, the Netherlands, and Japan, with striking differences in economic sector development. Differences in institutional structures favour particular kinds of sector development.⁵ The bottom-line for the coordinated market economies is that the institutional setting favours cooperation between sectors and governments, and offers for specific sectors a specific regional embeddedness. With that conclusion, Hall and Soskice (2001) answer the question left open by Storper (1997): not how, but why particular regions such as Baden-Württemberg and Silicon Valley could become economically successful in specific sectors in the 1990s.⁶

The metropolitan economy

Initially, global cities like London and New York, and industrial districts like Silicon Valley and Third Italy benefit from these economic shifts. Recent studies focus on a greater variety of levels and shapes, including globalising city-regions on the lower spatial scale (Hall 2001). The main idea behind this is that regional cities have chances and the potential to be connected to the globalising economy as well, particularly when they have the ambition to become a metropolitan economy. In this section, the affected city-regions by network formation and international relations are discussed. To better understand structural changes, a closer look is taken at the characteristics of the metropolitan economies in the latter part of the section.

The growth of the economic potential of the city-region is not only based on productivity growth, but also on the creation of new activities. Lambooy and Boschma (2001) argue that successful metropolitan economies such as London and Paris consistently are able to reinvent themselves due to a variety in the production structure, where other regions such as Walloon and Ruhr are stuck in a single economic speciality with a path-dependent mindset for many years. Kleyn and Tordoir (2002) conclude that the more successful metropolitan economies are able to continue expanding their markets and create new economic activities.

Kleyn and Tordoir (2002:19) emphasize the importance of three strategic clusters for creating a metropolitan economy: distribution, management functions, and creativity. Distribution services give access to the market, and the basics of market size increase. All metropolitan economies have a relatively large share on distribution and the market forces these firms to be competitive. This contributes to what we call here the further integration of the metropolitan economy. Second, the ability to manage transaction costs by creating a more efficient organisation of production is crucial for the metropolitan economy. The managers of the international corporations require and attract supply of strategic management, financial and legal services, consulting and other specialised economic activities in the city-region. Third, creativity is a strategic sector, not only in the artistic sense, but also R&D and entrepreneurship: labour that is concentrated in the metropolitan areas. These three clusters of activities are the pillars for a further diversification and productivity growth of the metropolitan economy.

These economic structure shifts have consequences for the production environment. The increased importance of knowledge makes human capital the leading factor for businesses. Business will follow high potential labour forces instead of the other way around. Crucial location decisions of firms in the global economy favour well-accessible locations with spatial qualities where a pool of high potential labour forces are available, factors that favour metropolitan areas. Due to decreasing transportation costs, metropolisation of the poly-nuclear structure of the city-region can take place in the Randstad and Flemish Diamond, as did mononuclear urbanisation in cities such as London and Paris in the 20th century. The importance of infrastructure in the city-region, with the development of urban networks, is therefore increasing. Infrastructure can be seen as generating and structuring spatial developments (WRR 1998). Nevertheless, in the end, not the infrastructure itself, but the real estate investments near infrastructure caused by the relations between businesses are the important generators of economic development (Schrijnen 2000).

2.3 Regional acting and benchmarking

The previous paragraph provided a general insight in competitiveness of globalising city-regions with her main characteristics, as subject of academic debate. Competitiveness is not merely used to analyse city-regions, it is increasingly used as a policy tool as well. What can the strategic actors do to improve the city-region's competitiveness? In answering this question we are faced with institutional adaptation, the city-region as one actor and the difficulties of predicting future developments.

In terms of evolutionary economics, the region has an important role to play in the innovation process, as an incentive and selection device, where accumulation and reproduction of knowledge in the region lead to a variety of activities (Boschma 2004, Boschma and Kloosterman 2005). This variety plus complementarities of institutions is quintessential for the competitiveness of the city-region. There is no superior or optimal institutional model that leads to greater successes, but on the other hand it is not to deny that some institutional models are better than others. In particular institutional arrangements that are part of a continuous adaptation process of institutions are determining the success of the region; history shows that some regions are more capable of dealing with this process of creative destruction than other regions. Therefore, we have to focus on the institutional dynamics within the city-region. The competitiveness of the city-region shows that the regions are thus becoming a meaningful and relevant entity that affects the behaviour and performance of companies.

After this understanding, the questions arises whether regions are competing with each other and if there is a zero-sum game or a positive sum game for the city-regions in this mutual competition. In this debate, economists such as Krugman argue that companies compete, not territories. Camagni (2001) challenges Krugman's view and finds evidence of regions competing on inflow of capital and other resources. John Friedmann (2001) expects city-region formation for a limited number of city-regions that are the nodes and focal points of the globalising economy, where city-regions have much to gain and nothing to lose by associating with other regions in networks. It is crucial for these regions to find an appropriate form of governance and city-regions are increasingly responsible for managing their own development.

"Nation-states may set the institutional framework for regional development, and perhaps provide some policy parameters and financial resources for local development. But the world's major city-regions will themselves become significant actors, planning, promoting, and guiding their own development within a dynamic and continuously evolving global economy." (Friedmann 2001:122)

Friedmann based his argument on Jane Jacob's classic work *Cities and the Wealth of Nations* (1984). The notion of city-regions as leading actors is also found in other recent studies. It is, however, not always clear what are the common and leading interests of the actors in the city-region. There is no single interest of all actors or one representative actor. To avoid this problem, it is better not to see the city-region as one actor. Nevertheless, acting of the city-region in competition with other city-regions is considered essential here. Therefore the focus is on the dominant development coalition in developing the airport as a cityport in the city-region.⁷ The critical factor is the instrumentalisation of identity by region-builders and leaders of the development

coalition (Keating 2001). The development of successful regions is partly path-dependent, but also a continuous creation and recreation of cultures.

The process of creative destruction implies that despite path dependencies, new developments occur spontaneously in a favourable embed. Therefore, long-term developments are hard to predict. It is a rather complicated task to formulate the incentives and conditions for successful regional policy-making (Boschma 2004).

One of the tools of policy-making that has become increasingly common in the 1990s is benchmarking. Benchmarking city-regions is a way of monitoring the performance of firms and regions in order to learn from best practises. Recent studies show this is a tool of limited use; in particular learning from best practises from companies and regions with a different milieu is meaningless (*ibid.*) The best example of this is the large number of 'planned' Silicon Valleys in areas without an innovation and R&D milieu. Benchmarking European regions on competitiveness for instance, does not show the factors that are behind the success or failure of the region. Benchmarks as a policy tool show increased differences between regions, which is quite in contrast to the policy aims of backward regions catching up (Kitson *et.al.* 2004).

It is nevertheless useful to compare the structure and performance of regions and to derive general policy implications from benchmarking. It offers insight in the wide range of available development paths for city-regions, and is very useful as a learning tool when it comes to awareness and dangers of simply copying success stories. This is therefore also the ambition in the next sections. The past, present and future competitiveness of the city-regions are compared.

The following sections explore the past and present economic performance of the Randstad, Frankfurt Rhein-Main and Tokyo Metropolitan Area city-regions by benchmarking indicators such as economic structure, growth, productivity, and employment. A comparison is made in international comparative perspective, of the city-region within the own country and on the regional level. Then, chapter 2.7 provides insight on future development by analysing more subjective indicators (infrastructure, governance, and business efficiency) that determine the quality of the business environment of the case studies. The results of the analysis of this investment climate are based on benchmark studies being updated and tested by interviews in the case study city-regions. Finally, chapter 2.8 gives further insight on the future development paths of the city-region as an acting entity, with particular attention paid to the integration process into one metropolitan economy.

2.4 Regional economic performance of the Randstad

The regional economic benchmark includes national factors, regional performances and investment climate. This paragraph first discusses the position of the city-region's economy in the international and national contexts and the relevance of national factors. The main reason that this is discussed is that national factors are of greater importance in the regional economic development than is often assumed and the national context is often ignored in comparing city-regions.⁸ Next, the economic performance within the region is benchmarked. The economic performance offers an more objective and measurable insight in the current situation, in terms of inhabitants, gross domestic product on the regional level (GDP), employment levels and share of economic sectors.⁹ Another tool of analysis singled out is the development of service

Table 2.1 Economic command functions in global city-regions¹⁰

City	Ranks						
	Population	Banks	Stocks	HQ's	Air traffic	Olympics	Rolling Stones
1 Tokyo	1	1	2	1	6	1	1
2 London		5	3	3	1		2
3 New York	5	4	1	2	5		
4 Paris		2	4	7	2	2	3
5 Frankfurt		3	5	13	3		
6 Amsterdam		12	9		7	2	
7 Seoul	4	12	5		13	1	
8 Brussels		7		17		2	3
9 München		9		9	20	1	
10 Zürich		14	7		9		

Source: Short *et.al.* 1996

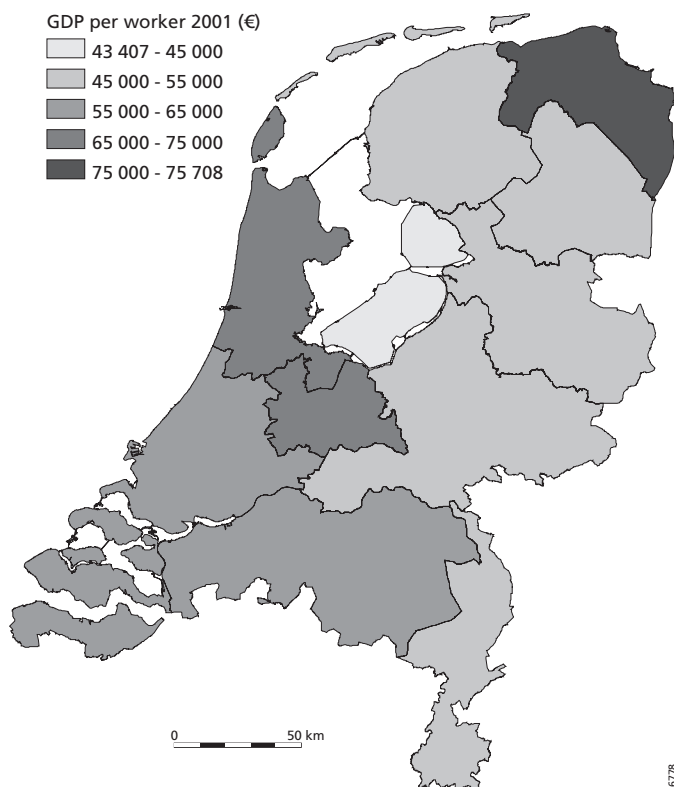


Figure 2.1 GDP per worker in Dutch provinces (Source: CBS Statline (2005))

industries, to have a rough insight in the sector structure of the regional economy. Finally, the employability of jobs per 100 citizens expresses labour participation and activity of citizens, since in international comparisons unemployment definitions are different between countries and in Germany even between the local and national level.

Randstad, Frankfurt Rhein-Main and Tokyo in international perspective

Most city-region studies focus mainly on the service sector's economic control function as leading industries in globalisation (Sassen 1991, Friedmann 1986, 1995). Short (*et.al.* 1996) provide a wider view on city-region development than merely economic control functions, despite its dated character (see Table 2.1).

