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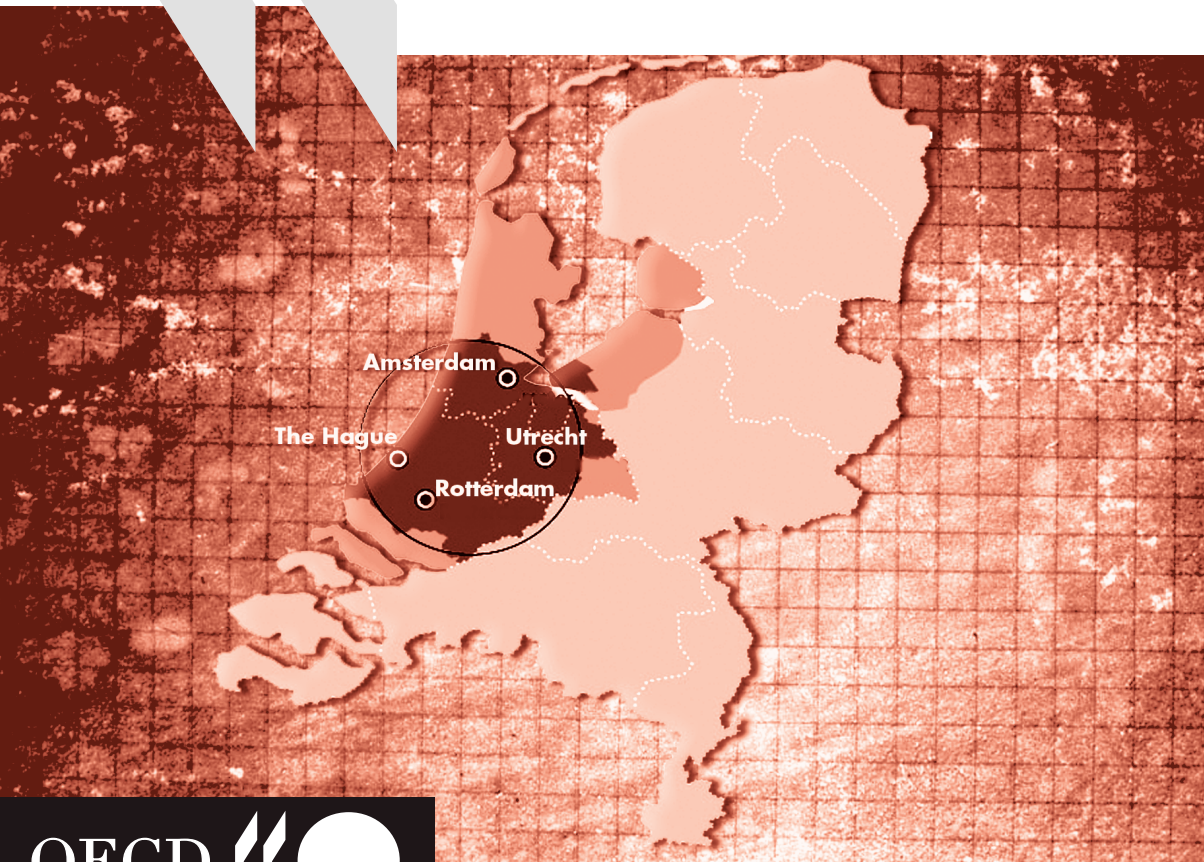
Randstad Holland, Netherlands



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Foreword

Across the OECD, globalisation increasingly tests the ability of regional economies to adapt and exploit their competitive edge, as it also offers new opportunities for regional development. This is leading public authorities to rethink their strategies. Moreover, as a result of decentralisation, central governments are no longer the sole provider of development policies. Effective and efficient relations between different levels of government are required in order to improve public service delivery.

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Responding to a need to study and spread innovative territorial development strategies and governance in a more systematic way, the OECD created in 1999 the ***Territorial Development Policy Committee*** (TDPC) and its ***Working Party on Urban Areas*** (WPUA) as a unique forum for international exchange and debate. The TDPC has developed a number of activities, among which a series of specific case studies on metropolitan regions. These studies follow a standard methodology and a common conceptual framework, allowing countries to share their experiences. This series is intended to produce a synthesis that will formulate and diffuse horizontal policy recommendations.

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The Randstad: a polycentric area covering the western Netherlands

The Randstad is commonly understood to be the urban area in the western Netherlands, comprising the largest Dutch cities (Amsterdam, Rotterdam, The Hague and Utrecht), as well as several medium-sized cities. Geographically, the region consists of a green area in its centre (known as the Green Heart) surrounded by a semicircle of urban conurbations. In the academic literature, the Randstad is frequently considered to be a metropolitan area, as it forms one closely connected urban area. The Randstad is a polycentric area: unlike many metropolitan areas in the OECD, it does not have one single dominant core. Instead, its functions are spread over its entire area. Although Amsterdam is the largest city in the Randstad, the national government is located in The Hague and the biggest port in Rotterdam. In practice, the Randstad cannot be considered to be a daily urban system: most people commute, move house, pursue leisure activities and shop within the more restricted areas of their city-region, such as Greater Amsterdam, Greater Rotterdam, Greater The Hague and Greater Utrecht.

Official boundaries for the Randstad do not exist and it does not fit into one of the three government tiers in the Netherlands. It remains an almost abstract concept as no government policies are implemented using it as the geographical basis for intervention. Nevertheless, the region is of considerable economic and social significance to the whole country: although it only covers 20% of the Netherlands' land area, 42% of the population lives there, and about half of the national income is earned within its boundaries. The result is that its economic development has a huge impact on the economic development of the Netherlands as a whole. But it would not be correct to equate the Randstad economy with the Dutch economy. The Randstad economy is more services and trade oriented whereas industry is largely concentrated in the rest of the Netherlands. The Randstad economy is also more international: it generates three quarters of Dutch exports, and about 60% of foreign direct investment (FDI) is invested there. Its population is more highly skilled and richer than that of the Netherlands of the whole.

…an area doing well economically, but with low productivity growth…

The Randstad might be best known for its role as the logistics hub for Europe, but its economy is diversified and includes other strong competitive sectors, such as financial and business services, trade & logistics, horticulture and the creative industry. Economic specialisation has led to different trajectories for growth within the Randstad, with the northern part (also known as the North Wing) of the Randstad doing better than the southern part (the South Wing).

The Randstad economy scores well on many indicators. It has a relatively high regional income per capita, unemployment is one of the lowest in OECD metropolitan regions and labour productivity per hour is high. Economic growth, though sluggish in the early 2000s, was good in the 1990s and has been picking up in 2006. The main challenge is the low productivity growth exhibited over recent years, with the Netherlands having one of the lowest such growth rates in the OECD over the last decade. The Randstad performed better than the country as a whole, with an annual average growth rate of 1.7% over 1995-2005. Several other regions in the Netherlands had higher productivity growth than this. Moreover, it was well below that of many other European cities like Dublin (4.3%) and Stockholm (3.7%).

…moving to a more value-added economy, but facing several challenges.

Much of the economic strategy for the Randstad has implicitly or explicitly been based on generating high volumes. The harbour of Rotterdam was, until relatively recently, the largest harbour in the world and is currently the third largest. It is one of the sectors with its strategic focus directed towards generating high volumes of goods for trans-shipment. Schiphol airport is similar in that it has managed to develop into one of the principal transport hubs in Europe by attracting large numbers of transfer passengers, which makes it possible to offer multiple destinations and high flight frequencies. In turn, this has helped to attract many foreign companies to the Netherlands. Several policies over the last few decades have been aimed at supporting this high volume strategy. Examples are the freight transport line (*Betuwelijn*) and the extension of the port of Rotterdam (*Tweede Maasvlakte*) designed to accommodate the growth of the harbour of Rotterdam and to provide government support for the growth aspirations of Schiphol airport.

At the same time, such activities face constraints regarding land availability in the densely populated Randstad. The extension of the harbour of Rotterdam is being constructed on artificial land built into the sea whilst in the area around Schiphol houses cannot be built because of the noise levels. And if flight movements grow at the same pace as is currently the case, Schiphol airport will reach its legal limit for flight movements within a few years, taking into account the maximum permitted noise levels.

Over recent years, in view of the above obvious limits to high volume economic activities, considerable efforts have been made to develop more value-added activities. In horticulture, for example, a kind of virtual transit economy is being created where flowers are auctioned which are not physically present in the Randstad. Several challenges, however, remain. Principally these are enabling the Randstad *i)* to take better advantage of the economic benefits which could be generated by the proximity of its city-regions, *ii)* to exploit its high knowledge potential and its knowledge infrastructure so as to increase innovation, and *iii)* to utilise its labour market more efficiently.

Better use can be made of proximity…

One of the ways to improve economic performance is to use the unique characteristics of the area better. Its morphology as a polycentric metropolitan area gives the Randstad as a whole, the opportunity to benefit from the proximity of its several different cities and their natural landscapes. These opportunities are currently underused, principally due to *i)* the difficulties of travelling around easily within the Randstad, *ii)* the lack of high quality housing which takes advantage of the nearby natural landscapes and *iii)* the duplication of certain economic sectors.

…by solving congestion…

The road network in the Randstad is heavily congested, with journey time for more than one in five journeys being unreliable during the rush hour. Most of the traffic jams in the Netherlands (81% in 2005) are concentrated in the Randstad. The traffic congestion there appears worse than that experienced in other polycentric areas, such as the Flemish Diamond in Belgium and the Rhine Ruhr Area in Germany.

Several policy measures have been introduced over the last few years to tackle congestion, for example, the widening of the “hard shoulders” (the emergency lanes at the side of highways) so that they can be used temporarily during the rush hour to facilitate the flow of heavy traffic.

Building new roads also assists in resolving congestion problems and the current priority area for such construction is the Randstad. The more radical step of road pricing has been under discussion for a long time, but a decision to implement this has only recently been taken by the current government. The scheme devised involves charging car users for each kilometre driven, with higher charges for more polluting cars and lower fees for driving outside the rush hour and on less used roads. This system, planned for introduction in 2012, will operate throughout the Netherlands in relation to all road networks.

These government policies to reduce congestion are undoubtedly steps in the right direction, but the issue of poor accessibility within the Randstad needs to be approached with greater urgency. The construction of new roads should be speeded up and particular priority should be given to roads connecting Almere, the Randstad's fifth largest city, with the rest of the region. Road planning must also ensure that whilst transport within each city-region is facilitated, travel region-wide is also made easier. This is so that the needs of industries, such as logistics and horticulture, and of individuals that rely on long distance transport or need to undertake long commutes, are catered for. As congestion charges focused at specific bottlenecks are very effective to deal with congestion, and as 80% of the congestion in the Netherlands is concentrated in the Randstad, it would make sense to introduce congestion charges in the Randstad or at the level of the respective city-regions, rather than throughout the whole of the country. Moreover, it needs to be introduced much earlier than 2012. Improvements can also be made by involving the corporate world in solving congestion problems. Regional governments should invite private enterprises operating in their area and their business associations to discuss creative solutions for increasing accessibility within the region.

...improving public transport in the Randstad…

A unified and coherent public transport system serving the Randstad as a unified area does not exist. For example, train connections are usually between city centres, whereas many firms are located next to highways. Although improvements have been made in The Hague and Rotterdam, metro and tram networks do not usually reach out into surrounding municipalities, making travelling within a city-region by public transport difficult. The connections between different modes of public transport could also be improved. In addition, the railway capacity in the Randstad is one of the most underdeveloped of all the metropolitan areas in western Europe.

Together, these problems contribute to relatively high car usage, which, in turn, creates congestion and air pollution.

Several regional public transport networks within the Randstad at wing-level have been initiated recently or will be launched within the near future (such as Randstad Rail, the "*Stedenbaan*" and the North/South railway lines). There could be more coherence in all these initiatives. In the short run, better co-ordination between systems should be created, for example when it comes to waiting time, travelers' information, tariffs and marketing. For the longer run, plans could be developed to create more connections between the actual systems. There should be more frequent fast trains between the large cities in the Randstad.

…solving mismatch on the housing market…

There is a considerable mismatch in the Dutch housing market between demand and supply in terms of both quality and quantity of accommodation. The qualitative mismatch is particularly apparent in Amsterdam where around 60% of the housing is suitable for those on lower incomes, whereas only 35% of the city population belongs to this group. At the same time, only 40% of the low income groups manage to get appropriate housing. This is caused by stringent regulation and limited influence of market forces. Clearly, the housing stock in Amsterdam and Rotterdam designed for middle and higher income groups should be increased.

More opportunities for increasing rents should be permitted, so that existing houses can be upgraded. In addition, more should be done to combat distortions in the rental market by, for example, allowing rents for social housing to increase in line with a tenant's increasing income. This would provide an incentive for tenants whose financial situation is improving, to move to other housing, freeing up cheap housing for those who need it. Mobility in housing markets, such as in Amsterdam, would be likely to improve as a result.

…making better use of the Green Heart…

Where agriculture (which previously preserved the integrity of the landscape) is disappearing or where the implementation of strategic green projects is stagnating, housing designed to be environmentally friendly (green housing) may prove crucial to maintaining the health of the local natural environment. Building in green areas (those preserved for their natural landscapes and containing little development), such as the Green Heart, is now highly regulated and construction is rarely permitted. Yet, given the pressure on green space in existing urban environments, the Green Heart should be used more imaginatively to provide attractive high-quality housing, such as green housing, which would also preserve the environment. In addition, its recreational use should be increased and its water storage function strengthened.

…providing more variety in firm locations…

Areas currently used for office space, or designated for such use in the future, currently lack variety and are often of insufficiently high quality to ensure their attractiveness to foreign firms. This is largely because municipalities have incentives to designate land for office space and have it sold as quickly as possible, as once a business is up and running on it, revenues accrue to them. Consequently, they tend to compete on land price instead of quality. The result is that they often do not make the most of those qualities specific to an area which may be attractive to particular sectors. Involving private players should be one way of ensuring advantage is taken of such qualities and that supply and demand for office space are better matched as such players will have a greater knowledge of the nature of market demand. Additionally, transferring the responsibility for designating office space to the city-region governance level offers more opportunities for assigning different locations within the Randstad to specialise in providing different and more varied office accommodation.

…and improving the co-ordination of the economic specialisations of the cities.

Since 2004, regional economic policy in the Netherlands has been focused on strengthening key economic regions, such as the North and

South Wings of the Randstad. This new regional policy looks promising as strengthening regions will probably be more effective than trying to reduce the gaps between the poorer and richer regions. Although this is a central government policy initiative, it is region-led in that the key regions have the major input into selecting the sectors to be encouraged in their area. This bottom up approach is in itself laudable, but more selection of sectors by the central government is recommended to ensure that they are truly region specific. Part of national urban policy is also directed at the economic development of cities, but it should be redirected to the city-region level and it would make sense to integrate this policy with regional economic policy.

Several other economic sectors, for example higher education and tourism, could derive long-term advantages from improved co-ordination. Increased specialisation by universities and better co-ordination between them could avoid unnecessary duplication of courses offered and of research fields undertaken, as well as increase knowledge clusters, and thus the quality of each university. With respect to tourism, cities in the Randstad seem to consider each other more as competitors than as partners. This does not promote longer stays by tourists in the Randstad as a whole, even though transit between its cities is comparatively easy for sightseers, and the area could be marketed in a unified way.

In the next couple of years, Schiphol airport will probably reach its maximum permissible noise limits due to increasing flight movements. Existing regional airports in Flevoland and Rotterdam are currently not suitable for absorbing the excessive demand placed on Schiphol. The necessary investments should be made now to prepare them to accommodate the growth of air traffic in the region of Schiphol.

Better use should be made of knowledge…

The proportion the Randstad workforce with a tertiary education is reasonably high compared with many other metropolitan areas in the OECD, but it lags behind areas such as the Flemish Diamond in Belgium, London and Paris. This is despite the fact that the Randstad has seven universities and 18 higher education colleges. Although several Randstad institutions have respectable positions in these international rankings for higher education institutions, they do not score exceptionally highly.

…by improving the quality of universities…

There are several strategies for tackling these problems. The proportion of the population obtaining a higher education can be increased by providing shorter educational courses and by matching students and institutions better, for example, by selection. The quality of higher education can be influenced by tuition fee levels, and by selection of students. Universities currently have few opportunities to select their students, offer shorter courses or increase the tuition fee above a certain level for full-time students under 30. From 2005 onwards, pilots have been launched that permit universities to take all these initiatives. Such policies should be implemented as structural reforms by a new government.

…attracting more foreign talent…

Despite its many advantages, the Randstad does not attract many highly skilled people, either highly skilled workers or students. Although it is difficult to know whether there is a "brain drain" taking place from the Randstad, more highly skilled Dutch people are admitted to the United States each year than the Netherlands is able to attract from the rest of the world (outside the EU). In 2004, new regulations were introduced to facilitate the entry of migrant knowledge workers. Although these policies are sound, important limitations to the current strategy remain. For example, better use should be made of existing knowledge migrants, such as foreign students and highly qualified refugees. The proposed new points system should be introduced more speedily so as to make it easier for knowledge workers, who are not employees, to obtain work in the Netherlands. The integration test should not be obligatory for former knowledge workers who have entered as such and spent several years in the Netherlands and, finally, the fees for work and residence permits should be substantially reduced to a level comparable to those of neighbouring countries.

…attracting innovative FDI…

Similarly, the Randstad does not do well when it comes to attracting innovative foreign firms. Only 2% of the foreign firms in the Netherlands are the R&D centres of their parent companies. Of those that are, only 35% is located in the Randstad. A range of policies in the Netherlands have been directed towards attracting foreign direct investment, but the foreign firms in the Randstad have not, so far, generated many knowledge spillovers there.

Since 2006, however, policy mechanisms have been revised to place an emphasis on attracting foreign companies that can add value to the Dutch economy. Nine sectors have been listed, in which foreign companies will be contacted pro-actively. This policy approach is a step in the right direction, though it is suggested that further refinement within the sectors chosen occur so as to target the most desirable foreign businesses. Any such refinement should ensure that the sectors chosen correspond to clear regional priorities.

…and stimulating use of knowledge by firms.

The public innovation infrastructure in the Randstad scores high on many indicators, such as publicly funded R&D and the number of citations of articles in academic literature. The picture for private sector innovation, however, is more mixed and there is room for improvement. Only 35% of the total private Dutch R&D expenditure is spent in the Randstad, which is well below the proportion of GDP generated there. It is likely that improving collaboration between firms and knowledge institutes in the Randstad would lead to greater private innovation since, at the present time, not much scientific knowledge seems to be translated into commercial activity.

Although there are several initiatives at the local level to increase knowledge transfer, the pay structure for researchers at universities (and the funding of research at universities) remains dependent on their scientific publications, not on interaction with the private sector. Universities' pay and funding systems could be adjusted to create incentives for academic staff to be proactive in creating such transfers. The problem remains, however, that not all firms are capable of absorbing the knowledge which already exists in a particular domain. This is especially true for SMEs although several government programmes are designed to solve this problem. However, as these programmes subsidise firms without demanding an additional R&D effort, their value-added outcomes have been limited. It has also been shown that market forces in the Netherlands are less likely to promote R&D activities in SMEs than in large firms. Government programmes should, therefore, focus their subsidies on new R&D activities and SMEs.

Better use of labour should be made by enhancing the flexibilityof the labour market …

Permanent employment in the Netherlands is highly protected as evidenced by the fact that in 2003, only three OECD countries provided greater employment protection for permanent employees than the Netherlands. As the Randstad economy is more internationally oriented and more influenced by international economic developments than the rest of the Netherlands, the strictness of employment protection legislation has, arguably, a more profound impact on its economy than the Dutch economy as a whole. Although the central government introduced legislation to reduce the administrative burdens connected with employment protection in 2006, such protection still remains a heavy burden on firms. It is recommended that the costs associated with the administrative complexity of dismissals be further reduced and additionally, that the financial compensation payable to a dismissed employee be reduced.

…and increasing the activity rate of ethnic minorities.

The unemployment rate of ethnic minorities, as compared to total unemployment in the Randstad is very high viewed from an international perspective. Non-western ethnic minorities are concentrated in the four large cities in the Randstad, making up more than 35% of the population in both Amsterdam and Rotterdam. In a quarter of the secondary schools in Amsterdam and Rotterdam, more than 80% of the pupils are of non-western ethnic origin. Segregation to such a degree poses a challenge to social cohesion in the Randstad.

Increasing the educational and vocational qualifications of ethnic minorities is crucial to promoting their labour market participation; this in turn will assist their social integration. Certain schools with many pupils from ethnic minorities have, however, more difficulties in finding teachers than other schools, thus affecting the quality of the education that they provide. As schools do not have much freedom to vary teachers' pay, such disadvantaged schools cannot offer better pay to attract more teachers. It would probably, therefore, be advisable to allow the payment of higher wages to teachers in deprived neighbourhoods in the large cities in the Randstad so as to attract good teachers to the schools there. Improvement in the educational outcomes for their ethnic minority and other pupils would be expected to result. Furthermore, drop out rates in vocational education are

much worse for students from ethnic minorities; reducing these could improve their labour market prospects significantly. Together with business, vocational education institutions should create more flexible programmes allowing students to acquire competencies via work experience, in order to reduce drop out rates.

Better governance can help to solve these obstacles…

The Randstad consists of 147 municipalities and the large part of four provinces. The role of provincial governments is relatively weak whilst that of municipalities is relatively strong. Efforts to reform the government system in the past have not been successful, but many informal co-operative arrangements have been reached between the main governance actors to improve region-wide government.

A governance problem that is often mentioned in the Randstad is administrative crowdedness. Administrative crowdedness is, to some extent, unavoidable as governments usually try to find the appropriate governance level at which to best perform different functions. As governments deliver a variety of local goods and services, there will also be a variety of governance levels at which they should be provided most optimally. The fact that administrative crowdedness is a particular dilemma at the regional level may indicate that this level is of increasing significance when it comes to delivering public services. Nevertheless, local and regional politicians should be encouraged not to create new institutions too often and to abolish redundant organisations when this is possible. A way to stimulate this could be to concentrate the main regional responsibilities in one institution as far as possible, probably at the level of the city-region. Provinces in the Randstad, especially North and South Holland, could then concentrate their activities on the areas not covered by the city-regions.

… by strengthening the city-region…

Many of the policies mentioned above could be implemented at the city-region level which currently functions as the daily urban system. At this level, pragmatic institutional arrangements, such as the so-called WGR plus-region, have proved to be useful. Some adjustments could however be made to improve their functioning: more positive incentives to co-operate could be introduced and the awareness of existing, but underutilised, legal mechanisms to strengthen accountability should be increased among municipal council members.

A more far-reaching way to strengthen city-regions would be to enlarge municipalities as the average surface of a municipality in the Randstad is small compared to other OECD countries. Enlarging municipalities could be done in different ways. The most radical is to merge all the municipalities that are currently part of a WGR plus-region, transfer the WGR plus-region responsibilities to the new municipality and abolish the WGR plus-region arrangement. However, a more gradual and less time-consuming approach would be to start by merging some of the surrounding municipalities of the four large cities.

…improving co-ordination for Randstad-specific issues…

Governance delivered at the Randstad level is appropriate for resolving a limited number of the problems faced by the region: Randstad-wide transport, tourism and location of up market housing and offices. There is one organisation at the Randstad-level, Regio Randstad where the four provinces, the four city-regions and four cities try to co-ordinate policies. An evaluation shows that special interests, rather than those of the Randstad as a whole tend to be taken into account by the governing board. A more programme-focused approach might resolve this problem. This would involve the selection of concrete projects (by central government, using persuasion and if necessary sanctions to ensure they are followed through) where co-ordination on a Randstad-wide scale would take place. Improving the public transport network within the Randstad, based on planning for the region as a unified whole, should be one of the first priorities for such a programme-based approach. For this a project management organisation could be created.

One problem preventing the development of a Randstad-wide approach to major policy issues affecting it is that no one person or organisation within central government is currently responsible for the region. Over the last four years this responsibility has been divided between all the ministers who participated in the Administrative Committee Randstad with different ministers being responsible for the different wings. This has increased central government co-ordination with respect to the different wings. However, a Randstad-wide focus for national policy development is also needed especially, as mentioned above, when it comes to transport. Stronger central government co-ordination is essential if this is to be achieved and it is suggested that, in addition to ministers responsible for the wings, an existing minister should become responsible for implementing solutions to Randstad-wide issues. A common Randstad-wide agenda could then be

developed, in co-operation with regional governments, in which transport should be an important element.

In the longer run, it may be necessary to merge the four Randstad provinces. Although national governments in OECD countries have sometimes created a special status for large metropolitan areas, none of these areas have the economic significance that a single province for the Randstad would have for the national economy of the Netherlands. Only Seoul, for which a special administrative status has been created, comes close. This would be a good reason for merging the provinces in the north, east and the south of the Netherlands at the same time, although loyalties to provinces seem to be stronger outside the Randstad, than inside it.

…abolishing municipal district boards…

Amsterdam and Rotterdam have directly elected municipal district councils with executive district boards. Municipalities' decentralisation of many of their responsibilities to municipal districts seems to have gone too far as there are now considerable differences between municipal districts in what should be standard levels of service provision and standardised bureaucratic procedures. Although decentralised provision of services in large cities needs to be retained, an elected municipal district council is not needed to deliver these.

…and increasing local public leadership.

A new balance seems to be necessary between consensus seeking public leadership and debate. The involvement of an area's inhabitants in public debate could be enhanced by asking local populations to vote on policy priorities and on how to spend additional budgets. This would provide them with an opportunity to determine which issues they find important and it would also give local politicians the mandate to do something about it. For example, municipalities should be empowered to ask their residents by referendum, to agree to a new local tax or a tax rate increase that goes beyond the rate increase that is allowed.

Chapter 1

The Randstad: Economic Trends and Challenges

Introduction

The Randstad is a polycentric urban area which includes the largest Dutch cities of Amsterdam, Rotterdam, The Hague and Utrecht; which is home to at least 40% of the Dutch population. It has the largest port in Europe (the third largest in the world) and is also Europe's main logistics hub. It has a thriving trade and service-based economy and has also developed a world leading horticultural industry. It is one of the most attractive regions in the OECD for foreign direct investment (FDI). Nevertheless, it must resolve significant socio-economic challenges if its success is to continue and indeed improve. Such challenges include tackling the lack of integration of the Randstad to improve its operation as a unified urban area, particularly in relation to transport networks, improving innovation levels and current low productivity growth as well as the skill levels of the workforce, and ameliorating certain labour market constraints. This Review's purpose is to produce policy recommendations to assist in solving these issues. It firstly describes the Randstad, assesses its economic performance and outlines the obstacles to be overcome in order to improve this still further (Chapter 1). Chapter 2 assesses the extent to which current policies improve economic performance and makes recommendations where necessary for policy changes which will further enhance the region's economic competitiveness. Finally, an evaluation of existing governance arrangements is made and reforms proposed to improve their effectiveness (Chapter 3). Where relevant, comparisons with other metropolitan areas in the OECD are undertaken to assist with devising appropriate recommendations.

This chapter focuses on (*i*) describing the Randstad in terms of the area it covers and the differing ways in which it has been defined geographically and assessing to what extent it operates as an integrated unit (its functional integration); *(ii)* describing the significance of the Randstad economy in

determining national economic performance and outlining the main indicators measuring the degree of the region's economic success; *(iii)* demonstrating the openness of the Randstad economy and the analysing the main sectors so as to assess the challenges they face; and *(iv)* assessing the key challenges to the Randstad's economic competitiveness.

1.1. What is the Randstad?

1.1.1. The Randstad: cities, population and land use

The Randstad is commonly understood to be the urban area in the western Netherlands, comprising the largest Dutch cities (Amsterdam, Rotterdam, The Hague and Utrecht), as well as several medium-sized cities. The name literally means 'rim city', referring to the geographical pattern of the area that consists of a green area in the centre (the so-called Green Heart) surrounded by a semicircle of urban areas. The Randstad covers a large part of the territory of four provinces, namely North Holland, South Holland, Utrecht and Flevoland[1].

Figure 1.1. **Randstad, Holland**

Source: Storm 2005. The Randstad is the area in the west, coloured in darker blue.

One of the most obvious characteristics of the Randstad is its polycentricity: it has several centres instead of one. It is this morphology that makes it different from almost all of the metropolitan areas in the OECD. As this characteristic may have an impact on the way the area performs and the development of policies to improve performance, it is important to have a clear understanding of how it affects the region. In addition to its polycentric nature, choices about land use have also given the Randstad its character as an area that is both very densely populated and yet largely used as agricultural land.

Unlike many other metropolitan areas, the Randstad does not consist of one core city with surrounding suburban municipalities. That is, it is not monocentric. Instead, it consists of several large cities that are connected to each other. Of the 25 largest cities in the Netherlands, 12 are located in the Randstad: four large cities and eight medium-sized ones.[2] The Randstad comprises a substantial number of the Dutch municipalities (147 out of 458 in the beginning of 2006), most of which are urban in nature. Part of the Randstad, mainly the so-called Green Heart, is not urbanised. The four large cities (often referred to as the 'Big 4') of the Randstad are Amsterdam (739 000 inhabitants), Rotterdam (596 000), The Hague (469 000) and Utrecht (275 000). The daily urban system in these cities also includes their neighbouring municipalities. These agglomerations will be called city-regions in this Review. The distances between cities in the polycentric area of the Randstad are small: the greatest distance between the centres of the four large cities is between Amsterdam and Rotterdam (75km), and the smallest is between The Hague and Rotterdam (25km).

There is not one dominant city in the Randstad, since national policy has successfully avoided the creation of such a city, but the most obvious candidate for such predominance would be Amsterdam. It was the leading city when the Dutch nation-state was created and it continues to be the largest Dutch city. However, it lacks several functions which would have made it clearly predominant as a consequence of the long history of policies targeted at preventing one city from becoming too powerful. Since the 17th century, the seat of the national government has been The Hague and as a result embassies and international organisations (such as the International Court of Justice since 1919) are located there. Amsterdam is not even the seat of government of the province to which it belongs (North Holland) which is Haarlem. National public radio and television are located not in Amsterdam, but in Hilversum. The central point in the national railway network is not Amsterdam, which would have been a sound choice (Boer, 1996), but Utrecht. National policy since the 17th century has consistently tried to avoid the creation of one dominant city within which too much power is concentrated. Spatial planning in the last half of the 20th century

has reinforced this tendency by regularly dispersing functions previously undertaken in the Randstad to the rest of the Netherlands. Economic specialisation has also made Amsterdam less important than it might have been: many trade and industrial activities have become increasingly connected to the harbour of Rotterdam which has surpassed the harbour of Amsterdam in importance, whereas service industries have developed in Utrecht. Amsterdam has only managed to safeguard its leading position as a centre for culture and for financial and business services (Engelsdorp Gastelaars and Ostendorf, 1994). As a result, not only Amsterdam, but to a lesser extent Rotterdam and The Hague, have all claimed a prominent position in the network of world cities (Taylor, 2004; Hall and Pain, 2006).

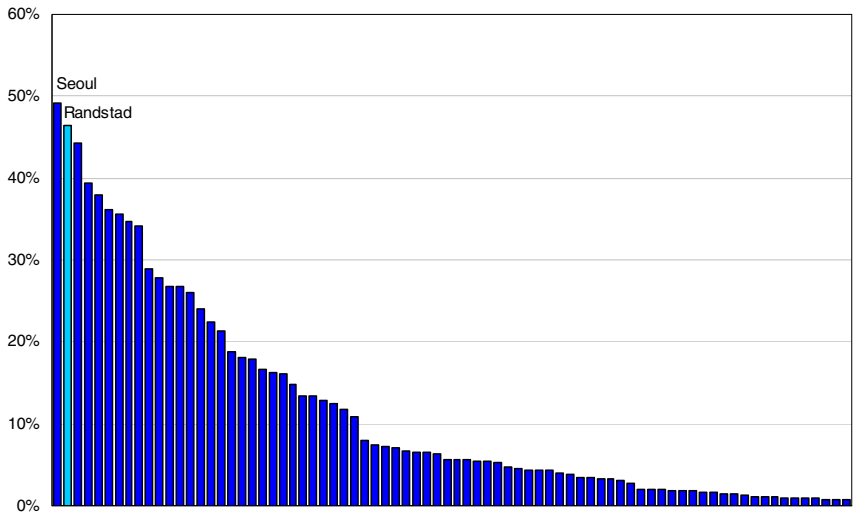
Box 1.1. **Concept of polycentric urban regions**

Polycentricity refers both to the morphology of urban areas, structured around several urban nodes, and to the existence of functional relationships between the cities and centres of such regions in terms of commuting flows, industrial and business relationships, forms of co-operation and the division of labour. However, as the literature on polycentric urban regions is still limited and therefore not consolidated, a diversity of concepts have been applied, which are largely synonymous with the polycentric urban region concept. Recent examples include 'multi core city-regions', 'network cities', 'city networks' and 'poly-nucleated metropolitan regions'. Moreover, in terms of ideas on spatial structure and inter-urban relationships, the polycentric urban region concept builds on older concepts such as the 'dispersed city', the 'megalopolis' or the ideas of Stein and Mumford about 'the regional city' (Meijers, 2005). The Randstad Holland, the Rhine Ruhr Area and the Flemish Diamond are often-cited examples of polycentric urban regions. Their situation is different from many other OECD metropolitan regions which usually contain one dominant city that connects with numerous rural areas. Polycentricity requires greater inter-city region collaboration in spatial planning, division of labour and various related urban issues such as housing and congestion etc.

The Randstad contains a high proportion of the national population. Around 6.7 million people lived in the Randstad in 2005 (TNO, 2006). This makes Randstad the fifth most populated metropolitan region of western Europe, after London, the Rhine Ruhr, Paris, and Milan. From a more global perspective, several cities are much larger. However, among the large metropolitan areas in the OECD, the Randstad stands out as a metropolitan area that contains a huge proportion of the

national population, namely 41.8%. This is very high compared to other metropolitan areas in the OECD (see Figure 1.2).[3]

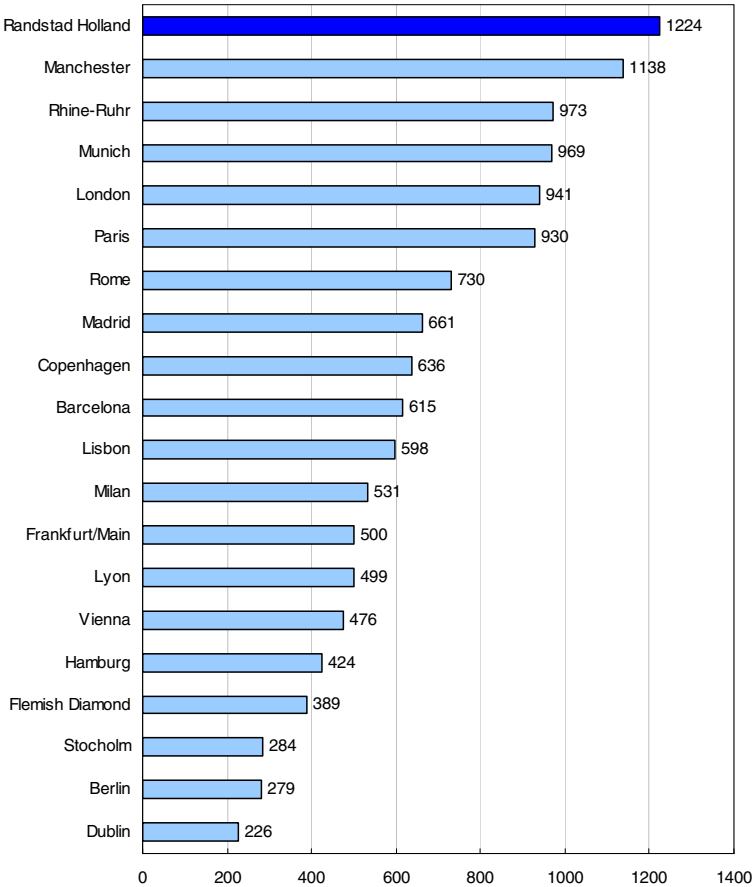
Figure 1.2. **Proportion of country population in metropolitan area**



Source: OECD Territorial Database 2006. Definition of the Randstad in this database: North Holland, South Holland, Utrecht and Flevoland.

The population density in the Randstad is 1224 people per square kilometre, which is high and is indeed higher than the other metropolitan areas in western Europe (see Figure 1.3). But though the Randstad is the most densely populated area in the Netherlands, the rest of the country is also quite densely populated as the Netherlands is one of the most densely populated countries in the world,[4] and the most densely populated OECD country after Korea. About 85% of the population lives in predominantly urban regions, the highest proportion among OECD countries.[5] Population density may feel higher to those living in the Randstad than the actual density indicated by these figures, since only a small proportion of the land (26%) in the Randstad is used for housing. The great majority of the land is used for agriculture (64%) and for nature reserves (10%) (TNO, 2006).

Figure 1.3. **Population density in selected metropolitan regions in 2002 (people/km2)**



Source: TNO, 2006.

1.1.2. The Randstad: an abstract concept rather than a functioning reality

Not every metropolitan area operates as a daily urban system[6] for individuals and as a functionally integrated entity, for example with regard to business activities. A metropolitan area may in practice be bigger or smaller than the area that people use on a daily basis and private enterprise may not operate across the area in a coherent way. This section looks at the extent of the Randstad's functional integration (for both individual and

business activities); that is, whether the Randstad is more than just an abstract concept. It is important to examine this as it is sometimes assumed that the Randstad functions in this way. Whether it does or not and to what degree, will affect the nature of the policy recommendations of this Review.

The Randstad is an abstract concept rather than a territorial or institutional reality. There is no government at the Randstad level and although there is general agreement that the Randstad consists of the urbanised part of the four provinces in addition to the Green Heart, there is no commonly agreed geographical boundary. The definition of the Randstad used in the Spatial Policy Document in 2002 is, for example, somewhat different from the one used for the Randstad Monitor (TNO, 2004; TNO, 2005) in which developments in the Randstad are compared with those in other cities in Europe. This is a common practice as definitions can change according to the policy focus of an analysis, whether it is spatial planning, an assessment of the state of local infrastructure, or an examination of the behaviour of private enterprise or labour markets. Regions can change shape as urbanisation processes evolve. Thus, the area meant to be covered by reference to the Randstad has not been stable over time: it currently covers more territory than when it was first used.

The Randstad has never been a level for policy intervention by the government. Since the concept of the Randstad was first mentioned in policy documents in 1958, it has been mentioned regularly in government reports without being a constant element in spatial planning or any other policy area. The most recent application of the Randstad concept[7] in policy development was in the 5th Strategic Policy Document on Spatial Planning in 2002, but this document was never implemented. This history of intermittent reference to the concept without making consistent use of it, has led observers to conclude that it is unconvincing (Zonneveld and Verwest, 2005). Two reasons can explain the historical resistance to using the Randstad as an important concept in policy making (Lambregts and Zonneveld, 2004). First, there was the strong desire to maintain well-defined medium-sized cities in a non-urbanised countryside. Second, to give too much priority to the Randstad would imply that fewer resources were available for the rest of the country – an unacceptable idea within the Netherlands where adherence to a policy of broadly equal distribution of resources throughout the country prevails (Cammen, 1990).

The term the Randstad has had different connotations over time and has been used as a focus for differing policy objectives. In 1958, the Randstad was presented by a state commission as an ideal for the future which would avoid excessive urbanisation in the western Netherlands (*Werkcommissie Westen des Lands*, 1958), whereas in the 1990s, the Randstad was used as a vehicle to create an increasingly urban and cosmopolitan approach in order

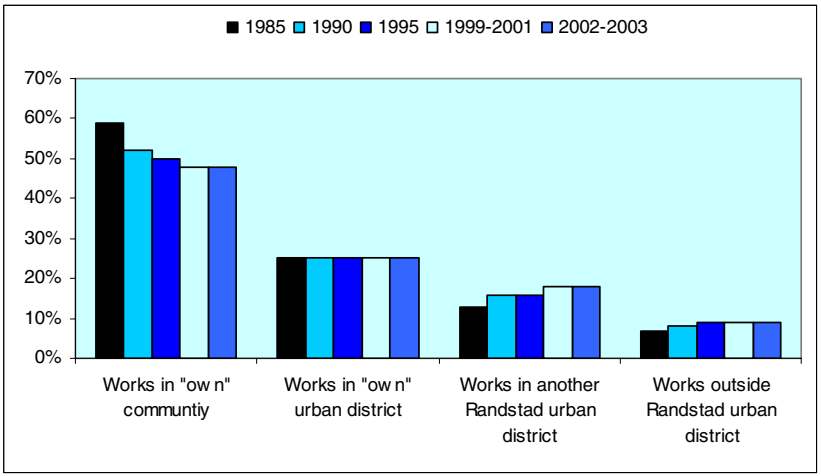
to increase economic competitiveness. The current Dutch discussion about the Randstad seems rather more concentrated on solving governance problems, as will be further analysed in chapter 3.

The Randstad: measuring its level of functional integration

The Randstad has, since the 1960s generated a lot of academic attention. It has been described as one of the seven world cities (Hall, 1966) and has been referred to as one of the principle examples of polycentric metropolitan areas. In many of these papers it has been assumed that the Randstad functions as a coherent metropolitan area. This tendency has been repeated in several commission reports (for example *Commissie Burgmans*, 2006). However, it is not self-evident that the Randstad is functionally integrated (Boer, 1992; Boer, 1996). There are several ways to examine whether it is, both for individuals and firms. An important criterion is whether it functions as an integrated labour market. Other criteria include whether people consider the whole area to be relevant for living, educational, shopping and recreational purposes (that is it operates as a daily urban system). For firms, the Randstad could be considered a functional area if they have multiple business links across the area, if different parts of the region complemented each other economically and if foreign firms consider the whole area, and not just a part of it, as a potential location for their business.

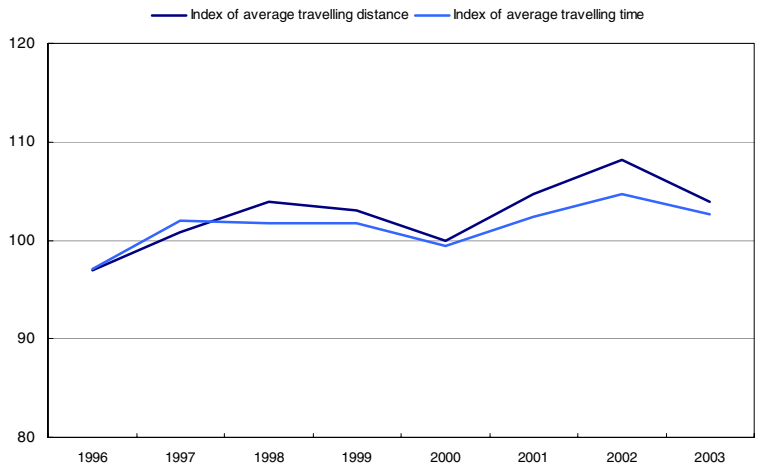
Using these criteria, the Randstad cannot be characterised as a functionally integrated area. For example, it has several regional labour markets instead of one integrated one, as demonstrated, for example, by its commuting patterns. Three quarters of the population works within its own city-region, such as Greater Amsterdam or Greater Rotterdam. Around 15% works in another city-region within the Randstad and 10% works outside the Randstad (CBS, 2006). The commuting between city-regions in the Randstad is skewed towards the closest city-region: there is considerable commuting between Amsterdam and Utrecht (and The Hague and Rotterdam), but relatively little between Amsterdam and Rotterdam. This is despite the significant increase of almost 20% in the number of commuters between 1995 and 2003 (from 2.5 million to 3 million). Travelling beyond municipal or city-region borders has increased very little, particularly that undertaken across the Randstad as a whole (Figure 1.4). Despite the greater number of individuals commuting, the average travelling distance and time has hardly increased over 1995-2003 (Figure 1.5). In addition, the commuting between the Randstad and areas outside its boundaries is far from marginal: commuting flows from the province of North Brabant are, for example, as big as those from Rotterdam to Amsterdam. However, whatever geographical boundaries are chosen to examine whether the Randstad operates as an integrated labour market, it seems that this function takes place either on a smaller scale than the Randstad as a whole, or on a larger one, operating beyond its boundaries.

Figure 1.4. **Commuting patterns of the Randstad's residents**



Source: CBS, 2006.

Figure 1.5. **Average commuter travelling distance and time for residents of western Netherlands 1995-2003 (index 1995=100)**



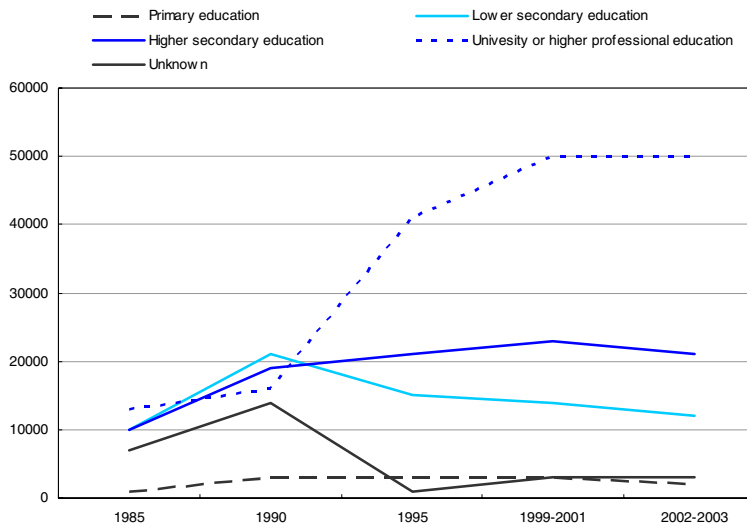
Source: CBS, 2006.