Frankfurt and Amsterdam/Randstad are comparable in terms of position in the hierarchy of city-region, both ways behind the global city Tokyo. Table 2.1 shows the dominance of Tokyo, London and New York in terms of command functions over other global cities, particular in terms of banks, stocks and headquarters. Frankfurt and Amsterdam are part of a large middle group of globalising city-regions. Olympic games hosting and biddings and Rolling Stones rock concerts are important cultural indicators with economic importance. Tokyo scores relatively low in air traffic due to dominant domestic travel.

The Randstad in national perspective

After putting the case study areas in an international comparative perspective, a national and regional perspective is necessary in order to obtain further insight in the city-region's performance. The territorial definition of the Randstad is disputed, since there are no social-economic indicators that single out a specific territory. The Randstad is located in the provinces Noord-Holland, Zuid-Holland, Utrecht and Flevoland, and is the residence for almost 40% of

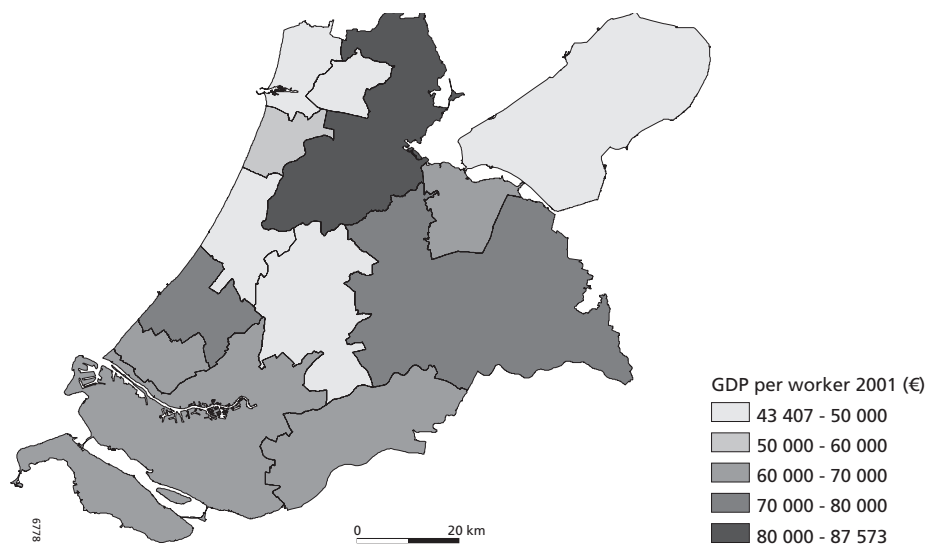


Figure 2.2 GDP per worker in the Randstad¹³ (Source: CBS-Statline (2005))

Dutch citizens.¹¹ The Randstad city-region contributes almost half of the national income (see Figure 2.1), with productivity levels over €60,000, with the exception of the blur picture of the mainly residential region Flevoland. Provincially accounted gas revenues blur the position of Groningen in Figure 2.1.

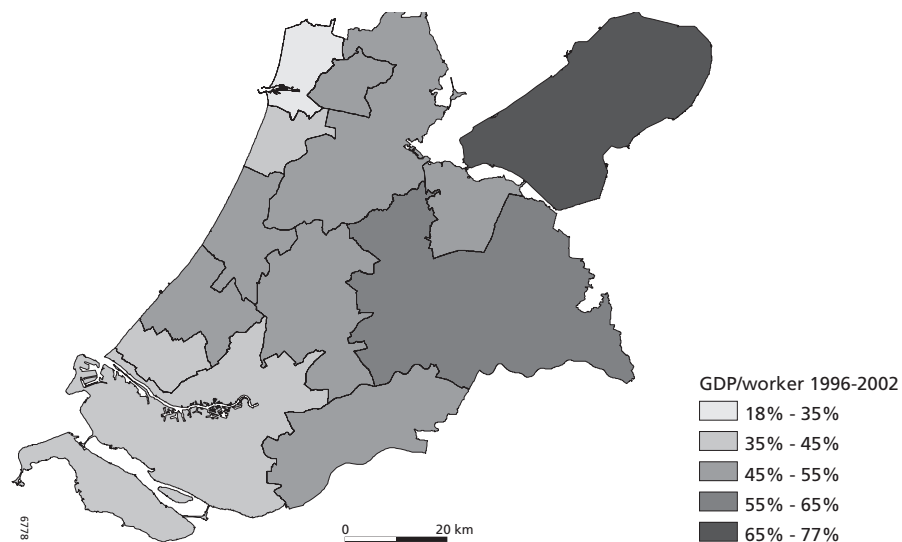


Figure 2.3 GDP growth in the Randstad (Source: CBS-Statline (2005))



Figure 2.4 Job growth in the Randstad (Source: CBS-Statline (2005))

Within the Randstad, the share of the GDP of the four main agglomerations of Amsterdam, Rotterdam, Den Haag and Utrecht increased from 31.9% to 34.1% in the 1988-1998-time period (Kleyn and Tordoir 2002), after a long period of falling behind in the 1970s and 1980s. These urban areas can catch up in terms of regional product in comparison to other European metropolitan areas. Particularly the northern wing of the Randstad, Amsterdam and Utrecht, benefits from the business service industries, and shows the highest income levels. In the period 1993-96 particularly Flevoland, southern Gelderland, southeastern Noord-Brabant and Utrecht have shown a larger growth of gross regional product than the Randstad's main cities.¹²

The Randstad in regional perspective

The Randstad's main cities have their own specialisation. Amsterdam is the financial and business services centre and dominant hub for air transportation, as well as the a major harbour. The greater Amsterdam includes harbours and steel mills in IJmond. This steel mills and harbour area in IJmond area has developed in terms of employment, but lacks in productivity (see Figures 2.2-2.5). The capital is the main city for headquarters of banks and multinationals and is with Gooi-Vechtstreek a major concentration of employment for media. The transportation sector dominates in Amsterdam Schiphol airport and the western harbour area. Rotterdam used to be the largest seaport in the world and is the prime transportation hub for bulk goods in Western Europe with an increasing offshore industry and a declining shipbuilding industry (Tummers and Schrijnen 2001). In recent decades, Rotterdam developed a broader economic basis with university and cultural institutes but yet with limited economic success. Den Haag is the governmental capital, the queen's residence, location of embassies and other international political institutes as the international war tribunal. This combined with the presence of national telecom and insurance companies headquarters, the economy in Den Haag has developed rapidly in the last decades, partly due to its strong focus on service sectors (*ibid.*).

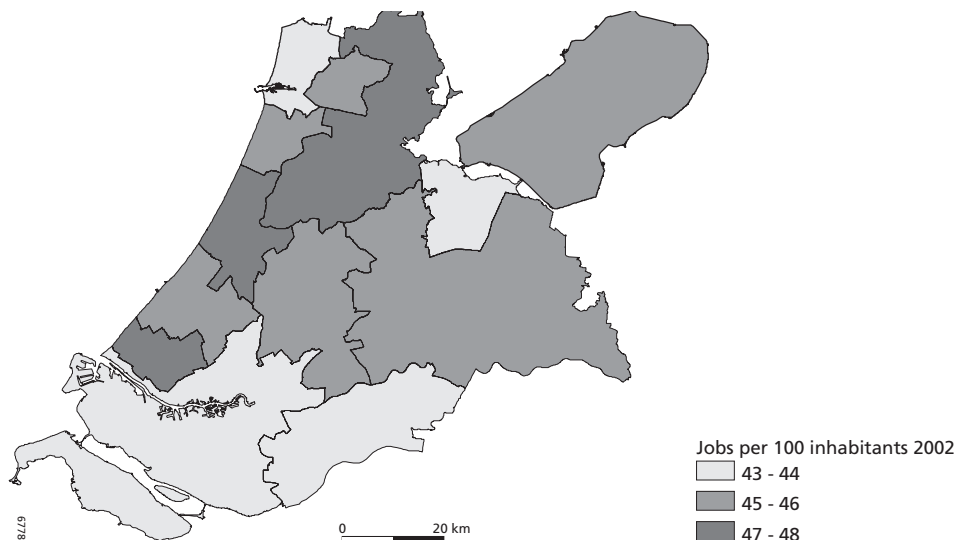


Figure 2.5 Employability in the Randstad (Source: CBS-Statline (2005))

Utrecht is the hub of the national railroad network and therefore developed as a centre for national corporate headquarters for service and software (*ibid.*). The rapidly growing university area is partly the reason for the high education level and high-income growth of citizens in the Utrecht region. The regions of Leiden-Aalsmeer and Westland are the centre of the still highly productive flower trade and horticulture. Gooi-Vechtstreek and the Haarlem sub-region are the elite residential areas east and west of Amsterdam. Since the core of the Randstad is the protected Greenheart, spill-over of economic and spatial dynamics is directed towards the reclaimed province Flevoland, in particular Almere, the Randstad's fifth largest city. With Almere, in the 1990s other medium-sized towns as Amersfoort in the Utrecht region and Leiden developed rapidly due to economic overpressure in the four largest cities and despite their less outspoken socio-economic profiles.

The end of the 1990s has shown a growth of larger and medium-sized cities in the Randstad. Particular attention should be paid to the larger Amsterdam region, with a GDP per worker of €87,573 comparable with other major European capitals. High commuter levels blur the productivity levels of Flevoland and East-South Holland. Nevertheless, the employability is equally distributed in the Randstad, with 45 jobs for every 100 inhabitants (Figure 2.5). In particular IJmond is set backward in terms of GDP growth (Figure 2.3). With the exception of Delft-Westland, and stagnating Haarlem, all regions were able to create new jobs, as Figure 2.4 shows. Even the main cities could, in contrast to London and Paris, decrease unemployment in combinations with income growth.

In the Randstad, the relatively equal distribution of employment and income and the relatively strong emphasis on service sectors is striking. With the exception of manufacturing in the southeast of Holland and Zaanstreek, steel mills in IJmond, and horticulture in Westland, all regions have four-fifths of their employment productivity in service industries. A large share of services is characteristic for metropolitan economies, parallel to a knowledge-intensive innovative manufacturing. This R&D is relatively weak developed in the Randstad, with a single concentration in Delft University of Technology campus. Amsterdam benefited more from the economic booming period than the Rotterdam region did in the 1990s. Medium-sized cities such as Haarlem and Leiden have a high percentage of services, although show slower economic growth figures because of a scarcity of space for business expansion.

The economic downswing in 2002-2005 in the Netherlands affects the economic performance of the Randstad regions as well. Amsterdam's business service industry and particularly information technology made a fall in terms of employment. The importance of services is thus tempered in periods of lower economic growth. The larger Amsterdam area near the airport, Haarlemmermeer, continued to grow at a lower pace. In 2004, it was only Flevoland that made up arrears and continued to create jobs where all other Dutch provinces lost employment. Amsterdam is recovering from the current recession, where the south wing continued to lose jobs until recently (CBS Webmagazine 2005).

In sum, the regional economic performance of the Randstad city-region can be characterised as trade- and business-oriented, with equally spread employment and income. The high labour productivity in Amsterdam is an exception and competes with other European capital regions. The lack of variety in performance between the sub-regions does not differentiate the Randstad

city-region entity from other regions in the Netherlands. In particular due national factors, the Randstad's economy flourished in the 1990s and declined more recently.

2.5 Regional economic performance of Frankfurt Rhein-Main

Frankfurt Rhein-Main in national perspective

The 1990s and 2000s German economic crisis with unemployment, labour market bureaucracy, pensions, social welfare contributions and strikes do have a considerable impact on the regional economy of the case study. In an international comparison of globalising city-regions, it made Frankfurt Rhein-Main perform worse than other city-regions, mainly due to the national factors. In terms of population and contribution to the GDP, the state Hessen is of average size for German standards and comparable in size to the Randstad city-region. Bayern and Baden-Württemberg perform best, particularly around München and the Stuttgart suburb, and Karlsruhe. The northern and eastern states show worse economic performances (Focus-Money 2003).

The relative importance of Frankfurt Rhein-Main should however not be underestimated. First the productivity per employee is the highest after Hamburg. But more importantly, Hessen differs from the Frankfurt Rhein-Main city-region that also includes parts of high productive

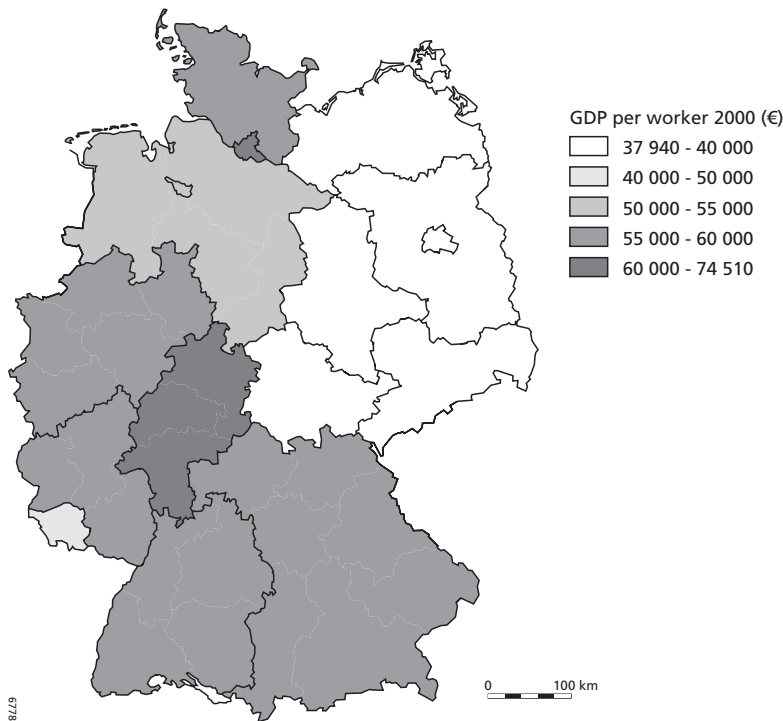


Figure 2.6 GDP per worker in German states (Source: statistik-portal.de (2005), Freund (2002))

parts of Bayern and Rhineland-Pfalz. In the end, Frankfurt Rhein-Main in southern Hessen covers 4% of the German area, includes 6% of the total population and, the inhabitants add 8% to the national income (IHK 2003). Since the 1950s, unemployment rates have been constantly up to 3% lower in Frankfurt Rhein-Main than the German average. Hessen's GDP of €64.289 per employee is around 20% higher than the German average, the second highest after the city-state Hamburg (Figure 2.6).

Frankfurt Rhein-Main in regional perspective

The northern and middle parts of the state Hessen perform on an average level in Germany (IBH 2002). Unemployment in the northern part (8,7% in 2001) and central part (6,8%) of Hessen remains higher than the more successful economic performance of southern Hessen (5,8%). The Rheinland-Pfalz sub-regions of Alzay-Worms and Mainz-Bingen, however, develop best in the city-region (Figure 2.8 and 2.9). Frankfurt, Hochtaunus and Main-Taunus districts follow the Rhineland.

Frankfurt's share is around 25% of Hessen's GDP, which dropped from 33,4% in 1988 (Gutberlet 2002). The other main cities Darmstadt, Offenbach, Wiesbaden, Aschaffenburg, Mainz and Worms together contribute another quarter to the GDP, a stable share compared to 1988. The other half of the total production in the city-region, with an increasing share over time, can be found in the less urbanised counties of towns and villages.

In Figure 2.7 Frankfurt's high labour productivity is remarkable. This is mainly explained by the fact that two-thirds of Frankfurt's jobs are filled with people living outside the city (Gutberlet 2002). The high productivity makes Frankfurt am Main the nerve centre of the German economy, and the growth engine of the region (Freund 2002). Frankfurt and the direct neighbouring counties in the '*Speckgürtel*' (Groß-Gerau, Hochtaunus and Maintaunus) base their added value on three economic pillars and their spin-off: the banking district, the airport and the convention centre *Messe*.

First, the airport offers direct work to 62.000 employees. The freight transportation in the airport is the largest, with passengers' transportation ranking as the second largest on the European mainland. There is a spin-off towards the catering, hotels, cleaning and retail industries in the direct environment. Second, Frankfurt's CBD is the main location for banks and insurance companies in the European mainland. After Germany was split in a western and an eastern part, banks moved to Frankfurt, a city with a specialised banking tradition and stock exchange since the Middle Ages. The banking quarter directly offers about 65.000 jobs (Freund 2002). Back offices and supplying financial services are found in neighbouring counties with lower taxes. The third economic pillar is the Frankfurter Messe that employs only 625 persons but functions as a magnet for the city: every year about 50 conventions are held that attract over two million visitors. The direct and indirect spin-offs are considerable, particularly in hotels, tourism and shopping in Frankfurt's downtown. Additionally, the importance of the media sector in the region is often underestimated; Frankfurt has the largest concentration of media employment in Germany.

Over time, the surrounding cities of Darmstadt, Offenbach, Wiesbaden, Aschaffenburg, Mainz and Hanau, within which many downtown areas were destroyed in the war, created their own economic position in the Rhein-Main region (Freund 2002).

The former artist city Darmstadt could be a typical bureaucrats' city due to its long history of governing the region. However, during the last decades Darmstadt has developed as the science and technology centre of the region and is allowed to call itself *Wissenschaftsstadt*. The city has a manufacturing character that could offer centrally located sites in the after-war era for low prices. This background combined with a science tradition created the environment for innovative industries, with particular growth in the software industry.

Hessen capital *Landeshauptstadt* Wiesbaden could combine hard location factors (accessibility) with softer location factors (culture), establish a flourishing economy with an above average GDP of €66.829 (Figure 2.7). Wiesbaden was able to maintain its profile of a city with an emphasis on the quality of life: in the 19th century starting as a bathing city, and in the 21st century added with conventions, consultants and governmental functions sprawled over the city.

Neighbouring media city Mainz is the capital of Rhineland-Palatinate with a relatively prosperous economy of GDP 55.977 per worker and substantial growth. Mainz has a mixed economic structure with 80,9% services. Capital governmental offices mainly cause this. Furthermore, Mainz specialises in media (ZDF headquarters) and specialised glass manufacturing.

Offenbach am Main developed in the 19th century in the shadow of Frankfurt as a chimney-free manufacturing city. The former *Landesfabrikstadt* is specialised leather, metal and machines. Because of the industrial image and the less attractive accessibility, the city has grown only 42% in the 1988-2001 period (see Figure 2.8) and shows the highest unemployment rate of Frankfurt Rhein-Main.

Neighbouring city Hanau is well known for its former nuclear industry and gold work, but is particularly specialised in chemical industries and medical equipment. The metal, measuring

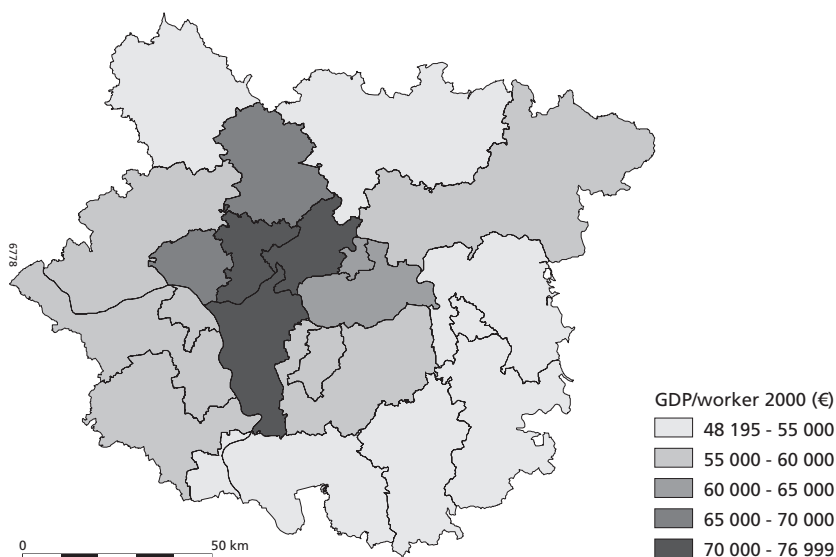


Figure 2.7 GDP per worker in Frankfurt Rhein-Main (Sources: Hessische Kreiszahlen 1989,1996,1999,2003, PVFRM (1997, 2002) Gutbarlet (2002))

apparatus and electric industries are still important for the city, but Hanau had problems in transforming to a service-economy structure. In particular, the decision to stop using nuclear power hit the city hard and led to a decrease of high qualified labour, increase of unemployment,

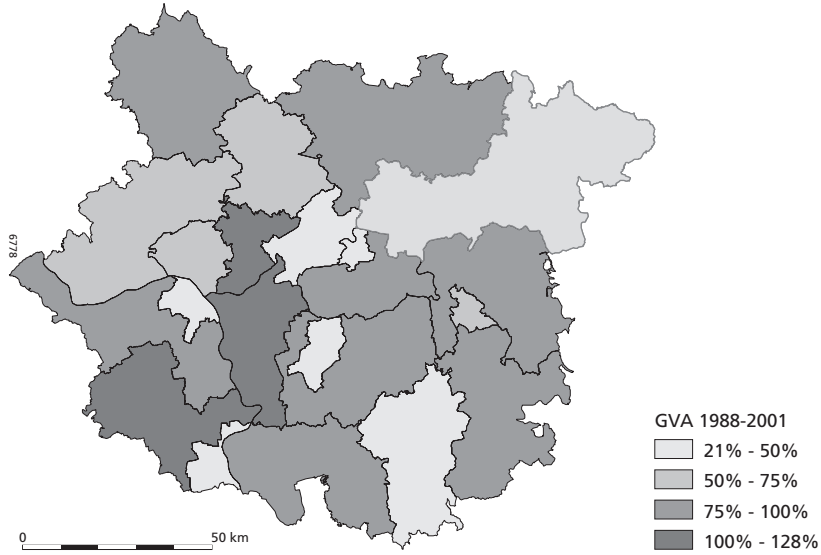


Figure 2.8 GVA growth in Frankfurt Rhein-Main (Sources: Hessische Kreiszahlen 1989,1996,1999,2003, PVFRM (1997, 2002) Gutbarlet (2002))