Another way to identify a labour market which works in integrated manner is by looking at the complementary activities existing in an area. An area may be said to be integrated if one part of it provides housing and the other employment. In fact, it appears that the largest complementarities in employment and housing functions exist between neighbouring municipalities, but not on a Randstad-wide scale (Ritsema van Eck and Daalhuizen, 2005). Several cities that provide housing

rather than work opportunities are strongly connected to the *neighbouring* large cities that have a net surplus of jobs: Dordrecht with Rotterdam, Alkmaar with Amsterdam and Leiden with The Hague (Van der Laan and Schalke, 2001). Still another approach is to look at travel distances. It has been shown that the short travelling distances between the cities in the Randstad make it possible to view it as one functional labour market for those willing to commute for 45 minutes or more. But it appears that only a small proportion of the working population does this, amongst whom highly skilled workers feature prominently. For the majority of the population, especially the low-skilled, it is more realistic to expect 15 minute commuting times, with longer commutes being undertaken reluctantly and exceptionally (Ham, 2002).

Even if commuting flows take place largely within the different city-regions, flows between city-regions have nevertheless increased in recent years, predominantly driven by highly skilled workers. As mentioned above, highly skilled workers seem to have a higher tolerance for longer commuting times. It should therefore not come as a surprise that the increased commuting between city-regions in the Randstad has been predominantly driven by highly skilled workers (see Figure 1.6), as well as by the increased commuting between the Randstad and its surrounding provinces.

Figure 1.6. **Inter-district commuting (four urban districts) in the Randstad by level of education**



Source: CBS, 2006.

Similarly, on the basis of the other daily activities undertaken by its inhabitants, the Randstad cannot be considered to be a daily urban system. Most people look for housing within a limited area that is, within their own region, and the proportion doing this has been almost constant over the last few decades. Around 70% of those wanting to move would like to do so within their own municipality; and although 20% would prefer to leave their municipality, they wish to stay in the province (CPB *et al.,* 2001). People mostly study, shop and pursue leisure activities in their city-region (Ritsema van Eck et al, 2006).

Research also confirms the lack of integrated business activity Randstad--wide. *Economic relationships* are formed mostly at the city-region level with the proportion of such relationships between firms in different central cities of the Randstad being relatively small. Of all the business relationships which a firm has, those with firms outside the Randstad represent an average of 43% (Van Oort *et al.,* 2006). With respect to services and goods that are *outsourced*, geographical proximity seems to be important: intra-regional business relations (that is within the city-region) are more numerous than interregional relations (that is within the Randstad). For this purpose, two separate clusters have been observed within the Randstad: one in the north where Amsterdam and Utrecht are the cores, and one in the south to which The Hague and Rotterdam are central. In contrast, with regard to co-operation between firms in the *manufacturing sector*, functional integration does appear to have developed as there does not seem to be a division between the northern and southern parts of the Randstad, but rather co-operation throughout the whole area. In addition to co-operation within the Randstad, there are also many links with firms in the other provinces (Van der Knaap, 2002). Analysis of *office networks* of advanced business service providers also shows that their business relationships are largely Randstad-wide. However, they have tended to establish offices in several cities in the Randstad, especially in Amsterdam and Rotterdam, but also in other large cities. This Randstad-wide activity could be interpreted in different ways. It might be tempting to view it as evidence for Randstad's functional integration It could, however, also be taken as an indicator for fragmentation in the Randstad, since it may mean that one urban centre cannot be served from another (Lambregts, 2005). Turning to an assessment of *firm relocations*, empirical research shows that 68% of relocating firms stay in their own city-region. When it comes to relocations between the large cities, the interaction between Amsterdam and Utrecht is the largest whereas the office markets of Rotterdam and The Hague appear to operate separately from each other (CPB *et al.,* 2001).

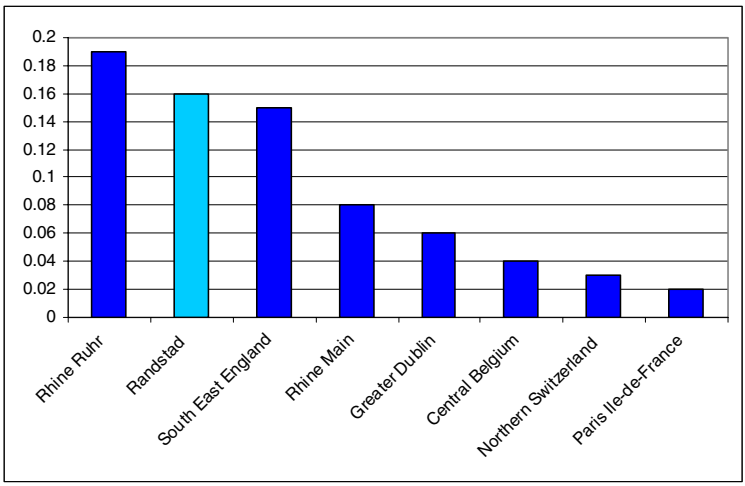
Of all the leading foreign business service providers that have chosen to be located in the Netherlands, more than 75% have opted for Greater Amsterdam as their office location, even if it is the business potential offered by the Randstad as a whole that attracts them to the area. Moreover, when its economy is adjusted for its domination by service industries, Amsterdam still stands out (Lambregts and

Van der Werff, 2004). It appears to have the best international links available for business services of all the Dutch cities (Lambregts, 2005).

Finally, there does not seem to be a common, positive identity linking the people living in the Randstad which many cities have. Rather, a Randstad identity is defined by those who are not from the area as a metaphor for how they do not want to be or become. Instead, identity is more closely linked to the city in which people live. This lack of a strong identity beyond the city-region goes back to the 16th century when the foundations for the Dutch nation-state were laid, not so much out of a common identity, but out of common interests of otherwise competing cities (Schama, 1987). This historical co-operative competition between cities could explain why common identity has been linked to the city and – to a lesser extent – nation, but not so much to the region.

On the basis of commuting in and out of the Randstad, its 'General Functional Polycentricity' score is 0.16[8] (Hall, 2005). This may appear low considering the fact that a maximum value of 1.0 can be achieved, if all the centres in the regional network under consideration are equally well connected to each other. However, compared to other large urban regions in north-west Europe, the General Functional Polycentricity in the Randstad is in fact rather high. Except for the Rhine Ruhr (0.19), most regions, such as the Flemish Diamond and the Rhine-Main, score considerably lower (see Figure 1.7). This might, however, be more of an indication of the extent to which concepts such as polycentric urban regions are still theoretical constructs, rather than proof that the Randstad is functionally integrated.

Figure 1.7. **General Functional Polycentricity Index**



Source: Hall, P. 2005.

The geographical boundaries of the Randstad: varied definitions

Defining the geographical boundaries of the Randstad for the purposes of the analysis in this Review is not straightforward, given the limited functional integration of the area, the different definitions of it used over time in the Netherlands and the gradual extension of the area. The lack of a precise demarcation means that it is more difficult to make statistical comparisons, over time and with other metropolitan areas in the OECD.[9] This Review will therefore use not one, but several units of analysis. It will look at the economic and governance challenges of the Randstad, but in doing so will focus on the level at which these challenges arise and can be tackled. This means that the unit of analysis will sometimes be the city-region level in the Randstad, sometimes a part of the Randstad, sometimes the Randstad as a whole and sometimes an area that exceeds the boundaries of the Randstad.

When discussing the Randstad area, this study will in most cases use the definition of the Randstad most commonly used in the Netherlands which is the definition used for the Randstad Monitor (begun in 2004[10] (TNO, 2004)). This is the area outlined in Figure 1.1. For some of the international comparisons a proxy of the Randstad will be used, by taking the administrative borders of the four provinces within which the Randstad is located (North Holland, South Holland, Utrecht and Flevoland). This area is larger than that normally considered to comprise the Randstad. However, being the provincial level it corresponds to the level that is most often used in international benchmarking, particularly in the OECD metropolitan database. The common definition will be used here. When the Randstad proxy will be used, this will be mentioned in the respective figure or table.

Limited functional integration

Summing up, the existing studies make it clear that the Randstad barely exists as a functional area, even if highly skilled workers in the Randstad increasingly commute throughout it. Daily urban life seems to be conducted at the level of a city-region - Greater Amsterdam, Greater Rotterdam, Greater The Hague and Greater Utrecht. Studies written for the several advisory bodies for the government[11] all conclude that the Randstad does not yet exist as a functional region, even if some signs of integration are visible. Perhaps unsurprisingly, Dutch governments at various levels have not chosen, so far, to develop policies at the Randstad level.

Functional integration in many respects seems to exist at the city-region level and many challenges might effectively be dealt with at this level. The Randstad does not seem to make optimal use of all the economic possibilities that proximity of populations, services and businesses offers to

a metropolitan area and the fact that it is not functioning currently as a daily urban system could of itself be causing economic and governance problems.

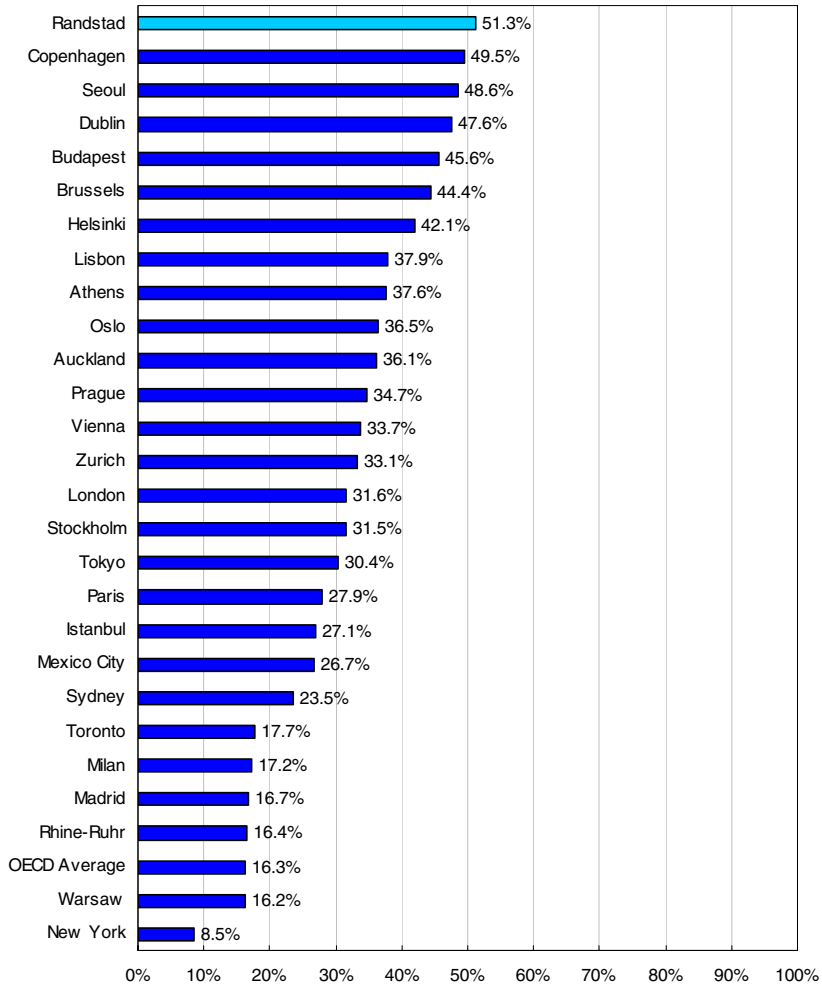
1.2. The Randstad economy: good performance, but low productivity growth

The previous section has described the polycentric nature of the Randstad and the degree of its functional integration. This section outlines the significant contribution of the Randstad to overall national economic performance. This is unsurprising as it is home to a large proportion of the Dutch population but its success is in large part due to the openness of the economy to international trade and investment, as well as the diversity of the most important economic sectors in the Randstad. It also describes the main indicators for measuring the Randstad's economic performance, in order to give an overview of its level of competitiveness. To do this, it uses comparisons with the performance of the country as a whole and with other metropolitan areas in the OECD. As mentioned above, the Randstad economy contributes very significantly to the Dutch economy, so its economic performance is likely to be an influential determinant of overall national economic performance.

1.2.1. Economic significance of the Randstad

The Randstad economy represents a proportion of the national economy that is very high from an international perspective. The regional income of the Randstad is around EUR 215 billion, almost equal to the GDP of Sweden. The Randstad, home to 41.5% of the Dutch population, thus provides 46% of the GDP of the Netherlands. Using the broader definition of the Randstad, that is the whole of the four Randstad provinces, then it contains 46% of the national population and generates 51.3% of the Dutch national income. That makes the Randstad one of the OECD metropolitan areas with the highest contribution to its national economy (see Figure 1.8). Metropolitan areas of a similar size to the Randstad, such as Paris and Milan, also play an important role in their national economies, but to a much lesser extent than the Randstad. This has several consequences: national economic circumstances will affect the Randstad's economy heavily and what happens in the Randstad will influence the national economy significantly. This economic influence increases the Randstad's domination of the rest of the Netherlands and the perception by the rest of the Netherlands that this is the case.

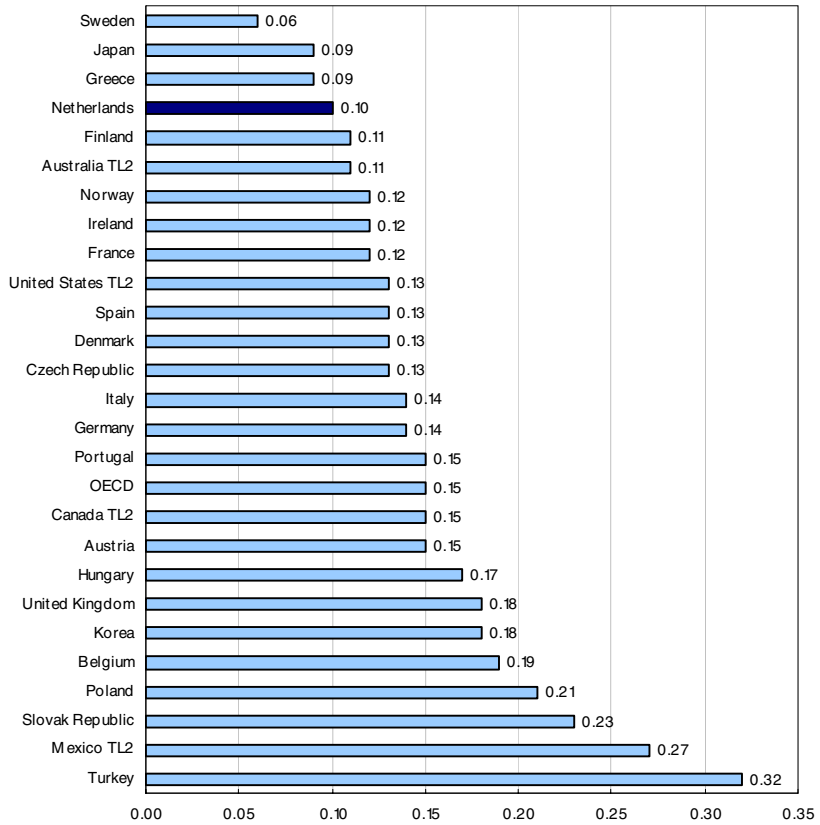
Figure 1.8. **Ranking of metropolitan regions by contribution to their national economies**



Source: OECD Territorial Database. 2006. Definition of the Randstad in this database: North-Holland, South Holland, Utrecht and Flevoland.

Compared to other OECD countries, the Netherlands exhibits one of the lowest regional disparities. In 2001, regional disparities in GDP per capita – as measured by the Gini index – were 0.10 in the Netherlands – compared to 0.15 as an OECD average (OECD, 2005). The Netherlands rank with Sweden, Japan, and Greece among the countries which have the most equal regional distribution of GDP per capita.

Figure 1.9. **Regional distribution of GDP per capita (Gini index for GDP per capita)**



Note: The Gini index looks not only at the regions with the highest and the lowest values but also at the differences among all regions. It ranges between 0 and 1: the higher its value, the larger the regional disparities.
Source: OECD Regions at Glance, 2005c.

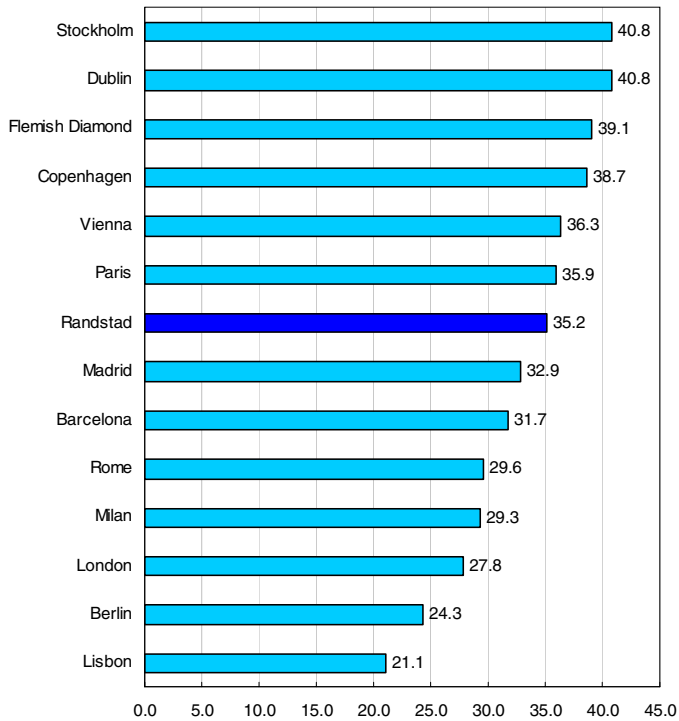
1.2.2. A wealthy region: high incomes, high employment, high productivity but low productivity growth

This section attempts to evaluate the economic performance of the Randstad. The indicators that will be used to assess the performance of the Randstad economy are income per capita, economic growth, employment rate, productivity and productivity growth. The main question is how the Randstad performed on these indicators as compared to other metropolitan areas in the OECD.

Average income per capita

Comparing the incomes of metropolitan regions is not easy as the precise definition of the region can influence the results considerably and differences in the costs of living in the different regions can make regional incomes difficult to compare in real terms, since regional purchasing power parities do not exist. An indication of regional purchasing power parity is obtained by taking into account the costs of living in a particular city. These data have been collected for several cities (UBS, 2005). The higher cost of living in a city will mean that income earned there provides less purchasing power than the same income in a city with a lower cost of living. When gross regional product (GRP) per capita is thus corrected for the cost of living, the performance of the Randstad is average: it scores well above some cities, such as Milan and London, but lower than cities as diverse as Stockholm, Dublin and Paris (see Figure 1.10).

Figure 1.10. **GRP per capita in 2006 (in 1 000 euros), in OECD metropolitan regions**



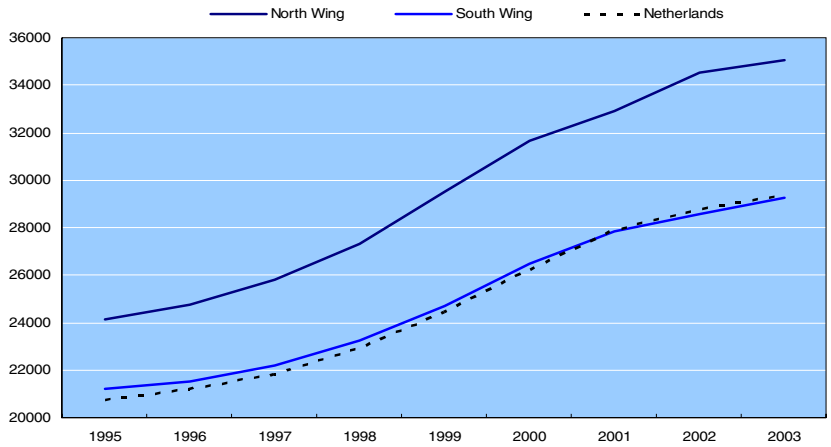
Note: Corrected for cost of living, based on UBS index in which Randstad is here set at 100).
Source: Calculations of OECD secretariat based on data of TNO, 2006 and UBS, 2005.

Box 1.2. **Criteria for defining regional competitiveness**

Regional competitiveness is a broad concept and can be measured in many different ways. The question of what makes a metropolitan region 'successful' is a tricky one, as success can have different aspects. There is a wide range of indicators developed by international organisations, academics and consulting groups to assess the competitiveness of cities, most often utilised to elaborate an international ranking. A good aggregate indicator of economic prosperity is gross regional product (GRP) per capita adjusted for purchasing power, given regional differences in price levels. It is the indicator most used for international comparisons. However, though GRP per capita is the most reliable indicator, but it does not take into account such determinants as quality of life, level of social cohesion and environmental quality. The OECD has developed a cross-country comparisons model, examining which factors explain a given region's gap in GRP per capita with other OECD metropolitan regions. These are productivity per worker, efficiency of the local labour market expressed in terms of employment/unemployment, and the relative size of the labour force with respect to the population, *i.e.* the activity rate.

The Randstad as a whole generates income per capita that is 6% higher than that for the Netherlands as a whole. But the differences between cities within the Randstad are substantial. Income per capita is higher in Utrecht (21% higher than the national average) and North Holland than elsewhere. These areas are the constituents of the so-called North Wing (the northern part of the Randstad). The South Wing comprising the city-regions of Rotterdam and The Hague ranks below the North Wing. The worst performing city in this respect is Rotterdam with an income 10% below the national average. The gap between GDP per capita in the North and South Wings shows no signs of getting smaller as over 1995-2003, that of the North Wing has continued to remain higher than that of the South Wing (Figure 1.11). However, it is worth noting that the GDP per capita of the South Wing remains slightly above – or at the same level as – the national level.

Figure 1.11. **GDP per capita gap between the North and South Wings**



Source: CBS, 2006.

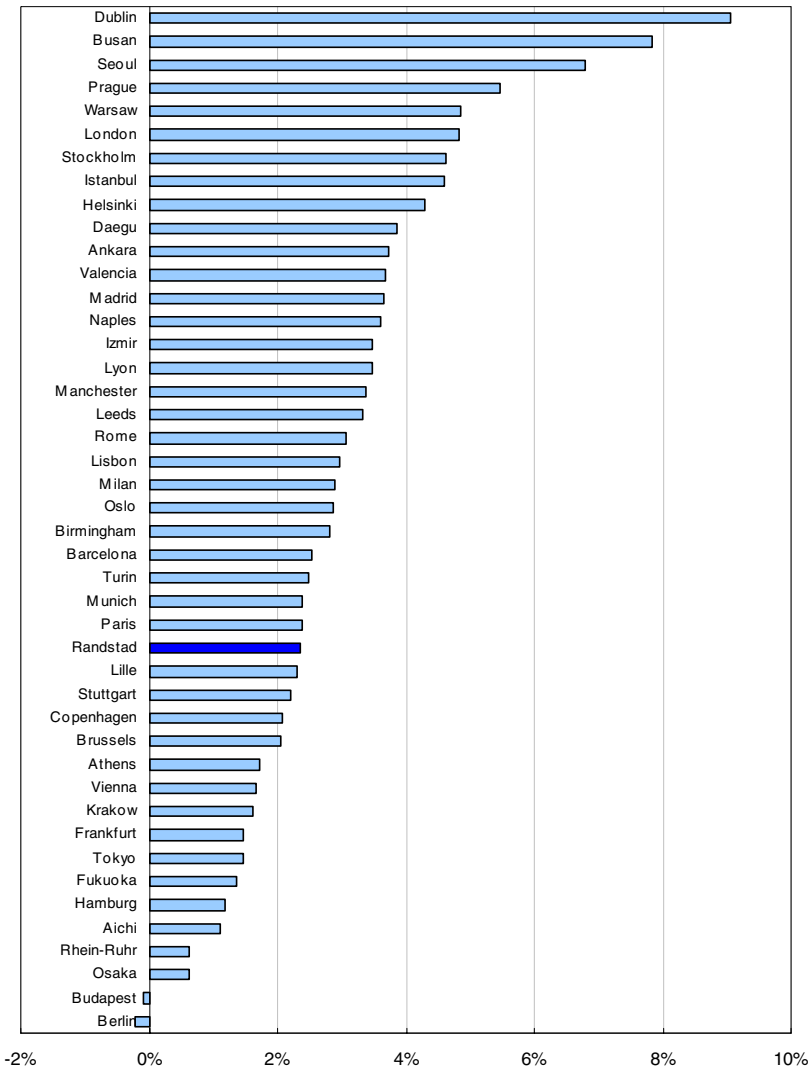
Economic growth

Economic growth in the Randstad over the last decade has been relatively modest. Its economy has grown at a real rate of 3.0% per year over the 1995-2005 period whilst for the Netherlands as a whole, the real rate of annual growth of GDP was 2.6%. In a ranking of 20 urban European regions the Randstad is in seventh position for economic growth over the last decade (TNO, 2006). The score of the Randstad over the period 1995-2002 as compared with other metropolitan areas in the OECD paints a rather bleaker picture (see Figure 1.12).

The average annual growth rate over the last decade hides the fact that that the first half of it was very successful and the second half the reverse as there was a remarkable economic slowdown between 2001 and 2004 (see Figure 1.13). External factors made an important contribution to the downturn as being a very open economy, the Netherlands was highly exposed to the downturn in world trade in the early part the decade and then suffered from the prolonged weakness of the euro area. As well, the increases in real wages at the end of the past decade reduced competitiveness. Moreover, private consumption remained stagnant during 2000-2005, due to a decrease in real disposable income and slow down of house price increases after 2001. It did not, therefore, provide a cushion for the decline in stock market prices (OECD, 2005). The effects of the economic crisis were more severe in the Netherlands as the flexibility

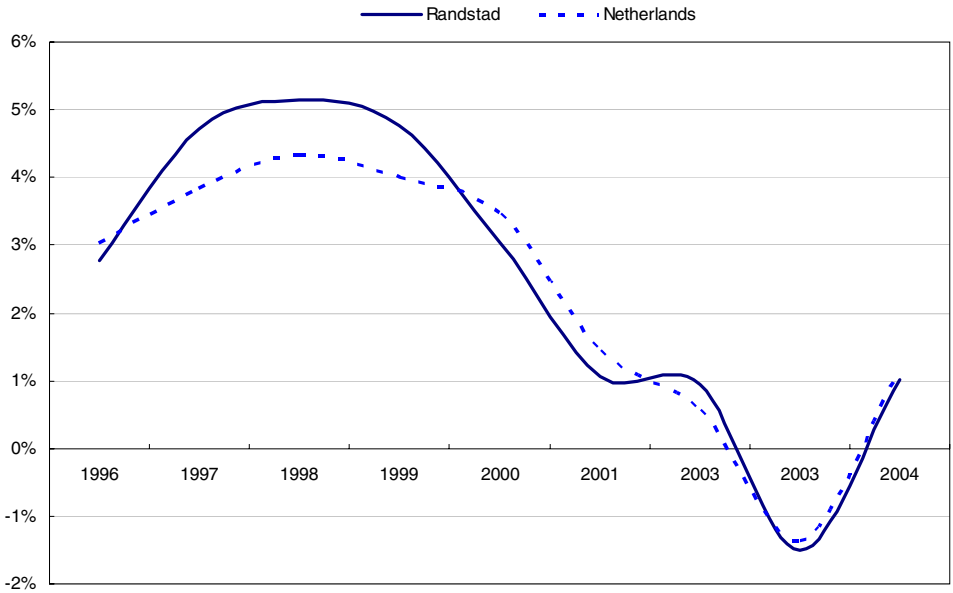
needed to adjust to the new economic conditions was lacking, most notably in the labour market.

Figure 1.12. **Average annual GDP growth 1995-2002 in selected OECD cities**



Source: OECD Territorial Database.2006 Definition of the Randstad in this database: North-Holland, South Holland, Utrecht and Flevoland.

Figure 1.13. **Annual economic growth in the Randstad, 1996-2004 (% GRP growth per year)**



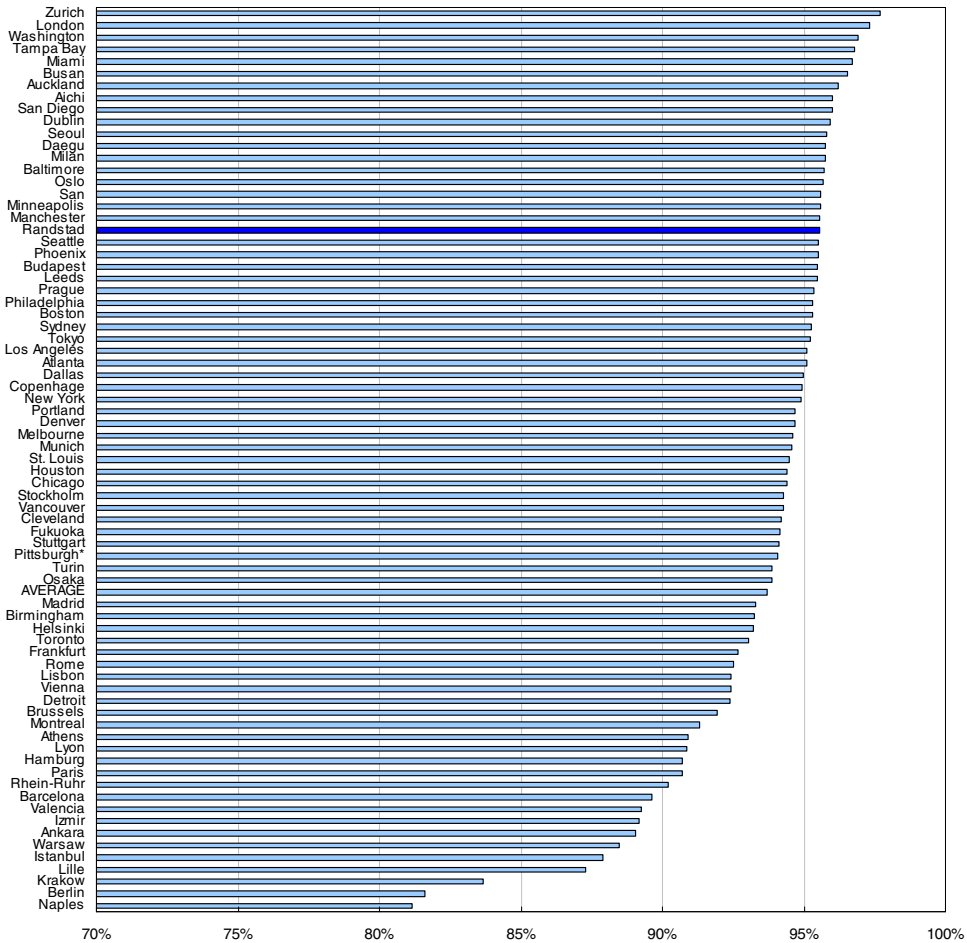
Source: TNO, 2005.

High employment rate

Compared to other OECD metropolitan regions, the Randstad exhibits a high employment rate and high employment growth. The unemployment rate in the Randstad was 3.9% in 2005. This is very low from an international perspective. Among comparable European metropolitan regions, only Milan had a lower unemployment rate, namely 3.5% (TNO, 2006). Moreover, on other labour market indicators too, the Randstad scores reasonably well. Its employment rate ranked 23rd among the 80 metropolitan regions in OECD countries in 2002 (Figure 1.14). Taking only European regions in the OECD into account, the Randstad ranked 7th out of the 37 regions in the OECD in 2002 (OECD, 2006). In employment growth, only Madrid, Dublin, Barcelona, London, Rome and Lisbon surpassed the Randstad during 1995-2005 (TNO, 2006). Labour utilisation in the Netherlands has grown steadily over past decades owing to a large rise in the employment rate (about 20% since the early 1980s). The national employment rate is now almost as high as in the United States and considerably higher than the EU15 and OECD averages (OECD, 2005). The rise in employment has had several causes, notably the policy of moderation in real wages growth that started in 1982 with the so-called Agreement of Wassenaar,[12] the reduction of the levels of social security benefits and the

growing participation of women in the labour market (Nickell and Van Ours, 2000). However, in line with economic growth, employment growth in the Randstad during 1995-1999 was more impressive than during 2000-2004.

Figure 1.14. **Rankings of employment rates across OECD countries 2002**

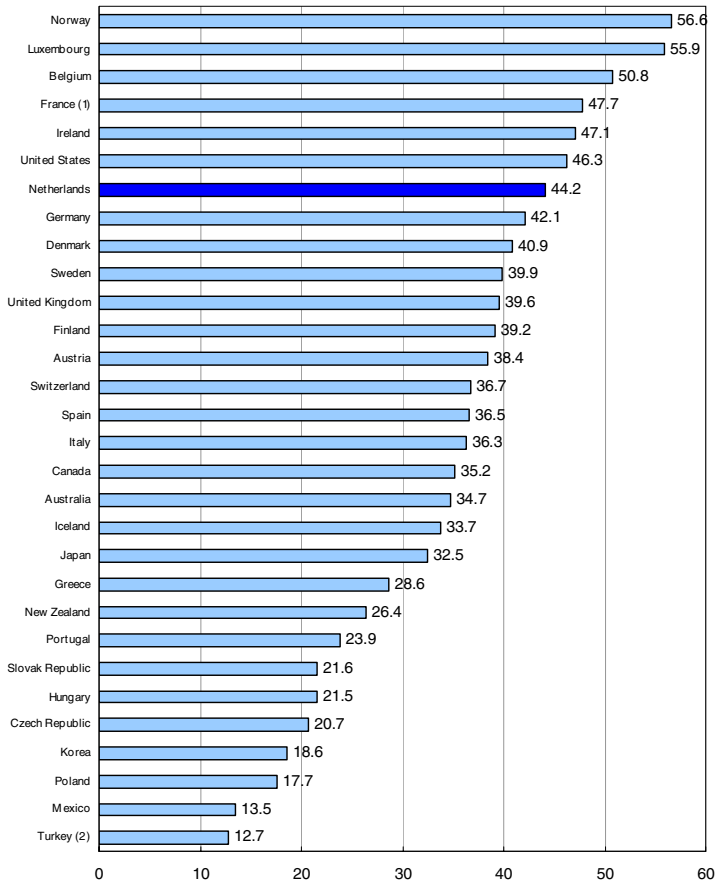


Source: OECD Territorial Database, 2006. Definition of the Randstad in this database: North-Holland, South Holland, Utrecht and Flevoland.

High productivity per hour

Although its position compared to other countries was considerably higher during the 1980s and 1990s, the level of labour productivity per hour in the Netherlands still ranks as high across OECD countries (Figure 1.15). There is a large difference in the Netherlands between productivity per hour and productivity per worker. As the working time per worker is very low in the Netherlands, due to a high proportion of part-time work, the productivity per worker is also low. A modest productivity level per worker in the Randstad leads to a modest GDP per capita compared to other OECD metropolitan regions, especially when compared with the metropolitan regions.

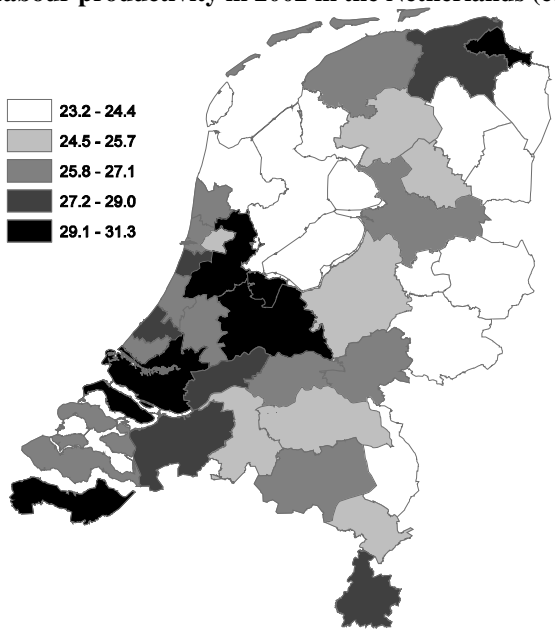
Figure 1.15. **Labour productivity (GDP per hour in USD) in OECD countries 2004**



Source: OECD Productivity Database, 2006.

The provinces with the highest levels of labour productivity in the Netherlands are three of the four Randstad provinces: Utrecht, North Holland and South Holland (see Figure 1.16). The only exception is the province of Flevoland, which has a relatively low labour productivity rate, but this can be largely explained by the commuting that takes place to North Holland. Sector structures differ between regions and as some sectors have higher productivity rates than others, this can to some extent explain differences between regions - up to a quarter of the difference in regional productivity according to some research (Broersma and Oosterhaven, 2004). Examples of sectors that are associated with high labour productivity in the Netherlands are Schiphol airport, the financial services' and business services' sectors and the industrial complex around Rotterdam harbour.

Figure 1.16. **Labour productivity in 2002 in the Netherlands (euro per hour)**

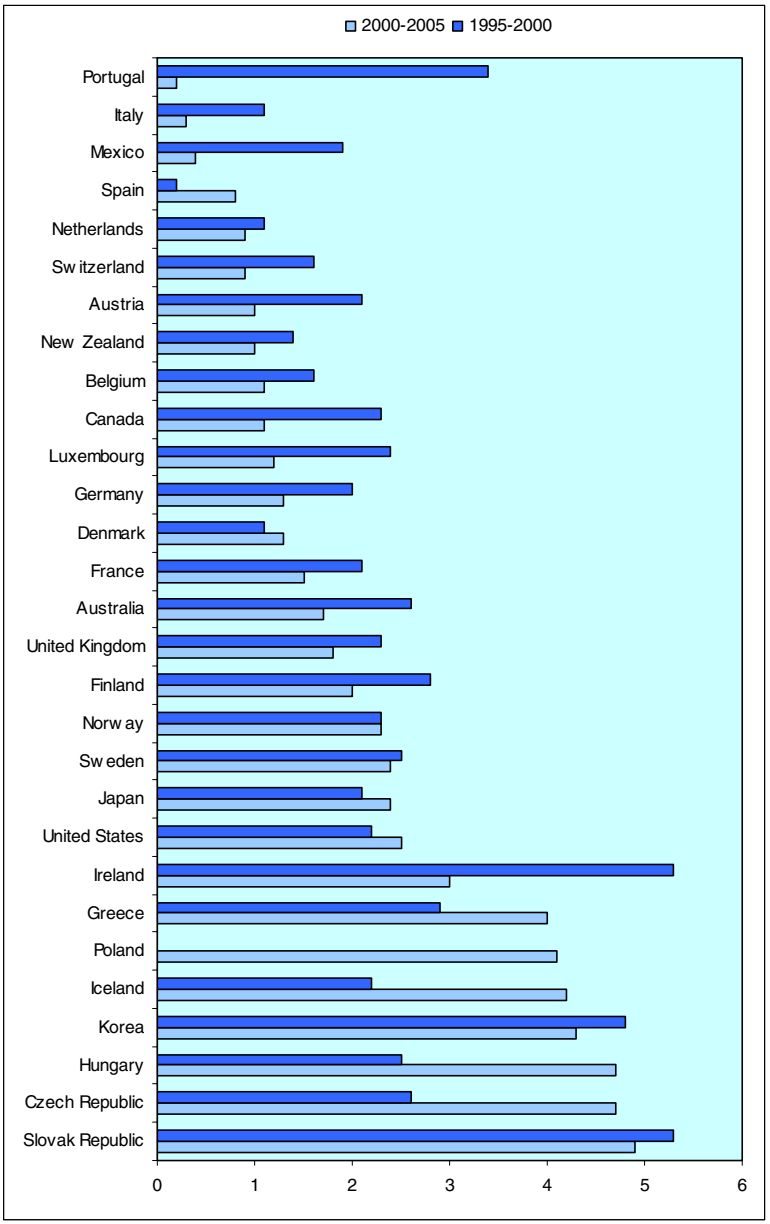


Source: Broersma and Van Dijk, 2005a.

Low productivity growth

Despite its relatively high labour productivity per hour, the Netherlands exhibited one of the lowest average annual labour productivity growth rates during 1995-2005: 0.9% growth over 2000-2005 and 1.1% over 1995-2000 (Figure 1.17). During this period, the Randstad performed better with growth of 1.7% over 1995-2005. Nevertheless, several other regions in the Netherlands had higher average annual productivity growth than this and the Randstad's was well below that of many other European cities, and far below cities like Dublin (4.3%) and Stockholm (3.7%) (TNO, 2006).

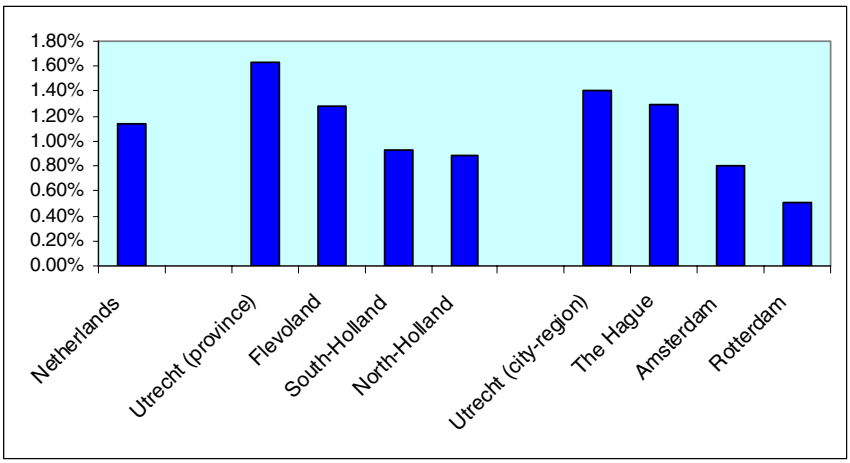
Figure 1.17. **Labour productivity growth (GDP per hour worked) in OECD countries, 1995-2000 and 2000-2005 (annual compound growth rate)**



Source: OECD Productivity Database 2006.

Between 1996 and 2002, there were considerable differences in productivity growth within the Randstad. The regions with a strong services sector and located in the centre of the country, on the border or just outside the Randstad showed the largest growth in labour productivity (Broersma and Van Dijk, 2005a). Utrecht had a higher productivity growth rate than the average in the Netherlands, but growth in the rest of the Randstad was considerably slower, in most cases below the Dutch average (see Figure 1.18). Several studies indicate that population and job density negatively affected the region's productivity growth, suggesting diseconomies of agglomeration (Frenken *et al.,* 2005, Broersma and Van Dijk, 2005b). The main reasons for this are congestion and lack of space.

Figure 1.18. **Annual labour productivity growth 1996-2002 in the Netherlands, the four Randstad provinces and the four large city-regions in the Randstad**



Source: Broersma & Van Dijk, 2005b; Ontwikkelingsbedrijf Rotterdam, 2005.

Conclusion

In conclusion, the Randstad economy scores well on many indicators, but productivity growth is a serious challenge. The Randstad has a relatively high GRP per capita, unemployment is low and labour productivity is high. Economic growth has been sluggish in recent years, but has been good over a longer time period. To this positive image could be added: low inflation, a low proportion of people below the poverty line and high income equality. The main challenge is the low labour productivity growth rate over recent years.

1.3. The Randstad: an open trade and services-based economy

In the previous section, the main indicators of the Randstad' economic performance have been described. Its largely good economic performance has been achieved by its openness to competition and the diversity and dynamism of certain of its economic sectors. This section will examine these factors, particular sectors and the challenges they face.

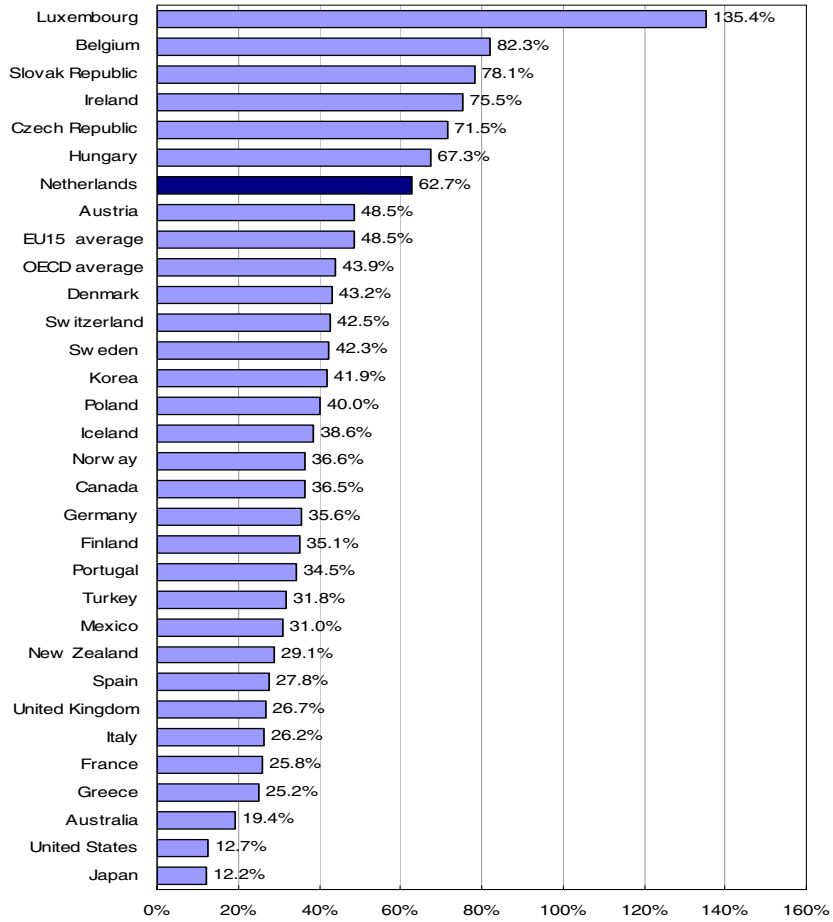
1.3.1. The openness of a services-based economy

The Randstad economy is dominated by the service sector, more than in many OECD metropolitan areas. The vast majority of working people in the Randstad (84%) works in services as, against 13% in industry and 3% in agriculture. The Randstad is among the metropolitan areas that have the highest proportion of their economies devoted to services. In western Europe only London, Stockholm and Rome have more services-oriented economies. Cities such as Barcelona and Milan are far more industry-oriented (TNO, 2006). The cities of the Randstad lack a strong industrial profile (Van Oort, 2004). Moreover, 3% of the labour force is employed in agriculture, a surprisingly high proportion given that agriculture has almost disappeared in most European cities. Agriculture and food products continue to take up a large part of Dutch exports (about one fifth). Compared also to the economy of the Netherlands as a whole, the Randstad is less industry-oriented and more oriented towards commercial services. Industry employs 17% of the working population in the Netherlands (13% in the Randstad) whereas 46% of employment in the Netherlands is in commercial services with this figure increasing to 52% in the Randstad. The share of the working population in agriculture and non-profit services is the same in the Randstad and the Netherlands as a whole: 3% and 33% respectively (TNO, 2006).