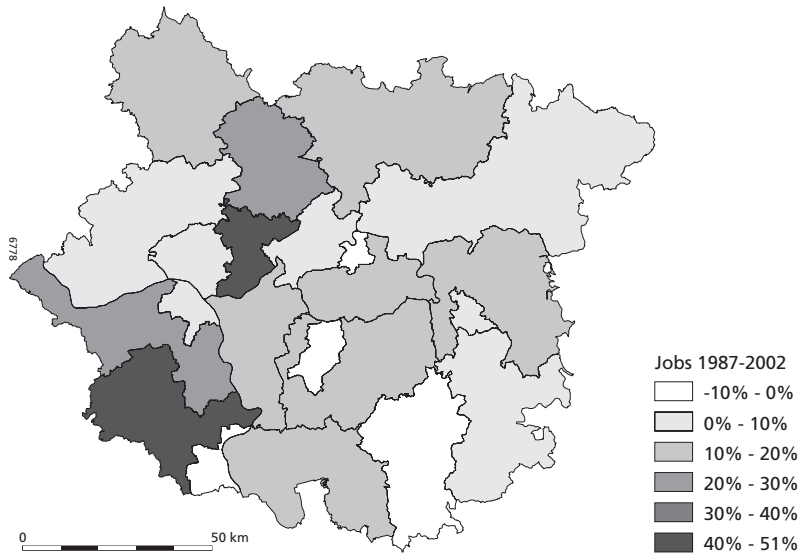


Figure 2.9 Job growth in Frankfurt Rhein-Main (Sources: Hessische Kreiszahlen 1989,1996,1999,2003, PVFRM (1997, 2002) Gutbarlet (2002))

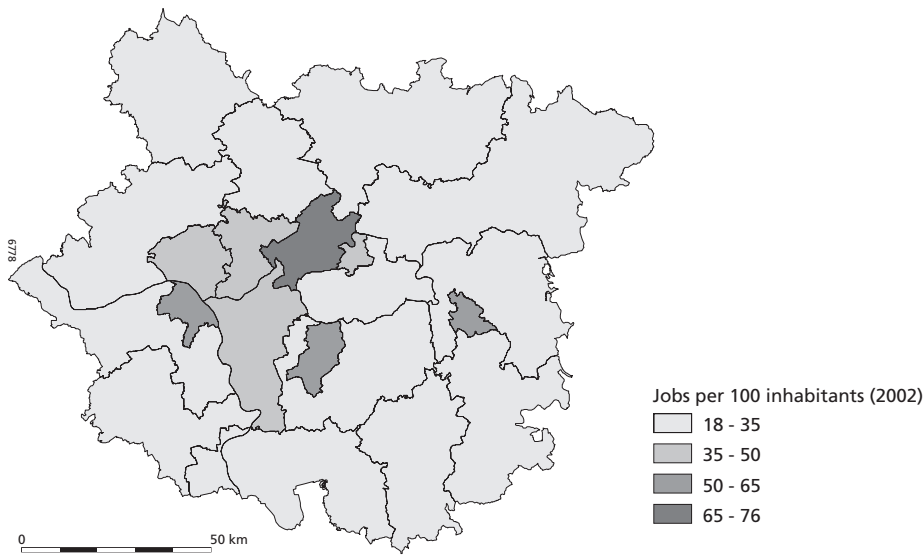


Figure 2.10 Employability in Frankfurt Rhein-Main (Sources: Hessische Kreiszahlen 1989,1996,1999,2003, PVFRM (1997, 2002) Gutbarlet (2002))

and lowest growth of gross value added (GVA), resulting in a low €20.644 per capita income (Figures 2.7-2.10).

Aschaffenburg is traditionally the centre of the Bavaria's clothing industry and supplying services, explaining the smaller size of the service industry. Similar to the Taunus area, this sub-region played the tax-competition relatively hard, and in combination with an attractive living environment could attract businesses and services just within her border and as Figure 2.9 shows created new jobs in the last decade.

Figures 2.7-2.10 also offer an overview of the economic performance of smaller sub-regions in Frankfurt Rhein-Main. In Rhein-Main the west-east contrast is remarkable: the Hochtaunuskreis and Main-Taunus grew rapidly in terms added value and jobs. Offenbach, Darmstadt and Odenwald in the east are the only sub-regions that faced a decline of jobs in the last fifteen years. The attractive northwestern Taunus mountain living environment, accessibility to airport and highways, economic structure and education level are the main explanations for these diverse developments in this so-called *Speckgürtel* (Freund 2002). The high productivity per employee in the car manufacturing industry in Rüsselsheim is furthermore remarkable. This is part of the southern ring of R&D intensive manufacturing, the locally so-called *Produktionsgürtel*.

In sum, the differentiation of income and employment is striking in the regional economic performance of Frankfurt Rhein-Main. Therefore, the conclusion drawn by Jacobs (2000:146) that the cities in Rhein-Main could be seen as merely suburbs of Frankfurt cannot be upheld. The dominance of Frankfurt's banking and airport sectors is without doubt, but the variety of the regional economic sectors in the cities and towns and clear economic profile makes the region strong as a whole, reflected in Frankfurt's losing share in the regional economy. The specialisation

and variety of economic sectors makes the city-region less vulnerable in times of economic structural change and sector process of creative deconstruction.

2.6 Regional economic performance of Tokyo

Tokyo in national perspective

The Tokyo Metropolitan Area or southern Kanto (Saitama, Chiba, Tokyo and Kanagawa prefectures) is not only the urban and political centre of Japan; it is also the economic core of the country and a global city. In the metropolitan area, where a quarter of Japan's citizens live, employment adds roughly 30% to the GDP on 3,6% of the country's surface (Chorus 2002). Almost half of the headquarters of national companies are located here (43%) and most headquarters of international firms can be found in the Tokyo Metropolitan Area (88%).

In structural and institutional analysis of Japan's economic problems, Porter, Takeuchi and Sakakibara (2000) found two Japans: the Japan of international leading sectors that are often cited as the famous model of bureaucratic capitalism, and the uncompetitive Japan of economic sectors that are strictly regulated and protected by government, which lack innovation and competition. The first Japan is carrying on and balances out the deficits made in the second Japan. The fast economic growth established the institutional context but actually hindered further development of less competitive sectors as retail, food, and construction. Studies emphasized the successful bureaucratic capitalism of the government of coal (1950s), steel and shipbuilding in Kansai (1960s), and semiconductors (1970s) and computers (1980s) in Kanto. In the 1990s headquarters, education, culture and media increasingly clustered in Tokyo with the international financial and management functions of the service economy (Porter *et.al.* 2000).

The economic performance of Tokyo and Japan cannot be understood without the context of the general economic stand still of Japan in the 1990s, after the steady and rapid economic growth that led to the climax of the bubble economy in 1989. The last ten to fifteen years are also known as 'the lost decade' but is actually an economic standstill in contrast. A lack of private investments and spending was mainly compensated by investments of the public sector, in particular public works (see McGormack 1996). Therefore, most Japanese did not consider economic problems as severe. Unemployment remains relatively low, income levels stable and prices deflated. In particular in centralised nation states such as Japan, one can expect that the Tokyo city-region is following national trends and has few opportunities to escape from the economic standstill.

In terms of productivity under €60.000 per employee Hokkaido, North-East Japan, Kyushu and Okinawa are still behind the Japanese average (see Figure 2.11). Amongst all Japanese regions, Kyushu showed a considerable growth in the last decade, which is mainly explained by the development of the city of Fukuoka. Most regions had a stable share of the GDP, although southern Kanto and Kansai had a strong decrease in the share of the GDP in the 1990s (Cabinet Office 2003). Nevertheless, the regional economies of Tokyo, Nagoya and Kansai are still disproportionately large compared to the population and have higher GDP per worker levels, where Nagoya even overtook the Kansai cities.¹⁴ The manufacturing sector in Tokyo that left the

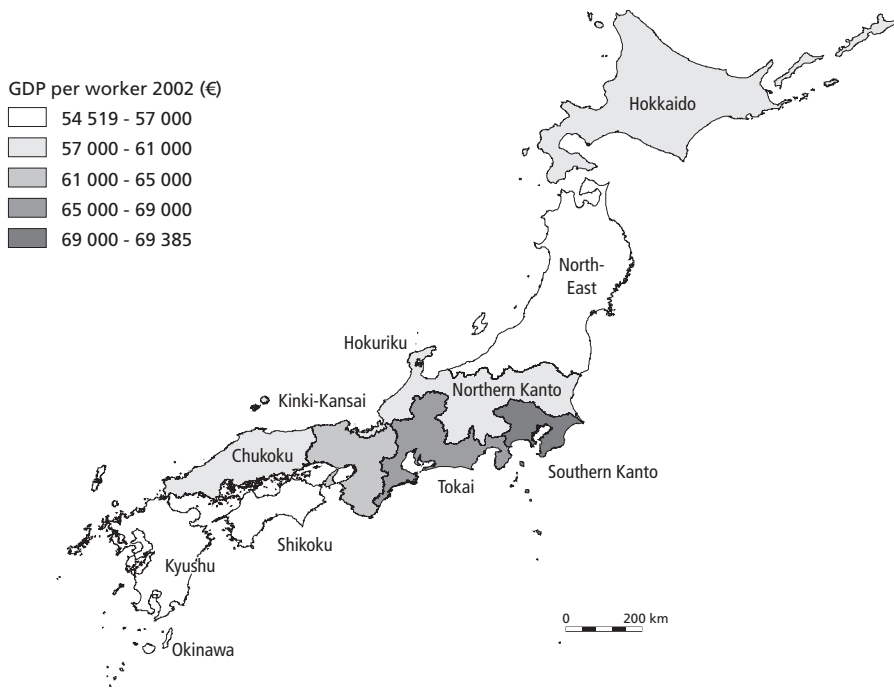


Figure 2.11 GDP per worker on Japan's islands (Source: Cabinet Office Japan (2003, 2005))

capital in the 1990s moved north, partly because of governmental regulations, boosting northern Kanto's economic performance.

Tokyo in regional perspective

Tokyo's population grew extremely rapidly in the 1950s, from six to over nine million. The speed slowed down in the 1960s and 70s and stabilized in the 1990s to twelve million inhabitants. Despite the recent stabilization and even slight decrease, the pattern within Tokyo is still dynamic. As Cybriwsky (1998) argues, in the 1990s Tokyo has become an 'urban donut' with a sprawl of people from the central business wards to the surrounding wards and suburbs.¹⁵ The economic recession with decreasing land prices and Tokyo's continuous attractiveness as a residence made it possible for citizens to return to Tokyo more recently. Figures 2.12, 2.13 and 2.14 display the indicators of economic and demographic development of Greater Tokyo in the last decades.