The Netherlands is historically one of the leading trading nations and continues to be so with an economy that is very open to international trade and investment as demonstrated by its share of global trade and attractiveness to FDI (see below). The country has positioned itself as the gateway to and from Europe and takes full advantage of its location at the mouth of major European rivers and overland routes. It has subsequently enhanced this advantage with developing two main logistics hubs: Rotterdam harbour and Schiphol airport. Thus it remains the distribution centre of Europe. Whereas its GDP accounts for only 1% of total world GDP, the Netherlands' share of global trade is 3.25%. In 2002, it accounted for 3.8% of world exports and 3.3% of world imports, making it one of the ten most important merchandise exporting and importing countries in the world (WRR, 2003). Seventy-six percent of worldwide exports and two thirds of worldwide imports go to and from European countries. Two thirds of exports from the Netherlands come from the Randstad.

However, the openness of the Randstad economy makes it vulnerable to external shocks. International trade is naturally dependent on developments elsewhere in the world, such as war, business cycles and protectionism. As most Dutch trade is with countries in the EU, the Dutch economy is closely linked to that of other European countries, especially to Germany's. Part of the economic downturn of the last five years can thus be explained by the severe German economic crisis that affected the Netherlands. These global interconnections require labour market institutions to be sufficiently flexible to be able to adapt to changing circumstances.

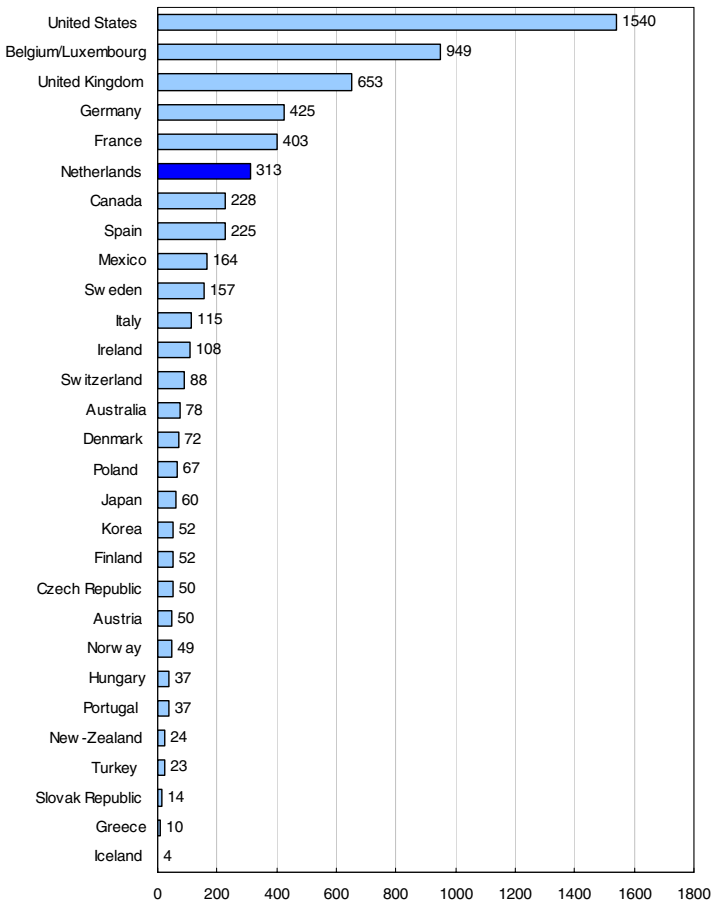
Figure 1.19. **Share of external trade in national GDP in OECD countries 2004**



Source: OECD Factbook, 2006.

There are high flows of foreign direct investment (FDI) into the Netherlands, both in absolute and relative terms. During 1996-2005, the Netherlands attracted a total of US$313 billion and ranked sixth in attracting FDI among OECD countries (see figure 1.20). The Netherlands currently has around 5 400 foreign firms which provide 535 000 jobs, around 7% of total Dutch employment. Almost 60% of these foreign companies have European mother companies, with those based in Germany and the United Kingdom predominating. One third is owned by North American companies. A quarter of the foreign companies in the Netherlands are production companies. Another quarter is engaged in marketing, sales and consultancy. Other large categories of inward foreign direct investment are wholesale (20%), logistics (12%) and headquarters (8.5%) (Stec Groep, 2006).

Figure 1.20. **FDI attraction (cumulative FDI inflows) among OECD countries, 1996-2005 (in billion US$)**



Source: OECD International Direct Investment Database, 2006.

Foreign direct investment is overrepresented in the four Randstad provinces as 58% of all foreign companies in the Netherlands are located there whereas the Randstad economy accounts for only 51% of the total Dutch economy. The neighbouring provinces of North Brabant and Gelderland host 27% of foreign companies. The other six provinces have only managed to attract 15% (Stec Groep, 2006). Research shows that the infrastructure in the Randstad exerts a large, positive influence on foreign firms when choosing their location in the Netherlands. High population density does not deter them, indicating that other factors compensate for the lack of space. In comparison with European and other firms, Japanese and US firms are disproportionately represented in the Randstad, whilst firms with a parent in Belgium and Germany prefer to be located in the border regions of the Netherlands (Hogenbirk & Narula, 2004). Although the attractiveness of the Randstad for FDI might have deteriorated a bit over recent years, it is still one of the most popular areas in which to locate a foreign firm (see Box 1.3).

Box 1.3. **International attractiveness of the Randstad**

There are several institutions which list the most attractive areas in which to locate a business by preparing rankings for cities and for countries. The Randstad is not an entity that is taken into account in these rankings, but Amsterdam is.

One of the well known rankings for international attractiveness of cities is the European Cities Monitor of Cushman & Wakefield. This publication ranks 33 European cities according to where it is best to locate a business on the basis of the views of the senior executives of 507 European companies. Key factors that are taken into account in their analysis are access to markets, qualified staff, telecommunications, cost factors and quality of life factors. From the 1990s until 2004, Amsterdam has consistently scored fifth place, after London, Paris, Frankfurt and Brussels. From 2005, Amsterdam has been overtaken by Barcelona and now ranks sixth. The factors Amsterdam scores best on are: languages spoken (2nd), access to markets (4th) and external transport links (4th). It's worst scores relate to the cost of hiring staff (26th) and value for money of office space (19th). Only 3% of the respondents view Amsterdam as a city which is trying to improve itself, a very modest score compared to Barcelona and Madrid that receive scores of 24% and 17% (Cushman & Wakefield, 2006).

Quality of life is only one of the indicators in the European Cities Monitor, and not the most important one. Mercer Consulting has developed a survey that ranks 215 cities worldwide according to their quality of life. Factors that are used to rank cities are (among others): political, social, economic and socio-cultural environment, public services, transport and recreation. In 2006, Amsterdam scored 13th place. The cities with the highest quality of life were Zurich, Geneva and Vancouver. It is interesting to note that the city with the highest score on quality of life in the Cushman & Wakefield study, namely Barcelona, scores only 44th in the Mercer Consulting ranking (Mercer Consulting, 2006).

Box 1.3. **International attractiveness of the Randstad** *(Cont.)*

There are several studies that look at how attractive countries are to foreign investment. As the Randstad is the major region in the Netherlands which attracts foreign direct investments, these studies also, indirectly, say something about the Randstad. One of these studies is the Business Environment Ranking by the Economist Intelligence Unit. This ranking includes the world's 60 largest countries and measures the attractiveness of the business environment and its key components. The model is used to generate scores for the previous and the following five years. Over the period 2000-2004, the Netherlands scored 3rd, after Canada and the United States. For the period 2005-2009, its ranking dropped to sixth, after Denmark, Canada, the United States, Singapore and Hong Kong (EIU, 2006).

Another study is the Ernst & Young European Attractiveness Study. In this study investment projects are tracked and perceptions of international senior executives are surveyed with respect to Europe as a potential investment destination. When it comes to total foreign investments, the Netherlands is in 13th position. The most frequent suggestions by CEOs for improving the attractiveness of the Netherlands are to reduce taxation, implement more flexible labour regulations and reduce labour costs (Ernst & Young, 2005b). The Netherlands scores fourth when it comes to market shares for headquarter investments in 2005, after the United Kingdom, France and Switzerland (Ernst & Young, 2006). In comparison with six European countries, the Netherlands was found to have the most attractive investment climate for European headquarters after Switzerland (Ernst & Young, 2005a). There are several studies that look into the cost of living and business costs (UBS, 2006, Mercer Consulting, 2006, KMPG, 2006) and they generally rank of these as moderate in the Netherlands.

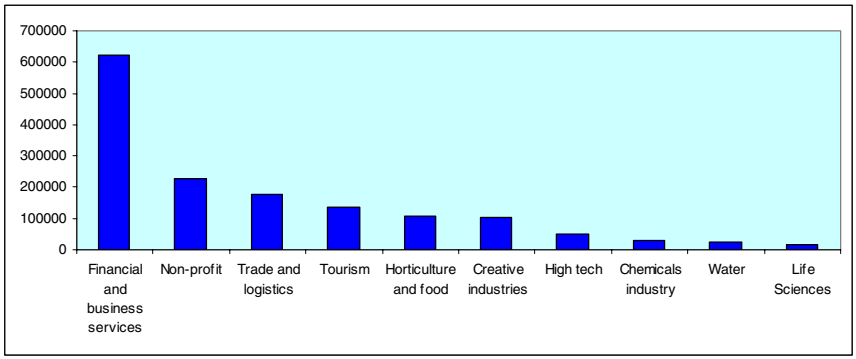
A related type of study concerns the economic freedom of a country. Both the Heritage Foundation and the Cato/Fraser Institute produce rankings on this. Although not explicitly made to evaluate attractiveness to foreign investment, the factors in this index nevertheless give an impression of the freedom that foreign companies have in the countries surveyed. Factors that are taken into account are, among others, government intervention, property rights and regulation. The Netherlands was ranked 16th in the economic freedom index of the Heritage Foundation for 2006 and 12th in the ranking of the Cato/Fraser Institute over 2004. Factors on which the Netherlands scores relatively poorly are the high level of regulation of the labour market, heavy fiscal burdens and extensive government intervention (Heritage Foundation, 2006, Gwartney and Lawson, 2005).

1.3.2. A diversified economy

Several attempts have in recent years been made to list the most important sectors of the Dutch and the Randstad economies (BCI, 2005). These lists give an indication of the strong economic sectors in the Randstad, both in terms of value added and share of employment. A comparison of the lists shows 10 strong sectors in the Dutch economy (Weterings *et al.,* 2006) each of which has diversified considerably. The sectors in which the Randstad is underrepresented as compared to the Dutch economy as a whole are the chemicals industry and the high technology sector. In all other eight sectors, the Randstad is clearly or slightly overrepresented. Compared with the rest of the Netherlands, the Randstad shows the most significant specialisation in creative industries, financial and business services and the water sector.

Financial and business services are by far the most important sector in the Randstad in terms of employment. A quarter of all its employment is in these sectors; this amounts to 623 000 jobs. Other sectors generating considerable employment are the non-profit sector and trade and logistics (see Figure 1.21).

Figure 1.21. Employment in important sectors in the Randstad (number of jobs)

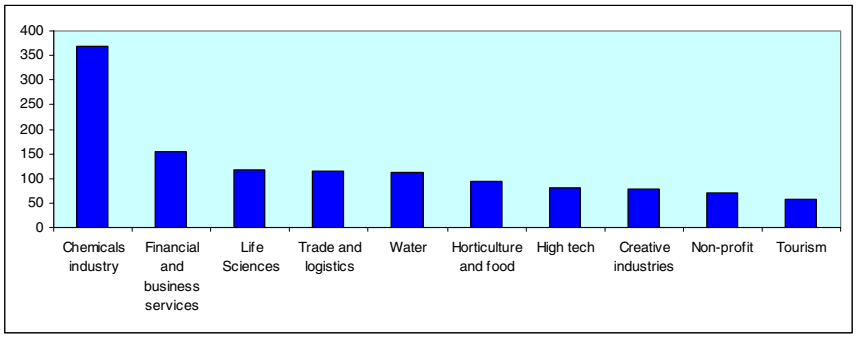


Source: Data from Weterings *et al.,* 2006.

Most sectors with high added value are relatively small, with the notable exception of financial services and trade. There are large differences in value added between the different sectors (see Figure 1.22). The chemicals industry adds by far the most value per worker, not surprisingly for a capital intensive sector. Other sectors, such as financial services, life sciences, trade and the water sector score lower but also have an added value that is above average. Many of these high value added sectors do not play a very significant part in the Randstad economy, for example, life sciences and the water sector are the smallest sectors of the 10 most important in the

Randstad and the chemicals industry is clearly underrepresented there when compared to the rest of the Netherlands. By contrast, some of the biggest sectors in the Randstad, the non-profit sector and tourism, score relatively low on value added. The exceptions to this pattern are financial services and trade. Both sectors are strongly represented in the Randstad, provide a high share of its employment and have relatively high value added.

Figure 1.22. **Value added per worker in important sectors in the Randstad**



Source: Data from Weterings *et al.,* 2006. Index: 100 is average value added

The Randstad economy is thus relatively diversified with several economic specialisations. Some of these specialised sectors are described and analysed below, that is the trade and logistics sector, financial and business services, the creative industry, tourism and horticulture. Their cases reveal challenges that are relevant for the whole Randstad economy.

Trade and logistics

The trade and logistics sector is concentrated around Rotterdam harbour and Amsterdam Schiphol airport. Rotterdam has the largest harbour in Europe, and it is one of the largest harbours in the world. Schiphol airport is the fourth largest airport in Europe. Major distribution routes go from Rotterdam harbour through the middle of the Netherlands to Germany.

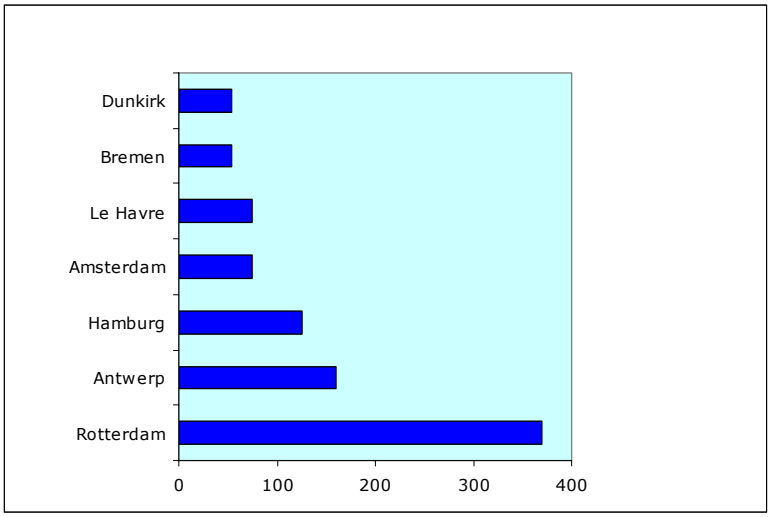
The harbour of Rotterdam and the logistics cluster

Rotterdam used to be the largest port in the world from 1965 to 2004, but since then Shanghai and Singapore have overtaken it.[13] This is unsurprising considering the fast growth in consumption and production in East Asia, especially China, and is not a sign of Rotterdam's decline. Its port is not in competition with Asian ports, but with major ports in north-west Europe. The port of Rotterdam is the largest in Europe, in terms of the gross weight of goods and the number of containers handled, accounting for 9% of total goods coming

from EU countries in 2003. Although its position has dropped over the last two decades, the port of Rotterdam still ranks 8th in the world in terms of container transport in 2004.

Despite fierce competition from Antwerp and Hamburg, the performance of the port of Rotterdam is good. It has by far the largest port in the so-called Hamburg-Le Havre range which serves north-west Europe (see Figure 1.23). The port of Rotterdam is more global and more diversified than its competitors. In particular, its relations with Europe, Africa and Asia are more developed, though the differences in the connections of the three ports with North and South America are less marked. It is also more diversified than its competitors. Almost half of the trans-shipment which takes place there is wet bulk (like oil), a quarter dry bulk (like coal) and a fifth is containers. In Antwerp and Hamburg there is a greater concentration on containers: 43% of the trans-shipment in Antwerp is in containers and in Hamburg this figure is 60%. The market has grown fastest in container trans-shipment and competition for this market has been the fiercest. Although Rotterdam is the market leader in all types of trans-shipment, [14] it lost market share in container trans-shipment to Antwerp and Hamburg (from 39% in 1992 to 27% in 2003), but managed to regain part of it in 2004 and 2005 (increasing its share to 28% in 2005) (Rotterdams Havenbedrijf, 2006).

Figure 1.23. **Trans-shipment harbours by volume (million tons) in Hamburg-Le Havre range in 2005**



Source: Rotterdams Havenbedrijf, 2006.

A number of developments indicate that the prospects for the port of Rotterdam are good, but several problems have to be solved. Further economic growth in China

will lead to increased logistical activities, whilst growth projections for the container market range from 7% to 10% per year (V&W, 2004a). Most of these goods will be transported in ever larger container ships, for which Rotterdam, as a very deep sea harbour, is well equipped. There are however several uncertainties. One of them is the development of multi-porting, the phenomenon whereby medium-sized and large container ships will, on intercontinental routes, use several different harbours and not only to the big and important ones such as Rotterdam (Rotterdams Havenbedrijf, 2002). Additionally, new markets in eastern Europe and increasing flows from Asia via Europe to the east coast of the United States might make harbours in southern Europe more important, although their catchment area is currently small. Moreover, most of the operating companies in Rotterdam have become international with fewer ties to Rotterdam and the Netherlands, so they will be quick to move if price and quality elsewhere appear more attractive (V&W, 2004a). As the loss of market share in containers shows, it is essential for the port of Rotterdam that existing weaknesses are solved. For example, problems in infrastructure, such as road congestion and spatial constraints, and in areas such as the labour market, where lack of flexibility and an insufficiently highly skilled workforce create difficulties for businesses. Additionally, lack of an effective use of the existing knowledge and skills base in the area and a lack of innovation must be tackled.

Road congestion in the Netherlands is one of the most urgent problems facing the port of Rotterdam, as it increases delivery time and decreases reliability for logistics companies that have chosen to use Rotterdam. The market shares of harbours can be explained by the relative merits of the logistical chain upon which they rely stretching from the origin of the goods coming through them to their ultimate destination (CPB, 1999). Although most of the goods coming from Rotterdam harbour are transported over inland waterways (60%), a substantial part is moved by road transport (35%). The new freight railway network from Rotterdam to Germany (the "*Betuwelijn*"), in operation from 2007, will increase the proportion of goods transported by rail to some extent, but road transport will remain important. The situation is of considerable concern as companies having to transport goods consider road transport in the Netherlands to be less reliable than it is in Belgium, France and Germany (IMD, 2005).

Another weakness that needs to be solved has to do with spatial constraints. Some observers foresee congestion in the harbours of north-west Europe due to the growth of the Chinese economy (Roos, 2005). Rotterdam and Antwerp seem to be battling for reserve capacity in Zeeland harbours (the Dutch province between Rotterdam and Antwerp). In Rotterdam's favour is the fact that it will increase its harbour capacity considerably when its extension by land creation (Maasvlakte 2) is realised. However, better co-ordination of harbour capacity in north-western Europe appears to be needed.

Increasing labour flexibility and skills would add further to the competitiveness of the port of Rotterdam. The regional labour market presents problems in terms of its inflexibility and lack of sufficient highly skilled workers (V&W, 2004b). Comparable labour costs in the harbour of Antwerp are considerably lower than those in Rotterdam (CPB, 1999). Making better use of Rotterdam's existing knowledge base and developing a better capacity to innovate are also likely to be essential for facing future competition. There is potential to do this in new markets, such as biomass and waste, and new process technology, such as logistical platforms[15] (Rand Europe, 2004) which must be grasped.

The port of Rotterdam is part of a substantial logistics cluster which generates economic production that amounts to 4.4 % of Dutch GDP. However, more than half of the total value produced by the logistics sector is exported and another approximately 10% of this total consists of transit goods, which are goods that are imported and immediately exported. On the positive side, some observers consider that the transit of containers has a central role in attracting foreign investment to the Netherlands. It appears that this may be the case as in 43% of cases, the establishment of a distribution centre in the Netherlands by a company leads to the establishment of other activities there (Ernst & Young, 2002). There does not seem to be much cooperation between the ports of Rotterdam and Amsterdam, possibly due to the different character of both harbours, Rotterdam being a port that offers a broad range of services, whereas the port of Amsterdam is more specialised in niche markets, such as cacao and coal.

The major drawback in the logistics sector is that it invests very little in research and development and has been weakened by the resulting lack of innovation. Each euro spent in logistics generates less than one cent of research and development expenditure. It is significant that compared to other Dutch service sectors, the supply-chain sector has a low level of innovation. Investment in information and communication technology (ICT) by the logistics sector is also relatively low (TNO, 2003a; TNO 2003b). It is reported that the competitive position of the Dutch supply chain has worsened due to this failure to innovate whilst neighbouring countries have copied the highly successful Dutch policies of the past and have caught up with the Netherlands in this sector. Several actors have contributed to this problem: producers and logistics services firms do not initiate innovation; transport companies are too small to undertake the necessary research and development; knowledge institutes, such as universities and public research institutes, are not commercial enough, too fragmented and not oriented towards working with small enterprises; government departments suffer from a lack of co-ordination with too many players and too many different objectives (*Commissie Van Laarhoven*, 2006). As the logistics focus seems to be shifting from western to eastern Europe (IG&H, 2003) providing more innovative and value added services becomes all the more urgent.

Schiphol airport

Schiphol airport has managed to become one of the biggest airports in Europe, by acting as a hub connecting many intercontinental with intra-European flights. This makes it possible to have a network with a huge variety of destinations and very frequent flights, despite the relatively small domestic market in the Netherlands. This network, in combination with the quality of the service, has attracted many foreign companies and resulted in much economic activity in the area surrounding the airport. However, the character of Schiphol as a typical hub-airport also has its downside in that it has many transfer passengers who generate little income for the airport but who contribute to noise pollution and the deterioration of air quality.

Box 1.4. **Schiphol airport**

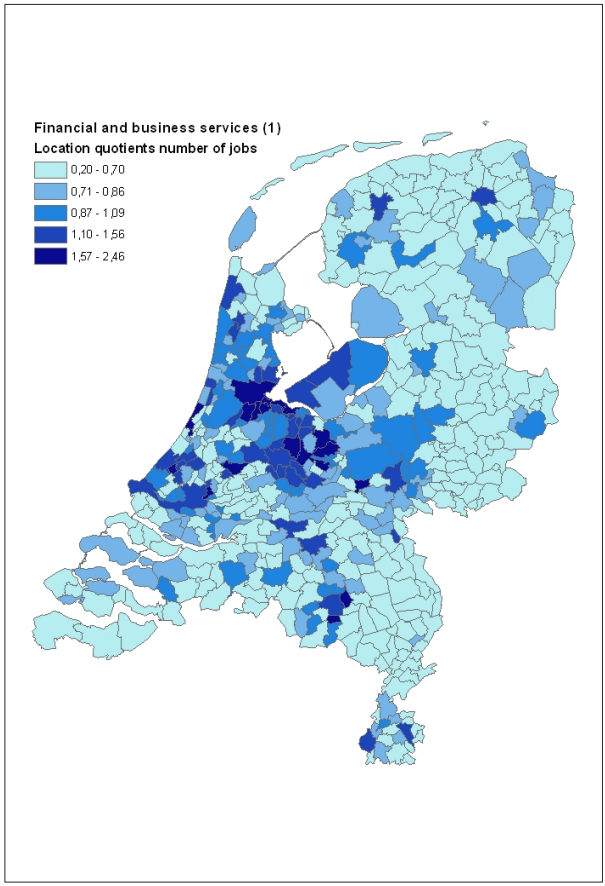
The development and expansion of Schiphol airport is more recent than the port of Rotterdam as it dates from the 1970s. Schiphol is the fourth biggest airport in terms of flight movements and air passengers in Europe, after London Heathrow, Paris Charles-de-Gaulle and Frankfurt. It ranks second in terms of total freight and mail, after Frankfurt. It is highly valued for its good connecting services using a single terminal system and for its substantial flight network. As a result, 41% of passengers using it in 2003 are in transit. There are several organisations that rank the quality of airports. Two of these organisations are Skytrax and IATA. In the rankings of both organizations Schiphol has, over the last decade, frequently been chosen best airport of the world or Europe, although not since 2003. Other organisations, too, have frequently chosen Schiphol airport as the best airport (Schiphol, 2006).

The main challenge for Schiphol airport is how to accommodate growth as, unlike many of its competitors, it is located very close to several cities (such as Amsterdam, Amstelveen, Hoofddorp, Haarlem, Zaanstad and Leiden). This has advantages (such as being 10 minutes from the city centre of Amsterdam), but it also creates considerable constraints on the number of flights, since the noise for citizens in the neighbouring areas has to be limited. This has had consequences for the operations of Schiphol, as limits have been imposed on the level of decibels permitted, which might be reached within a few years. Concentration in the airline industry could lead to more pronounced hub and spoke-networks in the future, in which Europe will have room for only a limited number of hubs, although alternative views exist about this prediction. If this does occur, however, the position of Schiphol is reasonably positive as it is unlikely to lose much of its market share, if only because its competitors also have capacity problems (Nyfer, 2000). It has, moreover, been shown that the growth of Schiphol will lead to positive economic effects, in terms of jobs generated directly and indirectly through its continued importance as a hub-airport (Koning *et al.,* 2002; Lijesen *et al.,* 2006) even if not all commentators are convinced of this (Boon and Wit, 2005). The main challenge will be to find ways to accommodate this growth. A further concern for Schiphol is to remain accessible by road, despite increasing traffic congestion.

Financial and business services

There is a high concentration of financial and business services both in the Randstad and also in the urban regions immediately outside it. They are less significantly represented in Rotterdam than in the north, in Amsterdam, Utrecht and their neighbouring municipalities. Of these last three areas, financial services seem more concentrated in Amsterdam and its surrounding municipalities, whereas information and communications technologies (ICT) services seem have a greater presence in and around Utrecht. The services sector in The Hague is dominated by large insurance and telecommunications companies, while Rotterdam also has several insurance companies as well as consultancy firms.

Figure 1.24. **Geographical concentration of business and financial services in the Randstad**



Source: Weterings *et al*., 2006. The darker the area, the more concentration of business and financial services.

The business services sector is a large and important one in the Randstad economy. It is a heterogeneous sector with some very large firms, but is mostly made up of very small companies: 88% of the firms in the sector have 5 employees or less, no doubt partly because there are more start ups in business services than in most other sectors. The products of the sector are partly standard ones, such as cleaning and surveillance services. Other products are more knowledge intensive, such as ICT services, engineering, economic advice, legal and marketing services. Business services in the Netherlands have been growing fast, compared to many other western countries. Between 1990 and 2000, the sector generated a quarter of the growth of the value added production in the private sector and a third of employment growth (Kox, 2002). This might, however, be to compensate for slower growth by the sector in earlier decades. The Dutch business services market is one of the most open to competition in the EU, together with those in Ireland and the UK (Kox, 2001).

The main challenge for the business services sector is its lack of innovation. Growth in labour productivity in it has been one of the slowest in OECD countries in western Europe. Business services providers in the Netherlands score low on innovation and expenditure for research and development (R&D). Dutch business service providers, more than their colleagues in other western countries, indicate that the shortage of highly skilled labour is a restriction on growth (Kox, 2002). A specific concern for ICT services is the limited linkages between local firms and knowledge institutes. In a comparison of key European cities in ICT development, Amsterdam has scored low on these linkages, as compared with cities such as Dublin, Helsinki, Stockholm and Oulu etc. (Meer, Winden and Woets, 2003). The imbedding of ICT development in local innovation and business networks is needed to enhance the development of the sector.

Creative industry

The creative industry, consisting of – among other areas - advertising, the arts and publishing, is a fast growing sector that could stimulate innovation in other sectors. It is concentrated in the major cities in the northern part of the Randstad due to its strong urban orientation. The sector is well represented within northern Randstad cities such as Amsterdam, Hilversum, Utrecht and Haarlem, and reasonably represented in the region of Rotterdam and The Hague. It has witnessed fast growth during the last decade when its employment growth between 1996 and 2002 was 10% in Amsterdam, where it is concentrated. The presence of many profit and not-for-profit creative entities in Greater Amsterdam indicates that certain locational factors favour growth in this sector. The interplay of the creative industry with the ICT sector could generate new economic activity and, in a broader sense, a strong creative sector could stimulate innovation throughout the economy.

The main challenge for the creative industry is to be able to attract creative people. Research indicates that Amsterdam is able to do this (Florida 2005). However, as competition within part of this market is already very global and may become more so, a prominent role for Amsterdam in this sector is far from assured. As developing linkages between the creative and other sectors seems to be a promising approach, specialisation and co-operation between Utrecht (where ICT services are concentrated), Hilversum (where broadcasting is concentrated) and other parts of the Randstad are essential, in place of the competition between city-regions, common in the past.

Tourism

The major cities of the Randstad have high levels of employment in the tourism sector,[16] with most of the tourist industry in the Netherlands concentrated in the Randstad. In 2004, about 70% of all foreign tourists staying in paid accommodation in the Netherlands and about 61% of the total number of nights when foreign tourists stayed in such accommodation were in the Randstad (CBS, 2006). Unsurprisingly, Amsterdam, The Hague and Rotterdam jointly receive the majority of international visitors. The tourism sector is also overrepresented in the municipalities along the coast. In addition, 'commercial tourism' is very successful with Amsterdam being ranked 10th among the best European cities for conferences/exhibitions in 2004 (Cushman and Wakefield, 2006).

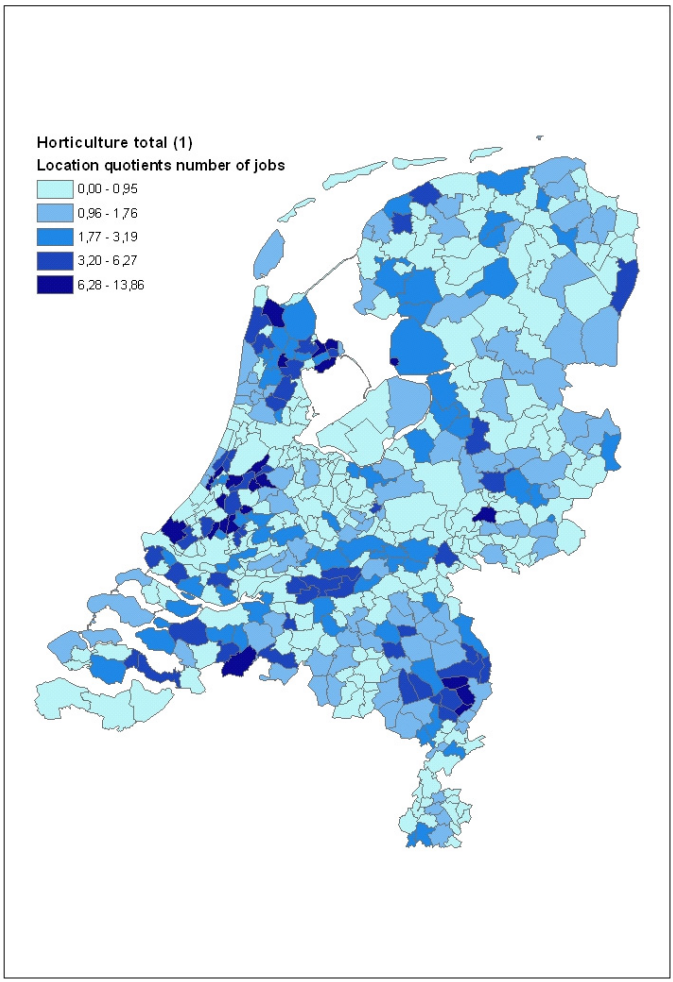
However, in recent years, the Randstad has been slow in developing its tourist industry. During 2001-2004, the number of foreign tourists staying in paid accommodation in the Randstad increased by only 1.4% (CBS, 2006) and the number of nights spent in accommodation in the Randstad by foreign visitors dropped by 1% during this period (CBS, 2006). This stands in sharp contrast to the growth elsewhere in Europe and the world. According to WTO statistics, global tourism grew by 12% during 2001-04. This raises concerns about the overall attractiveness, accessibility, and quality of life in the region, as the latter factors are important determinants of tourist destinations. Amsterdam has been ranked far behind Barcelona, Madrid, Berlin and Prague in a ranking of cities that are actively developing their tourist amenities (Cushman and Wakefield, 2006).

Horticulture industry

Although a relatively small sector in the Randstad economy, its horticulture industry is flourishing. It makes use of greenhouse cultivation and relies on long-distance transport, specialised exporters, auctions and support services. It is a world leader in many respects and its added value production is increasing but employment opportunities in it are not. It is

strongly innovative, without spending much on R&D. This cluster has linkages with knowledge institutes, including both universities (Utrecht and Wageningen) and applied science (TNO, Foods) and the sector also has a strong international orientation.

Figure 1.25. **Geographical concentration of horticulture and food industries in the Randstad**



Source: Weterings *et al.,* 2006. The darker the area, the more concentration of horticulture and food industries.

The horticulture cluster has developed a network of production, trading and distribution both at the local and international level. This cluster not only exports its products (*e.g.* flowers) but also its skills and technology to countries all over the world. There is increasing competition from Kenya, Ethiopia, and Israel and also from Dutch emigrants in Spain. But currently the Netherlands has the climate, knowledge and education to retain its leading position in the industry. However, it faces numerous challenges. For fresh products, logistics are critical and in the Randstad they present the major challenge to the continuing success of horticultural production. Congested road connections do not correspond with the needs of a growing flower trade.

Box 1.5. **Horticulture cluster**

Flowers are the principal added value activity of agribusiness in the Netherlands. It has been estimated that horticulture represents approximately 5% of GDP. It is concentrated around urban areas. Ninety percent of flowers grown are exported, and 95% of them travel by road, the rest by air. Thirty percent of the flowers, mainly roses, are grown overseas in Africa, South America and Israel. On a daily basis, flowers must come in from growers and from Schiphol, for auction, sorting, combining with other flowers, packing, and exporting. The industry is organised as a co-operative of growers. To respond to a changing market and capital requirements, there is a move from small family holdings to large high-tech businesses. As a result, there has been a lot of consolidation of small growers into large entities. More mergers are taking place and the size of the holdings is moving from one to two hectares to 10-18. However, there are still approximately 7 000 members in the co-operative.

Conclusion

The Randstad might be best known for its role as logistics hub for Europe, but its economy is diversified and includes other strong competitive sectors, such as financial and business services, trade & logistics, horticulture and the creative industry. Some of these have a long history there, such as financial services and horticulture. Other sectors, such as business services and creative industries are relatively new. Many of these sectors are innovative without necessarily investing much in research and development.

Although the economic sectors are quite different in character, they face similar challenges. Both the logistics sector and business services are relatively low on R&D expenditure. Several sectors, but mostly logistics and horticulture, are dependent on excellent transport links to and within the

Randstad to ensure ease and speed of access but the availability of these is under increasing pressure. Many sectors (Rotterdam harbour, the creative industries) have trouble finding skilled or creative people.

Economic specialisation has led to different trajectories for growth within the Randstad. The prospects seem to be brighter for the northern part of the Randstad as industry, which is declining generally in western economies, is more strongly represented in the southern part of the Randstad (mainly Greater Rotterdam). Additionally, the non-profit sector, which has generally less spectacular growth rates than the private sector, is a substantial force in the economy of The Hague.

In research on interaction between cities in the Randstad, it has been concluded that the Randstad still consists of four separate city-regions. There are few notable complementarities of economic functions leading to relationships between companies located in the various regions of the Randstad, despite the economic specialisation of the region. Clearly, the actors in the Randstad economy have not yet made of the most of the advantages that proximity between urban networks offers, for example, in terms of knowledge spillovers and complementarities.

1.4. Defining the challenges to improved growth

The previous section focused on the main economic sectors in the Randstad. To varying degrees, it was demonstrated that these sectors all faced challenges hindering their growth. The following section identifies the three main obstacles to this. These are the underutilisation of the proximity of urban centres, the suboptimal use of the existing knowledge base and labour market inefficiencies.

1.4.1. Taking advantage of the proximity of urban networks

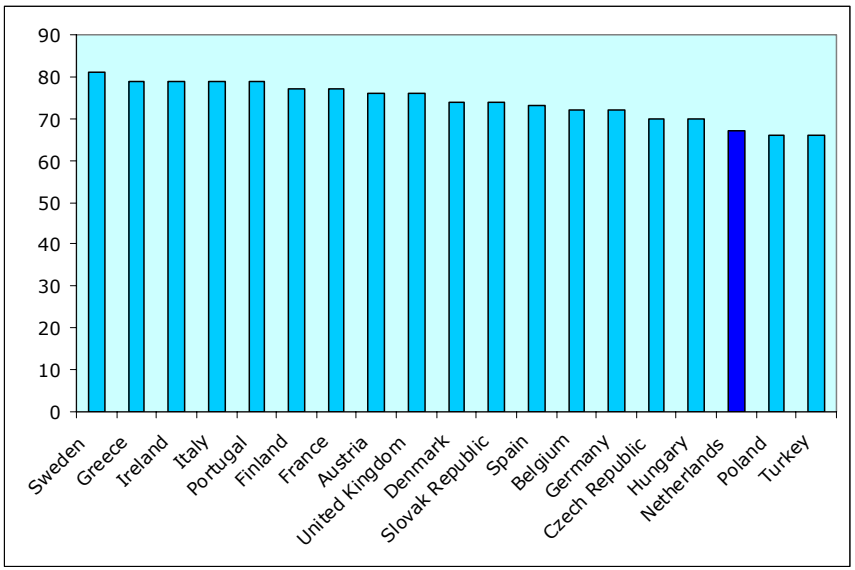
The Randstad has unique features working in its favour. It is a large polycentric area, densely populated and with numerous economic specialisations. Having a population with diverse skills and talents, located in close proximity to each other, should enable the area to generate greater innovation than it currently does and thus new high value added activities. Economic integration Randstad-wide does not really exist, as described in section 1.1.2, but tackling the problems outlined below would improve functional integration in this and other spheres where it is lacking (*e.g.* the labour market). Better business integration would be likely to increase productivity. Improving the ease of movement within the Randstad, that is its accessibility, avoiding the duplication of activities by city-regions, and ensuring housing demand and supply correspond more closely are all

achievable. The last development is particularly important if a more cosmopolitan outlook in the Randstad is to be created.

Internal accessibility within the Randstad: transport networks

Mobility connected to employment and study in the Netherlands is relatively low. As was mentioned in section 1.1.2 the share of people commuting within the Randstad is relatively small when compared to the share of people working within their city-region. This image is confirmed when commuting behaviour in countries is compared (See Figure 1.26): relatively few people in the Netherlands commute. This implies that there is a potential for more mobility, so that more advantage could be taken of the proximity of urban networks. A pre-condition for this to happen is of course that internal accessibility is adequate.

Figure 1.26. **Percentage of individuals who take more than 20 minutes to travel to the place where they work or study**



Source: Eurostat, 2003.

Accessibility throughout the country, but especially across the Randstad area, is a serious problem, and section 1.3 has indicated that it has damaging effects on certain economic sectors. The need for populations to be highly mobile whilst at the same time severe congestion exists in urban transport systems constitutes a recurrent problem in large OECD metropolitan regions. This is even more the case in polycentric regions, such as the Randstad, where travelling distances tend to be higher than in monocentric

regions. The mobility of the population has increased substantially throughout the Netherlands in the last decade which, together with relatively inadequate investment in the main transport networks and the slow implementation of improvements which have been agreed, has led to congestion which is threatening the networks' efficiency. The effects of these inadequacies are considerable in the Randstad.

Most of the passenger transport in the Randstad occurs by road. In an urban area such as Amsterdam 67% of all individual journeys take place by road, a figure which is still higher for regions outside the Randstad. Public transport plays a relatively small role in the Netherlands: when compared to other European countries a very small proportion of journeys are made by public transport (Eurostat, 2005). In large cities in the Randstad, it plays a more important role: in a city such as Amsterdam 25% of all journeys are by public transport, rising to 40% during rush hour (ROA, 2003).

The road network in the Randstad is heavily congested. During the rush hour, journey time is unreliable for more than one in five journeys. Most of the traffic jams in the Netherlands (81%) are concentrated in the Randstad (TNO, 2005) with eight of the 'top 10' traffic jams occurring there (AVV, 2006). Not surprisingly, the majority of the time loss due to traffic congestion is concentrated in the Randstad. On highways in the region of Amsterdam for example, 4.9 hours were lost (in 2000) per 1 000 vehicle-driven kilometres in the morning rush hour. This is twice as much as in other urban areas in the Netherlands. Most of the time, however, was lost in the city of Amsterdam itself (Groenewegen, 2005). New road capacity has become heavily used very quickly and between 1996 to 2001 heavy use of the network increased from 30% to 60%. As a result, the reliability of road traffic has decreased in the Randstad. Currently, rush hour travellers in the region must allow a margin of 40% of the usual travelling time in order to arrive on time in 95% of journeys. For some trips, such as between Amsterdam and its surrounding municipality, Purmerend, the travelling time in the rush hour is more than twice as long as the median travelling time (Hilbers *et al.,* 2004). This extra travelling time is larger than that of metropolitan areas in the United States, where additional travelling time in rush hours varies between 32% (Philadelphia) and 75% (Los Angeles) (TTI, 2005).

As traffic within a city-region makes heavy use of the highway network, many traffic bottlenecks in the Randstad are found on the edges of city centres. In the region of Amsterdam for example, short-distance journeys (less than 30 kilometres) on the highway account for 50% of all highway travel (Groenewegen, 2005). The use of the highway as a regional road is one of the explanations for its congestion, but there are also many traffic jams between city-regions (such as Amsterdam and The Hague) and at the

regional level, when coming into and leaving the Randstad (AVV, 2006). In the region of Amsterdam, every connection from Almere to key areas (such as the centre of Amsterdam, the South Axis, Schiphol airport and Amsterdam South East) contains a bottleneck (ROA, 2003).

Spatial planning has contributed to congestion in the Randstad. New housing areas have been located close to many highways, but have not been adequately connected to public transport networks. For example, over 30% of the new housing areas (containing 42% of new houses) in the Randstad do not have public transport facilities within walking distance.[17] As a consequence, people in these new housing areas travel more by car than by public transport (Snellen *et al.,* 2005).

The problem of transport and logistics is set to worsen due to the increasing requirements of individuals and businesses, if policies are not devised to address it. Road traffic is estimated to grow by more than 40% by 2020 compared to 2000, on both the national and regional road networks (Ministry of Transport, Public Works and Water Management, 2004).

The situation in the Randstad appears worse than the situation in other polycentric areas, such as the Flemish Diamond in Belgium and the Rhine Ruhr Area in Germany. The Randstad has limited capacity in terms of major roads (highways), so over-intensive use of the highway network occurs as the regional (lesser roads) road network is fragmented and does not form a comprehensive system. Regional roads mainly serve as feeder roads for the highway system. Only 42% of the highways have a parallel regional road, compared to 55% in Rhine-Ruhr and 71% in the Flemish Diamond (making the system vulnerable in the case of accidents) and consequently its highway network is the most heavily used. In addition, the capacity of the road network in the Randstad is low: it has fewer roads than the other two areas mentioned above. There is a high number of highway exits. The heavy usage of the road network is demonstrated by the fact that in the Randstad, 23% of it handles more than 20 000 vehicles per lane per day. This compares to 12% in the Rhine Ruhr and only 5% in the Flemish Diamond (Hilbers and Wilmink, 2002).

The costs of congestion have a substantial economic impact on the Randstad. Insufficient road capacity has caused longer and unreliable travel times, which has entailed huge socio-economic costs. In some calculations the costs of congestion are estimated to be EUR 2 billion per year (see Box 1.6). International comparison shows that the average costs of congestion in the Netherlands are very high: a study that used figures for 1995 showed that the Netherlands has the highest score within the EU15 when it comes to the average congestion costs per 1 000 passenger-kilometres (INFRAS, 2000). Since 1995, the congestion in the

Netherlands has rapidly worsened. The costs of congestion have an economic impact that is substantial. Assuming congestion costs to be EUR 0.8 billion per year, it has been calculated that if there were no congestion at all, national productivity growth in 2004 would have increased by roughly 15% (Broersma and Van Dijk, 2005b). As 81% of traffic jams are concentrated in the Randstad, congestion costs will particularly affect its productivity growth. Thus solving congestion in the Randstad might increase the productivity growth of the Randstad by up to 80%.[18]

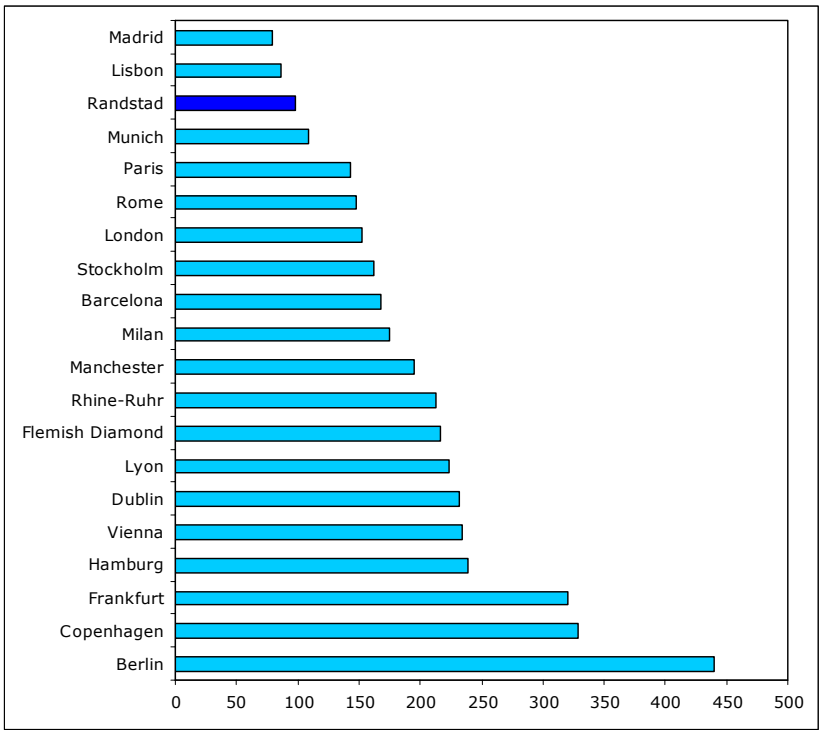
Box 1.6. **Costs of congestion in the Netherlands**

Several estimates of the costs of congestion in the Netherlands exist, varying according to the definition of the costs that is used. The direct costs of congestion (costs connected to loss of time) have been calculated to be EUR 700 million in 2002 and are estimated to be EUR 900 million in 2006, a steep rise from EUR 600 million in 2000. For 2020, the direct costs of congestion are estimated to be almost EUR 1.7 billion (AVV, 2004). When other costs are also taken into account, for example, the expense of finding alternatives (routes, means of transport) the costs of congestion are considerably higher, totalling EUR 1.5 billion (Koopmans & Kroes, 2004). This cost increases yet further when also the costs of unreliability and finding alternatives in case of incidental congestion is taken into account, total costs of EUR 2 billion is found (Van Reisen, 2006).

Given the problems of congestion on roads, a unified public transport system would have been an obvious choice for meeting the area's transport needs given how flat the Randstad is, its high population density and the location of several cities around the Green Heart. Such a system, however, does not exist. Train connections are usually between city centres, whereas many firms have been located next to highways. A metro system only exists in Rotterdam (and to a limited extent in Amsterdam) whilst Amsterdam and The Hague have tram systems. Both metro and tram networks do not always reach out into surrounding municipalities, making travelling within a city-region by public transport difficult. The two city-regions that are closest to each other (The Hague and Rotterdam) are connected solely by train; integration of local public transport networks has only very recently been implemented. There is also insufficient integration among different modes of transport (bicycle/car/local public transport/trains). In addition, there is insufficient parking in the very areas that could encourage the use of public transport. This lack in itself may limit the integration of different types of transport.

The situation of the railway network is similar to that of the road network with low capacity and high usage. The railway capacity (metres of railway per 1 000 inhabitants) in the Randstad is one of the most underdeveloped of all metropolitan areas in western Europe; only Madrid and Lisbon score worse in this respect (see Figure 1.27). The rail networks in the Rhine Ruhr area and the Flemish Diamond are denser (in terms of metres per inhabitant) and have more stations. The railway network is extremely heavily used: frequency of trains is higher in the Randstad than in the other polycentric areas and trains average a higher speed as well as longer distances between stops (Hilbers and Wilmink, 2002). Also from a European perspective the usage of the rail network is relatively high. The number of travellers' kilometres per kilometre of network is more than double the level in Germany, France, Belgium and the UK (V&W, 2006). This high usage of the railway capacity has limitations for growth and quality of train services, as infrastructure will to an increasing extent determine time schedules of trains.

Figure 1.27. **Railway capacity in selected OECD metropolitan areas (metres per 1 000 inhabitants in 2003)**



Source: TNO, 2006.

Reducing duplication, promoting co-operation: the economy, education and culture

Currently, many of the functions of a city-region in the Randstad are duplicated by other city-regions there. This is understandable as each of them wish to be as self-sufficient as possible. However, co-operation, so as to create complementarities and to reduce some of the duplication in activities between the city-regions which currently exist, will be necessary to promote the functional integration which is possible in the Randstad due to the proximity of its urban centres. This will be essential if it is to realise the ambition of becoming a unified world class city. Avoidable duplication of functions occurs within the economic, educational and cultural spheres. An example of the first is the Rotterdam harbour, which is extending its area with public funds by creating artificial land areas (Maasvlakte 2). Whilst doing this, steps should also be taken to avoid creating duplication in the operations undertaken by the harbours of both Amsterdam and Antwerp. In the educational sphere, the Randstad has five general universities (as well as the technical university in Delft and the business university in Breukelen) that overlap in terms of faculty subjects. Within the cultural infrastructure too, functions could be streamlined.

Housing

Better internal transport networks and improved complementarities in economic, educational and cultural activities and infrastructure provided Randstad-wide, are not the only pre-conditions for creating a metropolitan area that could be considered a world class city. To achieve this, better quality housing must be provided and better use made of the existing natural landscapes.

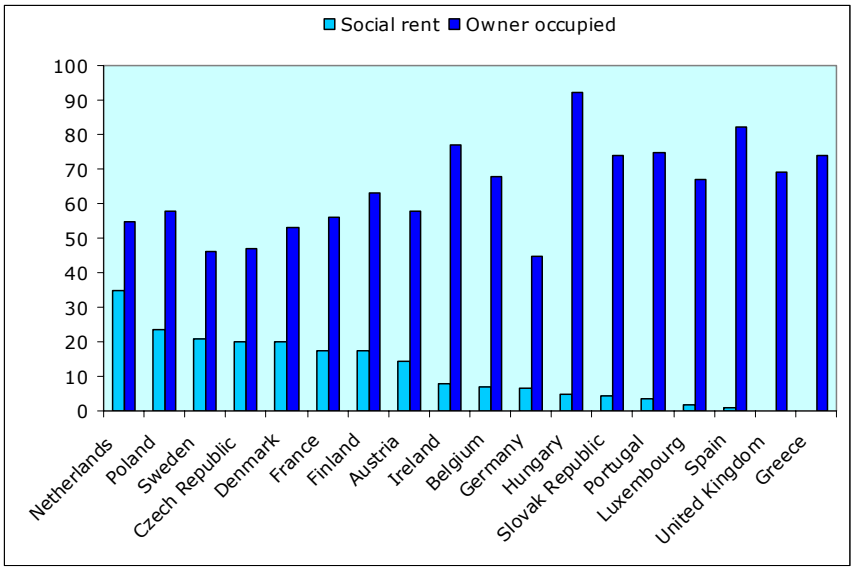
Housing: a mismatch between supply and demand

Several indicators suggest that the quality of housing in the Netherlands is good viewed from an international perspective. The average surface of a dwelling, 98 square meters, is large in comparison with dwellings in the rest of the EU: Luxembourg, Denmark and Ireland score higher, but the surfaces of dwellings in other countries are smaller. The housing stock is relatively young in comparison with other countries: more than 70% dates from after 1945. In addition, the Netherlands is one of the countries where 100% of the dwellings have hot running water and central heating (Boverket, 2004).

A remarkably high proportion of housing in the Netherlands is available for rental in the social sector and only a relatively small share is privately owned (see Figure 1.28). Amsterdam and Rotterdam stand out: both have a house ownership rate of little over 20%. In the rest of Europe, comparable

low levels are found only in German and Polish cities. In France, home ownership in large cities varies from 30% (Paris) to 40% (Lyon) and 50% (Lille). The proportions in Birmingham and London are 60%, with those in Barcelona and Madrid reaching 70% and 80% (Pellenbarg and Van Steen, 2005). Percentages of socially rented housing in Milan and Geneva are 14% and 5% respectively (Arnoldus and Musterd, 2002), whereas in Amsterdam and Rotterdam they are over 50%.

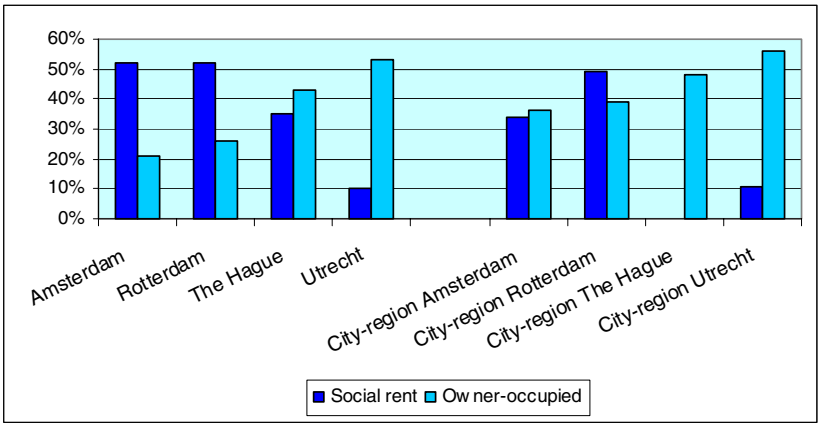
Figure 1.28. **Share of socially rented housing and owner-occupied housing as share of total housing stock (2003)**



Source: Boverket, 2004; for UK and Greece were no numbers available on social rented housing; for Czech Republic, Portugal and Slovak Republic data of 2000 were used for owner-occupied housing.

The composition of the housing market in Amsterdam and Rotterdam is not typical of the housing market of the whole of the Randstad. The shares of social renting in neighbouring municipalities are lower than in both cities. They provide a more suburban ambiance, with less social renting and more home ownership. What is remarkable, however, is that differences between city-regions are larger than differences within city-regions (see Figure 1.29). The proportions of housing which are rented in the social sector and which are privately owned in the city-region of Rotterdam resemble more closely those proportions in the city of Rotterdam than those in the city-region of Utrecht. Similarly, the profile of the city and city-region of Utrecht in this respect are barely distinguishable from each other.

Figure 1.29. **Social renting and home ownership in the four large cities and city-regions**



Source: Information provided by the municipalities of Amsterdam, Rotterdam, The Hague and Utrecht. No known public data available on social renting in the city-region of The Hague.

There is considerable mismatch on the Dutch housing market. A relatively large part of newly built houses (43%) consists of multi-family units, that is: apartment buildings of three or more storeys, but these represent only 11% of the types of accommodation in demand (Van Osch, 2004). On the other hand there is an insufficient production of single-family units, especially those available for owner-occupation in the lower and medium-price categories. There is an undersupply of houses built in residential areas. It has been observed that the value attributed to many natural landscapes, such as the dunes and polders, is so high that it hinders housing development ambitions (VHP, 2004). There is a tension between what is actually built (mainly in or near cities) and the nature of the accommodation in demand (more houses in smaller towns and villages in the rural parts of the country) (Pellenbarg and Van Steen, 2005).

The qualitative mismatch in Dutch housing is particularly apparent in Amsterdam where around 60% of the housing is suitable for those on lower incomes, whereas only 35% of the city population belongs to this group. This suggests that there is an oversupply of cheap housing. Despite this fact, only 41% of those in the lower income groups have succeeded in obtaining housing in the social rental sector. It appears that the sector is unable to meet demand because many people continue to live in this type of housing when their income level no longer justifies their doing so. There seems to be a severe lack of more expensive housing. Sixty-five percent of the population of Amsterdam is in middle and higher income groups, but only 30% of the housing stock meets their needs (Hof and Koopmans, 2006). In addition, the density of housing has become higher in large cities, resulting in loss of green spaces within the city (Keers *et al.,* 2002). This deficit of green space in urban areas is causing a decline in the quality of living there, according to some observers (RLG, 2005).

It has also been indicated that certain housing options simply do not exist, such as small-scale mixes of living and working or cosmopolitan housing styles and environments (Urhahn and Vrolijks, 2000). Creative workers in Amsterdam compete for a very oversubscribed part of the housing market. The knowledge workers who live in Amsterdam (38% of the Amsterdam workforce) are typically found in the most urban milieus, culturally creative workers (20% of its workforce) even more so. Much of the battle for the space needed by a creative knowledge city is being fought in a very small part of Amsterdam, basically the historic city centre and two surrounding neighbourhoods ("Oud-Zuid" and "Oud-West").

Despite the above mentioned problems, foreign highly skilled workers seem moderately content with their housing situation, at least according to one report relating to expatriates in the Randstad. The availability of houses does not seem to be a problem, but the costs sometimes are. Additionally, many expatriates consider the houses in the Netherlands to be small (Leveling *et al.,* 2005). When they live in cities, they tend to live in city centres. In Amsterdam for example, three quarters of the western foreigners live in the city centre and the "Oud-Zuid" neighbourhood, thus making up almost a quarter of the population in that area (Dignum, 2004). However, yet another report states that 75% of the personnel of international public organisations in the Netherlands would prefer to leave the country, giving as one of the reasons housing problems, especially cost (IOSA, 2005).

The Green Heart as underused Randstad asset

The potential of landscapes, such as the Green Heart, is not used to make the Randstad a more attractive area to live in. The Green Heart has always been considered a crucial part of the Randstad. It was intended to provide the city with a natural environment in its proximity that would lead to a more attractive metropolitan area: the Green Metropolis (Burke, 1966). In practice, the Green Heart has never played this role. Its current recreational use is limited, it is not used for providing attractive high quality housing and none of the plans that would make better use of the area have been implemented (Hajer *et al.,* 2006). Due to the failure to devise a far-sighted vision for its optimal use, the Green Heart has shrunk considerably due to urban sprawl. Even if future plans for its use must focus more on its value for water storage (see Box 1.7) or flood relief, the potential for improving the Randstad's urban environment is significant. Expected housing demand up to 2030 will, for a large part (50% to 60%), consist of demand for residential accommodation (RIGO, 2006). Even if newly released areas for housing development are exploited to their full potential, there is still a considerable demand for residential housing that has to be accommodated (VISTA, 2003). The Green Heart is not the only landscape that is an underused asset. The same could be said of the Dutch North Sea coast, the potential of which could be much more fully developed (Teisman *et al.,* 2005).

Box 1.7. Climate change and the water storage function of the Green Heart

Most of the Randstad area is below sea level. At the moment this does not pose any problems. There is a sophisticated system of dikes to protect the western part of the Netherlands against the sea; the risk of flooding is 1 to 10 000, which is a low probability compared to many other regions in the OECD. Climate change poses challenges to the Randstad. In some scenarios the whole of the Randstad is shown to disappear under water. Current estimates of increases in the sea level assume an increase of 0.2 to 1.1 metres in the Netherlands, and the increased possibility of extremely heavy rain and snow in winter, which may cause more severe flooding (WRR, 2006). Although there is much uncertainty about scenarios and estimates, it is clear that no decisions should be taken that could hinder measures to ameliorate the effects of climate change that might be necessary in the future. To fend off flooding from the sea, strengthening dikes might be necessary. Large parts of the Green Heart have been used for a long time for water storage to channel and contain water which otherwise might cause flooding. This function will need to be enhanced in the future. This is not necessarily at odds with more building activity in the Green Heart, as houses could be build in areas that are less likely to used for water storage, or could be constructed in such a way that it can be combined with water storage (floating houses for example).

1.4.2. Using knowledge, encouraging innovation

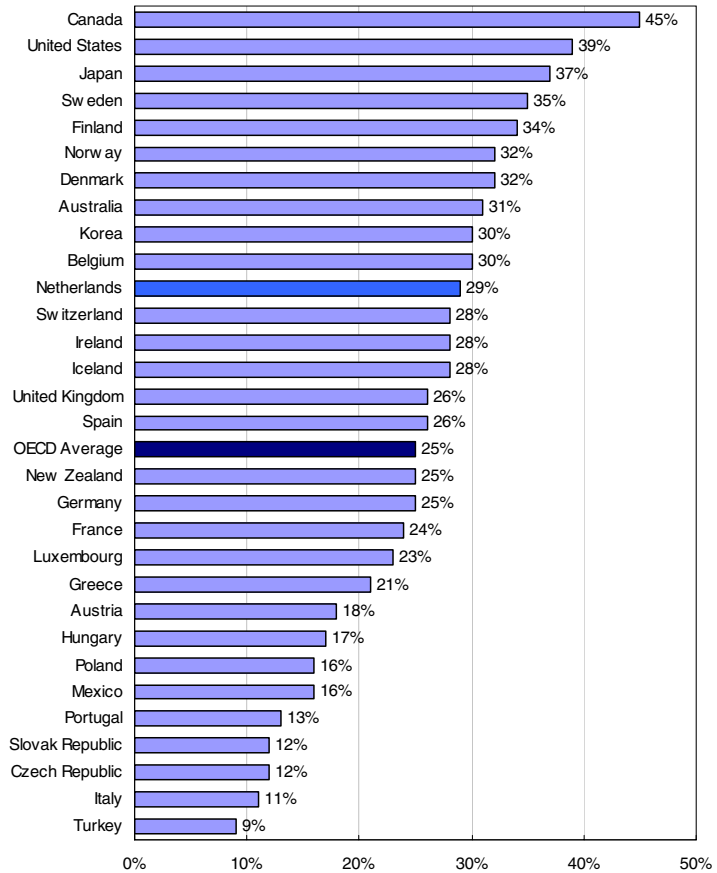
Many OECD economies are currently at a point where higher productivity growth can only be reached by innovation. In order to invent something really new, good quality is usually not enough; excellence is required. The conditions for this can be created by education and research. The next section looks at the need for higher educational attainment, innovation by firms, collaboration between firms and knowledge institutes and how to attract foreign students, knowledge workers and research and development investment.

Randstad workforce with tertiary education

The share of the population that has attained a degree in tertiary (higher) education in the Netherlands is higher than the OECD average (see Figure 1.30). At the same time, many OECD countries score considerably higher on this, notably Canada whose tertiary-educated population is 50% higher than that in the Netherlands. International statistics can, however, underrepresent the position of the Netherlands *vis-à-vis* other OECD countries. The Netherlands only counts degrees of universities and university colleges, whereas other countries are reported to also take into account higher forms of secondary and vocational education (Onderwijsraad, 2005). A study that compares higher

education attainment in six countries on the basis of several criteria concludes that the Netherlands scores well with only Finland scoring better. The Netherlands had a comparable score to Sweden's, and a considerably better one than those of the United States, Canada and the United Kingdom (Kaiser and O'Heron, 2005). Moreover, participation in higher education between 1993 and 2004 has increased by more than 10% (OCW 2005b). As for the Randstad, its population is better educated than the rest of the Dutch population: its educational level is 22% higher than the national average (RPB, 2005).

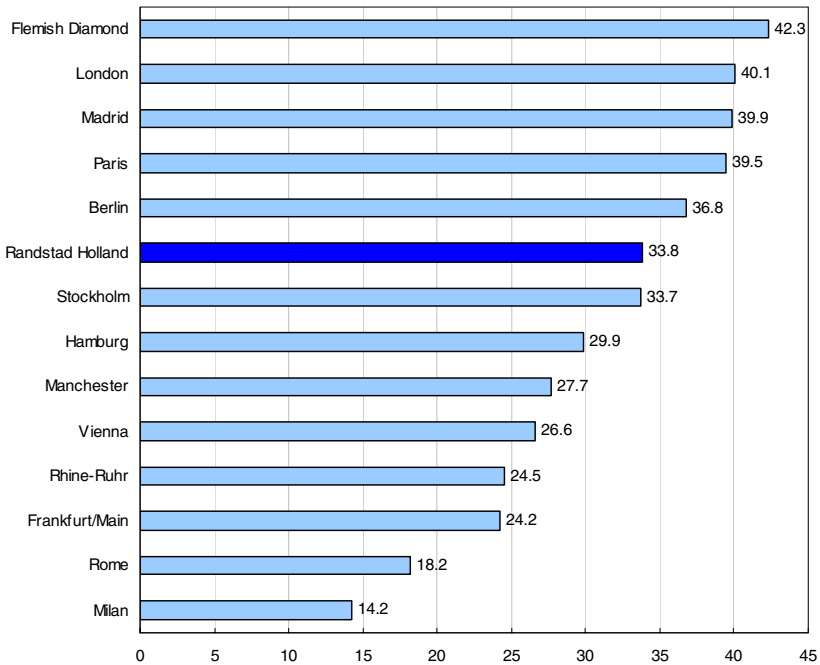
Figure 1.30. **Share of population (between 25-54 years) with tertiary education**



Source: OECD, 2006b.

The proportion of the Randstad workforce with a tertiary education is reasonable compared with many other metropolitan areas in the OECD, but it falls behind areas such as the Flemish Diamond in Belgium and London (see Figure 1.31). Even if definitional issues might underestimate the position of the Randstad, it is clear that several metropolitan areas in the OECD have more highly skilled workers.

Figure 1.31. **Share of highly skilled people in the work force (in %) 2005**



Source: TNO 2006.

The number of graduates in science and technology is 14% of the total number of graduates in tertiary education. Compared to other OECD countries, this figure is very low and is on a downward trend. It is hard to know whether the demand for science and technology graduates is greater than the supply. Employer's organisations have reported shortages of people with scientific degrees, but the labour market statistics do not confirm this (Noailly *et al.,* 2005).

Despite these limitations, the Dutch educational system achieves good results. On the OECD PISA mathematics scale that tests the overall performance of 15-year old students, the Netherlands scores highest after Finland and Korea. The expenditures per student in primary through tertiary

education are average when compared to other OECD countries with those for primary and secondary education being below the OECD average and those for tertiary education being above. Lower unit expenditure does not necessarily lead to lower achievement and it would be misleading to equate lower unit expenditure generally with lower quality of educational services (OECD, 2006).

The quality of the higher education institutions in the Randstad is good, but not exceptional. The region has seven universities and 18 higher education colleges. There are several international rankings for higher education institutions. Several Dutch institutions have respectable positions in these rankings, but they do not score exceptionally highly (see Table 1.1). Of the top three Dutch universities in each ranking, five are from the Randstad and two from outside it (namely Eindhoven and Twente). What can be concluded from these rankings is that many different universities in the Netherlands (although mostly those in the Randstad) figure in the rankings. This understandable as Dutch education is of a good basic quality (Van den Broek, 2006). All study programmes in the Netherlands are evaluated and accredited. Twenty percent of the higher education programmes scored 'excellent' on more than half of the evaluation criteria, though the number of excellent study programmes is not an indicator of the quality of a university as a whole.

Table 1.1. **Top three Dutch universities with their respective positions in three international rankings of higher education institutes (2005)**

World Top 500 (Shanghai University)	World Top 200 (Times Higher Education)	Top 20 European universities (European Commission)
Utrecht (41)	Delft (53)	Eindhoven (4)
Leiden (72)	Rotterdam (57)	Twente (6)
Amsterdam (UvA) (121)	Amsterdam (UvA) (58)	Rotterdam (11)

Source: OCW 2005

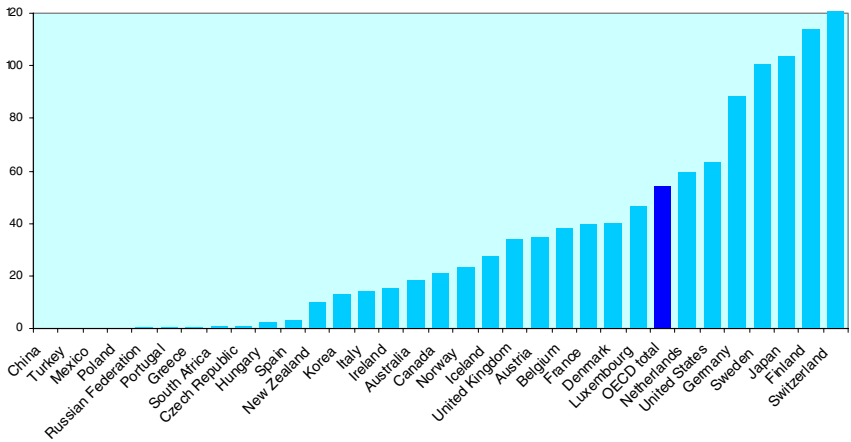
One major waste of resources is the drop out rate in vocational education as many young people do not succeed in finishing their vocational training. According to the definition used, between 15.1% and 21.2 % of the Dutch population between 20 and 24 years does not have a labour market qualification. These proportions are above the OECD average of 14.7% and 19.0% respectively (OECD, 2004; OECD, 2005b). Dropping out of any educational course, whether vocational or higher education or not finishing school, has an adverse effect on employability. Conversely, the chances of getting a job increase with educational level achieved.

Limited contribution by R&D and innovation to regional productivity growth

The public innovation infrastructure in the Randstad scores high on many indicators. Much of it in the Netherlands is concentrated in the Randstad. Apart from the research institutes of the universities, such infrastructure is formed by other public research institutes, such as TNO and KNAW, which are all located in the Randstad. Sixty-one percent of the public expenditure for research and development goes to the Randstad and on several indicators public infrastructure scores well. For example, Dutch scientists score well in international citation indexes and the percentage of publicly funded research and development initiatives is relatively high. The Netherlands has a low score on the share of investment in knowledge development in total GDP and the ratio of researchers per thousand employees, but since these are all input indicators, they could illustrate the efficiency of the Dutch system rather than being indicative of a problem.

The picture for private sector innovation is more mixed and there is room for improvement. On the one hand there are many positive indicators since, compared to other OECD countries, the Netherlands shows a relatively high ratio of patent created per population (Figure 1.32). There are far more innovative industrial firms in the Netherlands than the EU average as 62% of the companies are innovative; this is a score well above Sweden and Finland (Eurostat 2004). On the other hand, the level of R&D investment by Dutch firms (amounting to 1% of GDP) is far below the OECD average of 1.5% of GDP. This in itself need not be of concern as R&D expenditure is an input indicator and it does not measure innovative output. Moreover, some sectors are simply more R&D intensive than others. Further analysis shows that not many Dutch firms specialise in R&D intensive sectors. Controlling for sector structure explains about a third of the lower R&D intensity of Dutch firms (Hollanders and Verspagen, 1998). When process innovation is taken into account, the score of Dutch firms for innovation is above the OECD average, as they make considerable investments in software, royalties and licenses (CBS, 2000). Innovation in services is less well developed than in other sectors, especially in financial companies (CBS, 2000). In summary, whereas public R&D is overrepresented in the Randstad, private R&D is underrepresented: only 35% of the total private Dutch R&D expenditure was spent in the Randstad. The Randstad scores low on hard innovation and high on soft innovation compared with the rest of the Netherlands (RPB, 2005).

Figure 1.32. **Number of patents per million population 2002**



Source: OECD Factbook, 2006.

Collaboration between firms and knowledge institutes in the Randstad could be improved and there are several positive signs that this is occurring. Co-publications (publications in which minimally one researcher from a firm and one from a public knowledge institute are involved) are relatively high in the Netherlands, mainly due to the involvement of large multinationals, such as Phillips. International companies quote Dutch research relatively frequently, slightly more than the EU average (NOWT, 2003). Private funding of public research is around 7%: this is an average score. Private funding of non-academic public research is around 20%; this is relatively high compared to other countries. Problems exist, however, as evidenced by the fact that managers in large Dutch enterprises have assessed the effectiveness of knowledge transfer between firms and universities very differently over the years. In 2000, the Netherlands had one of the highest scores, in 1997, 2003 and 2005, one of the lowest (IMD, 2002, 2003, 2005). Much scientific knowledge does not seem to be translated into commercial activity. In addition, reported formal co-operation between firms and public knowledge institutes is low (Eurostat, 2004). Dutch firms do not consider universities and other knowledge institutes to be an important source of knowledge in contrast to the attitude of business in other countries (EIM, 2006). Despite being a world leader in key sectors such as logistics or water management, the Randstad has paradoxically not developed strong fields of academic expertise in these areas. In the case of water management, there seems to be some co-operation between universities and water boards, especially with Delft University. However, this is far from being systematic. The same applies for the logistics sector: there is no one single institute or university which specialises in logistics.

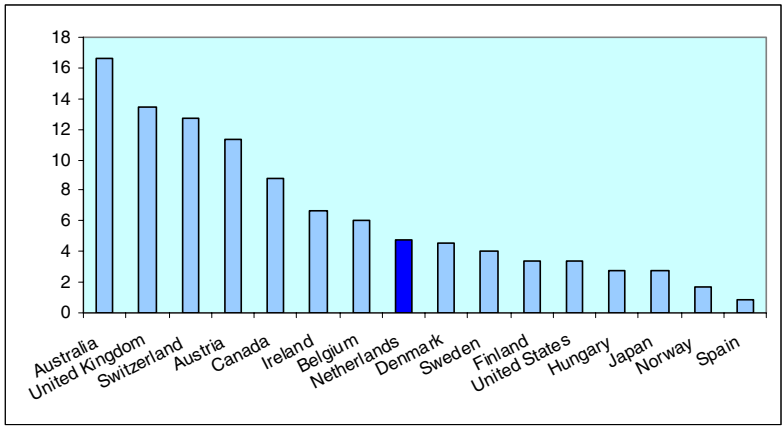
Knowledge transfer between universities and firms however is not always possible since their respective specialisations may be too different. This is the case in the Netherlands (as in many OECD countries). Universities and knowledge institutes are relatively more active in medical technology, civil engineering, biotechnology, food technology, environmental issues and energy and there is potential to co-operate with private enterprise in some of these fields, for example, civil engineering, biotechnology and food technology. Most firms in the Randstad, on the other hand, focus on process technology and ICT. There is no overlap as far as ICT and medical technology is concerned (Rensman, 2004).

Limited attractiveness of the Randstad for knowledge workers

The share of international students in the Randstad is relatively limited which is unsurprising as they make up not quite 5% of the students in higher education in the Netherlands as a whole. This is not a high percentage when compared to many OECD countries (see Figure 1.33). Universities have a higher share of foreign students (6.5%) than colleges of higher education (2.6%). According to some surveys the share of international students at universities in the Netherlands is higher, namely 8.6% (CINOP, 2005). The Dutch universities with the highest shares of foreign students are not located in the Randstad (see Figure 1.33) with the University of Maastricht having the highest international student population (26.1% of the student body), followed by Wageningen (19.1%). The leading university in the Randstad in this respect is Delft (13.1%), followed the University of Amsterdam (6%) (OCW, 2005). In the Netherlands almost half of the international students (48.2%) are enrolled in social sciences, business and law programmes (OECD, 2006), which is a remarkably high share from an international comparative perspective. For most of the foreign students no study visa is necessary, due to EU treaties and bilateral agreements. The largest share of the study visas which are granted, go to students from China, Indonesia, Turkey and Nepal (CINOP, 2005).

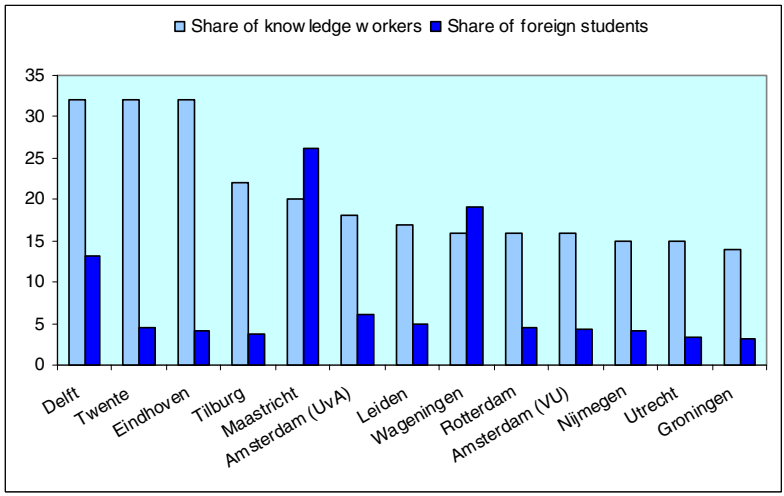
On average 17% of highly skilled workers in universities are foreign. As with foreign students, the universities with the highest share of such foreign workers are not within, but outside the Randstad. Of the Randstad universities only Delft University figures in the top five universities with the highest share of foreign workers (see Figure 1.34).

Figure 1.33. **Percentage of international students in tertiary enrolments (2004)**



Source: OECD, 2006b.

Figure 1.34. **Shares of knowledge workers and foreign students at universities in the Netherlands**



Source: OCW, 2005; Grijpstra et al., 2005.

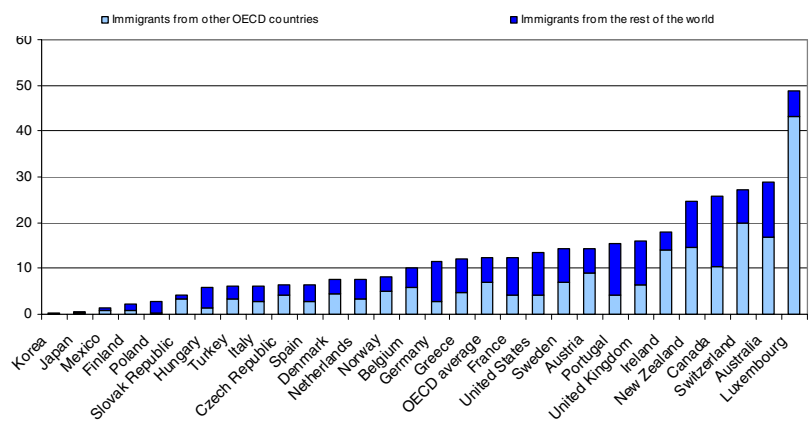
The Randstad does not score well in attracting foreign knowledge workers as compared to other OECD countries, the share of highly skilled workers (those with a tertiary education) in the Netherlands which is foreign, is very low (Figure 1.35) at only 9%. This percentage is comparable with the share of foreigners in the total working population, which reflects Dutch migration policy which is not targeted towards selecting highly skilled foreign workers in

preference to other migrants. The sectors in which the most highly skilled workers are employed are universities (where 17% of the workforce is foreign), the food industry (11%) and transport, communication and commercial services, where 10% of the workforce is made up of foreigners (Marey *et al.,* 2002).

It is difficult to know whether there is a "brain drain" taking place from the Randstad. Research shows that around the same amount of highly skilled Dutch people work in other EU countries as highly skilled people from EU countries work in the Netherlands (Merit, 2000). For a brain drain in relation to other countries, it is more difficult to say. In 2003, there were 16 211 Dutch temporary workers admitted to the United States of whom almost 4 000 were accepted in category H1B, the category for highly skilled people with special occupations. This made the Netherlands the fifth biggest country from the EU in this category (US Department for Homeland Security, 2004). But the other immigration categories also contained many highly skilled workers, such as in the categories intra company transfers (7 589 workers) and workers with extraordinary abilities (531 people). In the same year around 5 000 highly skilled workers from outside the EU were admitted to the Netherlands. This suggests that more highly skilled Dutch people are admitted to the United States each year than the Netherlands is able to attract from the rest of the world (outside the EU). This image is more striking still when one focuses on particular sectors. An example is the field of mathematics, where far more Dutch academics have become professors in other countries than foreigners in the Netherlands (KNAW, 1999).

Figure 1.35. **Foreign-born persons with tertiary education 2000**

As a percentage of all residents with tertiary education, circa 2000



Source: OECD Factbook, 2006.

Foreign companies and innovation in the Randstad

Similarly, the Netherlands does not do well when it comes to attracting innovative foreign firms even though (as described earlier) the Netherlands is very good in attracting FDI: both in relative and absolute terms it is one of the highest recipients of FDI within the OECD. Attracting FDI does not necessarily have positive effects on the economy unless knowledge spillovers to the host economy occur, as that is one of the main ways in which FDI can benefit economic development (OECD, 2005). First, it is crucial to attract foreign firms that can make a positive contribution to the domestic economy. However, existing foreign companies based in the Randstad are not particularly knowledge intensive and innovative. Indeed, studies have found that foreign affiliates in the Netherlands imitate rather than genuinely innovate, that is they introduce something that is new to the Dutch branch of the firm, but not to the market (Sadowski and Van Beers, 2002). Technology spillovers have been reported to take place mostly in the form of 'soft' technology such as management and marketing technology, and far less in hard technology (Van Beers *et al.,* 1999; Van Beers, 2003). Part of this might have to do with the sectors in which foreign companies are active. Only 2% of the foreign firms in the Netherlands are the R&D centres of their parent companies (Stec Groep, 2006), nor are foreign firms specialising in R&D particularly attracted to the Netherlands which is only an average performer in this respect (Cornet and Rensman, 2001). Another factor indicating the innovativeness of a foreign firm is its productivity growth. But whilst this was higher for foreign affiliates in the manufacturing sector than for domestic firms between 1995-2001, foreign affiliates have shown negative productivity growth in the services sector, whereas domestic firms have reported such growth (Criscuolo, 2005). As mentioned before, manufacturing is relatively underrepresented in the Randstad and the services sector overrepresented. Almost half of the Dutch gap in private R&D expenditures *vis-à-vis* the average in the OECD is explained by poor foreign R&D investments in the Netherlands (Erken & Donselaar, 2006).

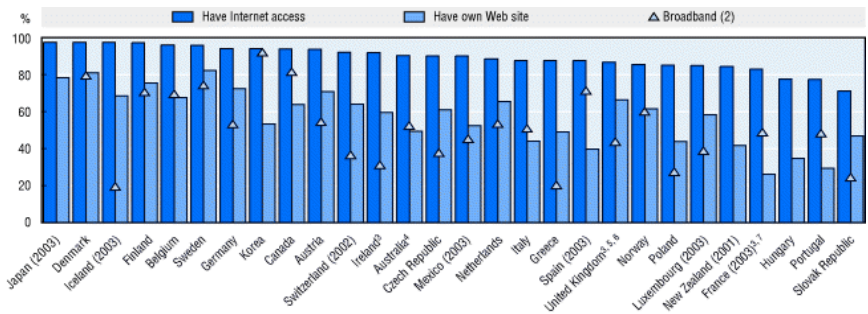
However, even those innovative foreign companies which have come to the Netherlands, do not necessarily enhance innovation there. This is because spillovers from foreign investment do not occur automatically and there is no clear and convincing evidence that FDI leads to knowledge spillovers in host countries (Erken *et al.,* 2004). For these to take place, it is important that links are formed between foreign companies and local firms and institutes so that the latter have the opportunity to learn from foreign firms (Blomstrom and Kokko, 2003). Foreign firms in the Netherlands do however co-operate more often with other foreign firms than with domestic ones (Wintjes, 2005).

The Randstad seems to benefit even less from foreign direct investment than other regions of the Netherlands since 58% of foreign companies are located in the Randstad, but only 35% of the foreign R&D companies have their location there. This is considerably less than the proportion attracted by, for example, the province of North Brabant (Erken *et al.,* 2004). Apart from the effect of the sectors in which foreign firms are found in the Randstad, the types of activities which they engage in there might explain their low level of research and development. For example, the headquarters and holding companies of foreign firms are particularly likely to be located in the Randstad (Hogenbirk and Narula, 2004). In this respect it resembles other metropolitan areas in which services form a very high proportion of the economy, such as London. The types of projects that London attracts are almost exclusively sales, marketing and headquarters' locations. Interestingly enough, London does not consider Randstad (or Amsterdam) a rival in this respect, but rather sees Barcelona, Dublin, Paris and Frankfurt as its competitors (GLA Economics, 2003). Sectors in which Amsterdam (in 1997-2000) belonged to the top five EU destinations for inward FDI investment were computers, transport services, software and telecommunications. Rotterdam belonged to the top five in chemicals (GLA Economics, 2003). All these sectors should in principle provide possibilities for knowledge spillovers.

Suboptimal use of ICT in economic activities

The Randstad, as well as the Netherlands (see figure 1.36), scores low on its utilisation in value added services even though the use of ICT in business activities can increase efficiency and business opportunities. This is despite the fact that Amsterdam is the second largest Internet hub in the world. In its traditional sectors where it has many comparative advantages, such as logistics and trade, the Netherlands does not perform better than the average OECD country. This may be partly because internet penetration in its wholesale trade is ranked only 12th among 22 OECD countries (OECD, 2005d).

Figure 1.36. **Business use of the Internet and websites, 2004**



Source: OECD, 2005d.

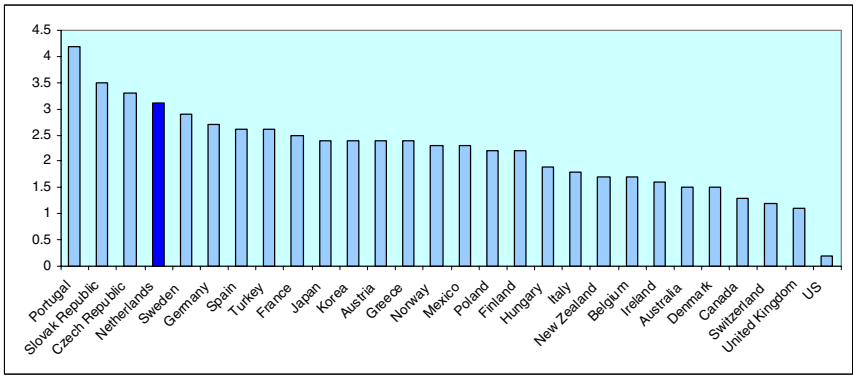
1.4.3. Making better use of labour

The optimal functioning of the labour market is essential for every metropolitan economy as flexibility in labour markets adds to their efficient operation. How well the Randstad's labour market works is analysed below, as well as the labour market integration of ethnic minorities and how to increase the labour supply.

Flexibility in the labour market

Permanent employment in the Netherlands is highly protected. In 2003, only three OECD countries provided greater employment protection for permanent employment than the Netherlands: Portugal, the Slovak Republic and Czech Republic (see Figure 1.37). The main feature that makes employment protection legislation strict by international standards is the high procedural inconvenience of dismissing a worker (OECD, 2004). The procedures for doing this are complex, costly and time-consuming. This means that dismissals are not routinely undertaken. Instead, firms increasingly tend to offer short-term contracts so temporary employment has become essential in providing flexibility in the labour market. It has been observed that the inability of the Dutch economy to adjust quickly in the aftermath of economic shocks is a weakness that urgently needs to be resolved. This would enable the Dutch economy to return more promptly to trend growth and avoid the stagnation seen between 2000 and 2004 in the event of future such downturns. The slowness of the adjustment appears to have resulted, for the most part, from the strictness of the legislation guaranteeing employment protection for permanent contracts (OECD, 2005). As the Randstad economy is more internationally oriented and more influenced by international economic developments than the rest of the Netherlands, the strictness of employment protection legislation arguably has a more profound impact on the Randstad economy than the economy of the rest of the Netherlands.

Figure 1.37. **Indicators of employment protection for permanent workers**



Note: Scale 0-6; 0 is least strict; 6 is most strict.

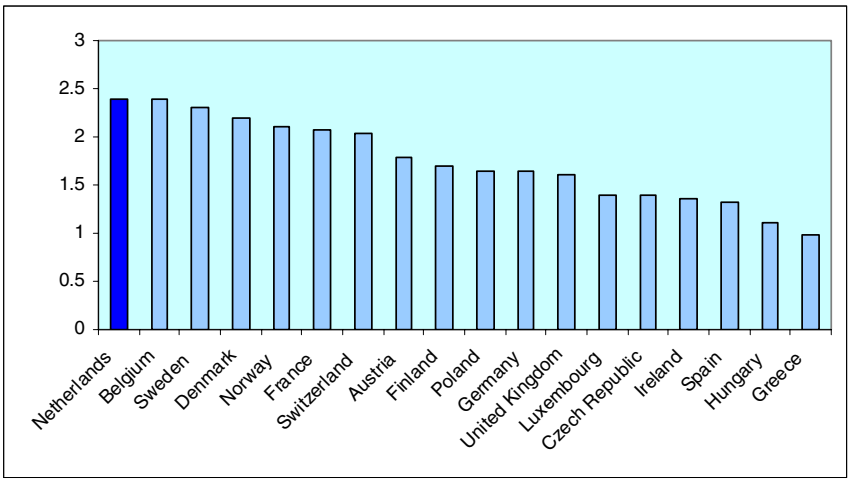
Source: OECD 2004b.

High inactivity of ethnic minorities

Non-participation in the labour market by foreigners, in particular those of non-western ethnic minorities, when compared to the participation of the native born, is very high in the Randstad from an international perspective. This is true in many OECD countries and the Netherlands is no exception. Although unemployment rates of foreigners in the Netherlands are not higher than those in many OECD countries, the difference between the unemployment rates of foreigners and the native-born is very high there (Figure 1.38). Foreigners of non-western origin, in particular, tend to have high unemployment and non-participation rates. The share of non-western ethnic minorities in the Randstad is higher than in the rest of the Netherlands at 16.7% of the population in 2005 as against 10.4% for the Netherlands as a whole (SCP and CBS, 2005). Ethnic minorities are concentrated in the four large cities in the Randstad with more than 35% of the population in both Amsterdam and Rotterdam consisting of non-western ethnic minorities, most of them concentrated in a limited number of neighbourhoods. Among the younger population, residents of non-western origin are now in the majority in the three largest cities (Amsterdam, Rotterdam and The Hague). The unemployment rate of non-western ethnic minorities is more than three times as high as those of non-foreigners.

The inactivity and unemployment of ethnic minorities comes in addition to social segregation. The majority of the ethnic minority population is socio-economically vulnerable with dependence on benefits being extremely high. Segregation in schooling is of particular concern, especially in the four largest cities and in vocational education. Fourteen percent of secondary education pupils in the Netherlands are of non-western origin, and this percentage rises to 45% in the four largest cities. Within Amsterdam and Rotterdam there is an even greater concentration: in a quarter of their secondary schools more than 80% of the pupils are non-western. More than 65% of the pupils in vocational education are of non-western ethnic origin.

Figure 1.38. **Proportion of foreigners unemployed relative to native-born population unemployed 2003**



Note: A score of 1.0 means that the share of unemployed foreigners in the labour force is proportional to the share of unemployed natives in the labour force. A score of 2.0 means that the share of unemployed foreigners in the labour force is twice the share of unemployed natives in the labour force. Foreigners include both western and non-western ethnic minorities.