Figure 2.14 shows that despite the economic standstill, 40% of the jobs in Tokyo are concentrated in the 5-ward area of Chiyoda, Chuo, Minato, Shinjuku and Shibuya, where service industries are concentrated. Employment concentration in combination with the relatively few citizens living in downtown Tokyo, leads to extreme differences in employability. Chiyoda has up to 100 times more jobs per 100 inhabitants than remote wards and the average of the cities in the table below. The downtown area suffered more than the average in Tokyo, but did not see a double digit decrease in jobs and establishments of firms such as in the northern wards of Taito,

Sumida, Toshima, Itabashi, Adachi and Katsushika as shown in Figure 2.12. These areas suffer from a relatively large manufacturing sector, the sector that already left more vital parts of Tokyo. Despite proximity of Haneda airport, and high absolute numbers of jobs and establishments, the economic performance of Ota-ward is poor (Figure 2.12). Ota used to have many small and medium sized enterprises, in particular factories and logistics that are apparently rapidly leaving the southeastern ward. The most recent economic trends show a slight economic improvement of the disadvantaged eastern wards based on (sub)culture and affiliated tourism.

Outside the central 5-ward area, employability is more stable than in downtown Tokyo with 45 jobs per 100 inhabitants. Economic downswing is found in most wards with extremely bad performance of some countryside villages and peripheral cities that are not mentioned in the table. In contrast, the Tama and Hachioji new towns and Fuchu, with double-digit growth Figures (Figures 2.12, 2.13), seem to be unaffected by the economic standstill in the rest of Japan. The employability rates of the new towns show that people suburbanised and jobs on more affordable followed later.

In Saitama jobs and establishments are overwhelmingly concentrated in the national appointed growth centres Urawa and Omiya, currently merged to Saitama City. Economic development is concentrated in southeastern Saitama, close to the 23-wards of Tokyo, besides Saitama City in Kawagoe, Kawaguchi and Tokozawa. Despite job concentrations, the employability rates are average in Saitama. Northern located Kazo shows high economic growth numbers, but with 25,482 jobs is still small in size (Figure 2.13). In comparison with Tokyo, the high growth rates of jobs in Saitama and low decrease of establishments is remarkable, and might imply Saitama's relevance as a more affordable option in the Kanto region.

Chiba prefecture experienced a remarkable 6,5% growth of jobs in a decade of stabilization in Japan. However, within the prefecture there are clear differences in economic development. Chiba's growth centres show a mixed result: Chiba City and New Town (7,3% more jobs), Narita Airport (19,2%), Funabashi-Makuhari (5,1%) did well but the planned R&D center Kisarazu: connected to Tokyo with an expensive Aqualine bridge-tunnel combination, (-6,1%) performed worse (Figure 2.13). However, it is Uryu, the location of Tokyo-Disneyresort, that grew from a village to a city and faced an explosion of jobs in the last two decades with the second highest employability rate in Chiba in 2001. Second best after Uryu, the Narita Airport City region with Narita, Sakura, and Togane also showed double-digit growth Figures. Narita City has a remarkable high employability rate of 89 jobs per 100 citizens, one of the highest in the capital region (Figure 2.14).

In southern Kanagawa, the coastal centres of Yokohama and Kawasaki dominate the demographic and economic development. Kawasaki faces severe economic structural problems caused by manufacturing outsourcing, and could not benefit from the nearby development of Haneda airport (Figure 2.12). Nevertheless, Kawasaki's employability rate of 40 is still average, where well-connected Atsugi show exceptional high employability rates (66 jobs per 100 citizens). Kanagawa prefecture in general has a similar decline of jobs and companies as Tokyo, where the exceptions are the concentrations in Sagami-hara and Atsugi, west of Yokohama and directly south of Tokyo, where R&D-related manufacturing developed rapidly in the 1990s (Sorensen 2001).

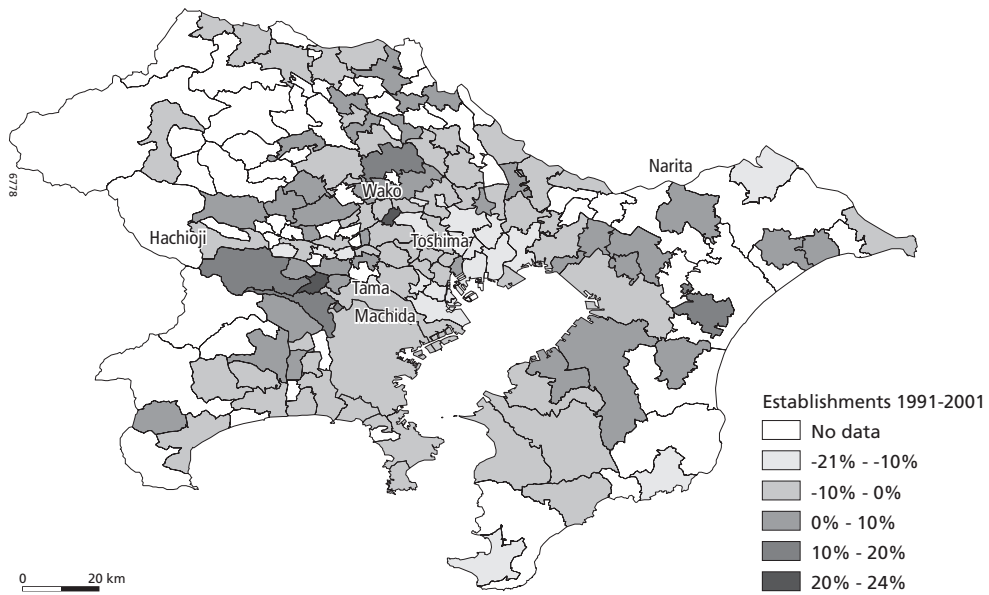


Figure 2.12 Establishment growth in Tokyo Metropolitan Area (Sources: Tokyo Statistical Yearbook (1992, 2002); Establishment Census (1996, 2001))

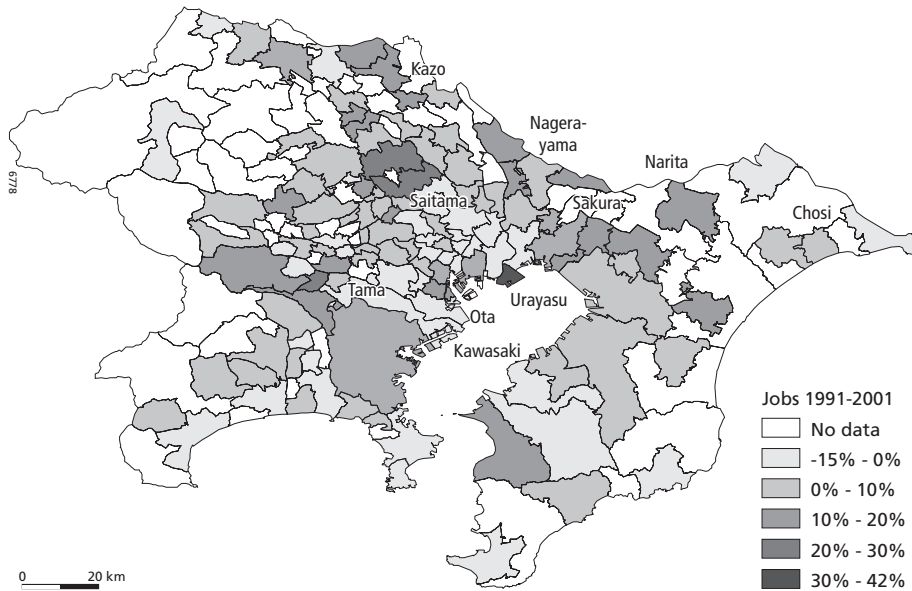


Figure 2.13 Job growth in Tokyo Metropolitan Area (Sources: Tokyo Statistical Yearbook (1992, 2002); Establishment Census (1996, 2001))

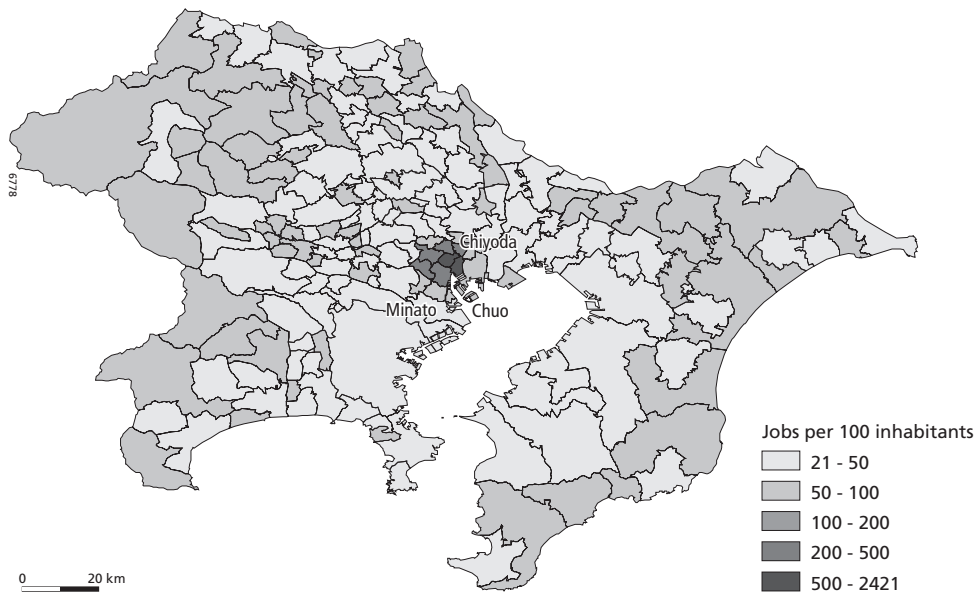


Figure 2.14 Employability in Tokyo Metropolitan Area (2002) (Sources: Tokyo Statistical Yearbook (1992, 2002); Establishment Census (1996, 2001))

In sum, in the last decade, the prefectures surrounding downtown Tokyo showed a better economic performance than Tokyo itself. There is nevertheless no doubt about the dominance of the 5-ward area in central Tokyo as the centre of the region. After a difficult start in the 1970s and 1980s, the appointed growth centres in the region flourished in the 1990s, and can now be seen as serious nodes that shape a polycentric network around Tokyo. These growth centres of Hachioji and Tachikawa in the west, Saitama in the north, Chiba, Narita, Urayasu and Funabashi in the east and Yokohama and Kawasaki in the south, these economic-geographical concentrations are encircling Tokyo, creating a polycentric city-region.

2.7 Quality of the business environment

The previous sections have given insight on the economic development of the city-region case studies. The second part of the benchmark, the quality of the business environment or investment climate, is more subjective and more future-oriented. These studies rely on the answers of entrepreneurs and the benchmarks of specialised agencies. First, general notions on the quality of the business environment on the national level are briefly addressed. Then, closer attention is paid to the strong and weak indicators of the regional investment climate.

The overall economic performance, according to the World Competitiveness Report (IMD 2005) analysed on the national level, is based on four elements: economic performance (as described in 2.4-2.6), government efficiency, business efficiency, and infrastructure for fifty selected OECD countries. In general, all three case studies are losing competitiveness in terms of business

environment compared to other countries in the world. For Germany and Japan, in particular efficiency of both governmental institutions and business are problematic. Recently, Japan's business efficiency (labour market, finance, management and attitudes) is slightly improving. In the Netherlands, fiscal policies and public finance are still weak, but the governmental efficiency is in general higher than in Germany and Japan. Furthermore, the Dutch institutional framework and business legislation in particular are improving. Germany and in particular the Netherlands are lagging behind Japan's excellent infrastructure in general, and outstanding scientific, technological and educational infrastructures.