Source: OECD, 2005e.

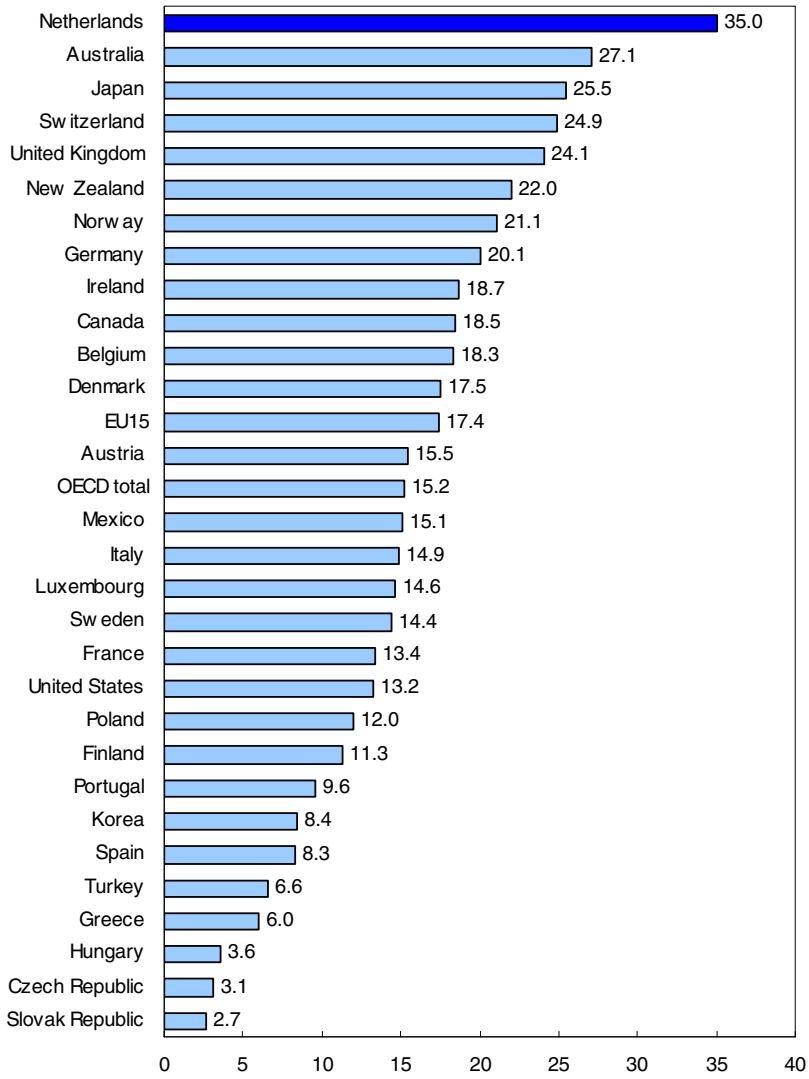
Increasing labour supply

Despite high participation rates, there is still room for increasing the labour supply in the Randstad. As has been mentioned before, the labour participation rate in the Netherlands is relatively high and has increased over recent decades. Despite that, there are still many groups in the population that are underrepresented in the labour force;

encouraging their participation will increase the growth potential of the economy and make it more possible to solve long term challenges, such as ageing. The inactivity and unemployment of ethnic minorities has already been mentioned. Another group that has low labour participation is the older workers. Although their participation rate has risen over in recent years, the employment rate for older workers remains low from an international perspective. The official retirement age is 65, but the effective retirement age is 61.0 for men and 59.1 for women. That is below the OECD average (OECD, 2005). Although the population of the Randstad is slightly younger than in the rest of the Netherlands, there is no reason to assume that the issue of increasing the participation of elderly workers is different in the Randstad than in the rest of the Netherlands.

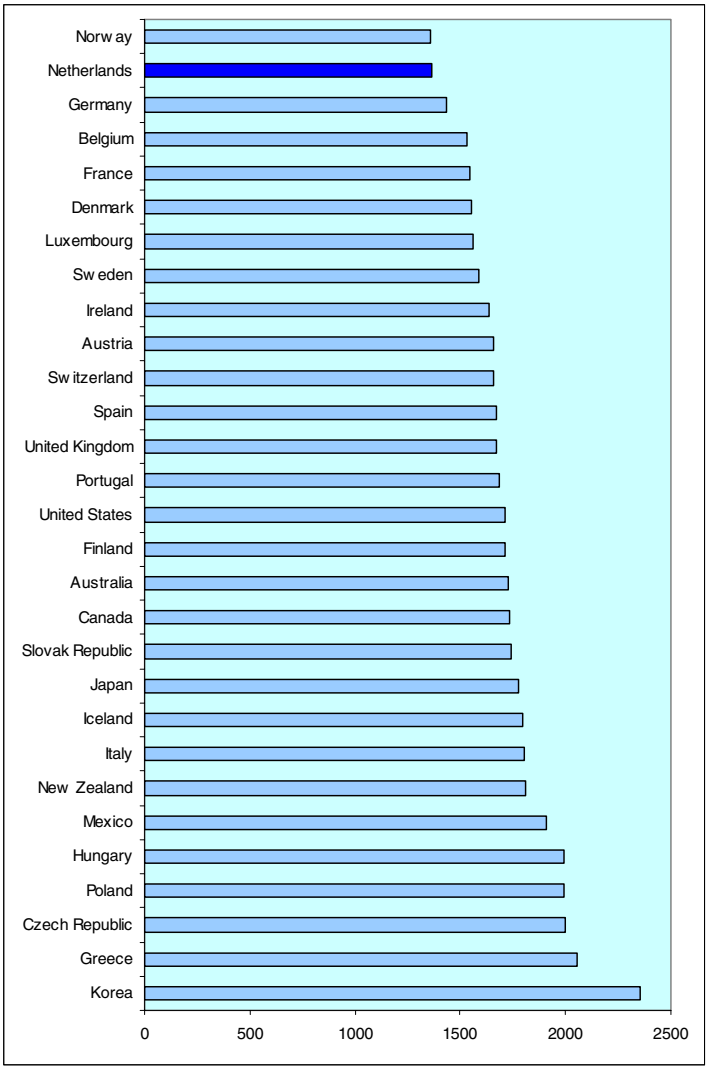
The Netherlands has one of the lowest annual working hours per worker in the OECD (Figure 1.40). Only in Norway is the number of hours worked per worker smaller, while workers in Korea work on average 70% longer. The standard work week has been reduced from 40 hours to 36 hours in the 1980s and few people work more than 40 hours per week. This is however not exceptional from an international perspective. The main explanation for the low number of working hours is the high level of part-time work. Of all OECD countries, the Netherlands has the highest rate of part-time employment (see Figure 1.39). More than a third (35%) of jobs are part-time; the OECD average is 15.2%. A large proportion of women (60%) in the Netherlands works part–time, but many men do too by international standards. Research (SCP, 2006b) shows that working parents seem satisfied with the division of labour of the one and a half earners model in which mothers work part-time and fathers almost full time. It indicates that the supply and price of childcare facilities do not influence women's choice on how much to work (SCP, 2006b). There seem however to be disincentives for women to work longer: marginal effective tax rates for second-earners switching from part-time to full-time employment in low-income households are high owing to the withdrawal of income-related benefits (OECD, 2005). As opportunities for finding work and childcare arrangements (formal and informal) are larger in the Randstad than in the rest of the Netherlands, one would expect a corresponding increase in the opportunities for women to work longer hours there.

Figure 1.39. **Part time employment rate across OECD countries (%)**



Source: OECD Factbook, 2006.

Figure 1.40. **Actual hours worked in OECD countries 2005 (hours per year per person in employment)**



Source: OECD Productivity Database, 2006.

Conclusion

The Randstad economy has performed reasonably well over the last decade, but suffers from low productivity growth. The Randstad has managed to develop the main logistics hub in Europe and a diversified service-based economy, with one of the lower unemployment rates in the OECD metropolitan regions.

Particularly between the mid-1980s and 2001, the Randstad had a higher growth rate than those of many metropolitan areas in the OECD. The region has also turned out to be one of the most attractive metropolitan areas for FDI. Growth in the Netherlands (and the Randstad) is picking up in 2006 after the economic slowdown of 2001-2004. However, despite this good overall performance, labour productivity growth is low.

There are three main challenges to improving economic performance in the Randstad. First, it does not benefit sufficiently from the proximity of its city-regions. It is difficult to argue that the Randstad is currently a truly functional area as many functions are still carried out at the level of the city-region, such as Greater Amsterdam or Greater Rotterdam. The economy of the Randstad could however benefit if the Randstad became a more integrated economy as city-regions could specialise further and complementarities would grow. The region has also seen rising negative challenges in land use, transport and housing. Overcoming the physical constraints will not only be needed for strengthening the Randstad's logistics hub function but also for facilitating its overall growth. However, in order to become a fully functional area, a substantial improvement in accessibility needs to take place as the Randstad suffers from increasing infrastructure obstacles such as congestion - which threatens the competitiveness of the two main ports, as well as limiting internal regional accessibility and cohesion.

Second, the Randstad's high knowledge potential and infrastructure does not seem to be adequately exploited, for example in terms of human capital development and good links between knowledge institutes and firms. Productivity growth can be increased by greater innovation such as commercially oriented inventions, better application of new knowledge, the discovery of creative combinations. The Randstad does not have an industrial or high-tech profile. Instead, its economy is very service-oriented, especially in trade, logistics, and finance and business services. This means that the desired innovation is more likely to be process innovation, rather than the more visible product innovation. As smart and creative people are the drivers of innovation, the crucial question is how to attract these people to the area. Third, challenges in the labour market, especially with regard to its flexibility and to the integration of immigrants, are particularly strong in the Randstad.

The analysis in Chapter 1 suggests that policies should concentrate on making better use of agglomeration economies, the existing knowledge base and the possibility of labour market reform to increase flexibility. Chapter 2 will cover the policies that are being and could be used to remove the obstacles to achieving these goals. That chapter will also address the question of which policies can be best left to central government and in which policy areas the regional governance level should play a role.

NOTES

1. The area covers 65% of four Dutch provinces, namely North Holland, South Holland, Utrecht and Flevoland. The population of the Randstad comprises 90% of the population of these four provinces.
2. A large city is understood here as a city with more than 250 000 inhabitants. A medium-sized city has more than 100 000 inhabitants and less than 250 000 inhabitants.
3. The definition used in the figure is the broad definition of the Randstad. In this definition the Randstad contains 46% of the population. Using the narrower definition of the Randstad would not alter the conclusion that the Randstad has a very large proportion of the national population.
4. It is the 8th most populated country of the 154 countries that have more than 1 million inhabitants (UN 2005).
5. Other much urbanised countries are Belgium (83%) and the United Kingdom (69%); the OECD average is 53%.
6. A daily urban system is here defined as an area which a significant part of the population sees as relevant for living, educational, shopping, employment and recreational purposes, over which businesses in the area interact and whether the labour market is integrated.
7. The Randstad was in the 5th Spatial Policy Document disguised by the name of Deltametropolis.
8. Network theory techniques derived from social network analysis make it possible to measure the strength and density of functional linkages in polycentric urban regions and to make comparisons with other regions (Hall and Pain 2006).
9. The methodology used in the OECD Territorial Database on metropolitan areas is based on four criteria. The first criterion is based on population size and a threshold of 1.5 million people is set before a region is considered to be a metropolitan one. Second, the density of population should exceed a critical value set at 150 people per km^2. Third, it is also fundamental that these regions with large and dense populations constituting urban areas represent a self-contained labour market. In order to define labour markets, commuting flows are used to calculate net migration rates. Predominantly urban areas at Territorial Level 3 have been selected and a process of adding and eliminating neighbouring regions based on net commuting rates has been carried out. Hence, metro--regions among predominantly urban areas (that is: large and densely populated ones) are those for which the net commuting rate does not exceed 10% of the resident population. The fourth criterion has been set to include a small number of important cities in their national context.

Therefore, the database also includes cities with less than 1.5 million people, but which account for more than 20 % of their national population, namely (for example) Auckland.

10. More specifically, the boundaries of provinces, municipalities and COROP areas (NUTS 3), including sub-COROP areas, have been selected as the outer limit for reasons of practicality. On the northern boundary in the province of North Holland, the intermediary COROP area of Alkmaar and environs is a less urban area as a whole, even though over the course of the years some municipalities within this COROP area which border the Randstad have become considerably urbanised. At the eastside of the Randstad the provincial boundary is chosen as the eastern boundary of the Randstad. The Amersfoort region is part of Randstad Holland.

11. These are bodies known by acronyms such as WRR, CPB, RPB, SCP and SER. Studies that could be mentioned here are: Van der Knaap 2002, CPB et al 2001, Van Oort 2006, SCP 2001, SER 2002

12. The agreement of Wassenaar is an agreement between trade unions and employers organisations to moderate wages in exchange for reduction of working hours.

13. What is meant here by Rotterdam port is strictly speaking the Port of Greater Rotterdam, that is, Rotterdam and its surrounding municipalities Schiedam, Vlaardingen, Maassluis, Dordrecht and Moerdijk.

14. Except for the roll-on roll-off market where Zeebrugge is largest and Rotterdam second largest.

15. Platforms are used to combine the advantages of large scale production with the desire for client specific products. It implies an integration of logistics and production.

16. Here a broad definition of tourism is applied, including not only employment in hotels and restaurants but also in cultural sectors, such as theatres, museums and galleries.

17. The acceptable walking distance was in this case defined as 500 meters from bus and tram and 750 meters from metro. Good public transport is in this case defined as minimally a bus stop with a frequency of four times per hour within walking distance; or a train station within 1,500 meters.

18. Assuming that the costs of congestion are not very different within and outside the Randstad, 81% of EUR 2 bn congestion costs gives EUR 1.6 bn. This presents almost 0.80% of the GRP of the Randstad.

Chapter 2

Policies to enhance competitiveness

Introduction

The first chapter of this Review concluded that the economy of the Randstad functions relatively well, for example, it is one of the most attractive metropolitan areas in the OECD for foreign direct investment (FDI). However, it could do considerably better as significant improvements could be made in several areas which would foster increased economic competitiveness. Principally, these are enabling the Randstad to take better advantage of the proximity of its city-regions, to exploit its high knowledge potential and infrastructure so as to increase innovation, and to utilise its labour market more efficiently. In this chapter the focus will be on describing the policies that have been implemented to try to address these issues, evaluating their effectiveness and making proposals for reform. To begin with, however, the current regional-economic strategy for the Randstad is set out.

The regional economic strategy for the Randstad is dominated by the two mainports of Schiphol airport and the harbour of Rotterdam. In the two important spatial reports of recent years, the Spatial Strategy Report and the Peaks in the Delta Report, which set out planning strategies for land use, these mainports play a crucial role. Moreover, recent programme proposals for the North and the South Wings focus to an important extent on how to develop them as does the economic strategy of Regio Randstad (this is that institution's first priority, though it has also paid a lot of attention to knowledge infrastructure; see Box 3.4 for a description of Regio Randstad) (Regio Randstad, 2004).

The dominant role of the mainports in regional economic strategy for the Randstad is also confirmed by an examination of infrastructural investments made in recent years, as many of these, have been aimed at

reinforcing their economic strength. The *Betuwelijn*, which will be finalised in 2007, is intended to transport more goods via railways from the mainports to the German hinterland. The *Tweede Maasvlakte*, which is currently being constructed, is an extension of Rotterdam harbour built by creating artificial land in the North Sea and it will enable the harbour to receive far greater numbers of containers. With respect to Schiphol airport, a fifth landing strip has been constructed and policy developments have been focused on enabling more flight movements to be accommodated.

Much of the economic strategy for the Randstad has thus implicitly or explicitly been based on generating high volumes. The harbour of Rotterdam was, until relatively recently, the largest harbour in the world and is currently the third largest and it is one of the sectors with its strategic focus directed towards generating high volumes of goods for trans-shipment. Schiphol airport has managed to develop into one of the principal transport hubs in Europe by attracting large numbers of transit passengers, which makes it possible to offer multiple destinations and high flight frequencies. In turn, this has helped to attract many foreign companies to the Netherlands.

This strategy of generating high volumes has, however, certain drawbacks. It is international transport companies which, to a considerable extent, benefit from the value added by the harbour of Rotterdam and the logistics sector. Schiphol airport does not earn much from transfer passengers and foreign companies in the Netherlands do not generate many knowledge spillovers. At the same time, these activities face spatial constraints regarding land availability given the high population density of the Randstad. In the area around Schiphol, for example, houses cannot be built because of the noise levels. And if flight movements grow at the same pace as is currently the case, it is expected that Schiphol airport will reach its legal limit for flight movements in the next few years, taking into account the maximum permitted noise levels. At the same, the mainports and the economic sectors linked to them, continue to play an important role in the Randstad economy. Although some calculations show that a reduction of investment in the logistics sector would not lead to economic decline, but to increased economic growth (TNO, 2003a and 2003b), these findings are not generally accepted (Hof and Koopmans, 2004). Several studies show the positive externalities of the mainports and logistics activities and that the rebound of the Dutch economy in 2006 was due to trade and logistics (CPB, 2005). It is also the case that in scenario studies for the long term, logistics continues to be a strong sector for the Randstad (CPB, MNP, RPB, 2006). Some observers indicate, however, that the level of attention paid to developing the mainports has been to the detriment of the knowledge infrastructure in the Netherlands (VROM-Raad, 2004). The challenge seems

to be to combine investment in the knowledge infrastructure with maintaining an ongoing focus on the mainports.

Over recent years, in view of the above, considerable efforts have been made to develop more value-added activities. For example, logistics activities in Rotterdam harbour are becoming increasingly innovative. Similarly, Schiphol uses its comprehensive knowledge of airport management by applying it to airports all over the world, such as JFK New York, Stockholm, Jakarta and Brisbane, in which it has a financial interest. And in horticulture, a kind of virtual transit economy is being created where flowers are auctioned which are not physically present in the Randstad. Although it is difficult to imagine that physical logistics streams will disappear, information technologies have changed the nature of logistics and make it possible for Schiphol and the harbour of Rotterdam to add value through design of supply chains or land use plans in other parts of the world.

Several challenges remain, however, both for the mainports and the logistics sector, as well as for other economic sectors in the Randstad, which could explain the low productivity growth of the past few years. For example, both the logistics sector and business services are relatively low on innovation and R&D expenditure. Several sectors, but mostly logistics and horticulture, depend on excellent transport links to and within the Randstad to ensure ease and speed of access to, and travel around, the region but the availability of these is under increasing pressure. Additionally, many sectors (Rotterdam harbour, the creative industry) have trouble finding skilled or creative people to work for them. Significant improvements could be made in all these fields which would foster increased economic competitiveness. Principally these are (as outlined above) enabling the Randstad *(i)* to take better advantage of the proximity of its city-regions, *(ii)* to exploit its high knowledge potential and infrastructure so as to increase innovation, and *(iii)* to utilise its labour market more efficiently.

2.1. Making better use of proximity

The Randstad is a metropolitan area in the Netherlands that has very competitive economic sectors and a lot of potential to develop further. One of the ways to improve its economic performance would be to use the unique characteristics of the area better. Its morphology gives the Randstad as a whole the opportunity to benefit from the proximity of the several different cities of which it is comprised and their natural landscapes. The proximity of its urban centres, for example, increases the possibilities of complementary economic specialisation, which should enable the Randstad to become more than the sum of its parts. The proximity of its cities to natural landscapes provides an unusual environment in which residents can live, work and engage in recreational activities close to each other. These

possibilities are currently underused but their development could assist in attracting much-needed highly skilled workers. Yet current policies do not address how to maximise the benefits of proximity coherently. To do so, they must tackle the main obstacles to developing a better living environment and to enhancing economic complementarity, issues which are closely interrelated. These obstacles are ease of movement within the Randstad, the availability of high quality housing which takes advantage of the nearby natural landscapes and the duplication of economic functions.

2.1.1. Accessibility

Improving the accessibility, both to and within the Randstad is essential for exploiting the advantages created by the proximity of the main cities in the region. This would result in positive economic effects beyond the Randstad: it has been calculated that better accessibility within the city-region of Amsterdam alone would lead to higher economic growth for the whole of the Netherlands (Thissen et *al*., 2006). The focus here will be on how such accessibility could be improved by developing the road and public transport networks.

Congestion

The most important government report on accessibility in the Netherlands is the Mobility Report, the national traffic and transport plan for the mid and long-term in which the targets to be achieved up to 2020 are delineated. The report took effect in 2006 and its contents must be translated into provincial and regional traffic plans before August 2007. Related to the Mobility Report is an implementation agenda that sets out the actions to be undertaken over the next two to four years to achieve interim targets. The Mobility Report places particular emphasis on accessibility to and within the most important economic regions but it does not propose a major shift from car transport to alternative forms of transport, as was the case in previous national transport reports.

The main transport goal of the national government is to reduce congestion and increase predictability of travel time with the aim that in 2020, travellers can reliably assess their travel time (see section 1.4.1 for the current unsatisfactory situation in this respect). The target is for 95% of travellers to arrive at their destinations on time. Another target is that congestion in 2020 will be reduced by 40%, despite the projected increases in passenger transport of 20%, and in freight transport of between 40% and 80%. In the following sections the policies that have been formulated over the last few years to reduce congestion and to increase predictability of travel time will be examined and proposals for improvement put forward in three distinct areas. The first is the need to invest in infrastructure, the

second, the importance of making better use of existing infrastructure and the third, the need to limit access to existing infrastructure.

Broadening existing roads and building new ones assist in resolving congestion problems. Currently, several investments are being made in road infrastructure, as set out in the multi-annual investment plan for infrastructure. The priority for these projects is accessibility within the Randstad. As building new roads takes time, other ways must be found to de-congest traffic bottlenecks. The construction of peak lanes is one of the most concrete ways in which congestion has been tackled over recent times. This has mainly involved building more lanes on the same highway or enabling the transformation of the emergency lanes (by slightly widening them) into additional lanes during rush hours to avoid or ameliorate traffic jams. This policy has been implemented by means of "fast track" legislation in which parliamentary procedures for enacting legislation were considerably simplified and shortened, resulting in its passage into law in 2003. The intention is to construct 200 kilometres of these peak lanes before 2008. To avoid congestion occurring elsewhere in the network, several measures have been taken such as the improvement of traffic management and the extension of areas where overtaking is forbidden.

Making better use of the current infrastructure can be done by improving the management of traffic flows, particularly around the city-regions, as it is in these areas that congestion mainly occurs. It is largely caused by intra-regional and interregional traffic making use of the same roads - which occurs more frequently in the Randstad than in other polycentric regions in the OECD. Better traffic management would ensure that intra-regional and interregional traffic use different highways by channelling traffic according to its destination (*e.g.* selective and temporary closure of highway exits). This approach has the potential to lead to decongestion of the whole highway network (*Commissie Luteyn*, 2003). These forms of traffic management have been applied with success in other countries. So far, only limited elements of traffic management have been used in the Netherlands, for example by providing congestion information on screens on the highways. A recent initiative has tried to improve traffic flows by improving the management of the whole road transport network at the level of the city-region, that is, the way in which traffic flows on local, regional and national roads is co-ordinated, for example by disentangling intra-regional and localised traffic flows.

Better use of existing road capacity could also be achieved by more optimal car use and a more even spread of working times. Nine of the ten cars in traffic jams contain only one person. Despite central government's efforts to promote car-pooling, ranging from public information campaigns to creating meeting places for those wishing to share car journeys, this

policy has been unsuccessful. It seems little can be gained from pursuing it further. On the other hand, there is more potential to solve congestion by varying working time so that people commute during a broader range of hours. To facilitate this, employers' organisations could make agreements to co-ordinate the spread of working hours and the road use of their employees. Other methods of promoting a wider band of commuting times, is the imaginative use of road pricing (see below) and encouraging employers to facilitate teleworking for their employees. ICT developments will make the latter increasingly attractive as it also saves on office costs. Measures like this could also stimulate combinations of work and care for children that might currently be difficult to realise.

The third strategy for tackling congestion is the introduction of road pricing, planned for 2012. Road pricing has been under discussion for a long time but never implemented despite agreement to do so in the past. The current proposal is to charge car users for each kilometre driven so that the more a person drives, the more they pay. Additional features will include higher charges for more polluting cars and lower fees for driving outside the rush hours and on less used roads The charging system will be a so-called 'free flow' system, an electronic system in which the driver does not need to stop to pay. This system will be used throughout the Netherlands in relation to all road networks and, at the same time as it is introduced, flat rate taxes on car ownership will be abolished. The introduction of the system is planned for 2012. Prior to this, tariffs might be introduced on particularly congested parts of the highway system.

Government policies to reduce congestion are undoubtedly steps in the right direction. Initial evaluations seem to show that the construction of peak lanes has had some positive effects as, of the 10 areas where the worst traffic jams occurred in the past, certain recurrent ones have disappeared. Although this development has not reduced the overall traffic jam intensity, which increased by 12.7% in 2004 and by 1% in 2005 (AVV, 2005). Additionally, the priority given to the Randstad when it comes to building new roads is a sensible one. Analysing the patterns of road use within the Randstad to improve traffic management and to enable traffic to flow more smoothly within the city-regions, is another promising initiative to make better use of the existing infrastructure. And finally, putting a price on causing congestion is a positive idea. Not only will it lead to a better allocation of traffic flows over the day, but it might also lead to an increased demand for high quality public transport.

Current plans to increase accessibility within the Randstad should, however, be treated as urgent. The construction of new roads should be speeded up and particular priority should be given to the roads

connecting Almere, the region's fifth largest city, with the rest of the region. The road use analyses which have been carried out are important; action should be taken to ensure that regional governments implement the resulting recommendations to increase the integration of the road networks. However, focusing on journeys within the city-regions could, in some instances, lead to less accessibility between city-regions in the Randstad (for example when travelling around a city-region is prioritised over the needs of businesses and individuals who must undertake more long-distance travel), so attention should be given to the need for Randstad-wide accessibility. This is of particular importance to vital economic sectors such as logistics and horticulture. Turning to road pricing, it appears that congestion charges focused at specific bottlenecks are more effective than universally applicable ones. Some specific fees, with a tariff of about 10 eurocents per kilometre, to be levied only at times and places that are very crowded, could lead to a reduction of congestion of 35% to 55% (Besseling *et al.,* 2005). Congestion charges in London and Stockholm have proven to be effective in resolving congestion (see Box 2.1). As more than 80% of the congestion in the Netherlands is concentrated in the Randstad, it makes more sense to introduce road pricing there, covering the whole of that region, rather than in the whole of the Netherlands. An alternative would be to introduce it on the city-region level, for the city-regions of Amsterdam, Utrecht and the combined Rotterdam/The Hague city-regions. Congestion charges should be introduced much earlier than 2012.

Box 2.1. **Congestion charges in Stockholm**

Stockholm ran a congestion charge trial between 3 January and 31 July 2006. As sets of data were collected before the introduction of the trial, during and after it, which were used to evaluate its effect (Trivector, 2005), the Stockholm congestion trial provided a scientifically evaluated experiment on the effects on congestion charges. Unlike the City of London that charges a flat fee of around GBP 6 to enter the city, Stockholm conducted a sophisticated traffic management system in which drivers were charged different amounts depending on the time of the day they drove into the city. The aim was to see if driving habits can be changed by financial incentives, thereby distributing traffic more efficiently throughout the day. Twenty-three toll points, with cameras and laser detectors, were set up monitoring traffic throughout the city. A driver travelling at the busiest time of the day from 4pm to 5.30pm would be charged about USD 3; after 6.30pm the ride home would be free. Fees were then automatically deducted from the bank accounts of the drivers (Luciani, 2006).

Box 2.1. **Congestion charges in Stockholm** (*Cont.*)

During the period of the experiment, the number of vehicles passing over the charge cordon (which includes all approaches to the inner city) declined by about 22%, equivalent to 100 000 passengers, during the daily charging period. Half of these passengers switched to public transport instead. The decline in vehicles passing over the charge cordon was greatest during the morning and afternoon/evening peak periods. Traffic flows on big inner-city streets declined, but not as much as over the charge cordon since the traffic flows in the inner city also includes vehicles belonging to people who live there. A consequence of the decline in vehicle traffic was that accessibility improved and travel times fell, with a significant effect on the reliability of travel times. The congestion charge led to reduced emissions of both carbon dioxide and particles by 2-3% in Stockholm County and about 14% in the inner city. Accidents involving personal injuries are also estimated to have fallen by about 9-18% (*Stockholmsförsöket*, 2006).

There are indications that the costs of the congestion charge in Stockholm outweigh the benefits of the toll by more than SEK 1 billion per year, even if environmental gains are taken into account (Prud'homme and Kopp, 2006). This balance seems, however, to be dependent on three specific local circumstances: the severity of the congestion, the implementation costs of the system and the availability of public transport. First, the benefits achieved by reducing traffic by 15% are about ten times larger in London, simply because London was much more congested than Stockholm. Second, collecting tolls from millions of car drivers, checking and pursuing delinquents is necessarily costly. Technical progress and experience might drive such costs down, as the costs of the Stockholm system were already much cheaper than those of the London system (by a half), which had been introduced three years before, in 2003. The third condition is cheap public transport. As some of car users will shift to public transport, this can either cause a decline in the quality of the public transport system or require an increase in its supply (*Prud'homme* and Kopp, 2006). In comparison with Stockholm, the Randstad appears more congested and less equipped with public transport alternatives (see Figure 1.26 for a comparison of railway capacity in OECD metropolitan areas). As the Randstad can learn from the experiences of road pricing in several other cities such as Stockholm, its implementation costs should be lower. All in all, this seems to suggest a more positive balance for the introduction of a congestion charge in the Randstad, when compared to Stockholm, especially when combined with strengthening the public transport system within the Randstad.

Improvements can also be made by involving the corporate world in solving congestion problems since much of the traffic congestion is caused by commuters, largely due to the limited span of hours within which most

daily work starts and finishes. Business spends considerable amounts of money to facilitate their workers' mobility, such as leasing them cars. Regional governments should invite the relevant firms to discuss creative solutions for increasing accessibility within the region, for example new forms of transport, the co-ordination of more flexible working times and facilities for teleworking.

Public transport

Contrary to many monocentric metropolitan areas, the Randstad has never had an integrated system of public transport connections. This is due to the fact that local, municipal governments are more powerful than the regional governments so local interests usually take precedence in transport planning. Unlike monocentric regions, the Randstad had no dominant core to which the edges have to be connected. But even on the city-region level, no integrated public transport system has been developed. The consequence of this is that public transport systems in the Randstad are fragmented. For the passenger, this means that different systems are usually not well connected: every transfer from one mode of transport to another will thus cause delays. The time schedules of different regional transport systems do not fit in with each other, there do not seem to be enough parking places for cars and bicycles near stations, there is no integration and coherent presentation of the regional public transport facilities and there are no consistent levels of comfort and frequency. This fragmentation is undoubtedly one of the elements that causes the relatively low usage of public transport when compared to other metropolitan areas in the OECD. Public transport does not seem to be a serious alternative for many commuters; this is a serious problem given the congestion in the Randstad.

The fragmentation of the regional public transport system is largely due to policy choices made in the past. Decentralisation of regional public transport to city-regions and provinces has made it more difficult to achieve coherence in public transport. This has led to a situation in which the central government is responsible for negotiating a contract with the Dutch Railways (NS) on railway transport in the Netherlands (and the Randstad), in which provinces and city-regions are responsible for regional bus transport and large cities for their tram and metro-systems. As reliability is one of the elements in the contact of the NS and not achieving this can result in lower central funding, the NS prioritises keeping strictly to their timetable, rather than making sure that connections with regional transport work well. As there is no central co-ordination of the time schedules of the different modes of public transport, nor of the tenders that the various government actors put out for regional transport, there is no mechanism for ensuring that the passenger is brought to their final destination as efficiently

as possible. At the same time there has been insufficient synergy between transport infrastructure policy and urban development. New housing areas are usually less well connected to public transport than neighbourhoods within the cities. At the same time many firm locations are not situated near public transport facilities but rather near the highways.

In the complex Dutch political context, it seems easier to construct a public transport network incrementally than by way of a comprehensive plan. This incremental development is currently taking shape, as several regional public transport lines are being set up. One of these local public transport lines is the Randstad Rail, which connects the city-region of The Hague with Rotterdam (see Box 2.2). Another proposed local line is the *Rijn Gouwelijn* that will run between Gouda, Alphen aan de Rijn and Leiden and which will be extended later westwards to the coast. Three other local lines will complement the public transport network in the South Wing of the Randstad. Most of these local lines will use existing track, but existing passenger carriages will be replaced with more modern ones and computer software will be renewed. There will be a more frequent service (from once per half hour to six trains per hour by 2014). Moreover 16 new stations will be built, of which three are at the planning stage.

Box 2.2. **Randstad Rail**

Randstad Rail is a light rail project in the province of South Holland linking the city-region of The Hague and Rotterdam. One of its characteristics is that existing railway tracks are connected to the tram network in The Hague and the metro network in Rotterdam. New stations will be opened and the frequency of the service on the networks will be increased. To avoid conflicts between heavy rail (for trains) and light rail (Randstad Rail) the tracks of Randstad Rail are disconnected from the railway track. This means that some of the tracks near The Hague will only be used for Randstad Rail.

Turning to the North Wing, the most important extension of the public transport network currently taking place there is the North/South line. This line connects the north of Amsterdam with the south. This metro line will replace much of the public transport system that now runs through the city (trams and buses), and will accommodate increasing traffic flows better. The intention is that the North/South line will run every four minutes at peak times. Construction of the North/South line started in 2003 and is expected to be finished in 2013. Although the North/South line is limited to the city of Amsterdam, it would be possible to extend it to Purmerend, Zaanstad and Schiphol airport.

The construction of several new railway tracks will make more incremental development possible. An example of this is the new railway track for the High Speed Train in 2007. The new track will enable the Thalys to reach high speeds in the Netherlands which will reduce the travelling time between Amsterdam and Paris (as well as Brussels) by more than an hour. Moreover, travelling times within the Randstad will be reduced considerably, for example, travel time from Amsterdam South to Rotterdam Central Station will be reduced to half an hour from the current 53 minutes. The new railway track will also benefit the rest of the public transport network as it will create the capacity to introduce more trains in the Randstad, such as the so-called "*Stedenbaan*". This train service will have the characteristics and frequency of a metro system and will run between Leiden, The Hague, Rotterdam and Dordrecht, between Rotterdam and Gouda and between The Hague and Gouda. The "*Stedenbaan*" is limited to the southern part of the Randstad, but extensions to Schiphol airport and Haarlem would be possible. In the long term, opportunities exist to connect it to the public transport systems in the North Wing, such as the metro system of Amsterdam. This would create a regional public transport system comparable to that in the San Francisco Bay Area (See Box 2.3).

Box 2.3. **San Francisco Bay Area Rapid Transit**

The San Francisco Bay Area Rapid Transit (BART) is a public rapid transit system that serves part of the San Francisco Bay Area, including the cities of San Francisco, Oakland, Berkeley and several other cities. It also serves San Francisco International Airport and Oakland International Airport. BART comprises 167 kilometres of track and 43 stations. Trains can achieve a maximum speed of 129 km/h. The BART system operates five lines, but most of the network consists of more than one line on the same track. Trains on each line typically run every 15 minutes on weekdays and 20 minutes during weekends. Since any given station might be served by as many as four lines, it may have a service as frequently as every 3-4 minutes. BART connects to San Francisco's local light rail system, the Muni Metro. BART's primary goal is to connect outlying suburbs with job centres in Oakland and San Francisco by paralleling established commuting routes on the region's highway system but it does not aim to provide a dense level of services such as the New York City Subway or the London Underground. The Muni does provide a local rail service in San Francisco and is comparable to such services in other urban areas. BART could be described as a "commuter subway" since it functions like a commuter rail system, running on a few longer-distance lines to the far reaches of suburbia with widely-spaced stations, while also operating like a typical subway system in San Francisco and downtown Oakland. Most suburban stations are park and rides typically located 3 kilometres apart. Suburban stations generally offer free parking and therefore are often filled to capacity during peak hours. To raise revenue, BART has begun charging parking at selected stations.

The connection of these local networks will provide the outline of a high quality public transport network on the city-region level, but several limitations remain. The connections between the different elements of the public transport networks should be improved. This means that transfer from one mode of public transport to another should be able to proceed more smoothly; timetables should be better co-ordinated, information for travellers should be improved and there could be more common marketing to present public transport as an attractive alternative for travelling by car. The Ministry of Transport has made the door-to-door approach to designing the public transport system central to its policies on regional public transport, an approach based on the perspective of the client. This is a positive development. Further steps should be taken to implement it, by working together with the regional actors that are responsible for public transport. In the longer term, plans should be developed to integrate the public transport systems in the different city-regions physically.

There seems to be an undersupply of longer-distance public transport in the Randstad. Much energy has, over the last decade, been spent on improving and planning for regional public transport at the level of the city-region and at wing-level. Although this is important, as much commuting takes place at this level, it is likely that the current supply of Randstad-wide public transport is insufficient to stimulate commuting between the North and South Wings. Greater frequency and faster travelling times would increase the benefits that can be reaped from proximity in the Randstad. Several plans for very frequent and fast public transport on a Randstad-wide scale have been developed (see for example Consortium Transrapid Nederland, 2005). And although there does not seem to be consensus on whether proposals to connect the four cities with a High Speed Train or a light rail network are effective (see CPB *et al.,* 2002 for a negative recommendation and Geest and Elhorst, 2003 for a more positive evaluation), it is clear that measures should be taken to increase the frequency and speed of longer-distance public transport in the Randstad.

Discussions have been taking place in recent years about the creation of very fast connections between the Randstad and other parts of the Netherlands. Plans to create a high-speed connection between the Randstad and the northern Netherlands to meet some of the demand for high quality housing in the Randstad and to benefit from some of the complementarities between the two areas' labour markets, have been shelved by the current Dutch Cabinet. It was unclear whether any real benefits would accrue to either region by the construction of such a rail link (many studies found minimal benefits, although research by Oosterhaven and Elhorst, 2003 was more positive). Creating more frequent public transport connections Randstad-wide should have much higher priority.

External accessibility

The external accessibility of the Randstad is, to an important extent, guaranteed by Schiphol airport, which offers a network of very frequent flights to many different destinations. External accessibility by train is less well developed. There is a fast train connection between Amsterdam and Rotterdam with Brussels and Paris, but it is only in 2007, when the construction of the High Speed Track (HSL) will be finished, that this train will be able to go at the same high speed that it can in France. Plans for a High Speed Track between Amsterdam, Utrecht and Frankfurt have been shelved by the current Dutch government. In the longer run, when a European-wide charge on intra-European flights is introduced, this could make the Randstad less externally accessible. A feasibility study for a High Speed Train to Frankfurt should therefore be carried out.

2.1.2. High quality housing

To become a world class city, the Randstad must increase its stock of high quality housing. Whether or not this can be achieved depends upon developments in national land use planning and housing policy. Below, policy developments in these areas will be analysed with a view to developing recommendations as to how they can be adjusted to ensure the provision of a larger supply of high quality housing.

Spatial planning

The national government's vision for land use over the coming years is expressed in the Spatial Strategy Plan. This document, accepted in February 2006, establishes the strategic framework for land use development until 2020, and in respect of some issues until 2030. Decentralisation is part of this vision, using as a motto: "decentralise wherever possible; centralise wherever necessary". Six urban networks have been developed, including the North and South Wings of the Randstad. In this spatial strategy document the basic quality criteria for spatial policy are indicated. The policy in the Spatial Strategy Plan is refined in other reports relating to land use in the Netherlands: the Mobility Report, the Agenda for a Revitalised Countryside and the "Peaks in the Delta" on regional economic development.

The essence of the national government's housing strategy is to promote the construction of high-density housing as close as possible to existing housing and other infrastructure. It includes provision for recreation facilities, green space and water supply and sewage infrastructure. New housing will therefore largely be constructed in existing cities. Over the

period 2005-2010, for example, 80% of housing construction will take place in existing urban areas. In Almere 40 000 additional houses will be built but there will be no large-scale construction in the Green Heart although its boundaries in some places will be adjusted to make further urbanisation possible. In addition, municipalities in the Green Heart will be permitted to engage in development to accommodate natural population increase.

Every governance level has its own role in land use planning policy, but the central government plays an important role by providing a structural vision on land use. To flesh out this vision, it lists the main decisions about the allocation of land in the Netherlands which forms the basis for provincial structural plans. These provincial plans indicate where cities and villages can expand and where land for agricultural, recreation and nature-based purposes must be located. The municipal land use plans which are much more detailed and which must be revised every ten years must follow the requirements of the provincial plans. Not only do these municipal plans determine what can be built, but also how it can be built, for example, buildings' maximum width and height. The citizen can influence municipal land use plans by protests and appeal procedures.

Housing policy

Since the mid nineties the driving principle of housing policy is to increase the influence of market mechanisms in the housing market. This has led to the privatisation of housing corporations together with enabling them to exercise more liberal rental and allocation policies.

During the 1980s and 1990s housing policy gradually changed to a more market-oriented system. During the late 1980s, it became clear that the large-scale construction of subsidised housing after the Second World War had led to an unbalanced housing stock, dominated by uniform large, inexpensive family dwellings. As a consequence, subsidised construction was gradually abolished during the 1990s and replaced by a more locally based housing policy, where local authorities, housing corporations and private business co-operate. Most public, locally controlled rental agencies were transformed into private non-profit housing corporations. Rents in this type of housing may be set by the non-profit landlord within a certain range, depending on the dwellings' amenities. These rental and allocation rules play an important role in Dutch housing policy. It has been shown that core regions have lower residential mobility rates than in the regions at the periphery (Van der Vlist *et al.,* 2002). This may have something to do with the rental and allocation rules (See Box 2.4).

Box 2.4. **Local housing allocation rules in the Randstad**

The system of allocation rules serves to prevent mismatches and to provide affordable housing to those who need it most. Allocation rules may differ locally. The most important rules are:

- For a rental unit in the social sector, a household must not earn more than a specified maximum income and must either live or work in the local community. Once a household has obtained a housing unit, it cannot be forced to move because its income increases, as eligibility rules no longer apply.
- To buy existing housing stock below a certain price threshold, in both private and public sector housing, households must have a connection to the housing market (that is, the city-region). In addition to transaction costs and legal fees, all transactions are subject to a 6% tax paid by the buyer.
- To buy a newly constructed dwelling, in both private and public sector housing, households must often comply with very stringent eligibility rules. In most cases, households must live or work in the local community, and sometimes an income maximum is set as well. Most new residential construction sites are designated by the central government. Allocation rules exist which allocate these units randomly to eligible households. Individual construction sites are hardly ever available for sale and, if available, local government rules regarding dwelling type and construction materials have to be obeyed. (Van der Vlist *et al.,* 2002).

Preparations have been made over recent years to free up the housing rental market. Currently 95% of it consists of government regulated stock, leaving only 5% of dwellings available at market rents. Government protection consists, among other things, of imposing maximum permitted rental levels (depending upon various factors) and maximum permitted rent increases. The central government prepared a new rental policy that was supposed to come into effect in 2007. This policy would allow the market value of rental housing to play a role in determining the rent that can be sought. Subsequently it was planned that part - possibly as much as 20% - of the housing stock would become freely available on the market with no controls as to rental levels or rental increases. This volume of housing stock made available in this way would depend on the amount of new housing that has been built. This new rental policy was however put on hold by the First Chamber of the Dutch Parliament, following the parliamentary elections in November 2006. For the private rental sector above a certain rent level (the 5% mentioned above where there are no rent controls) no allocation rules exist. As there is a tax credit for loans to buy houses, renting a house in this

sector is usually less efficient than buying, so the proportion of privately rented houses is relatively small.

There has not been an active policy to combat distortions in the rental market which have occurred because of the government regulation described above. Where, as is particularly the case in the Randstad, eligibility rules are very stringent they will affect mobility rates. In general, a household, wishing to move to a housing market in which it does not work, is only eligible to buy a privately owned dwelling which costs more than the local price threshold or to rent in the unregulated private rental sector. As a result, households think twice before they move house, and may remain in accommodation which is actually no longer appropriate (in terms of their income level) intended for them. In a recent government report it is stated that 'appropriate housing' should be actively promoted (VROM, 2006). This could be achieved by increasing the rents for cheap rental housing in line with the tenant's increasing income which would provide an incentive to move to other housing. Certainly, all new rentals should become means-tested in this way.

Effects on high quality housing

Dutch land use planning is still characterised by very active government involvement. Government institutions regulate the market by mechanisms such as building permits for specific projects and detailed municipal land use plans. In addition, they make use of their powers to stimulate the sort of private market activities which comply with the land use plans. The restrictive policies of the central government have made it difficult to build in the countryside in the Randstad.

Decentralisation has not resulted in more high-quality housing developments. When decentralisation occurs, there is a tendency for the lower levels of government assuming the decentralised powers to continue with the restrictive policies that were imposed by central government. Additionally, decentralisation to too low a level of governance may lead to a failure to develop a broad vision for efficient land use. Incoherence in planning developments may also occur (Van der Wouden *et al.,* 2006). A partial alternative to government planning of all land use decisions would be develop a system which responds to market demand regarding, for example, the location of firms.

Local governments in the Randstad have made some progress when it comes to housing, but much remains to be done. The housing plans of city-regions indicate that they understand the nature of local housing demand better, but that they have not been able to respond to it with an adequate supply of the type of housing people want nor have they provided

the desired facilities. Clashes in planning concepts occur between the different city-regions, with no overall vision for the Randstad as a whole (RIGO, 2005). For example, one question is whether every city-region should offer both cheap business premises where creative young people at the start of their careers can work in close proximity and very high-quality residential accommodation. More co-ordination at the Randstad level is essential to resolve issues raised by housing policy.

What seem to be required are different but complementary developments but no centrally planned new residential environments, such as the VINEX housing estates. The best way to guarantee the provision of living environments with different characteristics seems to be to link the development of new residential areas to the character and identity of the urban areas where they are to be built. Small, compactly built historical villages should try to develop small-scale compact new housing. The open spaces in the old harbours of Rotterdam and Amsterdam, that are located close to the inner city, should not be filled with single-family dwellings according to some observers (Musterd & Van Zelm, 2001). New construction in Amsterdam over recent years can be categorised into two groups. The first group is the construction of "urban milieu" apartments near the heart of the city centre. This has prevented overheating in this sector of the property market as people can start their housing careers there and be close to the city centre at the same time. It is these newly constructed housing sites that have won international admiration (See for example De Botton, 2006). The second group of new housing developments is on the edge of Amsterdam, for people who only want a short commute to work (Dignum, 2004).

Attempts have been made to liberalise the housing market in the Netherlands, but even if they were to be implemented they may be insufficient to resolve the housing problems faced by much of the Randstad. An example is the dilemma faced by the municipality of Amsterdam. On the one hand, the city wants to be a place which attracts creative talent; on the other hand it emphasises the need for sufficient social housing, since one of its priorities is social justice (College B&W Amsterdam, 2006a). The plan of the new municipal board of Amsterdam to develop into a leading metropolis mentions the need to meet the requirements of different housing markets, but it is unclear how it plans to achieve this ambition (College B&W Amsterdam, 2006b). Some years ago it was observed that, in Amsterdam, ideas about its future housing developments and its economic and cultural visions for the future seem to exist simultaneously without a coherent connection to each other (Arnoldus and Musterd, 2002). Although many housing projects have been focused at middle income groups, there is still a long way to go to solve the mismatch. As more than half of the

housing in Amsterdam is the property of non-profit housing corporations and the land is owned by the municipality, it is the municipal government of Amsterdam – more than local government in foreign cities – which will have to decide to take the risk to transform the housing environment in order to restore the balance on the housing market between market demands and social needs.

The wish to ensure that living in the city remains affordable for lower income groups is understandable, but this could be achieved by means which do not distort the whole housing market. An example of an alternative way to provide housing support to targeted groups is provided by London (see Box 2.5).

Box 2.5. **Housing market support mechanisms in London**

The Key Worker Living (KWL) scheme has helped targeted public sector workers in London, the South East and East of England to buy a home for the first time, upgrade to a family-sized home, share ownership or rent a home at an affordable price. KWL is targeted at key workers in the health, education and community safety sectors where there are severe recruitment and retention problems (i.e. teachers, nurses, police officers, fire-fighters, social workers, and other essential staff). It began as a GBP 690m programme in March 2004 to provide housing options for key workers. The following help is available:

- Equity loans of up to GBP 50 000 to buy a home on the open market or a new property built by a registered social landlord. This is known as the Open Market HomeBuy option and enables the proposed purchaser to raise a mortgage of around 75% of the property's value. From October 2006, lenders will provide a 'top-up' equity loan alongside the loan being provided by the Government.
- Higher-value equity loans of up to GBP 100 000 for a small group of London school teachers with the potential to become leaders in their field.
- Shared ownership of newly built properties. This is known as the New Build HomeBuy option and enables proposed purchasers to buy at least 25% of the home and pay a reduced rent on the remaining share.
- Access for all key workers to non-NHS (national health service) rented accommodation.

The new key projects provide the possibility of creating new attractive housing environments, but it will be a long time before those which are currently planned will be completed. One of the most significant large-scale

spatial projects at the moment is on the South Axis in Amsterdam. As the new highways and railway tracks will be built in tunnels, space for development is created that will connect the south of Amsterdam with nearby Amsterdam Buitenveldert and Amstelveen. This land will primarily be used for high quality office space, but an area has been reserved for housing development. This offers the opportunity to build interesting and high quality housing (Salet & Majoor 2003), even if the difficulties involved in combining office and housing developments successfully should not be underestimated. The same possibilities exist at the central station in The Hague and its surrounding area, where housing is also planned. Both projects are long-term ones with the completion of the South Axis project due in 2030, and the restructuring of the Hague Central Station in 2011.

Box 2.6. **Housing in Barcelona**

Few cities in the OECD develop large scale housing environments that are specifically focused on particular groups on the housing market. Barcelona is one of the exceptions. In Barcelona urban renewal seems to be part of its international profile. Renewal in its historical centre, the construction of the Olympic Village and building projects around Diagonal Mar are large focused on the higher segments of the housing market, which has sometimes led to tensions between the local government and lower income groups in the renewal areas.

The centrally located neighbourhood Raval is an example where government has sought to combine work space and housing for start-up enterpreneurs in, among other sectors, the creative industry. Raval used to be one of the most deprived areas in Barcelona, but was designated, because of its central location, as cultural centre of Barcelona in the urban renewal policy. The aim of this policy has been to create a housing environment that would attract several groups within the cultural sector, such as artists. The municipality tried to create the conditions for controlled gentrification of the area (Arnoldus and Musterd, 2002).

Building in 'green' areas

Building in nature reserves must also be considered although it is currently controversial. There are good arguments for doing this, particularly as in the future, a point will come when urban areas can no longer absorb the extra housing demands which will be placed on them (CPB *et al.,* 2006; Pellenbarg and Van Steen, 2005). This is particularly true of the Randstad. Chapter 1 pointed to the deficit of green space in urban areas (RLG, 2005); further housing construction will worsen this situation. Although housing needs in cities could to some extent be accommodated by

increasing the permitted height of buildings, there comes a point when the city environment is degraded by excessive housing density. Building in existing neighbourhoods is generally more expensive and can have consequences for housing quality and affordability for single-person households (CPB *et al.,* 2006). The cities in the Randstad are already fairly high density and their ongoing development has decreased the open space which was previously available for sports facilities and hobby gardens on the edge of each city. Moreover, much of the natural landscape is not of high quality: one third of the Green Heart is estimated to be "degraded landscape" (Keers, 2005).

One way to make building developments in nature reserves palatable is to invest in green housing on them. Such developments can have ecological value as – under the right circumstances – they can contribute to the care of the landscape. It has been estimated that to create an acre of new natural landscape, eight green houses are needed (Keers, 2005). Where agriculture (which previously preserved the integrity of the landscape) is disappearing or where the implementation of strategic green projects is stagnating, green housing may prove crucial to maintaining the health of the local natural environment (VISTA, 2003). Housing can also be an opportunity to solve certain water challenges. Several proposals have been formulated for this (see VISTA, 2003). Turning to particular potential sites for green housing in the Randstad, one of these is the islands in South Holland. There, the opportunity exists to develop the high quality housing environments that the Randstad needs: waterfronts, sand, strong tides and different surroundings as salt, fresh and mixed water all exist there (VHP, 2004). Another area is the Green Heart which some consider does not exist as a unified whole, but consists of several separate areas that could be used differently (Pieterse, 2005). Housing is one of the functions that urgently needs to be considered for certain parts of its landscape. Moreover, in environments with fragmented landscapes, such as the Green Heart, urban-green restructuring can bring the positive benefits outlined at the beginning of this paragraph.

It will be important to find the right planning rules to ensure the best financial trade-offs between urban gains and green investments. Some national regulations should be abolished, especially when it comes to the prohibition of non-agricultural construction in the Green Heart. In regional land use plans, specific areas could be designated for rural housing. In municipal land use plans regulations will have to be introduced to make building on green space for housing purposes possible whilst, at the same time, guaranteeing the quality of the natural environment (VISTA, 2003b).

Making better use of the Green Heart

The Green Heart has the status of a national landscape. This means that it is considered to be an area with rare and unique characteristics from a national and international perspective. The policy with respect to national landscapes is that their natural and cultural/historical qualities should be maintained and if possible be strengthened, in combination with their significance for recreation. The three provinces concerned (North and South Holland and Utrecht) have come up with a Green Heart programme and the central government co-funds this programme. Several goals have been formulated for the area, from maintaining the characteristics of the landscape, to increasing economic vitality and water storage functions. Symbolic and innovative development plans have been formulated that are essential for the Green Heart; these projects will stimulate the development of the whole area. Some of them try to increase high quality housing and living environments, some the transition of certain areas to a wetter ecological environment and others to make the Green Heart more accessible for recreational purposes. These iconic projects will be finalised in 2013 (LNV, 2006).

For a long time the Green Heart has been an arena of conflicting aims and interests. This has resulted in sub-optimal use of the area. On the one hand, the Green Heart was regularly redefined (reduced in size) in order to be able to build houses at its edges. On the other hand, the existing landscapes were preserved, but not so as to be accessible or attractive for recreation. Although current policy has paid more attention to the way in which the Green Heart could be used so as to increase its amenities for its inhabitants, it is still very restrictive in permitting housing, and thus in finding functional combinations of uses for it Although the goals for the Green Heart might seem conflicting, this need not be the case as opportunities exist to combine housing, nature preservation and water storage. More housing construction should be allowed, in combination with restructuring and increasing the quality of the landscapes. Increased use of the Green Heart as an area to store water in case of a high level of water run-off from rivers could also be combined with housing (for example by building more floating houses) as well.

Firm locations

Firm locations currently lack quality and variety. According to the Ministry of Economic Affairs, over 20% (more than 21 000 hectares) of existing industrial estates in the Netherlands are outdated. The quality of these industrial estates no longer meets either the needs of businesses (capacity to expand, accessibility, parking facilities) or society, such as an acceptable interface with rural or urban areas, external safety, noise and

odour (EZ, 2004b). Policy incentives can lead to relatively quick replacement of firm locations as, in contrast with the situation with housing, there is little planning involved in the meeting areas for firm location (Louw *et al.,* 2004). There does not seem to be much understanding of the nature of the quality of office space required, as only projections about the volume of demand are available. Despite the increased size of many firms, most office space is made available in small and fragmented areas by individual municipalities. Municipalities compete among themselves, by offering lower land prices. This can be considered problematic when land is scarce, as is the case in the Randstad, particularly as office space is constructed quickly and rapidly degenerates as it is not built to last. This process is encouraged by municipalities continuing to provide new land at low prices. Additionally, firms do not have many incentives to invest in the physical environment. Demand for firm locations of high quality is estimated to make up 10 to 15% of the current stock (Stec, 2005). For foreign firms in particular, quality can prove to be an important factor. Better use could also be made of the specific qualities of an area.

The central government has taken an active role in restructuring potential firm locations. In the Action Plan for Industrial Estates, the Ministry of Economic Affairs describes how it intends to tackle the qualitative and quantitative restrictions facing them. The new approach will be based on an explicit choice of 50 'top projects'. Manpower and resources will focus on these projects, which will involve both the restructuring of outdated industrial estates and the provision of new ones. The label 'top project' will not alter the responsibilities of the municipal and provincial authorities. The government will make agreements for the implementation of these top projects in the urban covenants for the 2005-2009 period. A supplementary subsidy scheme for those relating to the restructuring of industrial estates has also been agreed to. The government plays only a minor role in the office space market since there are almost always enough locations available for new office development. This is because offices take up relatively little space, their negative external effects are minimal and their cost-benefit ratio is generally positive. One exception is the development of complex office locations at urban transport interchanges, such as the six new key projects built around stations on the route of the high-speed rail link. The government is co-funding these projects.

More involvement of the private market and city-regions could increase the availability of quality land for firm location development. In the long term the anticipated demand for such areas is relatively limited. This underlines the importance of restructuring current space into areas of high quality. In the development and restructuring of firm locations the municipality currently plays a central role yet private actors usually have

more knowledge of the nature of market demand. In addition, they have more experience in cost/benefit and risk analyses so it is probable that increased involvement of private enterprise in firm location planning will increase the match of demand and supply. Upscaling the responsibility for firm location to the regional level also offers more opportunities for varied types of land appropriate to different sector specialisations to be made available; for this to work a significant role for the province may need to be created. Regional co-ordination would also avoid oversupply at the top end of the market.

Box 2.7. **Market involvement in the development of firm locations**

A good example of the involvement of private enterprise in the development of firm locations is provided by the mainports. A fundamental characteristic of these areas is their significant dependence on the economic activity of special and shared external facilities, outsourcing links and knowledge circulation. For that reason, economic key areas in the Randstad are usually characterised by strong private enterprise area management organisations. Examples are the ports and airport areas which are usually very well maintained and efficiently used. In some instances, the business which is the economic driver participates in the development of the surrounding area in co-operation with the municipality. An example of this is the Schiphol Area Development Corporation, but also companies such as Corus, DSM, Philips and Shell, invest in the areas surrounding their offices in co-operation with municipalities. (VROM-Raad, 2006).

More attention should be given to multiple land use as the vitality of neighbourhoods could be strengthened if more land in city centres was designated for business activities which are appropriate for such areas. This multiple land use would make combinations of work and private life more possible. It would enable city-based, low-skilled labour in particular, that is relatively less mobile, to find work in the city (VROM-Raad, 2006).

2.1.3. Regional co-ordination

Regional economic policy

Regional inequalities in the Netherlands are relatively limited. Central government's policy is aimed at enabling each region to provide the same level of public goods and services. This takes place via general and specific grants that are allocated to both provincial and (principally) to municipal governments (see Chapter 3). They are calculated according to criteria that

try to take factors into account to compensate for regional cost differences and differences in revenue raising capacity. Central standards and limited local fiscal autonomy ensure that regional differences remain small. Policies promoting regional development are limited. An indication is the budget for regional development of the Ministry of Economic Affairs: this adds up to about EUR 128 million per year, only a small part of the total central budget. Generic central government policies also, of course, have consequences for regional development. That is why the focus here is both on regional economic policy and national policy that has influenced the regional economic development of the Randstad.

Regional economic policy in the Netherlands has, since 2004, been focused on strengthening economic key regions, such as the North and South Wings of the Randstad. Regional policy had for some time prior to this been dominated by the idea that the gap between the northern Netherlands[1] (that was lagging behind economically) and the rest of the Netherlands should be closed. In 2004, a new regional policy was implemented that focused more on strengths than on weaknesses. This policy was formulated in the report "Peaks in the Delta". This document is not a detailed regional policy programme, but a broad agenda for regional economic development in the Netherlands. The express goal is to exploit region-specific opportunities of national significance (EZ, 2004a) and to make use of the regional potential to create an internationally competitive investment climate. This policy change brought the Randstad into the sphere of regional economic policy. The report "Peaks in the Delta" established the five regionally based programmes created by this policy (plus the one for the northern Netherlands that already existed). Two of the five areas are located in the Randstad: the North Wing and the South Wing.

At the same time, programme-based policy making was introduced with one single policy instrument and budget, and the earlier sectoral, instrument-based approach was left behind. Each of the six regions mentioned above, was charged with establishing a Programme Commission to devise a coherent programme with priorities and results to be achieved in four years. This programme allowed public and private parties to come up with specific proposals that were ranked by the Programme Commission and decided upon by the Secretary of State of Economic Affairs. Each Programme Commission comprises three representatives from the business sector, three from knowledge institutions and three from decentralised public sector bodies, with a civil servant representing the Ministry of Economic Affairs. This programme-based policy making has led to a restructuring of the internal organisation of the Ministry of Economic Affairs. The policy-based organisational structure along the lines of key policy instruments was changed to a geographical clustering, based on joint

central-regional programme teams, in which the five regional offices of the Ministry were integrated. As such, the region became the level at which the regional economic policy within the Ministry of Economic Affairs was organised.

A programme for a region prioritises the clusters it wants to support. These clusters have now been selected by the Programme Commissions. In the South Wing, harbours, horticulture, international law and life and health sciences have been chosen whilst in the North Wing the sectors are the creative industry, innovative logistics, trade, tourism, and life sciences and the medical cluster[2]. Within these clusters projects were selected in 2006. Over the period 2007-2010 they will receive EUR 271 million from the Ministry of Economic Affairs.

The reformed regional policy looks promising. Strengthening regions instead of trying to reduce the gaps between the poorer and richer regions seems a reasonable approach. Programme-based policy making seems to have made policy formulation and implementation less compartmentalised than it was before, though the lack of sound evidence on the effects of the previous policy makes this hard to assess. The evaluations of regional economic policy programmes in the past have not always been done in scientifically sound ways so that it is difficult to establish the net effect of the policy accurately (Bijvoet and Koopmans, 2004). However, less rigorous evaluation methods have been used to provide a preliminary assessment of their success. Estimates of the net employment effect of the programme for the northern Netherlands half way through the programme, were that it had resulted in 4 510 extra jobs. If accurate, this would mean that each additional job cost EUR 115 000 of public funds. The contribution of the programme was minor in comparison with the total employment growth in the region for 2000-2002 which was 39 000 jobs. Its role in reducing the gap in labour participation rates between the northern provinces and the rest of the Netherlands was insignificant (IBO, 2003). In response to Parliament's request, economic policy support to the northern Netherlands is not to be abolished immediately, as was originally proposed, but phased out gradually by 2010.

However, there are indications that the selection of themes in the reformed regional policy is not region specific enough. Many regions prioritise the same sectors. For example, health sciences are selected by the North Wing, the South Wing, south-east Netherlands and the province of Groningen. Prioritising the same themes in different regions might be the result of the choice to include almost all the regions in the Netherlands as economic key regions. The only provinces without one or more areas targeted by this policy as an economic "key" region are Friesland and Drenthe. The chosen areas cover some 70% of Dutch industry (and

population). Sectors picked as specialisations by many regions should each be the focus of central government policy. As most of the regional policy projects are focused on innovation, there is a risk of overlap between the new regional policy and the general innovation policy devised by central government. One of the themes of central government's innovation policy is, for example, flowers and food, which has a strong link with horticulture that was selected as one of the priorities for the South Wing. The Ministry of Economic Affairs is currently looking into the possibility of making life sciences – as mentioned earlier also a priority in four different regions – a priority of innovation policy. Although the bottom up approach of the new regional policy is in itself laudable, more selection by the central government of themes that are truly region specific is recommended.

Additionally, the different regional programmes should also stimulate linkages between different sectors in different regions as some regional priorities are strongly interconnected. Successfully encouraging the horticultural industry (a priority in the South Wing) naturally relies on also promoting the development of Schiphol airport (a priority in the North Wing). Encouraging the growth of the harbour of Rotterdam has strong links with the promotion of innovation in the logistics sector in the North Wing. Although there are currently no indications that the programme-based structure is creating boundaries between sectors, the central government should be careful not to create new compartmentalisation. Linkages across programmes, if relevant, should thus be encouraged. It should be noted, however, that one advantage of the new regional programme-based policy making is the reduction of compartmentalisation within the Ministry of Economic Affairs.

Finally, large and established sectors are, arguably, too well represented in the Programme Commissions. Contrary to initial expectations, the Commissions have been able to attract key individuals to serve on them (Yuill, 2006). That is of course a good sign. At the same time, it is remarkable that many representatives of large or established sectors and firms are sitting on the Commissions. Although established sectors might be region specific priorities, one may ask if it is these sectors that need government support. This raises the question of whether the policy is really stimulating new initiatives and sectors and is not instead based on a "picking the winners" principle. This strategy will be evaluated in the section on innovation policy. However, it does appear that the South Wing and, to a lesser extent, the North Wing have to a limited extent prioritised new sectors.

Urban policy

Since 1994 the central government has developed an integrated policy framework for large cities, co-ordinated by the Ministry of the Interior. The context of this policy was the increasing social problems of the large cities observed at that time. This resulted in the targeting of urban policy towards revitalising them. Initially, policy development was only focused on the four largest cities, but it was quickly extended to 25 cities. From 1999 onwards, urban regeneration policies have been extended to 31 cities. Each city makes an agreement with the national government in which it undertakes to achieve certain urban policy goals over a period of five years in return for central government funding. The agreements take three so-called pillars into account relating to social, economic and infrastructure developments. The periods covered are 1994 to 1998, 1999 to 2004 and 2005 to 2009. The national urban policy framework bundles the existing national budgets for cities into three block grants; one for each pillar. The national budget directed at achieving urban policy goals is around EUR 830 million per year from 2005 onwards.

Results of current urban policy seem to be mixed. Cities generate considerable economic growth. At the same time, a variety of social problems remain: dependency on social benefits is relatively high and labour market participation of ethnic minorities is still very low. Many people that work in the city do not live there. The Ministry of the Interior states that most of the specified goals have been reached and that urban policy contributed substantially to that. At the same time it mentions that 58% of the quantitative targets have not been reached, because some of the targets were set too high; better results were reached within the field of physical infrastructure where 65% to 75% of the targets were realised (BZK, 2006a)[3]. Evaluation shows that urban policy has mainly been successful in creating a more attractive housing environment and a more pleasant climate for visitors. The highest income groups have benefited from the changes in the housing stock, but the middle classes still face numerous difficulties in finding suitable housing. Urban policy has had no substantial impact on unemployment levels, but the allocation of unemployment has shifted a bit in favour of ethnic minorities and youths (Marlet en Van Woerkens, 2006).

As the goals which urban policy is meant to achieve have been increased over time inevitably, pursuing all of them cannot always be easily combined. The original reason for devising an urban policy was social problems. Its first years were thus devoted to battling social deprivation. In the second half of the 1990s, stimulation of the urban economy became more important. Policies were increasingly focused on encouraging growth and making use of the advantages generated by agglomerations. The assumption was that increasing economic growth would decrease social

problems. This, however, has not been the case, partly because the benefits of a substantial share of urban economic growth went to people who work in the city but do not live there. The combination of these two goals has led to the selection of different kinds of cities as priorities for urban policy over the years and the criteria for receiving assistance under the urban policy programme have changed over time (Wouden *et al.,* 2006b).

Urban policy does not take into account that it is the city-region and not the city which is increasingly becoming the daily urban system. For this reason several institutions have advised focusing the five-year development plans more towards city-regions (CPB, 2000; SCP, 2001). This suggestion has not been implemented. Moreover, in the second urban policy period (1999 to 2004) a lack of regional co-operation has been observed as most of the development plans have been prepared without prior interregional debate and discussion. This is perhaps not surprising, as the plans are not devised so as to require regional co-operation. Dordrecht is an exception as it is the site of a pilot requiring a city municipality to co-operate with its surrounding municipalities so as to come up with a regional development plan. However, this approach led to a plan in which around 90% of the projects were focused on resolving problems faced by Dordrecht rather than its partner municipalities (Ecorys, 2005). The third period of the urban policy development, which started in 2005, is again focused on cities and not on city-regions (BZK, 2004). Cities are asked to indicate whether inter-municipal agreements have been made and, if so, the nature of their content, in their five-year development programmes. Despite this, the central government's policy does not provide positive incentives to co-operate.

A recent suggestion is to integrate the economic pillar of the urban policy framework with the programmes for Peaks in the Delta (Wouden *et al.,* 2006b). This would make sense for several reasons. First of all, it would better take into account that the city-region – and to an increasing extent the area covered by the wings - is becoming the daily urban system. It would thus better connect urban policy in this respect to the regional economic programmes that have been developed within the framework of Peaks in the Delta. Secondly, it would disentangle economic and social goals within the urban policy framework and would thus allow urban policy to go back to its original goals: solving social problems in certain neighbourhoods of cities.

Regional co-ordination

Four examples of sectors in the Randstad which might benefit from regional co-ordination, as their problems are susceptible to regionally based policy resolution, are described below. They are tourism, cultural, port and higher education activities.

Tourism

The last central government policy document on tourism dates from 2003 (called the Renewed Tourism Agenda). In this document foreign tourists are prioritised as they spend three times more than domestic tourists. Around 70% of foreign tourists visit the Randstad and the Dutch coast (EZ, 2003c). Another priority is increasing the number of international congresses in the Randstad, as they could create knowledge spillovers to other economic clusters in the Randstad.

Local governments are also active in implementing an agenda related to tourism. They have their own promotional activities and provide information to tourists about their city. There does not seem to be a lot of policy co-ordination between cities in the Randstad which seem to consider other cities in the Randstad more as competitors than as partners. There are not many arrangements offered by museums or other tourist sites that make it possible to use a ticket for one activity (*e.g.*, visiting a museum) in one city for similar activities in other cities. This does not help in trying to persuade tourists to stay longer in the Randstad as a whole. In addition, the sustainability of future tourist streams is an issue. It has been remarked that tourism is a positional good that tends to deteriorate its object (RMNO, 2006). That is: the more tourists there are in Amsterdam, the fewer tourists will enjoy visiting it partly because a huge inflow of tourists will decrease the charm of Amsterdam as a tourist attraction. This dynamic might become even more serious in the future when more tourists from all over the world, for example, from Asia will be able to afford holidays. In such a situation, it may be in the interests of Amsterdam to promote tourism in Utrecht or other cities, as it could lessen the tourist congestion in Amsterdam.

Regional co-ordination of cultural infrastructure

Within the cultural sector there is no co-ordination between the different cities in the Randstad. Competition, sometimes fierce, exists instead, especially when decisions have to be made as to where to locate certain national institutions, such as the national photography museum.

Regional and local governments fund a substantial portion of cultural expenditure. In particular they fund libraries, regional broadcasting and amateur arts. Culture that is considered to be of national importance is financed nationally. In part, this finance is provided by central government funds for culture (Culture Funds), but other finance is made available through the Culture Report. This is a mechanism where, every four years, a group of experts, the Culture Council, assesses the funding applications which cultural institutions have submitted to it and advises the Secretary of

State for Culture on whether to grant an application and if so the level of funding. The Secretary of State usually accepts their advice. This assessment is based on the merit, in a cultural context, of applications. Although one of its principles is that there has to be a geographical balance of cultural supply, it looks at this from a national perspective rather than how such a balance can be achieved within each region.

Neither the national government nor the Culture Council has been responsive to proposals that more regionally based decisions should be made about how to finance the cultural sector. In response to a plea by the provinces for regional involvement in disbursing the central government Culture Funds, the Culture Council, in 2003, advised the Secretary of State to conduct research into this option, but this was never undertaken. The Culture Council has also commented unfavourably on the suggestion that Culture Report funding could be transferred at least partially, to regional Culture Funds. It based its opposition on concerns that such a move would lead to smaller grants being made to less ambitious and interesting cultural projects, leading to a decline in the quality of the projects funded (*Raad voor Cultuur*, 2003).

Despite the concerns of the Culture Council, a case might be made for adopting a more regional approach to funding the cultural sector. The Association of Provinces, IPO, argues that the regional level is the appropriate level to make connections between culture policy and other policy issues, for example by supporting regional development integrating the creative and cultural sectors which could also be designed to ameliorate the urban environment (IPO, 2005). The Ministry of Education, Science and Culture has observed that developing a cultural policy without reference to other economic sectors and land use planning does not maximise the potential benefit to be drawn from cultural funding. It has highlighted the advantages to be gained from integrating cultural and economic objectives in particular regions, similarly with cultural and educational policies, culture and urban renewal programmes, renewal of the country side and land use planning policy (OCW, 2006c). An example of this approach is the urban renewal project in Barcelona that was tied to stimulating the creative industry and cultural sectors, as described in Box 2.6. On the regional level co-ordination and complementary specialisation throughout a given region could take place, avoiding duplication. The three northern provinces in the Netherlands have engaged in this kind of co-ordination to some extent, as well as the eastern provinces of Gelderland and Overijssel and to some extent it has also occurred within the southern province of North Brabant (IPO, 2005). However, in the Randstad such co-ordination is missing.

Although it has become clear that cultural facilities do not have a demonstrable effect on attracting creative talent (Van Aalst *et al.*, 2005),

many municipalities have, over recent years, created a cultural profile on the basis that they do (Marlet, 2004; Drenth *et al.,* 2002; Cachet *et al*., 2003). This policy development has been largely inspired by ideas about the link between a creative class and the creative city (Florida, 2002; Landry, 2000). Were these local developments to lead to the attraction of more foreign knowledge workers to the Netherlands, a net increase of talent could be the result. If, however, municipal cultural policy only results in creative people and firms being relocated within the Netherlands, then it is self defeating: local benefits may accrue but there are none from a regional and national perspective. When these kinds of policies are going to be introduced, co-ordination is required to ensure the desired results (Canoy *et al*., 2005).

Co-ordination of harbour activities

The growing trade flows from China will have a large impact on the harbour of Rotterdam. It will increase volumes of goods that are trans-shipped, but might also intensify competition between harbours for these new markets. Some observers think that the future challenge for the harbour of Rotterdam is the avoidance of congestion - and this is despite the projected additional capacity which will be generated by the second *Maasvlakte* (Roos, 2005). If this is likely to be the case, more co-ordination is called for.

The South Wing's regional economic policy predicts that the increasing trade flows from China require a clearer international economic profile for the harbour of Rotterdam. In line with this prediction, the South Wing is developing such a profile by co-ordinating the harbour authorities, the Ministry of Economic Affairs and representatives of private business and provincial governments (*Programmacommissie Zuidvleugel*, 2006). Although this is a good idea, attention should also be paid to improving the links between the ports of Rotterdam and Antwerp; and the ports of Rotterdam and Amsterdam.

Over recent years, the harbours of Rotterdam and Antwerp have grown increasingly interdependent and this trend is continuing. Many international transport companies offer free transport between the two ports to their customers. One third of the value added by the harbour of Antwerp flows to the Dutch economy (Nistal, 2004). International transport companies seem to pick an area (for example, the Hamburg-LeHavre range) before deciding on the exact harbour. As Hamburg was traditionally the Chinese harbour in Europe, co-ordinated action to attract more Chinese trade flows could benefit both Rotterdam and Antwerp. The increasing trade flows from Asia may contribute to changing the nature of the relationship between the two ports to a more co-operative one. The relationship between the ports of

Rotterdam and Amsterdam is a different one. Rotterdam is a port that offers a broad range of services, whereas the port of Amsterdam is more specialised in niche markets, such as cacao and coal.

Co-operation between the harbours will not, however, occur automatically. Dutch policy with regard to co-operation between harbours, is to devolve this to the harbours themselves: no role for the national government in fostering this exists (V&W, 2004a). However, harbours will tend to compete with each other since it is in their interests to do so, while it might not be in the interest of the region or the country (Barzdukas *et al*., 2000). In international comparisons of co-operation between harbours, it appears that bottom up co-operation between harbours rarely occurs. (De Langen *et al*., 2006). Grassroots-based co-operation between harbours in the same region or country is uncommon and virtually unheard of across national borders. A number of harbours are operationally very closely connected despite their location in different countries, due to cross border logistical chains and cross border deliveries. Nevertheless, the road and railway connections across national boundaries remain less than satisfactory as is, for example, the case for the ports of Zeeland (Netherlands) and Gent in Belgium (De Langen *et al*., 2006). The only successful example of close cross border co-operation between harbours is that between Copenhagen and Malmö. This co-operation was grass-roots driven due to a shared sense of urgency when a bridge over the Sund (which is the stretch of water separating the two countries) was being built which would take away the main source of income of both harbours, namely the ferry between Denmark and Sweden. This external factor created an incentive to co-operate and, crucially, regional political involvement and support were also available.

Although it is not impossible that co-operation between the ports of Rotterdam and Antwerp – or the ports of Rotterdam and Amsterdam - will occur at the instigation of the port authorities, it is unlikely. In the longer term, co-operation might be necessary to stimulate this, for example, by the creation of a regional planning authority that can come up with a vision that will benefit the whole region (Barzdukas, 2000). The programme that has been written up for the South Wing of the Randstad mentions that a feasibility study will be carried out on possible cooperation between the ports of Rotterdam and Antwerp (*Programmacommissie Zuidvleugel*, 2006).

Regional airports

Regional airports in the Randstad could help to accommodate the growth of Schiphol airport. It is estimated that with the current increase in flight movements, Schiphol airport will reach the limits of the maximum allowed noise level within a few years. At that point, a decision will need to be taken on whether the growth of Schiphol can be accommodated further.

This could in principle take place by making more use of the regional airports in the Randstad, in Lelystad (in the province of Flevoland) and Rotterdam. For the hub-function of Schiphol, it might be important to keep the transfer passengers at Schiphol. Other categories of passengers, such as those from charter flights might, however, make more use of the regional airports. The two regional airports that are mentioned above are currently not suited for accommodating the growth of Schiphol, as their landing strips are too short for large aeroplanes. The Ministry of Transport has asked Schiphol to come up with options to accommodate increases in future flight movements. It may not be in Schiphol airport's own interests to devise these, as they may want to keep all the airport operations concentrated at Schiphol. As the central government has the responsibility for making sure that the detrimental effects of economic activities are kept within certain boundaries, it may be up to the central government to ensure that using the regional airports to accommodate growth at Schiphol remains a viable option for the future.

Competition between universities in the region

Of the existing seven universities in the Randstad, six are publicly funded and the seventh relies entirely on private funds (the Nijenrode University in Breukelen). Two of these universities are specialist ones: Nijenrode in business administration and Delft in technical studies. The other five universities are general universities with a range of courses and research areas that range from quite to very broad.

The current system results in an overlap in the courses and research areas offered by the different universities. Such competition could in itself lead to better quality education and the fact that a relatively high number of Dutch universities appear in several international rankings, may support this proposition. However, in a knowledge economy it may be more important for a more limited number of universities to be amongst the best international players than for a greater number to achieve lesser rankings even if these are not much below the best. Only by having universities which rate as excellent when compared internationally will the most talented individuals be retained by or attracted to the Netherlands. Moreover, the simultaneous specialisation of publicly funded universities in research areas which can be very costly (such as life sciences) could lead to the sub-optimal use of public funds. Duplication of research efforts seems for example, to be taking place in life sciences, in which field at least four universities in the Netherlands (of which two are in the Randstad) are trying to become the leading one. On the other hand, the three technical universities in the Netherlands have decided to co-operate in order to create one specialist Dutch technical university so as to compete more effectively

on the international market. A similar approach might benefit the five general universities in the Randstad as well, following the example of the universities in the Øresund-region in Denmark and Sweden (See Box 2.8). Research shows that large universities do not provide better quality education and research than small ones and that there are no economies of scale for university education (Thissen and Ederveen, 2006), so the merger of universities in the Randstad might not create added value. Instead, increased specialisation by universities linked to better co-ordination between them as to which institution should specialise in the various research areas and which offer differing courses, could increase knowledge clusters and thus the quality of each university.

Box 2.8. **Øresund University**

The Øresund University is a trans-national consortium of 14 universities based in the Øresund region. It comprises broad universities, such as Lund University and Copenhagen University, as well as rather specialised universities, such as the Royal School of Library and Information Science and the Danish University of Pharmaceutical Sciences. Its goals are to be one of Europe's foremost centres for higher education, knowledge production and knowledge transfer, create a world leading science region and increase cross border integration. Øresund University has 140 000 students, 10 000 researchers, 8 Nobel Prize winners and is 5th in Europe for scientific output. There are several reasons for its cross border focus. The assumption is that the co-operating universities complement each other in some fields, such as nano science, provide critical mass in others, such as Asian studies and promote regional co-operation when it comes to fulfilling its aim of becoming a leading scientific region.

An additional argument in favour of making such a change in relation to the Randstad is that there, the distances between university cities are small, and so no reduction in the variety of courses within the region need occur. To start the process of change, the Minister of Education could request the five general universities to make detailed proposals as to how they could better co-ordinate the courses they currently offer. If the response to this request is unsatisfactory, the Ministry could make stricter use of one of the university funding mechanisms, the macro effectiveness test ("*macro doelmatigheids-toets*") which links accreditation of institutions to considerations of whether the use an institution makes of public funding, benefits or detracts from the effectiveness of the higher education system.

Box 2.9. Main recommendations on making better use of proximity

1. Improve accessibility within and to the Randstad:
   - Introduce road pricing in the Randstad as soon as possible and earlier than 2012.
   - Invest in frequent and high quality public transport on a Randstad-wide scale.
   - Increase the co-ordination of regional public transport systems.
   - Solve urgent road bottlenecks quickly.
   - Intensify integrated traffic management at the regional level.
2. Make better use of area-specific characteristics when it comes to locating housing and firms:
   - Use the Green Heart as an attractive housing location (and for recreation).
   - Further liberalise the housing market.
   - Increase housing stock in Amsterdam and Rotterdam for middle income groups.
   - Provide more regional diversity and quality in the choices available for firm locations.
3. Improve the co-ordination of the specialisations of cities in the Randstad:
   - Co-ordinate regional specialisation of higher education institutes, economic clusters and cultural institutes
   - Be more selective in regional economic policy and integrate the relevant parts of national urban policy into it.

2.2. Making better use of knowledge infrastructure and skills

2.2.1. Higher education

Two problems affecting higher education were observed in chapter 1: the relatively low proportion of persons with higher education and the quality of higher education (section 1.4.2) in the Netherlands. The first problem can be tackled by providing shorter educational courses and more choice of subjects, by increasing the number of secondary school students who go on to university and other higher education institutes and by matching the students and institutions better, for example by selection. The quality of higher education can also be influenced by tuition fee levels so that universities have more funds to invest in teaching and facilities (see

below), and the improved co-ordination of the universities in the Randstad (see paragraphs above).

Since the introduction of the bachelor-master structure, several universities, for example Delft University, have introduced honours programmes for the best students. These are intensive programmes in which additional credits can be obtained and for which students are selected. Another example is the University College Utrecht that offers a selective bachelor degree programme with intensive coaching. Such liberalisation of the higher education system will contribute to making more varied courses available to students and improve the quality of the degrees awarded (Onderwijsraad, 2005).

Universities currently have few opportunities to select their students. Some courses will accept only a limited number of students, but selection for these mainly takes place at the central government level. Universities have more freedom to select students that do not enter higher education via secondary education, but this is a relatively small group (only 10% of the total student population) (OCW, 2003). This does not mean that universities do not select. Where a faculty has too many applications for the number of places available, it may select the students it accepts. Selection also takes place for courses such as the one described above at University College Utrecht. Two universities, one of which is in Leiden, operate a system which means that they can insist that a student leaves the university after they have completed their first year of study if their performance is inadequate.

In the Netherlands, all full-time students aged under 30 pay a tuition fee, the amount of which is set by legislation. This is EUR 1 519 - for the year 2006/2007. A greater range of fees (between EUR 4 500 and EUR 9 000) applies to non-EU students. As they cannot vary their tuition fees, universities have to fund extra investments, which they consider necessary to ensure the education they provide is of the best possible quality, from their own revenues. In the Randstad some universities offer private courses which are not funded by the government. For these they charge fees through which they both fund the courses and raise money for the universities' general purposes. The highest tuition fee currently is EUR 32 500 per year, for example, for a Master of Business Telecommunications in Delft (IBO, 2003). There is only one private university, Nijenrode University. It offers an MBA for a tuition fee of EUR 23 000.

Pilots on variable fees and student selection

In 2003 the central government decided to engage in trials which permitted selected universities both to vary their tuition fees for selected courses undertaken and to select students for particular courses. The purpose

was to evaluate the effect of using these mechanisms on the quality of university education and on the uptake by school students of university places. The trials were able to take place using existing regulations and are based on central government policies modeled on the British Office for Fair Access (OFFA). The first round started in September 2005; the second round in September 2006. A final report is expected to appear in June 2007. Most of the trials related to the effect of student selection not the impact of fees on access (OCW, 2006a). The trials in the second round are to determine whether the quality of student outcomes from courses is improved by introducing honours programmes.

Additionally, two rounds of pilots of short-term programmes in higher education colleges will be run in 2006-2007 and 2007-2008. These programmes will be part of a college bachelor programme and be finalised with a new degree: the associate degree (OCW, 2006b). These trials are intended to measure the contribution of short programmes to increasing participation in higher education.

The central government has increased the opportunities for students to obtain loans by the introduction of the tuition credit. The amount of this loan depends on the tuition fee that the student has to pay. In addition the repayment system depends on the level of income that the student earns after completing their studies, with a view to reducing the reluctance of students to incur this debt (OCW, 2005). It was decided in 2006 that Dutch student loans can be used for studies both in the EU and throughout the world.

Assessment of the pilots

It may be asked what kind of information will be generated by the pilots mentioned above. These are not experiments of a strict scientific kind: no random control groups exist. On the contrary, the experiments have been promoted by the universities themselves and additional public funds are available to them if they run them. It is therefore questionable whether the pilots can be evaluated meaningfully; this implies that the experiments will obtain little additional information in addition to what is already known from the scientific literature about the effects of selection, of variation in tuition fees, market-based charging and of short courses.

However, the introduction of the pilots was a sensible idea. As the issues were politically sensitive, conducting experiments was probably one of the ways of creating the possibility of change in the practices in higher education. When the education field and political parties are used to the idea of selection and of varied tuition fees, they could be introduced throughout the university system. Although it might be useful to wait for the results of the pilots, it would be a pity if the momentum for reform at the beginning of

a new cabinet period was missed. A new cabinet has the opportunity to give universities more freedom to introduce selection and varied tuition fees.

The introduction of both variable tuition fees and of student selection by universities should be central to current higher education policy. Variable fees can be introduced in such a way that the accessibility to universities for students from low-income groups will not be endangered. This is because over recent years the opportunities for taking out student loans have increased and the repayment requirements are more flexible and depend on the income earned by a student after their studies are completed. The Dutch system is similar to the Australian one which made it possible to introduce different tuition fees for different courses without endangering accessibility by students from low income groups (Chapman and Ryan, 2002). Selection, too, should be introduced much more widely as universities should, in principle, be permitted to select their students so as to improve the quality of the education which they provide.

The Netherlands has relatively few technical and scientific graduates. This is not currently a problem as there are no indications of labour market shortages within the field of science and technical studies. Nevertheless, it has been perceived as a problem by the central government. In 2003 it put an action plan in place to increase the number of science and technical students (OCW, 2003b). Its main focus is on increasing supply by using financial incentives (lower tuition fees), increasing the attractiveness of technical studies and improving the retention rate of science and technical students. Evaluations have found that these policies to increase the supply of technical students in the Netherlands are not effective. It takes a long time before a science student is contributing to R&D activities. Moreover, only 40% of the technical students go on to work in R&D and, as the relevant labour market is global, there is a large "brain drain" effect (CPB, 2005).

2.2.2. Attracting knowledge workers

In chapter 1 it was observed that the Netherlands is not good at attracting foreign knowledge workers though over recent years, several steps have been taken to try to do this. In 2004 new regulations were introduced to facilitate the entry of such workers and a further step was taken in 2006 when a new labour migration system was announced. An outline of this system is given below.

Routes for knowledge workers to enter the Netherlands

The 2004 regulations for knowledge migrants aimed at simplifying their entry to the Netherlands. Their key element is that a knowledge migrant is

no longer obliged to obtain a work permit, only a residence one, reducing the administrative burden involved in migrating. In addition, such a migrant will be granted a residence permit for 5 years (the maximum allowed), unless their labour contract is for a shorter period, when their residence permit will match its length. This reduces the frequency with which the renewal of a residence permit must be sought by a knowledge migrant. The government aims to process a knowledge worker's migration application within two weeks. The regulations define a knowledge migrant as a migrant who comes to the Netherlands to work as an employee and who earns a gross income of at least EUR 45 000 (one and a half times the average income). For knowledge migrants under 30 the threshold is EUR 32 600. The income threshold does not apply when the person concerned is doing a PhD at a university, nor for post-doctoral researchers and university teachers under 30. Students and entrepreneurs are not considered to be knowledge migrants but after a foreign student has successfully completed their studies, they will have three months within which to find employment within the above-mentioned income thresholds (Justitie, 2004). In addition, the government has proposed reducing the time it takes to process the application of a migrant who wishes to enter the Netherlands to work for a non Dutch company from 10 months to two weeks (Justitie, 2006a).

The knowledge migrant regulations apply only to workers who are employees. But there are, of course, other groups which may be categorised as knowledge migrants, such as entrepreneurs, who wish to migrate to the Netherlands. The 2006 report "Towards a modern migration policy" issued by the Ministry of Justice proposes that migrant entrepreneurs are enabled to enter the Netherlands if they qualify under the report's proposed points system. This would make the current migration policy more selective but could also simplify and streamline it. The proposal would apply to all labour migrants who will not work as employees, but the report suggests that the points system initially applies only to entrepreneurs and is then gradually extended to other self-employed persons such as independent researchers or outstanding creative talents, (Justitie 2006b). Applicants under this regulation would be entitled to a two-year residence permit. Although the proposed new labour immigration system for the self-employed would be a step forward, there is no timetable for its introduction as yet. In any event it would only grant two-year permits and would be introduced gradually. The Netherlands needs to attract entrepreneurial and knowledge migrants - a difficult group to appeal to - but the new regulations and the additional proposals for doing this lack an effective strategy and an urgent timeframe.

Operation of the knowledge workers programme

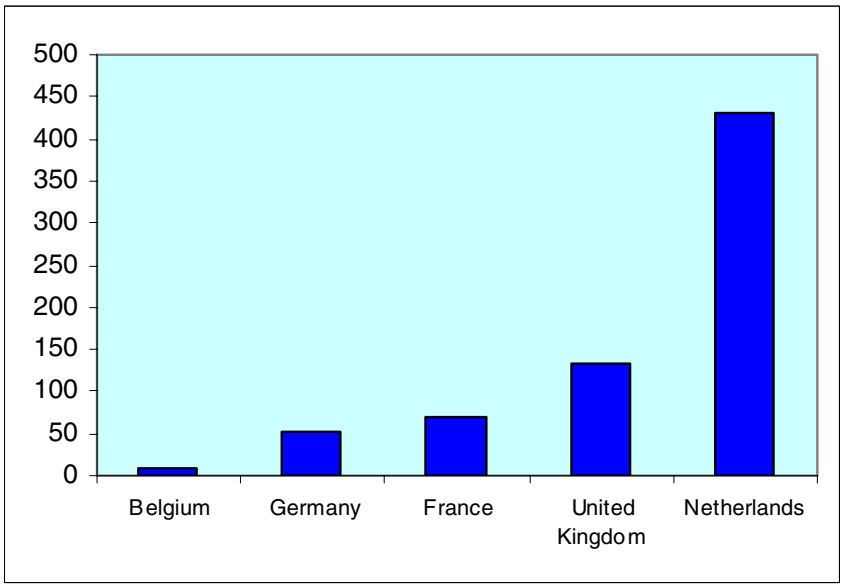
But other important limitations remain which hamper the effectiveness of the operation of the 2004 knowledge migrant regulations. They are not running smoothly (see below), fees are very high and the scope of the regulations' application is limited. The integration requirements (see below) and current negative attitudes towards immigration may also inhibit their success.