After this general overview, it is essential to have a closer look into these categories and into the region. We draw here on benchmarks in northwestern European regions and extend it with Tokyo, in terms of market relations, business climate and image. The quality of market relations in the regional investment climate in Frankfurt Rhein-Main is valued best in Western Europe (Ecorys-NEI 2001). The enormous potential of the Tokyo market with cooperation, competition and complementarities is outstanding, in particular in combination with the high quality demand of the Japanese buyers.

In Table 2.2 there are considerable differences between the case study city-region in terms of quality of production environment.¹⁶ In the 1990s economic booming period, scarcity of skilled and motivated labour developed in the Randstad, but with the recent downswings in terms of quality that is no longer an urgent issue. Randstad and Frankfurt Rhein-Main are stepping stones for talent to global cities as London and Tokyo. The Japanese market is more stable; Tokyo continuously attracts the quality and quantity of labour the regional market needs to continuously develop, partly brain draining other regions in Japan.

The availability of houses is problematic in the Randstad due to a lack of high-end residential areas, in Frankfurt due to high rents, and in Tokyo due to a general lack of quality and high rents of apartments and houses (Table 2.3). The position of crime in the benchmark for Frankfurt is misleading since all illegal refugees entering Germany by Frankfurt International Airports are counted in the local crime statistics.

Table 2.2 Best performances of the case studies' business climate

Rank	Randstad	Frankfurt Rhein-Main	Tokyo-Japan
1	Air transportation	Air transportation	Rail and public transportation
2	Water transportation	Market relations & services	Domestic suppliers
3	Financial market	Telecom infrastructure	Public investment R&D
4	Freight rail transport	Education facilities	Education
5	Competition	Freight rail transport	Buyer sophistication
6	Market size	Public transportation	Quality research labour
7	Available offices	Financial market	Competition
8	Services	Services for residents	Regulatory standards
9	Suppliers	Quality industrial sites	Tax
10	Urban environment	Accessibility by road	Technological infrastructure

Source: Ecorys-NEI (2001), Porter *et al.* (2000), IMD (1995, 2005), Takeuchi (2001)

The second main problem in the Randstad is infrastructure accessibility, particularly in Amsterdam, Den Haag and Utrecht. The infrastructure is valued even less than in congested Paris and London, and appreciated more than the less urbanized areas in and outside the Randstad. Frankfurt Rhein-Main and Tokyo's regional integration is well developed due to excellent regional transit systems. In these city-regions rail transport is a competitive advantage. This is in contrast to the Randstad where the lacking coherence in the polycentric region is the most important reason for entrepreneurs to not see public transportation as a serious alternative to accessibility by car, particularly outside the main cities (cf. Jacobs 2000). In the Randstad, water transportation is still a competitive advantage. Most striking is that in both Frankfurt Rhein-Main and the Randstad, the airport is seen as the main competitive edge. This is in sharp contrast to Japan, where air transport is considered as weakness number five, slightly better for the Tokyo region but still considered as a disadvantage.

In the international benchmark Frankfurt's government is seen as relatively strong due a positive attitude of the regional government. Frankfurt entrepreneurs' main problem is the tax climate however, in particular corporate tax, despite the fact that many European cities perform even worse (Ecorys-NEI 2001). Particularly, the direct competition on corporate tax amongst towns in the Rhein-Main area is one of the critical issues of political debate. Furthermore, subsidies and incentives are not considered as very valuable for economic activities. The Randstad and Tokyo do not have tax competition and therefore also less financial incentives for distinguished regional development. For Tokyo, low VAT tax is a major advantage. Foreign direct investment (FDI) inflow into Japan's economy is, with 1,1% adding to the GDP in 2000, still extremely low compared to for example Germany (22,4%), and is the limited access to the Japanese market is one of the most important national factors hampering the development of regional economies as Tokyo (ACCJ 2004).¹⁷

The limited access to markets for foreign companies and start-ups protects the interest of the current major entrepreneurs, although the regulatory standards also lead to the advantage of higher product and services quality. Japan's competitiveness is mainly caused by the intensity of local and domestic rivalry in combination with high quality demands. Although the quality of education and research are in international perspective good, the quality of management schools

Table 2.3 Worst performances of the case studies' business climate

Rank	Randstad	Frankfurt Rhein-Main	Tokyo-Japan
1	Availability & quality labour	Tax climate	Market access
2	Availability & quality housing	Crime	Computer utilization
3	Education level	Available housing	Financial markets
4	Accessibility by road	Available labour	Quality business school
5	Attitude governments	Office rents	Air transportation
6	Attitude labour	Subsidies & incentives	Openness public sector contracts
7	Crime	Water transport	Port infrastructure
8	Tax climate	Rents industrial sites	Bureaucratic red tape
9	Public transportation	Competition	Road infrastructure
10	Wage level	Education level	Antitrust policy

Source: Ecorys-NEI (2001), Porter *et.al.* (2000), IMD (1995, 2005). Takeuchi (2001)

is nevertheless disappointing. The famous government R&D investments are exaggerated: the actual governmental contribution is much lower than is supposed, and managers do not consider R&D consortia to be important for the economic performance (Porter *et.al.* 2000). Japan's best and worst performances are in contrast to the Randstad area, where market access is the competitive edge and labour market quality and availability is limited.

An additional location factor is culture. Tokyo, Amsterdam, and to a lesser extent Rotterdam and The Hague are the national centres of culture, with the famous museums, opera, and cinemas. For Frankfurt, this issue is more complicated and subject of debate, since Berlin has more culture to offer, due Frankfurt's image as a working city. Nevertheless new projects such as Museumufer in Frankfurt contribute to the city-region's culture base, and challenge the established image (for a detailed discussion, see Van Aalst 1997).

In sum, the benchmark survey offers an overview of the quality of the business environment in terms of market relations, business environment and image. The quality and availability of labour is high in Tokyo, but problematic in the Randstad. Japan's business efficiency is sluggish, but the size of the market and high quality demand makes market relations excellent. In the contrary, the Randstad is open but small in size. Tokyo's rail infrastructure is a major advantage, but airports are seen as less well developed in the city-region. Frankfurt scores excellent in rail, road and airport infrastructure. Airport in the Randstad is considered a competitive edge, but roads are congested and public transport is not taken seriously. Tax competition is severe in Frankfurt Rhein-Main, and not harming business investments seriously in the other cases.

2.8 City-region formation in the case studies

The analysis of economic performance and quality of the business environment emphasises the importance of developing a metropolitan economy that integrates the city-region, increases scale, with wider variety, higher standards, better access and more competition. Processes of city-region formation stimulate the process of regional integration that provides more variety on larger markets that city-regions need in able to specialise and take position in the new global hierarchy. The question rises if and how this takes place in the case studies. In order to answer this, the history of political and bureaucracy initiatives are explored, as well as more recent bottom-up private and public initiatives that are of the increasing importance.

City-region formation in the Randstad

The ambition in the Randstad to develop towards a metropolis that can compete with other globalising city-regions was particularly examined in three different periods. According to Zonneveld and Verwest (2005) the discussion was raised in times of economic recession (1980s), and in times that the Randstad had to compete with other metropolises (1950s and 1990s). Here we will discuss these periods and see if and to what extent the Randstad could become successful in the formation of a coherent and competitive city-region. The changing way of thinking about the Randstad region can best be described upon the national planning memoranda and private initiatives over time.

The precursor of the first national planning memorandum, *De ontwikkeling van het Westen des Lands* (Rijksdienst voor het Nationale Plan 1958), sees the Randstad as a circle of sprawling

agglomerations without a defined centre. This incoherent spatial pattern was considered as a major advantage compared to congested and overcrowded cities with over than one million inhabitants such as Paris and New York (Dijkink 1990). Proponents of further development of the western part of the Netherlands introduced the double planning concept Randstad-Green Heart, which refers to the ring of cities around the wetlands in the geographical centre (see Faludi and Van der Valk 1994). Opponents in the 1950s point at the fact that this Randstad area does not function as an social-economic unit at all, and fear the metropolitan ambitions in the Randstad-Green Heart that would lead to congestion and overcrowding.

The second national planning memorandum (*Tweede Nota* 1966) is a continuation of the general view of spatial redistribution from the urban-economic centres to the disadvantaged regions, including redistribution within the Randstad city-region. The common thinking, argued by Dijkink (1990), was that a metropolis in the Randstad would furthermore increase inequality in the Netherlands. Therefore, his minister banned a publication of former national planning agency director Hazelhoff on the need of a metropolitan E-milieu. This currently non-existent 'super-urban quality milieu with allure and élan' would, in his view, be complimentary to the officially distinguished locations for agriculture (type A), villages (B), towns (C), and cities (D) in this planning memorandum.

The discussion over the development of the Randstad as a city-region changed tracks in the 1980s (Zonneveld and Verwest 2005). Economic recession planning was more than before forced to focus on economic aims rather than the metropolitan shape. Concentration was no longer the worst imaginable development, and the economic potential of the major cities, in the face of crisis, should be applied (Dijkink 1990). This line of reasoning started in the third national planning memorandum (*Orienteringsnota* 1975) and continued in the fourth (VROM 1988), where it was said that regions should develop based on their own strengths, and urban nodes of concentration were appointed (cf. Korthals Altes 1995). The Randstad developed as the western wing of a larger network of central cities in the Netherlands. It, however, turned out politically unacceptable that the discussion over the structure of the Randstad did not lead to conclusions over the urban design of the Randstad (Zonneveld and Verwest 2005). Furthermore, provinces and cities were unable to come to a metropolitan development scenario. For the second time, temporarily, the debate over the city-region faded away.

In the 1990s the discussion on the Randstad as a metropolis ran high for the third time. Similar to the 1950s, the debate was intended by the challenge to compete with other globalising city-regions. Nevertheless, there were crucial differences to the former discussions. First, it was more or less agreed upon that the Randstad is not a typical metropolis (Dijkink 1990, Zonneveld and Verwest 2005). Despite the failed policies of the cities to establish metropolitan policies in the last decades, the Randstad is not, but still can become, a metropolitan area, De Boer argues (1996). Second, and more important, the bottom-up development of both public and private actors interested in creating a metropolitan economy evolved. Private initiatives were taken to discuss the further development of the Randstad,¹⁸ which finally resulted in the establishment of the Deltametropolis Association (1998).