The administration of the new regulations has not gone according to plan as in only 8.3% of cases have the applications been processed within two weeks. Small enterprises consider the salary threshold problematic; it is too high for them to be able to make use of the programme. In addition, between the start of the programme and July 2005 (a period of nine months) 603 persons have received a residence permit as knowledge workers. By December 2005, this figure was 1 061 (Justitie, 2005). This figure is relatively small compared to the 5 000 knowledge migrants who were admitted in 2004 using the migration procedures in force before the 2004 changes (Doomernik, 2005) and many knowledge workers have continued to use these earlier migration procedures as they were not repealed.

The evaluation undertaken of the new knowledge migrant programme also indicates that it has enabled migrants to enter who are not genuine knowledge workers and who have not substantially contributed to the knowledge industry. Yet the programme does not seem to apply to all those who could contribute to the development of the economy such as transferees and entrepreneurs. It appears that 42% of the applications refer to management functions (IND, 2005): although this corresponds to the specialisation that the Netherlands, and the Randstad in particular, has when it comes to companies' headquarter functions, one might ask whether foreigners in management positions often provide many knowledge spillovers for the Randstad. Overall, the success of the regulations is in doubt.

Although fees have been lowered for those applying through the new programme, they are still very high in comparison with other countries (see Figure 2.1). The main principle of the fee system is that the tariffs imposed should cover the costs of the process of granting the residence permit. Since the permit in the new system is given for five years and does not have to be renewed every year, the costs which a knowledge migrant bears have been reduced to EUR 424 in comparison with the previous tariff of EUR 480 in 2004 (Justitie, 2004).

Figure 2.1. **Costs of work permits in selected OECD countries**



Source: Justitie, 2006, for the data on the Netherlands. *Innovatieplatform*, 2003, for the other countries.

Integration tests

Since March 2006, migrants are obliged to pass an integration examination in their country of origin at the Dutch embassy or consulate before they can enter the Netherlands. The examination tests knowledge of Dutch language and history. In addition, from January 2007, existing migrants in the Netherlands will be required to undertake an integration course, in which language skills and social and economic knowledge and an understanding of the legal system will be tested. Part of the examination will test a migrant's ability to deal with ordinary daily situations, but other aspects of it are extremely complex.[4] Despite its controversial nature, and questions as to whether it will assist in integrating migrants into Dutch society, the government is assuming that it will do so.

Knowledge migrants are initially exempted from the integration examination. But if they decide to stay in the Netherlands for longer than five years, those who are not from the EU and some other western countries, will have to acquire a residence permit and thus be required to pass the integration test. This could be an obstacle to their continued stay in the Netherlands, especially since the Netherlands is one of the few countries which has such an integration test and as the Dutch language is (unlike English) not widely spoken. Moreover, the heated debate on integration may

have reduced the traditional openness to, and tolerance of, migrants in the Randstad, decreasing its attractiveness to workers who, by virtue of their qualifications, have a choice of destinations open to them.

It is doubtful whether the best use is made of the foreign talent that is currently available in the Randstad. The opportunities open to foreign students to work in the Netherlands are limited when compared to other countries. The number of highly qualified refugees in the Netherlands is estimated at 30 000, 30% of whom are qualified in a scientific or technical area in their country of origin. Yet around a third of qualified refugees are unemployed and the rest work below their level of education (Regioplan, 2006). The Ministry of Social Affairs has asked the Social Economic Council (SER) for advice on how to take advantage of the skills of the foreign students who graduate in the Netherlands and of highly skilled refugees (SZW, 2006).

It follows therefore that, in addition to current policies to attract knowledge workers, several further steps should be taken. First of all, politicians have a responsibility to express clearly the need for knowledge migrants. Second, better use should be made of existing knowledge migrants, such as foreign students and highly qualified refugees. The latter group could benefit from additional language courses, an adequate procedure for recognising acquired competencies, work experience and short higher education courses. Third, a points system should be introduced more speedily so as to make it easier for knowledge workers who are not employees to enter for work purposes in the Netherlands. Fourth, the integration test should not be obligatory for former knowledge workers. Finally, the fees for work and residence permits should be substantially reduced to a level comparable to those of neighbouring countries.

2.2.3. Attracting foreign direct investment with knowledge spillovers

Many policies in the Netherlands have been directed towards attracting of foreign direct investment. The Ministry of Economic Affairs has an agency that tries to attract investments world wide, the Netherlands Foreign Investment Agency, which can point out to foreign companies the various policies that support foreign firms in the Netherlands. For example, FDI restrictions in the Netherlands are one of the lowest in the OECD, after the UK and Ireland. This includes few limits on foreign ownership, few restrictions on foreign personnel, operational freedom and few screening requirements (Maher and Wise, 2005). Foreign firms can make arrangements with tax authorities so that they know well in advance what their taxation liability will be. Another fiscal arrangement is the 35% rule which allows employers the opportunity to pay up to 35% of the income tax

liabilities of their fixed-term contract employees. The maximum period for which such payments can be made, is 10 years (Van Beers, 2003). In general however, the approach of the Netherlands has been to create an overall business environment that is attractive to both local and foreign firms (Hogenbirk and Narula, 2004).

Local governments in the Randstad also have policies to attract foreign investment. Both Amsterdam and Rotterdam have offices which seek to attract foreign investments and The Hague has an agency which it funds in co-operation with some smaller sized cities in its surroundings. The local business climate, location and accessibility are all important factors which they use to attract investment but the opportunities for offering local fiscal incentives are limited. Instead, local governments compete on land price.

These policies for attracting foreign firms have not, so far, generated many knowledge spillovers for the Netherlands. The majority of inward and outward FDI flows are characterised by low R&D/production ratios, which implies that the geographical position of the Netherlands does not attract the more high tech sectors. And even were the Randstad to attract more R&D firms, it has been remarked that spillovers do not take place automatically, but depend crucially on the ability and motivation of local firms to learn from foreign companies and to invest in new technology (Blomstrom and Kokko, 2003). FDI alone will not foster the inflow of technology nor promote innovative activities in the national economy; it must be accompanied by measures to facilitate the innovative capabilities of domestically owned companies (Sadowski and Van Beers, 2002). Other countries, such as Finland and Ireland, have paid far more attention to extracting knowledge spillovers from foreign direct investments (See Box 2.10).

Box 2.10. **Foreign direct investment and knowledge spillovers in Finland and Ireland**

Finland attracts less FDI than the Randstad, but the quality of this investment is higher. Finland has used its innovation policy to attract foreign direct investment and to affect the location decisions of foreign companies. National science and technology policies in Finland have concentrated on the creation of innovation centres and platforms for technology firms and this reinforces the effectiveness of national innovation policy as a whole (Van Beers, 2005). High technology firms invest in Finland and co-operate frequently with Finnish universities and R&D insititutes. Additionally, it is reported that foreign firms regularly have links down the supply chain to Finnish suppliers and co-operate over technological development with Finnish firms.

Box 2.10. **Foreign direct investment and knowledge spillovers in Finland and Ireland** (*Cont.*)

Ireland seems to have progressed in linking FDI to the local economy. Since the 1980s they have promoted relations between foreign companies and local service companies. Recently they developed a programme to upgrade the capabilities of existing foreign firms in Ireland by helping them with making investment plans to be submitted to the mother company (Wintjes, 2005).

Since 2006 a new impetus has been given to policies for attracting FDI. In devising such policies several developments are now taken into account, such as the increasing importance of new investment areas and the increased competition in attracting FDI. One of the consequences is that the NFIA office networks in China and India will be extended, that existing companies will be tied more closely to the region by better investor relations and that better co-ordination will take place between the different organisations that attract FDI.

A step in the right direction is the emphasis on attracting foreign companies that can add value to the Dutch economy. For this purpose pro-active targeting of foreign companies that specialise in key sectors and technologies is planned so as to persuade them to locate in the Netherlands. Attracting foreign R&D is part of this approach. The assumption in this policy is that there are foreign companies which could strengthen current economic clusters in the Netherlands. This approach is supposed to be linked to regional economic policy and innovation policy. Areas that are mentioned that might be suitable for this approach are: the creative industry, the sustainable energy sector, pharmaceuticals, nanotech, embedded systems, polymers, agro-food, logistics and financial services. A programme has been announced by the central government to develop a plan for developing investor interest. This will be done in co-operation with regional development agencies and will link existing foreign companies to local companies. This policy approach is a step in the right direction; increased selectivity as to the list of possible sectors targeted and making sure that these sectors correspond to regional priorities will thus become increasingly important.

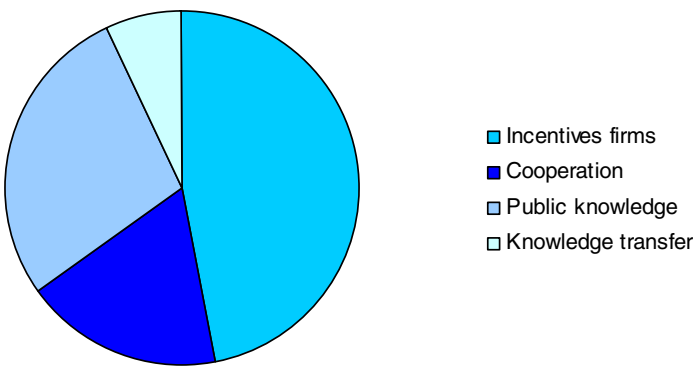
2.2.4. Innovation

Market failure may exist when it comes to promoting innovation in the economy but government policies with this objective can also prove problematic. They may, for example, crowd out market activities and thus

be of limited or even negative value. Moreover, a policy maker can lack the information to establish whether policies are being effective (Cornet and Van de Ven, 2004). This is currently the case in the Netherlands (IBO, 2003). Nevertheless, a preliminary assessment of the effect of Dutch innovation policy is set out below.

Innovation policy focuses largely on disbursing financial incentives for firms to innovate. This accounted for 47% of government funds for innovation in 2006 (see Figure 2.2). A substantial part of the budget goes to knowledge institutes but fewer funds are available to encourage co-operation between firms and knowledge institutes. The funds for knowledge transfer are relatively limited.

Figure 2.2. **Innovation budget, Ministry of Economic Affairs 2006**



Source: IBO, 2003

The Dutch advisory council on innovation policy (AWT, 2003) proposed that policy be directed at backing proven industry "winners". A relatively large part of the innovation budget (around 50%) has therefore been directed at specific enterprises which fit this category. This avoids the government risking its funds on trying to predict which new industries or firms will prove to be leaders in their field. The downside of this approach however, is that no new, young firms which innovate are supported, but rather established firms which have proved themselves to be successful in the past. Innovation policy can thus become too safe – and in fact not achieve its goal of stimulating new developments. An example of this "safe" approach is the Innovation Platform, created in 2003, with the Prime Minister as chairman and composed of representatives of government,

science and big corporations. The projects mentioned above which are supported within the framework of the region-focused economic approach for the wings of the Randstad strengthen this impression of playing it safe.

A more generic approach, leading to increased backing for genuine innovation appears a more appropriate policy approach, particularly as the earlier approach was incoherent and piecemeal. National government has announced a simplification of the specific instruments' approach. The key idea is to replace several subsidies to specific firms in the same sector by targeting public funds at the sector as a whole, for example, funds are now available for the water, horticultural and food, high technology and materials sectors. Although this is a real simplification, the question remains as to whether the programme promotes genuine innovation. More of these funds could be directed towards promising start ups. It also remains unclear how these policy mechanisms link the sectors chosen with those being promoted under the regionally based economic approach so as to avoid overlapping interventions.

Knowledge transfer

The public innovation infrastructure in the Randstad is good but private R&D expenditures are relatively low. Correcting for sector composition of the Randstad economy makes the picture more favourable with regard to private R&D investment but this still does not match that of the public sector. One of the main challenges is to improve the commercialisation of public knowledge. Greater knowledge transfer from public knowledge institutions to firms, especially SMEs, needs to take place. There are three elements to this: incentives for public institutes, assisting firms to expand their capacity to absorb such transfers and the connection between research agendas in the public and private sector.

The pay structure for researchers at universities (and the funding of university research) is dependent on their scientific publications. A culture of publish or perish. Not surprisingly, Dutch scientists score high on publication and citation indexes. However, universities in the Randstad do not encourage their staff to interact with the private sector. Adjusting pay and/or funding structures could provide suitable incentives to staff to do this. One way could be to give part of the financial benefits of patents or marketed inventions to the university scientist involved in any invention. Specific help could also be given to universities so that they can reap the commercial benefits of inventions (see, for example, the Technology Transfer Offices at US universities).

Other public institutions from whose knowledge capital private firms could benefit include the water boards. They possess knowledge and skills

that could be commercialised although currently the only the use of this which they can make is to export it by providing technical assistance to other countries. Dutch engineering firms interested in co-operating with the water boards so as to exploit and commercialise this knowledge have encountered several legal barriers. It is recommended that the relevant legal regulations are amended so that water boards can form partnerships with private enterprises.

Not all firms are capable of absorbing the knowledge which already exists in a particular domain. This is especially a problem for SMEs. Several government programmes are designed to solve this problem. There is a tax facility to stimulate research and development in firms, called WBSO (*Wet bevordering speur- en ontwikkelingswerk*). Part of the labour costs of R&D workers in a company can be deducted from the income taxes and social security premiums that firms have to pay. Adjustment of this facility in 2001 has created extra financial facilities for start-up firms. This adjustment has been successful: every euro of WBSO has led to between EUR 0.50 and EUR 0.80 of extra work in R&D (Cornet and Vroomen, 2005). In general, however, the facility has not been successful, since it subsidises firms without demanding an additional R&D effort with the result that the value added outcomes of the programme have been limited. The programme's focus could be improved by only providing subsidies for new R&D activities.

As has been noted in chapter 1, most private R&D activities are undertaken by large firms. These firms operate on a global level which is a scale that makes R&D investments more feasible, even if their benefits may be felt elsewhere than in the Netherlands Market mechanisms are less likely to promote R&D activities in SMEs than in large firms. For that reason the WBSO programme could usefully refine its focus further by limiting its application to SMEs. One of the initiatives to create links between SMEs and public knowledge institutes was the innovation voucher, introduced in 2004. The voucher has a value of EUR 7 500 - and can be spent at a public knowledge institute, such as universities, higher education institutes and the TNO (one of the semi-public knowledge institutes). The first evaluation results seem to be promising: eight of every ten vouchers resulted in a piece of research that would otherwise not have taken place. It remains too early to calculate the value added generated by the vouchers (Cornet *et al.*, 2005).

Regional governments also have a role to play when it comes to knowledge transfer. Provinces, such as the province of South Holland, have over recent years organised networks for several sectors in which academics, entrepreneurs and governments discuss proposals to improve conditions for knowledge transfer. Municipalities are also active in the field.

They can influence knowledge transfer for example, by the way they organise firm locations. The municipality of Leiden has used its land policy to build a cluster in bio science, in co-operation with the university (See Box 2.11). These kind of examples deserve wider imitation by local governments in the Randstad.

Box 2.11. **Life sciences cluster in Leiden**

The Leiden Bio Science Park is the biggest dedicated Bio Science Park in the Netherlands. It has a workforce of 5 000 people. The focus of the enterprises and institutions in the park is the prevention and cure of human diseases. The park features a complete bio science cluster. Research institutes of Leiden University, the Leiden University Medical Centre and the Netherlands Institute of Applied Technology contribute to the scientific basis of the park. The university and other educational facilities in the park provide a stream of well educated graduates at all levels. Forty enterprises in the park are part of the cluster, ranging from start ups to Centocor, the park's biggest company. Many of the start ups are spin offs of the university and focused at R&D activities and the development of new products, technologies and services. The National Museum of Natural History in the park informs the general public about bio science. In the very near future, the size of the park will be doubled and more facilities will be added.

Half of all 'dedicated' Dutch bio technology firms are located in Leiden. When the high tech employment in Leiden is combined with those of Delft and The Hague, this triangle appears to rank in fifth position in Europe, after South East England, Ile-de-France, Bayern and Hessen (KvK Rijnland, 2003).

The municipality of Leiden was one of the initiators of the Bio science park and the stimulation of the knowledge sector in Leiden is still high on its agenda. Key to the Bio science park is the selective use of land targeted at activities connected to Bio science.

It is very difficult to stimulate knowledge transfers if the research agendas of the public and private sectors are different. This is to a large extent the case in the Netherlands but overlaps do exist in several fields. One task of central government could be to try to bring these research agendas closer together. This could be done by giving greater weight to the interests of private enterprise when deciding on the funding of the public research agenda. Caution must however, be exercised in doing this as many of the knowledge transfers that lead to innovation are not primarily connected to knowledge institutes and firms in the same region, but to an international network of firms and universities. For most innovative firms connections to international knowledge networks are more important (Weterings *et al.*,

2006). Although encouraging the better application of public knowledge is important, the right balance has to be found between doing this and fostering fundamental research which is often the real driver of innovation.

Box 2.12. Main recommendations for making better use of knowledge in order to innovate

1. **Increase the level and quality of knowledge:**
   - Attract more foreign knowledge workers.
   - Attract more foreign direct investment that generates knowledge spill overs.
   - Provide freedom to higher education institutes to select students, provide short courses and vary tuition fees.
2. **Stimulate the use of knowledge by firms:**
   - Focus (regional) innovation policy on SMEs.
   - Stimulate regional governments to increase knowledge transfer.
   - Introduce more incentives for regional co-operation in the national funding system for public research.

2.3. Flexibility in the labour market

2.3.1. Employment protection

The difficult economic adjustment of recent years was caused by labour market rigidities, especially with respect to employment protection of regular contracts. In the Netherlands, firing employees is possible in two ways: via the Centre for Work and Income (CWI) and via the judicial system. The first route requires an application to the CWI for permission to dismiss the employee. The CWI bases its decision on whether the application meets the legal requirements for a valid dismissal. Dismissals are permitted when economic circumstances make reducing the labour force necessary. A dismissal for other reasons is possible if it can be argued that the person is unsuitable for their job. The CWI-route is mainly used for collective dismissals and by SMEs for individual cases. The second route is to seek the dissolution of the labour contract by a judge following which the company then pays compensation to the former employee. Large companies in particular use this route. The use of this method has increased over time to encompass half of the dismissal applications made.

Employee protection for those on regular (permanent) contracts is high because of the procedures involved and the fact that an employee remains in their employment until the procedure is completed. The CWI-route in particular has relatively strict criteria restricting dismissal and its procedures are slow: between 25% and 50% of the cases coming before it take more than six weeks to complete. The dismissal requirements create heavy administrative burdens for firms. Yet many cases are brought solely to ensure that the dismissed employee receives unemployment benefits rather than because the dismissal is contested by the employee: 80% of the judicial cases and 22% of the cases before the CWI are brought for this purpose (CPB, 2006a). Moreover, the Netherlands has the highest score (4) on the OECD index for employment protection procedures. Deelen (2006) has calculated that reduction of this index by 1 point would lead to a reduction in the unemployment rate of 0.4%. Accordingly, the central government has, in 2006, introduced a law to reduce the administrative burdens connected with employment protection.

However, employment protection is not only a heavy burden on firms because it is difficult to fire someone, but also because of the high compensation that employers have to pay to employees when they use the judicial route. It is recommended that this compensation is cut by changing the relevant legal regulations. Additionally, consideration could be given to limiting employment protection to certain specific groups. At the minimum, the current very good protection available to employees could be reduced.

2.3.2. Inactivity: ethnic minorities

It was mentioned in chapter 1 that the Netherlands scores worst of all OECD countries when it comes to the labour force participation of ethnic minorities. Several initiatives were taken between 1995 and 2001 which were successful in gradually reducing the unemployment rates of ethnic minorities during that period. However, the economic recession from 2002 has undone almost the entire reduction of the previous years (SCP, 2006a). This section evaluates the policies used to ameliorate this situation during the past few years and focuses on describing those which appear most successful in doing this In addition to that the focus will be on the relationship between the segregation which exists between ethnic minorities and the native born population in terms of their living accommodation and schooling and how this affects the integration of ethnic minorities into Dutch society.

Policies focused on labour market integration of ethnic minorities

The low labour market participation of ethnic minorities is caused by their low educational level, insufficient Dutch language skills, high drop out rates in vocational education, the ineffectiveness of the labour market services they have access to and the negative images held of them by employers (Klaver *et al.*, 2005). Policies have been developed over recent years to try to resolve all these issues. What is striking is the sheer number of programmes, agreements and projects with firms and other organisations which have been sponsored by government at all levels (SZW, 2005). It is possible that there have been too many initiatives undertaken, which may have made it more difficult to see the connections between different problems and to find coherent solutions.

Experimental evaluations of the programmes pursued have not taken place and it is therefore difficult to assess which ones have been effective. Nevertheless, other sorts of evaluations indicate that many of the programmes where employers participated in some way have contributed to improving the labour market position of their participants (Klaver *et al.,* 2005). Examples include the agreement between the Ministry of Social Affairs and the Association of SMEs to employ those with ethnic minority backgrounds and the Youth Employment Taskforce that encourages employers to make vacancies available for young people. But on the whole, the labour market position of ethnic minorities remains weak.

Labour market integration and spatial segregation

There is a certain degree of segregation between the native born and those from ethnic minorities, in terms of the areas where they live, especially in the four large cities. One obvious consequence of such segregation is that the education system has also become increasingly segregated.

Residential segregation of ethnic minorities appears to have only a limited effect on their integration into the labour market. It does, however, decrease the opportunities for ethnic minorities and the native born to meet. It also influences cultural values and Dutch language skills. In so far as residential segregation does affect labour market opportunities, this appears to affect those with a better education more severely than low-skilled workers. There might therefore be a case for increasing the housing choices of the middle-class ethnic minorities, but this might not be politically achievable, particularly as most ethnic minorities whatever their earning potential, wish to move out of the segregated areas in the large cities. But any strategy to integrate ethnic minorities into a wider variety of residential settings requires a more diverse housing supply in the large cities and more

housing opportunities for those on low incomes in neighbouring municipalities. There is a certain neighborhood effect, but this effect is not very large (Laan Bouma-Doff, 2005) and it appears to be stronger for ethnic minorities with good employment opportunities. Enabling those from ethnic minorities whose employment prospects are limited to move out of segregated areas in cities is therefore no panacea when it comes to strengthening integration. More employment gains are to be expected from enabling well educated ethnic minorities to move away from currently segregated areas by increasing the housing choices of the ethnic minority middle classes. Dismantling segregation could of course be a goal in itself. Ethnic minorities do not appear to live in the same areas voluntarily: they have a great desire to move into other areas.

Labour market integration and segregation in education

As a consequence of the spatial segregation in the four large cities, there is also segregation in the educational system. This is most evident in primary and secondary education, where some schools have a very strong majority of ethnic minority pupils. As for the other forms of education, ethnic minorities students are overrepresented in vocational education and underrepresented in tertiary education.

Research has indicated that schools where most students are from ethnic minorities (ethnic minority schools) are able to improve the Dutch language skills of ethnic minority children so that they achieve the level of the native born population. This might be because their schools are relatively better funded due to the school funding system which provides schools with a fixed sum for each pupil, but with more funding for pupils with poorly educated parents, such as predominate amongst ethnic minorities. It has been found that the quality of the education provided and outcomes achieved in predominantly ethnic minority dominated schools is generally better than in schools which are ethnically mixed (Gramberg, 2000). That does not mean that there are no problems. It is difficult for ethnic minority schools to find teachers as they consider ethnic minority schools difficult places to work. Moreover, there are few teachers with the same background as their pupils and as schools do not have much freedom to vary teacher's pay, ethnic minority schools cannot offer better pay to attract teachers. Payment of higher wages to teachers in deprived neighbourhoods in the large cities in the Randstad should be permitted, to attract more and better quality teachers to such schools in order to improve the educational opportunities for ethnic minorities students.

A more subtle form of segregation takes place via the religious schools. Since religious schools can refuse pupils if they feel that they would not correspond to the religious character of the school, many parents of white

children use religious schools to avoid placing their children in public schools, with the result that public schools become increasingly dominated by ethnic minorities.

The language capacities of ethnic minority children are worse than those of native Dutch children before they go to school, leading them to start their educational career from a disadvantaged position. For this reason central government has, over recent years, invested in pre-school education. Although there has not been an evaluation yet on how this has worked, international experiences show promising results (Currie, 2000).

Since the majority of minority children end up in vocational education, drop out rates in vocational education clearly have a disproportionate adverse effect on ethnic minority students Reducing drop out rates could therefore improve their labour market prospects. The underrepresentation of ethnic minorities in higher education has decreased over the last decade. This trend will continue if policy challenges in primary and secondary education are tackled more effectively. Together with business, vocational education institutions should create more flexible programmes combining studying and work/work experience.

2.3.3. Working hours

The number of hours worked per employee in the Netherlands is the lowest in the OECD. This is caused by the high incidence of part-time work, especially among women. The typical employment pattern of a household with children is that the woman works a bit more than half-time, whereas the man almost always has a full time job (the one and a half-earner model). The standard workweek in the Netherlands is not exceptionally low.

If the volume of hours worked is considered to be too low, a possible way ahead could be to try to increase the amount of hours that women work. However, as was illustrated in the previous section, greater priority for assistance with entering the labour market should probably be given to groups of inactive people, such as ethnic minorities who rely whilst unemployed on publicly funded social assistance benefits. Nor does the ageing of Dutch society appear to provide a convincing argument to have as a policy goal increasing the working hours of women.

The goal of Dutch policy in this field has been to provide facilities, such as after school facilities that make the combination of having children and work possible. Over the last few decades an increase in and improvement of childcare facilities has taken place, as well as an increase of the maternity and parental leaves available to employees. A new Child Care Act was introduced in 2006, under which funding for childcare is now shared by

government, employer and employee. Evaluation shows that use of childcare facilities has not increased since the new law, confirming that there are sufficient facilities for a reasonable price (SCP, 2006b).

Box 2.13. **Main recommendations for making better use of the labour force**

- Increase labour market flexibility.
- Pay higher wages to teachers in deprived neighbourhoods in the large cities in the Randstad, so that education for students from ethnic minorities is improved.
- Create more flexible learning arrangements by increased co-operation between vocational education institutes and firms in the region.

NOTES

1. Northern Netherlands consists of three provinces: Groningen, Friesland and Drenthe.
2. In addition to these there are national innovation programmes on several themes, such as water, flowers & food and high technology systems & materials. These programmes will be looked at in the section on innovation policy in the Netherlands.
3. On average only a third of the cities has made explicit attempts to achieve quantitative and output-oriented project management (Ecorys, 2005). This may have a connection with the failure to achieve a substantial minority of the agreed targets.
4. One of the requirements is knowledge of the economic characteristics of different regions and "the importance of the Randstad" (ICE/CITO, 2006).

Chapter 3

Governance in the Randstad

Introduction

The economic performance of the Randstad can be enhanced by improving public policies and public governance. Possible improvements in public policies have been examined in chapter 2. This chapter will analyse the current governance structure in the Randstad, evaluate its effectiveness and recommend improvements. Good governance is important for economic competitiveness as it determines to what extent public goods and services are provided effectively. Metropolitan governance is a challenge in many OECD countries. The polycentricity of the Randstad makes good governance an even bigger challenge, but current political discussions provide a window of opportunity for governance reform.

The key question is the nature of the changes in governance arrangements needed to improve competitiveness of the Randstad. To answer this, the first section of this chapter provides a description of the formal government system in the Randstad. As there are many informal methods of co-operation within local and regional governments, an exclusive focus on the formal institutions in the Randstad will not give a complete picture. It is, in addition, essential to understand the co-operative arrangements between the same levels of governments (horizontal co-operation) in the Randstad as they play an important role. They will be covered in the second section. After this desription of the government actors in the Randstad, the focus (in sections three and four) will be on the role they play within the three policy areas that were identified in Chapters 1 and 2. That is, which institutions are active in trying to resolve the main obstacles to improving the competitiveness of the Randstad and which levels of

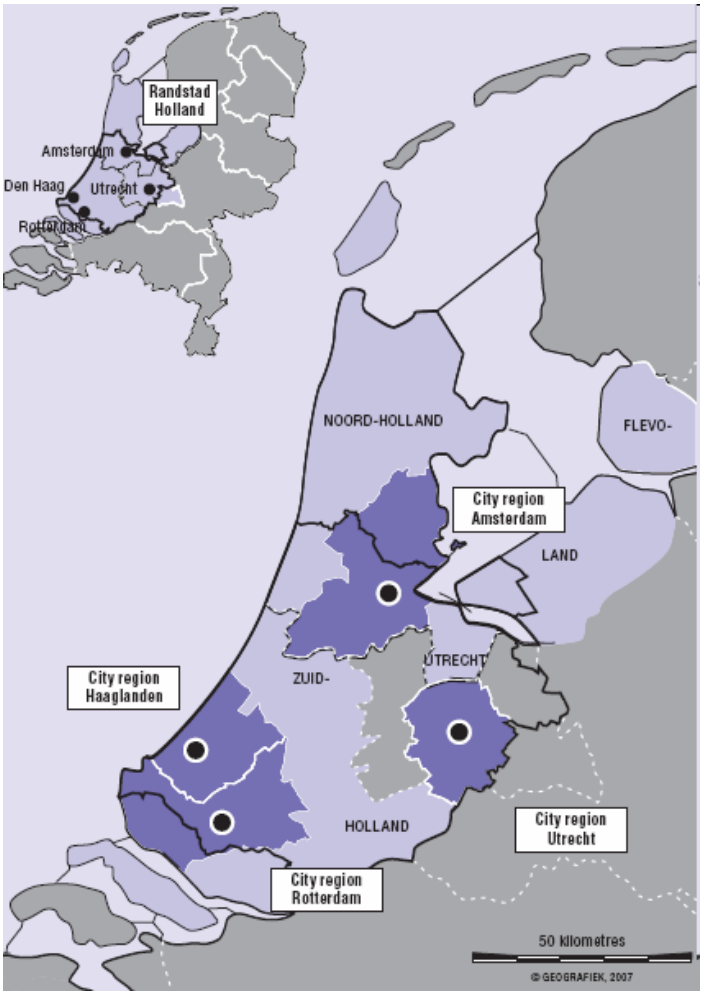
government perform the different tasks which need to be undertaken to better utilise proximity, knowledge and labour. But government does not provide the only actors in the Randstad governance system; several in civil society and the political sphere also play an important role; they are analysed in section five. This interplay of public and private actors creates the need to choose between conflicting options as different aims are pursued by the different players. Not all of these can be realised simultaneously; instead achieving one goal may come at the expense of another; decisions about priorities have to be taken and reaching these creates governance dilemmas. These are analysed as they occur in the Randstad in section six which also illustrates how history and tradition have led to certain trade offs between conflicting goals that are not necessarily the most appropriate ones to have been made.

3.1. Government structure of the Randstad

To understand the government structure of the Randstad that of the Netherlands as a whole must be described. This section therefore examines the different levels of government throughout the country, their functions and their degree of autonomy, as well as the ongoing decentralisation [1] being implemented by the various governance levels and institutions. At the same time it explains how the Randstad fits into this governance structure. An overview of past and present proposals to reform the governance system is then presented in order to provide a context for the current reform debate.

The Netherlands is a unitary state with three tiers of government, central, provincial and municipal, which have been in place since 1848 with direct elections taking place for all three tiers. There are currently 12 provinces and 458 municipalities. As mentioned before, the Randstad is a polycentric metropolitan area with several interconnected urban centres, but with no single city being dominant. It has no official boundaries, but within its unofficial ones there are 147 municipalities. It also lies within four provinces but does not cover the entire area of any of them. It is significant that the Randstad has, therefore, no unitary governance structure within the three-tier governance system.

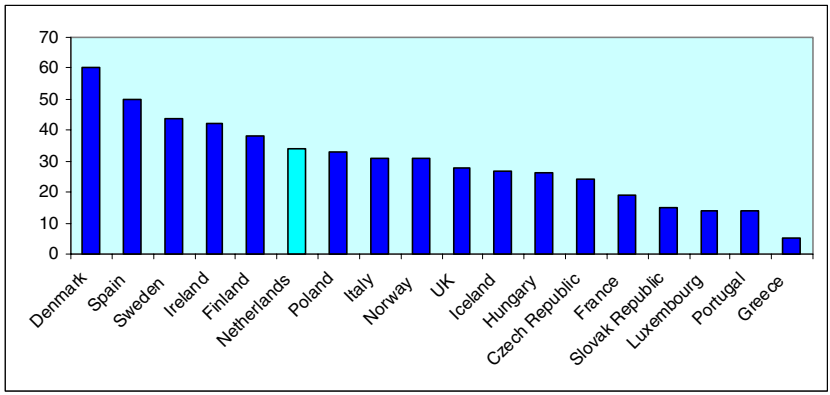
Figure 3.1. **The Randstad and its four provinces, four city-regions and four large cities**



Source: Figure provided by Regio Randstad.

The responsibilities of the sub-national levels of governments are heavy in the Netherlands when viewed from an international perspective. This can be seen from a comparison of sub-national expenditures as a proportion of total government spending of unitary states in the OECD (see Figure 3.2). Sub-national expenditures make up more than 30% of total government expenditures in the Netherlands which is relatively high when compared to many other OECD countries.

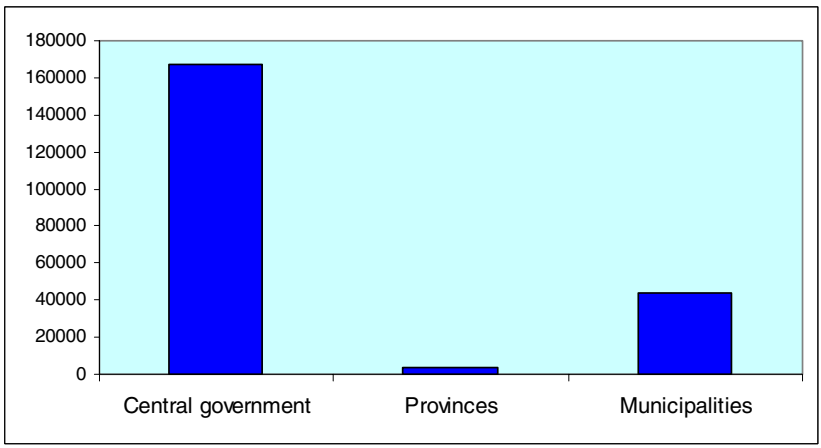
Figure 3.2. **Sub-national expenditures as percentage of total government spending (2003)**



Source: OECD Revenue Statistics Database 2006.

The responsibilities of the municipalities are more substantial than those of the provinces. The latter mainly have responsibility for land use planning and physical infrastructure such as planning, building and operating regional roads, whereas the responsibilities of the municipalities are much broader (see paragraph 8). The more dominant position of the municipalities is confirmed when the expenditures of central, provincial and municipal government are compared (see Figure 3.3).

Figure 3.3. **Expenditures of central government, provinces and municipalities (in million euros 2004)**



Source: Ministry of the Interior, 2006.

Provinces co-ordinate some public policies (planning, transport, culture, social affairs). They also have legal control over the municipalities (notably in the domain of planning where they approve the municipal land use plan) and over water boards (which are a third tier of government entirely separate from the municipalities, see paragraph 15), and they maintain some operating responsibilities for a few policy sectors like the management of the road system. In addition, the provinces correspond with the territorial level of deconcentration[2] of some ministries such as those for administering public works, water management and agriculture.

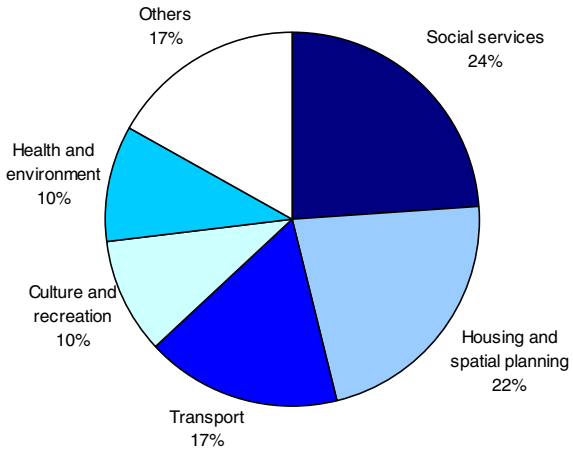
Box 3.1. **Provinces and municipalities in the Netherlands**

Provinces, of which there are 12**,** are the second level of government. The Randstad itself is situated in four provinces, although it does not cover the whole area of any of them. Flevoland, the smallest province, has 356 000 inhabitants, North Holland 2.6 million, the province of Utrecht about 1.2 million and the largest province, South Holland, over 3.4 million. Each province is administered by a council, which is directly elected by the provincial population for a four-year term using a system of proportional representation. It is the deliberative body of the province. It is chaired by a commissioner, appointed by the Crown (in practice the central government) on the recommendation of the provincial council, for a period of six years. The council also appoints the executive board (between three and nine persons) which is chaired by the commissioner.

There are 458 ***municipalities*** in the Netherlands and 147 in the Randstad. Their population ranges from about 5 000 people (Bennebroek) to more than 740 000 people in Amsterdam. The four largest cities (G4) are Amsterdam (744 000), Rotterdam (600 000), The Hague (464 000) and Utrecht (265 000). Each municipality is administered by a council directly elected by the municipal population for a four-year mandate using a system of proportional representation. The municipal council is the deliberative body of the municipality. It is chaired by the mayor, who is appointed by the central government on the recommendation of the municipal council for a period of six years. The municipal council appoints an executive board composed of aldermen. It is usually composed of two to eight members in addition to the mayor, depending on the size of the municipality.

Municipalities are responsible for a wide range of policy sectors like roads, public transport, housing, local planning, environment, social affairs, economic development, education, health care, etc. Most of the civil servants in municipalities work in the areas of social services, housing and spatial planning and transport. Figure 3.4 gives an indication of the variety of municipal tasks.

Figure 3.4. **Domains in which municipal civil servants are working (2002)**



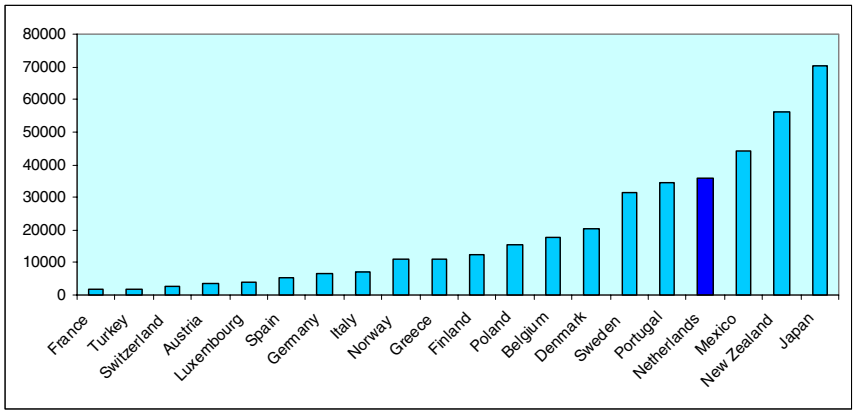
Source: Huijben et al, 2002.

The municipalities share many of their responsibilities with central government, but they are relatively independent. The central government is omnipresent in policy making and, because it establishes the general framework, rules and norms that local authorities must follow, monitors most policy implementation and controls the funding for most policy sectors. And in performing some of its functions, a municipality acts only as an agent for central government. In general, however, municipal council executive boards operate relatively autonomously. If autonomous decisions are defined as those taken at the board's own initiative, independently and with substantial policy freedom, more than half of the decisions taken by municipalities are autonomous (Fleurke & Willemse, 2006). Thus municipalities have not turned into branches of central government, merely implementing its policies (Fleurke, 2004); co-governance or co-administration (*Medebewind* in Dutch) is the rule.

Municipalities are relatively large and have considerable numbers of staff. The population size of the average municipality in the Netherlands is relatively large when compared to other OECD countries (see Figure 3.5), but there is a considerable number of small municipalities. Around 15% of municipalities have less than 10 000 inhabitants. As the average number of municipal staff varies from three to eight employees per 1 000 inhabitants, some of the small municipalities only have a few municipal workers (Huijben, 2002). This situation is different for large cities. They have disproportionately more staff than small municipalities. The municipality of Amsterdam, for

example, has around 18 500 civil servants (PWC, 2005). The majority of them are engaged in providing public services rather than making policy.

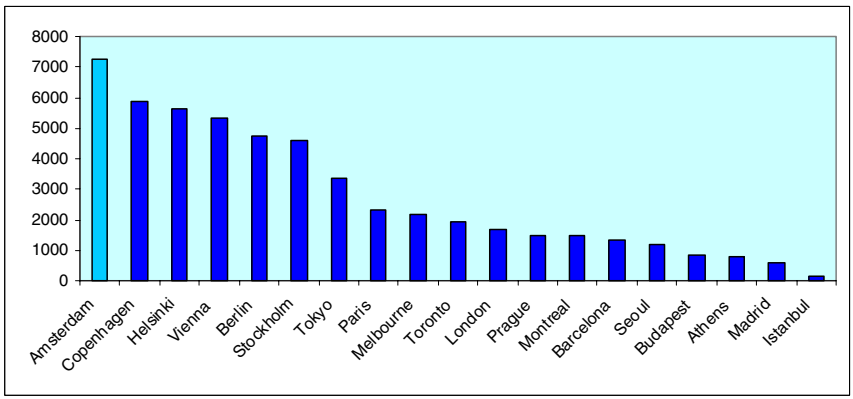
Figure 3.5. **Average number of people per municipality in OECD countries (2006)**



Source: OECD database, 2006.

The importance of the large cities in the Randstad, such as Amsterdam, is confirmed by international comparisons. Although it is always difficult to compare the responsibilities and position of cities internationally, an indicator of relative strength may be their expenditures per capita. When the expenditures of selected OECD metropolitan areas are compared, it appears that Amsterdam ranks first (OECD, 2006) (see Figure 3.6).

Figure 3.6. **Expenditure per capita for selected OECD cities (in euros 2003)**

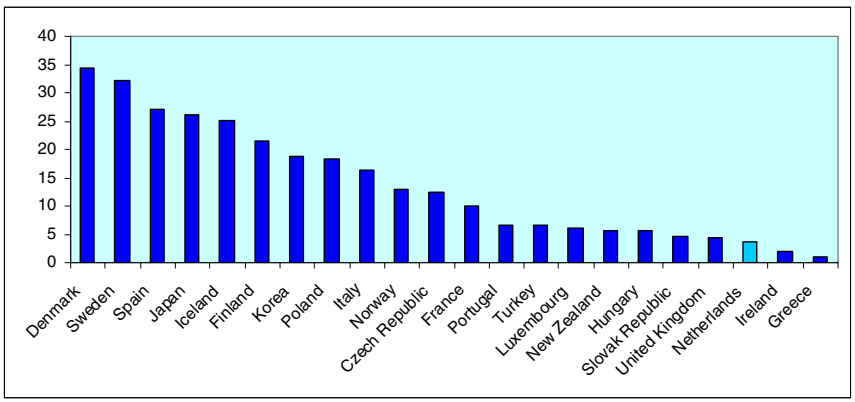


Source: OECD, 2006c.

Fiscal autonomy: how do Dutch municipalities fare?

Despite their broad responsibilities, Dutch municipalities have limited opportunities to impose local taxes. A relatively small proportion of municipal revenues are raised by local taxes. In 2004, this percentage was on average 5% (see Figure 3.7). As part of the municipal property tax was abolished in 2006, the proportion is currently even smaller. That is much lower than the average for OECD countries. The Dutch system of governance seems to place considerable emphasis on regional equity; the limited share that local tax revenues play in total expenditure has been seen as a guarantee that differences in local services between regions do not become too large; resources provided by central government grants ensure that the different local governments are able to offer similar levels of public service.

Figure 3.7. **Sub-national tax revenues as share of total sub-national revenues (2003)**



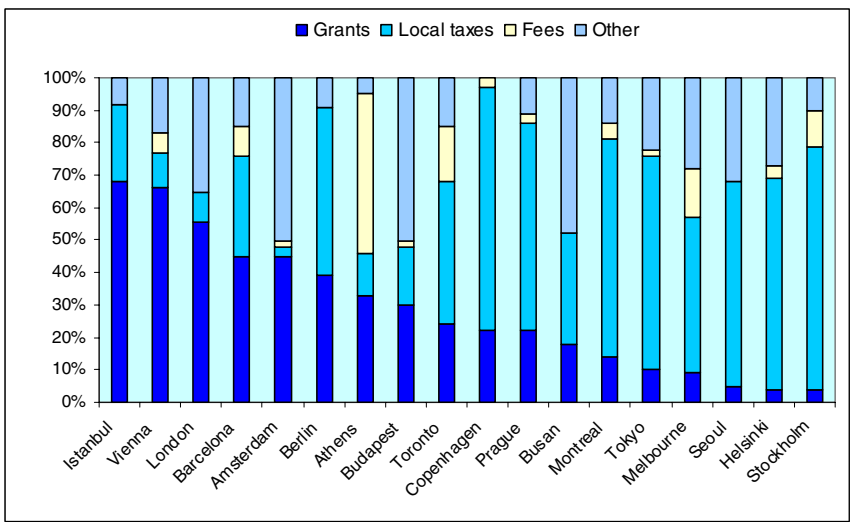
Source: OECD Revenue Statistics Database, 2006.

Municipalities are, however, fiscally more autonomous than the limited proportion of their revenues raised by local taxation suggests. In countries where a large proportion of local tax revenues are raised by local taxation, for example in many Scandinavian countries, extensive equalisation systems are needed to correct for the differences in local tax bases. As a general principle, local autonomy of municipalities does not depend on whether most of its expenditures are paid for by local taxes or a general grant from central government. Local autonomy is, in fact, guaranteed by the existence of municipalities' ability to use local taxation at the margins to respond to local preferences, either by reducing taxation or by providing more local services. The introduction in the Netherlands in the 2006, of limits to local tax rate increases (common practice in many OECD countries) reduced local

fiscal autonomy. On the other hand, when compared to other OECD countries, Dutch municipalities have an average share of general grants, which could be regarded as indicative of autonomy in decision making.