The main objective of the Deltametropolis Association was to make use of the potential of the delta area by transforming the current incoherent region with individualistic medium-sized cities into a coherent metropolis. This however indirectly implied improvement of the Randstad's infrastructure and therefore was politically connected to the *Rondje Randstad* project of the

high speed rail loop line between the four largest cities in the Randstad. The Deltametropolis Association think-tank and lobby group was eventually successful with the (political) embracement of *Deltametropolis* as substitute for *Randstad* in the precursor of the fifth national planning memorandum (2001).¹⁹ The discussion on the metropolitan ambitions, however, led to the political sensitivity (in particular expensive) of the *Rondje Randstad* and the conclusion that the Randstad is not the appropriate spatial scale for social and economic activities of most citizens.²⁰ These critiques are recently one of the reasons to bring the well-established name Randstad back on the agenda as Randstad Holland, with an aim of merging provinces and increasing planning tasks on the Randstad level.²¹

Until today, *Bureau Regio Randstad*, the Randstad coordinating platform's tasks are very limited, and it is only equipped with tools to improve relationships between provinces, major cities and national governments on a voluntary basis. Since the Randstad covers almost half of the Netherlands, the national government and policy makers are reluctant to establish the Randstad as a constitutional unity with self-steering powers.

In sum, the attempts in the Randstad to develop towards a city-region, which can act as one actor, has shown less success. The debate in particular focused on the planning concept and program rather than on institution or organization building. These failures are mainly caused by fear of super-urban structures, dominance of the city-region in the national context, and the rejection of the scale of the Randstad city-region as the appropriate level of social-economic activities and political action. Zonneveld and Verwest (2005) argue that the failures to define the Randstad as a metropolis should lead to the conclusion that the concept of a Randstad metropolis misses the required convincing power.

City-region formation in Frankfurt Rhein-Main

The formation of a city-region in Frankfurt Rhein-Main focuses on organisation structures rather than a generally accepted planning concept. The main problem is creating organisation structures, not the fear of super-urban structures, as they already exist in Frankfurt. Furthermore, in Frankfurt Rhein-Main, actors agree upon the spatial scale of the city-region.

Nevertheless, parts of the political-bureaucratic discussion are comparable to the Randstad. The Rhein-Main region has a structure of medium-sized towns, villages and larger cities that have their own roots and social-economic profile. Until recently, these places operate relatively independently. The shorter distances due to the transportation networks have made the Rhein-Main region however, against its tradition, a city-region in terms of social-economic activities. The city-region, integrating as a political and governmental unit, parts in a problematic tradition. In 1975, *Umlandverband Frankfurt* (UVF) was established. The aim of this regional association was to be a cooperative and ordered development of the Frankfurt region by transferring planning competences and water-, waste-, and leisure management to the regional level. According to Heinz (2000), the UVF was however always considered as a 'toothless tiger' due to a lacking enforcement of competences and a limited regional coverage that excluded the airport's neighbouring communities.

The 2001 successor *Planungsverband Frankfurt Rhein-Main* has even less competences but is at the same time a larger and more realistic planning area with more municipalities joining the association. A state like Hessen would lose meaning if the region Frankfurt Rhein-Main would

become too independent and powerful, and is no supporter of territorial reorganisation of the bureaucracy.

The lack of city-region formation is not only a bad performance of political actors, argues Freund (2002a:143), but there is also nothing worth mentioning in terms of city-region formation by social and cultural non-profit organizations. It is the economic agents alone, in relation to regional media, which are leading the city-region formation process in Frankfurt Rhein-Main. There is a variety of market actors, including airport, business leaders and managers of cultural institutes, that are interested in the construction of a metropolitan region and continuously discuss the matter on regional platforms.²² Many actors are disappointed in this respect and are willing to mobilize their own grassroots support, for instance in *Wirtschaftsinitiative – Metropolitana Frankfurt Rhein-Main* and *Vereinigung hessischer Unternehmensverbände*, and *IHK Forum-Rhein-Main*, the regional business employers' organisations.²³ The common idea of the private actors is to push the governments to change toward one metropolitan area. Inspiring projects such as the Olympics bidding can contribute to the regional self-consciousness. The current business perspective is pessimistic: the 2003 European third position after London and Paris might be an eight position in 2006 (FR 7.11.2003). Therefore the entrepreneurs demand a politically powered multi-purpose organisation in Frankfurt Rhein-Main, which is not merely based on voluntary cooperation.

Probably some other attempts or efforts to promote and develop Frankfurt Rhein-Main can be added or are currently emerging: it shows the interest of regional stakeholders in regional cooperation. This regional cooperation is in a political lock-in created by unwillingness, local interests and cooperation failures in the past. A major problem is that all public efforts are politically sensitive and politicized. The sense of urgency and the economic interests of the entire region now force the strategic actors to change the chosen paths.

In sum, political and administrative conflicts are the main reasons for the lack of regional cooperation in Frankfurt Rhein-Main. Private initiatives for creating a breakthrough for this institutional lock-in are different from the Netherlands. Urban designers do not lead them, but rather economic stakeholders and regional media, which underline the sense of urgency. Salet *et.al.* (2002) conclude that creating this kind of connectivity between stakeholders on the regional level can be a solution for regional cooperation rather than reforming or adding a regional administrative level with executive powers.

City-region formation in Tokyo

According to Friedmann (1986), a city's position in the world hierarchy is related to the global economic functions it hosts. In this sense, the position of Tokyo is dominant, although its star is less shining due low economic growth in the last decade. Despite competition amongst city-regions, it looks like Tokyo did not actively strengthening its position as global city; it is primarily a natural economic process (cf. Machimura 1992). Because of economic hegemony, Tokyo did not have to worry about the competitiveness of the city-region, and for safety, social and environmental reasons it was even seriously discussed to dismantle Tokyo and move the capital to a safer and more suitable location (Cybriwsky 1998).

Until the 1980s, the developmental state model was at the basis to improve the city-region's competitiveness. This model required a close harmony between governmental policy

and economic investments (*ibid.*). The mechanism to succeed economic development was based on close links between Japanese politicians, bureaucrats and businesses, and at the same time separated Tokyo from the rest of the world. Tokyo Metropolitan Government was, due to financial and economic power, the leader of coalition with strategic projects as the new waterfront in Tokyo. Saito (2002) argued that this waterfront was Tokyo's answer to the capital relocation plans of the national government.

More recently, since the financial crisis in Asia in 1997, competition for a global city status in Asia has increased. Singapore, Shanghai, Hong Kong and Seoul are competing to get to the level of Tokyo, London and New York. New airports in these cities are seen as a symbol of this trend to be connected to the worldwide network of city-regions, but also the relatively new element of gaining attention by hosting exhibitions or festivals (Douglass 2000).²⁴ Tokyo's goal is to compete with other foreign global city-regions, which is in contrast to other cities in Japan that lack profile and ambition. Even Osaka is no longer a serious threat for Tokyo.

Saito and Thornley (2002) examined Tokyo's recent moves to move out of the arm-chair position. The 1990s economic recession forced Tokyo to change plans for the capital region to re-emphasise the importance of Tokyo's downtown in balance with new towns in the region, and to open-up the discussion of internationalisation. It opened the composition of the actor-coalition to 'outsiders'; however, it is currently unclear if there is a leading actor coalition in the city-region (Interview Machimura 2004). Decentralisation is the dominant policy, so in legal terms the ministries and TMG are enlarging the playing field for local and private actors, but their ambition is to remain in control of powers. The National Capital Region's prefectures and leading mayor are discussing the future of the capital region but the discussion of relocating the capital is fading away. There seems not to be a new urgent topic for discussion. The Tokyo Metropolitan Government itself is rather abstract on the future development of the city-region:

"Tokyo is faced with a range of socio-economic changes [and] the changeover to policy-led urban development [by] maintaining and developing urban vitality, creating and sharing a rich urban environment, urban culture, safe and healthy living environment and new urban development based on the use of information technology" Tokyo Bureau of City Planning (2001)

Amongst many abstract perspectives, only two concrete urban projects become clear: internationalisation of Haneda airport and development of three loop roads around Tokyo. Mitsui-Fudosan (Interview Mitsui-Fudosan 2004) criticise the governments' lack of vision on Japan and Tokyo, since there is no longer the perspective of catching up with leading western countries. Urban project developers such as Mitsui-Fudosan, Mori and Mitsubishi might fill the gap of the leading coalition in Tokyo, and become recognized as important for managing parts of the city. Mitsui-Fudosan's (2002) ideas of Tokyo's are to increase the current profiles of the zones in and around the city by improving the current inefficiencies of transportation -congestion- and land use – low densities.²⁵

In sum, the discussion over a global competitive city-region formation in Tokyo is different from Frankfurt Rhein-Main and Randstad. Because of economic hegemony in Asia, plus the focus on economic development, Tokyo did not have to focus on this issue for a long time. The situation changed dramatically in the 1990s. There is no discussion over the planning concept in the Tokyo

Metropolitan Area due to the focus on economic development in the city-region. The Tokyo Metropolitan Government (TMG) used to be the dominant actor for boosting the city-region's competitiveness, but in terms of regional coalition building, it is currently these economic agents acting as project developers that are leading the discussion. The city government is not dominating the debate any longer as it used to do in the era of the developmental state. Policy orientation shows an interesting forced shift of the hard infrastructure orientation with visionary and expensive mega-projects at the waterfront and new towns, to softer elements that make the city-region competitive in terms of quality of life combined with economic development.

2.9 Conclusion

Theories over the further development of globalising city-regions in economic geography in the 1990s and 2000s focus on competitiveness. Despite disagreement on the exact meaning of competitiveness, it is generally accepted that city-regions are competing for their unique position in the global hierarchy, and this is not limited any longer to the traditional global cities. Polycentric city-regions are increasingly globally connected as well. Therefore, they have to organise and establish leading development coalitions that contribute to an integrated metropolitan economy with a wider variety, continuous change and an increase of scale, for instance with strategic urban projects. Regional benchmarks can contribute to the insights in paths, structure and weaknesses in the competitiveness, but can be traps when successful models are merely copied without considering the institutional roots.

Benchmarking city-regions is in this chapter used as a tool to measure the competitiveness in the past, present and future: the first step to answer research question 1. In the Randstad, Frankfurt Rhein-Main and the Tokyo Metropolitan Area case studies, this is measured by taking a closer look at economic performance, quality of the business environment and the formation of leading coalitions in the city-region.

All cases do have a disproportional share in the national economy, which is not so much shown in the share of the national economy (higher than the share of population), but mainly in the higher productivity levels of workers compared to other regions in the national economy. It is striking that despite economic growth in the regions, the number of jobs are not always increasing: a polarising trend of increased productivity with less jobs. Therefore it is important to consider the employability, which is strikingly equal in the Randstad sub-regions and (due to commuting) unequal in central Frankfurt and Tokyo. In addition, unemployment in all case study areas is relatively low.

The service industries are dominant for economic development in the last decades. The Randstad has proven to be successful in this field, particularly in (air) transportation, European headquarters, financial, and business services. Frankfurt and its northern neighbouring municipalities benefit in similar terms with airport transportation, international banking, and conventions. Tokyo was successful in international corporate headquarters, banks, and innovative business services. It turns out that, as theories on the metropolitan economy suggested, creative, management, and transportation jobs are leading sectors in the city-regions development. Nevertheless, other sectors can be highly productive and competitive too by applying new technologies, including manufacturing. In the benchmark study this was found

for the horticulture and flower trade in the Randstad, and some high-tech manufacturing in the southern belt of Frankfurt Rhein-Main, and Kanagawa south of Tokyo.

A benchmark can indicate the economic strengths and weaknesses, but can not frame the windows of opportunity for spontaneous innovations and changing trends. Where the Randstad is relatively egalitarian and service-sector oriented, Frankfurt Rhein-Main and Tokyo show more variety (by the share of services) and concentration (employability). This can be explained by a natural drive with a need of specialisation due to the market size and demand (Tokyo), and financial incentives for the regions to specialise due tax-competition (Rhein-Main). In addition, Tokyo and Frankfurt Rhein-Main have a competitive regional transit network and search of regional identity with a key role for regional media and economic agents, both supporting the process of regional integration, and increasing the economic potential. These are assets the Randstad does not have for improving the city-region's competitiveness.

In the process of positioning the city-region in the global economy, with a major role foreseen for the regions themselves, it is not the regional or national governments, but bottom-up public and private initiative that are leading. Economic actors such as chambers of commerce and business associations are leading in Frankfurt Rhein-Main, and major area developers in Tokyo contribute. In the Randstad, governors of the cities and other members of the Deltametropolis Association sense urgency, but the regional integration towards a metropolis continues to be tackled by the fears of metropolitan problems, super-urban areas, and a too powerful city-region on the one hand, and the awareness that daily life of most citizens takes place on a much lower spatial level on the other hand. In Tokyo it was not international competition, but national ambitions to relocate the capital that forced the local government to reassure its leading position by creating strategic urban projects as the waterfront redevelopment. Currently, it is project developers that are dominating the discussion of improving the competitiveness of the Tokyo city-region.

In terms of quality of the business environment, all cases continue to grow demographically and economically, an important condition for the stabilizing mature economies. On the labour market, there is a clear hierarchy in position of the case studies. Tokyo brain drains other regions in Japan and beyond, Frankfurt is seen as a stepping-stone in the career market, and the Randstad has increasing problems of attracting high educated and motivated personnel. Frankfurt Rhein-Main's and the Randstad's competitive edge is air transportation, which was also reflected in the economic performance of these areas in the city-region. In the 1990s, both city-regions have, despite their small size; benefited enormously from the international connections these airports offer the region. In the Tokyo Metropolitan Area however, air transportation is seen as a weak element of the regional economy, in contrast to the national excellence in rail infrastructure. City-regions do develop more and more polycentric, and airports are one of the centres. To understand the position of the airport as one of the new nodes, we need to take a closer look the new and current centres of economic, infrastructure, and urban development.

Notes

- 1 According to Porter, wealth (value of good and services) defines the productivity with which its firms compete. The central issue in economic development is to create conditions for rapid and sustained productivity growth. For Porter, targeting desirable industries as information technology is based on a narrow

- view on competitiveness (Porter *et.al.* 2001). All industries can increase competitiveness if they employ high technology. For productivity geographic location, natural resources, and military power are no longer decisive. Instead, prosperity depends on how a nation and its citizens organize and manage their economy, the institutions that they establish, and the types of investment they make, both individually and collectively.
- 2 It goes beyond the scope of this chapter to discuss globalisation itself. The main characteristics of the global economy are according to the opus magnum of Castells (2000) information, internationalisation and network structures between firms and between people.
 - 3 Three main elements of the regional economy should be treated as equal for the competitiveness of the region, argues Storper (1997). First, relations of economic and public organizations are crucial in the coordination problem; these relations are socially and historically embedded. Personal contacts, networks reproduction and imitation of contacts are the relational qualities of the agents; relations of actors are interdependent. Second, technology used to be treated as a black box where rational actors are working on ad hoc innovations. Storper sees the element of technology as social relations with a continuous process of input of information, innovation and output of knowledge. Third, the position of the region is not only dependent on economic organisation and technology. The balance of technology, economic organisation and territory can lead to different results in regional worlds of production and innovation and coordination in action frames. This leads to the conclusion that voice and loyalty between public and private actors, in particular in coordinated market economy regions must be seen as relational assets.
 - 4 Evolutionary economics means that actors have a bounded rationality of risk-avoiding behaviour and routine decision-making. Despite this limited rationality, innovative behaviour is necessary to increase productivity and creativity. Bounded rationality and the need for innovations leads in an evolutionary economy to a basically stable pattern of activities and growth in the region (Nelson and Winter 1982).
 - 5 In liberal market economies, radical economic changes and innovations are favourable and are more effective, resulting in the successful development of the IT and biotechnology sectors. In coordinated market economies however changes are slower and less radical and new ways of coordination are more effective for improving economic performance than a retreat of the state. Despite the slower reaction the coordinated market economies have a track record in successfully adjusting to the new economic reality in a later stage and for a longer time. This can be found in Germany's success in the machinery and pharmacy sectors (Hall and Soskice 2001).
 - 6 Baden-Württemberg guarantees a stable and high-quality production environment for motors, where the more wild and open entrepreneurial environment of San Francisco favours new innovations in IT. A major finding is that every region has got its own competitive institutional advantages (*ibid.*).
 - 7 The underlying assumption then is, that airport area development is one of the economic pillars for developing the competitiveness of the entire city-region. The importance of the airport as a cityport will be further discussed in the following chapters 3 and 4.
 - 8 Especially in small countries as the Netherlands or centralised countries as France, city-regions have limited possibilities to change institutions as fiscal rules, labour wages or education levels (Ecorys-NEI 2001, 2001a).
 - 9 Gross Domestic Product (GDP) consists of Gross Value Added (GVA) minus subsidies and plus taxes to express the region's economic accounts. GDP can be measured per capita and per worker. GDP per capita measured the economic strength of the region as a whole, including machines and capital, but here the emphasis is to look at the productivity of the production factor labour in particular (see for a discussion in detail Gutberlet 2002). The main problem with GDP per employee is the incorrect economic picture that is given due to commuters, since GDP is measured at the working place and not at the place of living. GDP levels on the local level are not available for Japan, so the development of jobs and establishments are included

- in the comparison to indicate economic performance. In German sub-regions it is more common to use gross value added (GVA), in the Netherlands GDP is common.
- 10 Note: the hierarchy is ranked among the top fifteen cities in any two or more categories. The ranking of economic control functions is respectively based on 100 largest banks' head offices (1995), major stock exchanges (1992), headquarters of largest industrial corporations (1993), airport international passengers (1992), largest population centres (1991), hosting or applying for Olympic Games since 1964, and Rolling Stones World Tour concerts (1995) (Short *et.al.* 1996).
- 11 In 1840, Holland was considered a too powerful province and was split up in the current northern and southern part (Van der Woud 1998). Flevoland is reclaimed in the 1950s and an official province since 1986. The Randstad city-region covers most parts the provinces of North- and South Holland, Utrecht and Flevoland. The provinces are subdivided in social-economic units (COROP), and the more remote parts north of Alkmaar, not being part of the social-economic unit, are singled out.
- 12 The productivity levels per employee of Groningen is traditionally misleading due to gas revenues counted in, regional product is in fact closest to Friesland's GDP.
- 13 Note: Until 1995, GDP is measured in factor costs; after 1995, GDP is measured in market prices, making comparisons impossible. Service are all sectors excluding agriculture, mining, fishing and manufacturing (Ecorys-NEI 2001).
- 14 The current status of Chubu region as 'engine' of the Japanese economy with highest growth levels in the past five years is explained by Toyota's presence and spin-off around Nagoya area. Kinki's (Kansai and Kyoto) decrease is related to older industrial sector structures.
- 15 The central 23 wards have decreased in size to 7.5 million, and new towns as Tama and Saitama, Chiba and Kanagawa surrounding prefectures show a rapid growth. This growth in the region was rapid and steady and led to the current 32 million inhabitants in the capital region. The table below shows the donut of central Tokyo, despite the recent strong increase of citizens in Chuo and Minato wards due planning regulations.
- 16 The production environment includes developments on the labour market, location qualities, infrastructure, quality of place, and regional government.
- 17 Direct investment are in general good for an economy, creates particularly new and structural employment of high added value, aggregates demand and increases spending, the most urgent problems of Japan's economy.
- 18 See for instance the *Randstad Overleg Ruimtelijke Ordening* (RORO, 1990: Randstad Urban Planning Consultation) and *The Metropolitan Debate* (Frieling 1998).
- 19 The interpretation of the concept by the ministry of spatial planning, however, is less progressive and ambitious than the concept the Deltametropolis Association had in mind.
- 20 Jacobs (2000) for instance shows that even on the level of the southern wing of the Randstad, including Rotterdam and Den Haag, there is hardly integration of activities. In addition, Amsterdam's policy makers recently understood that they are more and more part of a regional economic network, but that network is mainly defined as the finance, business and media industries in the northern wing that ranges from Haarlem and Schiphol to Almere, not the level of the Deltametropolis (Salet and Molenaar 2003).
- 21 This is in line with the Commission Geelhoed's conclusions (2002) to restructure the regional level in the Netherlands by limiting the number of governmental bodies and come to scale increase of the provinces, while keeping the basic structure of the Dutch state (i.e. state-provinces-municipalities) intact.
- 22 In a podium discussion organised by Metropolita Frankfurt/Rhein-Main, Frankfurter Allgemeine Zeitung (FAZ) and Medienwoche, an airport manager, county mayor, theatre director, housing corporation director, business managers and an architect were invited to discuss the future of the region with citizens (FAZ 14.II.2003). The competing regional newspaper Frankfurter Rundschau invites the airport, politicians and

- citizens in an open *Rhein-Main-Dialog* to discuss the future development of the airport and the impact on communities (FR 12.II.2003).
- 23 *Frankfurt Rhein-Main and Friends* is another initiative of international managers that are related to Frankfurt and supported by the Chamber of Commerce (IHK) and *Wirtschaftsinitiative-Metropolitana*. The aim of this association is to apply personal contacts of managers, ministers and ambassadors to use the opportunities of the economic specialisation and regional competition (FR 12.II.2003a). In order to use these opportunities, close relations are built with other globalising city-regions, to start with Greater Zurich Area. The chair of the *Vereinigung hessischer Unternehmersverbände*, leads a fourth initiative for regional cooperation: location marketing (FR 7.II.2003). The city marketing's aim is to bring Frankfurt Rhein-Main in the top ten of leading city-regions in the world. A fifth attempt for regional cooperation is initiated by a cooperation of nine Chambers of Commerce. This *IHK Forum-Rhein-Main* encourages local Chambers of Commerce, with Hanau as chair, to cooperate and exchange knowledge.
- 24 The International Design Expo and Aichi World Exhibition (Nagoya), Food festival (Sapporo), Flower exhibition (Osaka), Science Exhibition (Tsukuba) and Olympic bids (Tokyo, Nagano; Osaka, Nagoya) are examples of this trend (Douglass 2000).
- 25 In Mitsui-Fudosan's vision (2002), Tokyo is subdivided in a central zone, historical and cultural zone, emerging zone for IT content, waterfront, multinational and urban-type manufacturing zone. Outside Tokyo, the satellite metropolises should be developed towards an eastern (Chiba-Narita), southern (Yokohama-Kawasaki), northern (Omiya-Urawa) and western gateway (Hachioji-Tachikawa) to Tokyo.