Limited revenues from local taxes may, however, lead cities to develop revenue sources that hinder regional co-operation, such as land lease. It is difficult to establish whether the fiscal autonomy of the municipalities in the Randstad is sufficient for the challenges they face. As can be seen from a comparison of several OECD cities, Amsterdam has a very high share of revenues from sources other than grants, local taxes and fees (see Figure 3.8). This might indicate that it has enough alternative resources, and so does not need more fiscal autonomy to increase local taxes. Alternatively, it may mean that it has had to find ways of raising revenue to assist its development which hinder wider co-operation within the Randstad. This latter hypothesis appears to be correct as land lease is the largest form of own-source revenues in Amsterdam. As a consequence, Amsterdam is reluctant to see new offices, industrial premises, retail construction and even housing go beyond its borders or to co-operate with nearby municipalities which wish to foster similar developments, if there is a chance that new construction can be contained within or attracted into their own jurisdiction (Kantor, 2006).

Figure 3.8. **Municipal revenue sources of selected OECD cities**



Source: OECD, 2006c.

Water boards and local central government agencies: another tier

In a country where half of the surface is located below sea level and which is the delta of many rivers, controlling the water level is a vital function. This task has been taken care of by the water boards since the Middle Ages. Water boards are local, independent public authorities, democratically elected, and are thus similar to the provinces and municipalities. They are in charge of flood control, water quantity and quality and the treatment of waste water. There has been substantial merging of these authorities over recent decades with 26 existing currently, 11 being in the Randstad area. They range in surface area from 410 km² to 2 000 km². Their borders are determined by the direction of water streams (delineated by either dykes or rivers). This means that their boundaries do not necessarily match the administrative boundaries of provincial or municipal governments, but in practice intersect with them. Water boards can levy two taxes to fund their responsibilities: a water board charge and a pollution levy. They are run by a board (for a four-year term), half of whose members are elected by the local population and the other half of which is appointed by the local chambers of commerce, farmers associations, environmental groups and housing corporations. The president of the board is appointed by the central government. As from 2008, most of the board will be directly elected.

The management of many central government functions is also deconcentrated to geographical areas that coincide with neither municipal nor provincial boundaries. These include, for example, the 25 police areas, the 35 transport and traffic areas, the 40 regional health authorities and the 130 regional labour market offices that form part of the national labour market authority, the CWI. In these fields, standards are set by central government but the service is delivered by its local agency and under its direct control. It is not part of the other two tiers of government. These delegated functions are therefore described as deconcentrated rather than decentralisated.

On-going decentralisation: more powers and responsibilities for municipalities

During recent years considerable decentralisation - the transfer of powers and responsibilities to lower tiers of government (see note 1) - has taken place, mostly to municipalities. Responsibility for maintaining school buildings was delegated to municipalities in 1999. Since 2002, the new spatial policy has paved the way for more decentralisation in spatial planning. In 2005, the responsibility (and financial risk) of providing social assistance for the unemployed was transferred to municipalities, together

with a budgetary allowance set by the central government. Municipalities have received other added responsibilities from central government in a variety of fields, including the environment, social services, and law and order.

The three-tier system: a structure largely unchanged since 1848

Despite some small changes, the traditional three-tier system has undergone remarkably few changes since 1848, with several attempts to reform the system having failed over recent decades. The number of provinces and municipalities has changed, but the governance framework has remained the same, although in a few large municipalities a fourth tier of government, the municipal district, has been added.

Municipal districts

Both Amsterdam and Rotterdam have directly elected municipal districts. *Amsterdam* has 14 municipal districts, each with its own elected council, from which an executive body, comprising a chair and local aldermen is chosen (this is similar to the municipal council system described in Box 3.1, except that the chair of the district municipality is appointed by the municipal council/board). The municipal authorities have delegated tasks and powers in many areas to the municipal districts, which have a budget and their own staff to carry these out. *Rotterdam* has 11 municipal districts, which also have their own elected councils responsible for appointing a chair and local aldermen. *The Hague* and *Utrecht* are also divided into municipal districts (eight and 10 respectively), but they do not have their own elections. Instead, for each municipal district a committee is formed from the municipal council. This committee has the task of identifying relevant local issues of importance, such as development bottlenecks in the municipal district, and bringing them to the attention of the municipal council. Within the municipal council, individual aldermen give special attention to one or more municipal districts.

Box 3.2. **Brief history of municipal districts in Amsterdam**

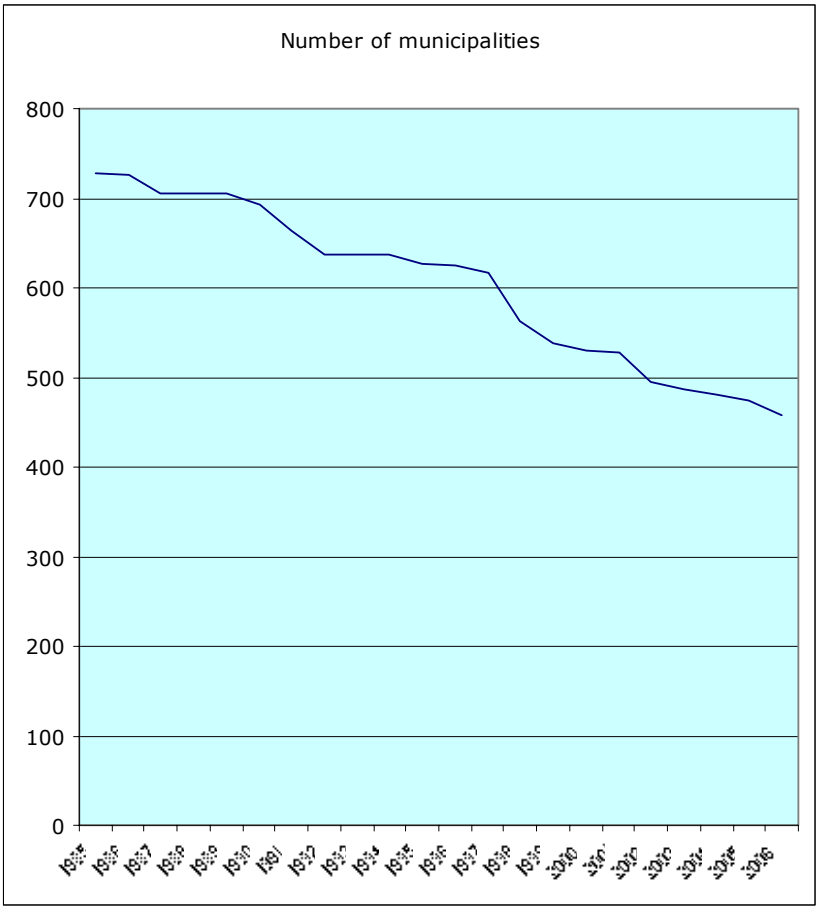
The introduction of municipal districts in Amsterdam started in 1981 with an experiment involving the introduction of two districts. Four districts were added in 1987 and 10 more in 1990, so that there were 16 in all. After an evaluation in 1997, the number of districts was reduced from 16 to 13 in 1998. In 2002, the centre of Amsterdam, which until then had been under the direct control of the municipal board of Amsterdam, became a municipal district. Amsterdam currently has 14 municipal districts.

The tasks and responsibilities of a municipal district are comparable to those of a municipality of a similar size. The municipal council can however annul decisions of a municipal district and resume certain responsibilities when this would be in the interest of the municipality as a whole. Municipal districts in Amsterdam are responsible for building and maintaining public housing, maintaining public spaces, for providing most of the municipal services to their inhabitants and for several tasks within the fields of welfare, sports, education and culture. Municipal districts have considerable staff and budgets: 32% of the staff of the municipality of Amsterdam works in the municipal districts (PWC, 2005) and around 45% of the budget of the municipality of Amsterdam is devolved to the municipal districts (Hiemstra and Overeem, 2005). Part of this is provided as a general grant from the budget of the municipality of Amsterdam; part of it is made up of the specific grants that the municipality of Amsterdam receives from various ministries. Municipal districts also have their own sources of income, such as being able to charge a fee for garbage collection. In both Amsterdam and Rotterdam the general grant that municipal districts receive from the central municipality is similar to the general grant that municipalities get from the central government: they both have global objective criteria that try to correct for differences in costs between localities and that cannot be influenced by the district (Cebeon, 2002; Raad voor de Stadsdeelfinanciën, 2004).

Changes in number of provinces and municipalities

Over the last several decades the number of municipalities has been drastically reduced, whereas the number of provinces has been more or less stable. The number of municipalities in 1850 was 1 350; the number of provinces 11. Considerable municipal amalgamation has reduced the number of municipalities to the current 458. During recent decades, this has been a gradual but continuous process (see Figure 3.9). In contrast, the number of provinces has been stable for many decades; the only change has been the addition of Flevoland in 1986 as the 12th province. As this consisted of newly created land, the boundaries of the other provinces were left unchanged by its creation.

Figure 3.9: **Number of municipalities 1985-2006**



Source: Data provided by the Ministry of the Interior

Failed reform proposals

Since the 1960s, the three-tier government system has regularly been under discussion. Several reforms have been proposed by successive central governments to this governance structure, such as adding the region as a tier, scaling down the geographical size of the provinces and creating city-provinces. All such proposals were concerned with improving government at the regional level. In the early 1970s, the creation of 44 regions was proposed, in addition to the existing three tiers. Between 1975 and 1983, proposals were discussed for increasing the number of provinces to 26, then 24 and finally to 17. In the 1990s, the focus shifted from scaling down the provinces to increasing the role of the large cities by

creating 7 city-provinces in addition to the existing provinces (Boogers & Hendriks, 2005). These urban provinces were to take over the service and planning functions of the major Dutch cities. Functions and financing would have remained the same; but the integration of policy development would have been improved. This reform was primarily focused on Amsterdam and Rotterdam. The goal was to create a Greater Amsterdam and a Greater Rotterdam, so as to merge the surrounding municipalities into the municipalities of Amsterdam and Rotterdam respectively. This was proposed because many inhabitants of the municipalities surrounding one or other of these cities work in the city itself and make use of its facilities, whilst living in the neighbouring municipalities.

All these and other attempts to reform the three-tier system have failed. The way in which they failed differed, but the reasons each time were similar, that is, the wish to preserve local autonomy and identity overwhelmed the impetus to implement reforms. Government legislation to create 44 regions was rejected by Parliament in 1975 due to concern that it would reduce local autonomy and because it did not want a fourth governance tier. The proposal to increase the number of provinces was rejected in 1983 by a new government that did not believe in imposing government restructuring from the top down, but in more organic grass roots driven restructuring by inter-municipal co-operation. In the 1990s, there was agreement at the political level to form city-provinces, but voter support was lacking. When the reform was put to a vote in a referendum in 1995, the proposal was overwhelmingly rejected by 93% of the voters in Amsterdam. A similar vote in Rotterdam also ended that city's flirtation with a new regional "urban province". The opposition was not so much against broadening the role of the large cities, but against the subdivision of the city into smaller municipalities that was part of the proposal. Citizens did not identify with these smaller units: they felt they belonged to Amsterdam, not to, for example, Buitenveldert (Boogers and Hendriks, 2005).

The consequence of this failure to reform has been an increase in the horizontal co-operation between municipalities which have found technical and less politicised solutions to the need for improved co-ordination. When the 1983 proposals to increase the number of provinces failed, the opportunities for inter-municipal co-operation were strengthened. The so-called Joint Arrangements Act (WGR) was amended in 1985, allowing municipalities to enter into voluntary co-operative arrangements by creating joint authorities, which have the powers to perform a wide variety of tasks; the WGR regulates the agreement under public and private law. The referenda in 1995 blocked the creation of city-provinces, but the pre-existing co-operation on the level of the city-regions intensified. These arrangements for city-regions (called Kaderwetgebieden) went further than just voluntary

co-operation as provinces could enforce co-operation. The change of central government in 2002 led to a renaming of "Kaderwetgebieden" into WGR plus-regions by further amending the Joint Arrangements Act in 2003 (see paragraph 30).

The three-tier system is currently again under debate. However, the focus this time is on the relationship between the provinces and central government, with a view to merging provinces, that is to enlarging rather than scaling them down. This is unlike previous debates where the interrelationship between municipalities (or cities) and provinces, was under consideration through the varied proposals to create smaller provinces. In 2002, the Geelhoed Commission proposed the merger of the current 12 provinces into four regions. The four provinces in the western Netherlands would then merge into one Randstad province. The successive Balkenende governments chose not to respond to this proposal. However, at the end of 2005, the mayors of the four largest cities and the four commissioners of the western provinces (acting under the name Holland 8) asked for radical change to the government structures in the Randstad (Holland 8, 2005) followed in 2006, by the four large cities proposing the creation of a Randstad province (*Commissie Burgmans*, 2006). In response, the Minister of the Interior published a discussion paper examining this proposal (BZK, 2006) and established a government committee to look at the issues involved (*Commissie Kok*, forthcoming).

Conclusion

The Dutch government system is often described as a decentralised unitary state. This term nicely captures the paradoxical nature of the Dutch government system. On the one hand, sub-national governments (especially municipalities) are powerful and strong. They have a considerable bureaucracy, many responsibilities and a substantial budget, including when compared to other OECD countries. On the other hand, central government sets local agendas, restricting decisions which might lead to differences in local service provision. Municipalities have limited fiscal autonomy and many of their responsibilities are shared with the central government. Recent decentralisation decisions have made the Netherlands more decentralised, but the unitary elements are still very present.

3.2. Horizontal co-operation

Horizontal co-operation between local governments in the Netherlands, involving both provinces and municipalities, is very common. In the Randstad, this takes place between municipalities at three levels: at the city-region level (where it is particularly well developed), at the so-called

wing-level and at the level of the Randstad as a whole. Co-operation at the city-region level is the most developed; co-operation at the Randstad-level the most problematic.

3.2.1. Co-operation between municipalities and at the level of the city-region

Co-operation between municipalities is frequent and on average each one participates in 27 co-operative arrangements. Co-operation can take place by way of agreements under public or private law (see paragraph 24) which, once made, are legally enforceable. Most of the private law agreements (40%) take the form of contracts between municipalities (Partners & Propper, 2005). Municipalities have become increasingly aware of which arrangements will be beneficial to them as they usually measure their eventual outputs and make cost/benefit analyses of each co-operative arrangement they enter into (SGBO, 1997). The result of this approach is that co-operative arrangements have become more task specific, as each issue addressed by an agreement often requires different sets of municipalities and different timescales. Ninety-three percent of all co-operative arrangements address only one issue whereas seven percent cover several issues at the same time.

Although democratic legitimacy could be an issue, the co-operative arrangements generally work well. As the board managing a co-operative arrangement is not directly elected, but elected or appointed by municipal boards (see Box 3.1) concern has been voiced by many municipal councils over the democratic legitimacy of co-operative arrangements (Partners & Propper, 2005). There are however several points to make about this. It has been observed that municipal councils do not make use of the existing mechanisms they have to control co-operative arrangements (BZK, 2005). Moreover, the single issue arrangements (that is, the great majority of arrangements) are relatively transparent. In addition, controlling co-operative arrangements is part of a municipal council's general function of controlling its boards (both the executive one as well as those running co-operative arrangements). There appears to be no reason for singling out the latter as the more problematic to control (SGBO, 1999). The Dual Local Government Act of 2002 has already strengthened the municipal council's power to control its executive board and it is the government's intention to reinforce these powers further in the future. It can be assumed that such a development would also increase the democratic legitimacy of co-operative arrangements. Apart from concerns about accountability, there is the issue of whether the results of municipal co-operation are satisfactory. As about two thirds of the municipalities think they are better off with such co-operation than without, it appears that they are and that promoting co-operative

arrangements and improving democratic control of them is worthwhile (Partners & Pröpper, 2005).

Co-operation on the level of the city-region involves a degree of compulsion which is absent from the co-operative arrangements between municipalities. It is the province that officially determines the territory of the city-region and it is the province that can invite municipalities to form city-regions. It can compel co-operation when the municipalities involved in a proposal refuse to co-operate. There exist minimum requirements as to the functions which a city-region must perform. The informal governance level of the city-region has been in place since 1995 after it became clear that the proposals for city-provinces had been rejected. Since 2003, the city-regions have been based on the so-called Joint Arrangements Act plus (WGR plus-regions). There are currently 8 WGR plus-regions in the Netherlands[3] (see Figure 3.10). These city-regions consist of a large city with the surrounding municipalities that form part of the same daily urban system. There are four of these WGR-plus regions in the Randstad: the city-regions of Amsterdam, Rotterdam, The Hague and Utrecht.

Figure 3.10. **The 8 city-regions of the Netherlands**

Source: Map provided by the Ministry of Ministry of Housing, Spatial Planning and Environment, 2007

City-regions have several areas of responsibility within the field of transport, housing, the environment and the regional economy, but are particularly important actors when it comes to traffic and transport. One of a city-region's main responsibilities is to decide on tenders for running the concessions for the regional public transport system. The budgets of city-regions are considerable, although not comparable to the size of the budgets of large cities or of provincial budgets (see Table 3.1). The budget is funded by earmarked grants from the central government and to a limited extent by the municipalities which are co-operating in the arrangement. The number of staff is modest and city-regions often have staff on loan from the participating municipalities.

Table 3.1. **Four city-regions in the Randstad**

	Budget 2002 (million euros)	Budget as % of budget of largest municipality in the city-region	Staff (2002, full time equivalents)	Number of co-operating municipalities	Population covered (in millions)
Amsterdam (ROA)	400	8%	33	16	1.3
Rotterdam (SRR)	350	8%	41	18	1.2
The Hague (Haaglanden)	350	16%	108	9	1.0
Utrecht (BRU)	200	17%	46	10	0.6

Note: Haaglanden has more staff as it does not outsource youth care and associated overheads.
Source: TK, 2004

The effectiveness of city-regions remains largely dependent on municipal co-operation. Horizontal co-operation works well as long as the interests of the participating municipalities are the same, for example, when external funds can be raised for a joint project. On some of the issues their interests will not necessarily coincide, such where to house asylum seekers or build housing for lower income groups. Although the Joint Arrangement Act plus provides provinces with the legal mechanism (the issuing of recommendations) to enforce co-operation, these are rarely used. There have been instances in which provinces confirm a decision of a city-region's board that was not in the interest of one of the municipalities in the city-region (Berg *et al.,* 2002). But provinces have only very rarely used a recommendation to city-regions, which is the means of enforcing co-operation. In practice city-regions are still very much dependent on voluntary co-operation; coercion is not the panacea (Berg *et al.,* 2002).

Thus city-regions remain subject to municipal conflicts of interests and they do not always embody a shared common vision for the region. Evaluation of the city-region of Amsterdam in 2000 showed that municipal representatives on the board defended municipal interests instead of coming up with a regional vision. Continuous tensions between Amsterdam and its surrounding municipalities at that time were reported to have created a reciprocal negative dependency: Amsterdam could not solve its problems because the other municipalities did not co-operate and the other municipalities had to tolerate the harmful effects of Amsterdam's problems and its inability to resolve them (Lambriex *et al.,* 2000). Current developments in the North Wing seem to be more positive; although conflicts of interest arise frequently common visions are developed, as well as potential solutions for common problems.

3.2.2 Co-operation at the wing-level

There is also co-operation at a level embracing several city-regions and municipalities. In the case of the Randstad this level is indicated by reference to "wings", the North Wing and the South Wing. Both wings cover a surface that is larger than a city-region, but do not fall within the boundaries of a province and may stretch beyond its borders depending on the geographical definition used. Co-operation at the wing-level is a combination of horizontal and vertical co-operation, as both city-regions and provinces as involved. The Green Heart falls into the same category as the wings, as it crosses several provincial boundaries.

There is no common demarcation of either wing; indeed, several definitions as to which cities and municipalities are included in the respective wings exist. For the South Wing alone, more than 10 different definitions have been used (Dijking *et al.,* 2001). That the definitions of the wings are fluid is also demonstrated by the fact that Utrecht originally used to belong to the North Wing, but no longer does so as it decided to leave the North Wing co-operative arrangement (platform).

The co-operation on the South Wing level has improved, but it has taken a long time to produce concrete results. Studies undertaken a few years ago to evaluate the co-operation on this level indicated that there were no innovative ideas, that projects were not really specific to the South Wing and that there are several bottlenecks that have not been solved for decades. The two most important strategic South Wing projects have taken years to come to fruition. The first was the Randstad Rail, the strategic light rail project that was mentioned in section 2.1.1. This was delayed in part due to conflicts of interest related to the fact that Rotterdam wanted its metro network to extend to The Hague, whereas The Hague, as a city with a tram system had other priorities (Dijking *et al.,* 2001). Similar delays occurred with the second strategic project,

the A4 road corridor that is of strategic interest to the Randstad as a whole as it could improve long-distance traffic flows, but where municipal interests were in conflict with the overall plan. On both these projects there seems to be agreement now, but it has taken a lot of time and energy over recent decades. Moreover, only physical infrastructure projects are tackled in the South Wing; integrated plans in areas such as culture, the economy, media or education are never developed. There is no identification with the South Wing by its residents, no sense of belonging to it. More recent studies indicate that there is a gradual improvement in co-operation with a view to developing a common South Wing agenda. Although most of the spatial planning and co-operative governance arrangements are still more on the city-region level, there are new initiatives and visions on the South Wing level. A common vision seems to be developing and priorities for action have been established. Although many politicians do not find South Wing meetings inspiring, they seem moderately content with this form of co-operation. However, there is insufficient co-operation with Regio Randstad (see Box 3.4) (B&A, 2005) and the development of appropriate institutions remains fragile (Salet, 2006a).

The co-operation in the North Wing is considered constructive, but has been limited to the city-region of Amsterdam. After the national economic restructuring in the 1990s, when the agenda of the North Wing was dominated by issues of resource redistribution (between the city of Amsterdam and neighbouring municipalities), discussion has now moved on to co-operation in developing the area (Salet, 2006b). On the level of the North Wing, consensus has been sought and found for giving priority to infrastructure projects and sites for construction programmes, which were needed to match the policy recommendations of national reports into spatial planning and infrastructure. As Utrecht left the North Wing in 2001, this platform now mainly covers the agglomeration of Amsterdam (Salet, 2006a) but such a focus does not correspond to the economic one, in which, for example, many links between Schiphol and the area south of Schiphol (Leiden, Alphen, Bollenstreek) exist, yet these areas are outside the North Wing.

The co-operation in the Green Heart has evolved from a very broad platform to a more focused form of inter-provincial co-operation. Initially, from 1996, co-operation there involved a very broad range of organisations (see Box 3.3). After a negative evaluation of its operation, the three provinces involved and the central government agreed, in 2004, on a more substantial provincial role. A new set of co-operative arrangements were established, in which public and private responsibilities were separated. The Green Heart municipalities have united into one group (called "*Woerdense Beraad*") whilst non-governmental groups have come together in the Pact Green Heart. The provincial role is provided for by the Steering Group Green Heart in which the three provinces are represented.

Box 3.3. **The Administrative Platform Green Heart**

The Administrative Platform Green Heart (*Bestuurlijk Platform Groene Hart*) was created in 1996 to participate in policy making for the Green Heart and the implementation of it. The Ministries of Spatial Planning, Housing and the Environment, Agriculture, Transport and Water Management, and Economic Affairs were represented. Three provinces were members (North Holland, South Holland and Utrecht), as well as five co-operative arrangements of municipalities. The four large cities provided one member, as did the water boards. In addition, non-governmental organisations were represented, such as the farmers' organisation, chambers of commerce, the automobile club and environmental organisations. The Platform was not intended as a decision-making body, but to renew co-operation.

An evaluation concluded that many of the goals of the Green Heart Platform were not reached. No common concept of the Green Heart evolved, as the Platform's focus was primarily on agriculture and the environment. Co-operatively devised plans relating to transport, economics and urban development remained underdeveloped. Regulations and financing were not enforced. As the Platform was very broad, it required a great deal of co-ordination, which made it slow and cumbersome. The culture of co-operation was voluntary and the cities were not fully committed to the work of the Platform. Inter-ministerial co-ordination was missing. Ultimately, many members did not wish to continue their participation in the Platform. The evaluation advised that the Platform be abolished and suggested that inter-provincial co-operation would be a better instrument to unite the interests of the cities and their surrounding areas (Lysias, 2003). This advice has been followed. In 2004, the Platform Green Heart was abolished.

3.2.3. Co-operation at the Randstad-level

Co-operation at the Randstad-level has so far not been very successful. The Randstad has, like other polycentric areas, such as the Rhine Ruhr and the Flemish Diamond, developed soft governance arrangements. These arrangements are bottom-up initiatives coming from municipalities, often with partners from the private sector (ESPON, 2005). These partnerships do not have decision-making powers and seek the implementation of their proposals by making recommendations. Co-operation at the Randstad- level is relatively recent when, in 1998, the Delta Metropolis Association was founded. This was not a government-only co-operative body, but more of a platform for the development of new ideas with a private and public membership. In 2002, Regio Randstad was founded, in which the four large cities, the four city-regions and the four provinces co-operated (see Box 3.4). An evaluation of the functioning of Regio Randstad conducted in 2005, indicated several weaknesses with this arrangement. It was observed that there was not much focus on a

common Randstad agenda, as many board members combined several functions and defended interests other than those of the Randstad. No sense of urgency was detected in its decision making, no procedures for conflicts were devised and spatial issues were the only ones that received enough attention. Moreover, relations between the wings and the Green Heart were not addressed thoroughly. Politicians in the South Wing were uncertain that their wing would get as much funding as the North Wing (Teisman, 2005). An independent trans-regional and more comprehensive geopolitical approach is more or less completely absent (Salet, 2006b).

Box 3.4. **Delta Metropolis and Regio Randstad**

The **Delta Metropolis Association** is a public-private foundation. It was created in 1998 by a professor of Delft University and the four aldermen in charge of urban planning in the four major cities of the Randstad. Its covers the whole western part of the Netherlands (larger than the Randstad, following the ecological borders of the Delta). It developed into a larger structure with the involvement of chambers of commerce, provinces, water boards, housing corporations, public transport companies, farmers' associations and some business associations. Today it has about 36 members. It is a lobby group whose purpose is to be a place to exchange ideas to improve synergy in the metropolitan system. This coalition has advanced new ideas about the ecological and particularly the water agenda for its region, and puts the case for an interconnected system of infrastructure, combining railways, highways and other aspects of the transport system at the Randstad-level.

Regio Randstad was created in September 2002. It is a deliberative body comprising only government representatives, that is the four provinces of the Randstad (*i.e.* North and South Holland, Utrecht and Flevoland), the four major cities (Amsterdam, Rotterdam, The Hague and Utrecht; with an observer status for Almere) and the four city-regions. Its stated purpose is 'the strengthening of the Randstad as an attractive metropolitan region to live in and to increase its competitiveness at the European and international levels'. It is administered by a council of 12 members which appoints an executive committee of five people. This committee meets every month. The committee is assisted by an administrative and technical staff of 10 people. Regio Randstad works on the themes of intrernational competitiveness and quality of life. Regio Randstad also acts as the representative of the region in its relationships with the European Union and central government. However, Regio Randstad is not a government layer with official responsibilities.

Conclusion

In addition to the three official government tiers (central government, province and municipality), several other levels of intervention do in practice exist in the form of horizontal co-operative arrangements. These exist at the level of the city-regions, at the supra-city-region and municipal level that is the North and South Wings of the Randstad (as well as the Green Heart) and at the level of the Randstad as a whole. Some of the co-operative arrangements, such as the WGR plus-region (*i.e.* the city-regions), work relatively well and achieve results. Moreover, mechanisms exist (in principle) to go beyond voluntary forms of co-operation at some of these levels. This is an indication that despite the failure to reform the formal government structure, solutions have been found to improve governance in the Randstad. Some observers have characterised this system as "formal conservatism and informal progressiveness" (Hendriks, 2006).

As some large cities also have municipal districts, this brings the total number of government levels in certain areas to seven: municipal district, municipality, city-region, province, wing, the Randstad and national government. For simplicity's sake water boards are not included nor many of the other functional deconcentrated areas. Nor has the influence of the EU been taken into account, which is also increasingly important in determining public policy.

3.3. Governance and the obstacles to competitiveness

In chapters 1 and 2 it has been shown that there are three challenges to the competitiveness of the Randstad: making better use of the proximity of urban networks, the knowledge infrastructure and the potential for a more efficient labour market. In many instances public policy has an important role to play in this. This section will focus on these three challenges and the different government levels that play a role in meeting these.

Maximising the benefits of proximity

Economic strategy

The economic strategy for the Randstad is currently mainly determined at the wing-level or below rather than at the Randstad-level, by a variety of actors. The cities that are in the urban policy programme, for example, have to formulate economic targets in the multi-annual development plans that they have to submit before every new term of the urban policy programme. Large cities, such as Rotterdam and Amsterdam, are quite active in the field

of economic policy in other ways as well. They publish annual economic assessments (*e.g.* SEO, 2006; Ontwikkelingsbedrijf Rotterdam, 2006) and formulate strategies for the medium term. The economies of the cities are however very strongly linked to those of the neighbouring municipalities: Schiphol airport for example is located within the municipality of Haarlemmermeer, not the municipality of Amsterdam; much of the harbour of Rotterdam and the industrial complex that is connected to it, is not located within the boundary of Rotterdam municipality. Formulation of economic strategy thus also takes place at the city-region level. Economic strategy formulation at the wing-level is stimulated by the regional economic programmes of the central government that have taken the North and South Wings of the Randstad as the relevant level for regional economic policy. It has also established Programme Commissions for each wing to define the regional economic sectors that should be prioritised. Regio Randstad has come up with an economic strategy for the whole of the Randstad area, proposing several lines of action that transcend the level of the wings; the implementation of this economic strategy is currently being evaluated.

More economic specialisation in the Randstad (and the rest of the Netherlands), could be achieved by a more selective central government regional economic policy approach. Many cities in the Randstad try to have a broad set of sectors within their boundaries. The result is that economic specialisation occurs only to a limited extent. The most direct way in which the central government has an influence over this is via its regional economic policy, as mentioned in the paragraph above and described more fully in Chapter 2. There it was noted that several regions prioritise the same sectors. The central government could be more selective in its approach, to avoid encouraging the growth of the same sectors in close proximity to each other. Although links exist between clusters in the North and South Wings, this does not mean that regional economic policy should be up scaled, as the South Wing also has important economic linkages with its neighbouring provinces Zealand and North Brabant

Accessibility

Central government and city-regions are the most important actors when it comes to regional transport, although many others are involved. Central government, provinces and municipalities maintain the roads (national, regional and local roads respectively), the Dutch Railways (NS) and several transport companies provide public transport and ProRail is responsible for the railway network. The transport networks run by central government, the provinces and the municipalities are intended to be complementary, so any extension and improvement of the respective networks should be

co-ordinated. This concerns the national infrastructure plans (MIT), provincial plans (PVVP), city-region plans (RVVP) and municipal plans (GVVP). Provinces and city-regions act as the regional transport authority; they put out to tender the contracts for the provision of public transport in their areas. As there are 12 provinces and 7 city-regions in the Netherlands, there are 19 of these regional transport authorities. In provinces with city-regions, the provincial responsibilities are limited to the area outside the city-regions. The Randstad thus has eight regional transport authorities (four provided by the provinces and four by the city-regions). Since 2005, the funding for investments in regional infrastructure and the operation of regional public transport have been decentralised to the 19 regional transport authorities in the form of a block grant. This implies that provinces and city-regions can decide themselves how to spend the funds that are allocated to them. They can, for example, chose to spend less on maintaining good public transport in terms of frequent services and more on new infrastructure such as new train carriages. Only for projects that will cost more than EUR 12.5 million (EUR 250 million for the city-regions of Amsterdam, Rotterdam and The Hague), will the central government co-fund.

Lack of co-ordination between actors in the region is one of the causes of the sub-optimal regional transport systems. There is rarely a set of common regional priorities nor is there any co-ordinated implementation of them as every government actor has its own procedures and such co-ordination as takes place, does so on an ad hoc-basis. The region remains dependent on the central government when it comes to large projects. The decision making on these projects is an insecure and not very transparent process that can only be influenced by continuous lobbying of central government (RVW, 2006). The consequences of these systemic problems are a less than ideal co-ordination between different networks, insufficient co-ordination of maintenance activities, no co-ordinated policy for managing disasters and insufficient co-ordination of bus and train timetables.

Current plans for regional co-ordination might improve the situation, although they will probably not solve all the issues arising at the Randstad-level. The Ministry of Transport is developing an analysis of network needs in co-operation with the city-regions in the Randstad. This analysis aims to create an agreed analysis of the problems facing the regional transport systems which, it is hoped, will lead to a shared vision on how to solve them. This should lead to planning specific measures for which money will be reserved by way of the central government making reservations in its MIT (the national infrastructure plan) and provinces and city-regions agreeing to reserve funding out of their respective block grants. If this process is implemented, the result could be a multi-annual investment

and expenditure plan for regional transport that is shared by all the relevant actors. In 2006 three of these analyses were carried out in the Randstad (in the North and South Wings and Utrecht). In the North Wing for example, the province of North Holland, the city-region of Amsterdam, the municipality of Amsterdam and the Ministry of Transport are working together in a platform to increase regional accessibility ("*Bestuurlijk Platform Bereikbaarheid Noordvleugel*"). It appears that the current regional plans are to a large extent complementary and not conflicting. At the same time, it appears that coherence in the transport network at the level of the Randstad could be improved. Issues which have been identified as likely to require action at the Randstad-level are road pricing, ease of travel within the key economic areas of the Randstad, the relative priority given to long-distance travellers as compared to intra-regional travellers (the needs of the former seem to receive less attention) and the organisation of regional public transport at the Randstad-level (Appelman and Buitendijk, 2006). However, almost all the actors concerned prefer the existing (or similar "soft") methods of co-ordination, as opposed to a more mandatory top-down approach.

City-regions in the Randstad do not have much influence on the development of regional rail transport by Dutch Railways. Since 2005 responsibilities for rail services and for the rail infrastructure have been separated. Dutch Railways is now responsible for providing the public transport services, ProRail for maintaining the rail network (the infrastructure such as the track). For rail services using track which does not belong to the main rail network, the provinces are responsible, although Dutch Railways does in practice, provide a form of regional transport by running short distance trains that stop at small cities and several stations within cities. In the urban areas in the Randstad each city-region plays an important role. It is responsible for the metro and tram systems and the new regional transport systems such as Randstad Rail. City-regions, however, have only limited influence on the rail transport services provided by the Dutch Railways at city-region level. Despite the contract between the NS and the central government where it is stated that the NS should consult with decentralised governments about the services to be provided, the NS is more interested in its responsibility to provide for long-distance travellers rather than local ones. It is therefore difficult for a region to negotiate with it for the use of the main railway network track to improve city-region public transport, as is the case with the *Stedenbaan* project in the South Wing. Additionally, the safety standards designed by ProRail are appropriate for long-distance trains, but less onerous requirements can be asked for when light vehicles use the rail network.

Although regional transport might in the future be provided for separately from the Dutch Railway services, this solution would nevertheless require improved co-ordination with Dutch Railways and between the other players. It is possible that Dutch Railways has insufficient incentives to invest in city-region transport, as it is not very profitable. The proposed financing model is to ask it to make a business case for the transport system required by the city-region. If it is not commercially viable for them to run, the city-region could co-finance it as they have done in the *Stedenbaan* project. In 2008 the current contract between the central government and the Dutch Railways will be evaluated and one possibility is to separate long-distance and city-region rail transport. The latter could then be left out of a new contract with Dutch Railways in 2015, with the provinces and city-regions being permitted to put the operation of the regional railway transport network out to tender to a regional provider.

Housing

Key actors in the housing sector are the housing corporations which usually operate on the level of the city-region. They build houses for lower income groups and maintain social housing. Since they were privatised in 1994, they no longer receive subsidies from central government. Instead they make agreements with local governments as to what is to be built. Private housing developers also provide housing.

Over the last decade housing agreements have increasingly been made at the level of the city-region. Agreements were made on new housing developments (for example, VINEX) and the percentages of social housing in such developments although such agreements have not always come to fruition partly due to conflicts of interest. For example, suburban municipalities do not always want to solve the problems of the large cities by providing more social housing whilst large cities do not want to be held exclusively responsible for the groups needing such housing. In some areas, such as in Utrecht, the idea of creating a provincial housing allocation policy has been floated.

Differences in housing markets within city-regions are considerable but relatively limited compared to the differences between city-regions. This would suggest that the Randstad as a whole has a more varied housing supply than any one city-region in the Randstad.

Co-ordination on exceptional projects would be better served by Randstad-wide planning than that undertaken at a lower governance level. For certain categories of housing, for example very expensive houses, only a limited demand exists and Randstad-wide planning would circumvent the problem of each municipality trying to attract the small group of people who

can afford these houses - a situation which could lead to duplication and waste of money.

Firm location

Office space is usually provided by municipalities, which compete to attract firms, mostly by offering low land prices rather than competing on the quality of the infrastructure or the profile of the area. This competition leads to the over-supply of firm locations and not much differentiation in quality. Land scarcity and the fact that spatial plans are developed which cover more than individual municipalities suggests that regional co-operation and co-ordination in the provision of office space, is necessary.

Steps are being taken in the Randstad to do this. For example, in the North Wing attempts are being made to co-ordinate the development and supply of office space on a regional level by the creation of a platform (co-operative arrangement) to plan this. One of its initiatives is to develop one regional monitoring system by providing for co-operation between the governance levels involved in the platform such as the municipalities of Almere, Amsterdam, Haarlem, Haarlemmermeer and Zandstad and the provinces of North Holland and Flevoland and the city-region of Amsterdam (ROA). Were increased regional co-operation to take place, revenues from different levels of government could be used to redevelop appropriate areas for office space in municipalities around the region, as has happened in the city-region of Rotterdam.

Tourism

Local tourist offices have become more regionally based over recent years because they have been reduced from 250 to 50. A small local tourist office (VVV) provides information to tourists on attractions in its particular area and also to provincial tourist offices and to the national organisation for promoting the Netherlands abroad (NBTC). Large local tourist offices are, together with the national tourist organisation (NBTC), responsible for the promotion of the Netherlands abroad. These are offices like the Amsterdam Tourist Board, The Hague Promotion Foundation and the tourist office of Rotterdam. As has been mentioned in Chapter 2, it might, in the medium term, be necessary to have more regional co-operation so as to spread tourists more evenly throughout the Randstad.

Making better use of the knowledge infrastructure

Higher education

Increasing higher education attainment and the quality of institutions require action by central government for example, changes to central government legislation. As mentioned earlier, more variation in tuition fees and greater opportunities to select students will increase the quality of higher education institutions, whilst a wider variety in the subjects on offer and the length of the courses to be undertaken will increase higher education attainment. Regional and local governments do not play an important role with respect to higher education.

Foreign direct investment

A substantial share of FDI in the Netherlands is attracted by the Netherlands Foreign Investment Agency (NFIA). The agency uses its offices in various locations around the world to seek out companies which will consider locating in north-west Europe. It makes presentations, organises conferences and puts any interested company in touch with suitable locations in the Netherlands. Whilst not favouring any particular areas in the Netherlands, nevertheless the NFIA in practice contacts certain municipalities and provinces more frequently than others. Around a third of all FDI is brought into the Netherlands by the work of the NFIA.

Large cities, such as Amsterdam and Rotterdam, also have their own organisations to attract foreign investment. The municipality of Rotterdam for example has an office in Baltimore and has contacts with Rotterdam representatives in Asia and several European countries. The development agency of Rotterdam and the port authority of Rotterdam both have staff to attract investors. There is a division of labour: the port authority focuses on harbour-related investment; the development agency on non-harbour related activities. Similarly the municipality of Amsterdam has its own municipal body that aims to attract foreign investment. It co-operates closely with other organisations that are focused on the acquisition of FDI for, and promotion of, the Amsterdam area, such as the Schiphol Area Development Company (SADC), the port authority, the Amsterdam Promotion Foundation and the municipality of Almere. The Hague co-operates with cities in the region in the West Holland Foreign Investment Agency. In contrast, the activities of Utrecht in attracting FDI have been modest.

At the end of 2006, the Holland Business Promotion Office was proposed as an initiative to improve the co-ordination between the different actors promoting various places in the Randstad as destinations for FDI. The aim of the Office is neither to take over existing promotional activities, nor

to start up its own programme of promotion. Instead it will try to make sure that existing promotional activities are coherent and non-contradictory. Its objectives will include the promotion of the Randstad, with one message and one image for the region. Different levels of government are represented (such as the Ministry of Economic Affairs, the four large cities and the Randstad provinces), as well as Schiphol Airport and the port of Rotterdam.

The creation of this new organisation to attract FDI will require more co-ordination between the NFIA and the regions. As has been mentioned in section 2.2.3 a recent government document on attracting FDI stresses the importance of attracting firms that can add value to the Dutch economy through knowledge spillovers. The document suggests that these firms could be in the sectors that were identified in the regional policy framework. If this suggestion is adopted as policy, the NFIA will become less location-neutral, making it increasingly important to co-ordinate its work with regional governments.

Knowledge transfer and the commercialisation of research and development

There are a variety of actors that are involved in the transfer and commercialisation of knowledge. A central role is played by universities and their research institutes which provide, for example, services for start ups and commercial application of knowledge. Several universities have developed science parks for mixing new companies and research institutes to maximise the interaction between them. Municipalities decide on local land use and so have an influence over these developments. Sometimes they play an active role in their development, as is the case with the science park in Leiden for life sciences. Provinces also play a role in knowledge transfer; the Knowledge Alliance in South Holland brings together firms, knowledge institutes and governments to increase the co-operation between several different sectors.

More knowledge transfer could, however, be generated by the central government and at the regional level. Currently research institutes of universities do not have a financial incentive to transfer or commercialise their knowledge for research and development. They are mainly financed according to their scientific performance (citations for example) but not on the extent that their knowledge is actually transferred or used by firms. The central government is in a position to change this, but regional governments could also influence such transfers. Currently there are four regional development agencies in the Netherlands – one in the north (the NOM), one in the east (Oost NV) and two in the south (the BOM and the LIOF). One of their tasks is to provide venture capital to SMEs and assist with innovation and development within companies. Yet there is no regional development

agency for the Randstad as a whole as the big cities usually have their own development agencies. It may be advisable to have one or more for the Randstadt area given the implementation of a regional economic policy by central government.

Although the specialisation of higher education institutions should be done on a regional basis, it is central government which has the mechanisms available to it to achieve this. Higher education institutes should be able to decide with each other their areas of specialisation, in the same way as the technical universities in the Netherlands have done. The central government could steer the process by using its macro efficiency criterion more stringently.

Making better use of labour

The labour market for most workers is located in their own city-regions but for highly skilled workers the labour market can be larger. Workers in the Randstad seem to commute relatively less than workers in metropolitan areas in other OECD countries and so improving transport within the Randstad could possibly increase labour mobility. The labour market of a city-region shows a certain asymmetry: many poorly educated people live in city centres but many jobs in the city centres are for the highly skilled whilst the reverse is true for the municipalities that surround the city centre. This seems to suggest that part of the geographical mismatch in regional labour markets could be resolved by making sure that low-skilled workers have access to good transport within the city-region.

Employee flexibility

Central government is primarily responsible for introducing more flexibility into the labour market as regional and local governments do not have much influence over employment protection legislation. In some sectors wage agreements, and to some extent flexibility, have been "decentralised", which involves the delegation of the responsibility to negotiate in these areas to individual workplaces or firms but provides no role for regional governments. As the Randstad economy is more international than the economy of the rest of the Netherlands, the Randstad is more affected by the high level of employment protection available to employees in the Netherlands which makes its economy less able to adjust to international economic developments.

Increasing the labour force participation ethnic minorities

The labour force participation rates of ethnic minorities can be increased by quality schooling from pre-school onwards. This is provided on a

neighbourhood level, but funded by central government. Although the large cities have an influence on the conditions in which pre-school education and subsequent schooling operate, for example by maintaining school buildings well, it is central government action that can have a significant impact in this field. As mentioned earlier, these actions could be allowing more wage variation between teachers depending upon performance and paying higher wages to attract teachers to work in schools with students predominantly from ethnic minorities. Although pre-school education is funded by the central government, municipalities can play a role in providing this service in the way that corresponds most to local needs.

It has been noted earlier that resolving the residential segregation of ethnic minorities does not in itself increase their labour force participation, but as segregation does not correspond to the preferences of the inhabitants in most areas, it should to some extent be avoided. The government level at which this could be done is the city-region as it is at this level that agreements are made on housing provision. If more social housing in suburban municipalities were created, this might attract low-skilled ethnic minorities to live there, whereas more middle class housing in city centres would be attractive to the ethnic minority middle class which now lives in segregated neighbourhoods in the cities.

Increase labour participation

Central government is in the best position to create the conditions for a significant increase in labour force participation. Municipalities can play a role in providing childcare facilities which are near schools and which also provide before and after-school care. This would make it more possible for parents with young children in the labour force to increase their labour supply.

What obstacles to be solved by which government level?

Many obstacles can be solved at the city-region level which currently operate as the daily urban system for most of the inhabitants of the municipalities covered by each of them. Not surprisingly, many policy interventions are increasingly taking place at this level with both transport and housing having become more centred upon the city-region. This trend will continue. In some areas co-operation at the city-region level is not as developed but its development is recommended, such as agreeing the best approach to designating business locations. Where city-regions have become most integrated, such as the city-regions of The Hague and Rotterdam, integration at wing-level is increasingly being addressed.

Certain policy issues can only be addressed by central government, but there are decisions which could be taken on these which would disproportionately benefit the Randstad. Examples are increasing labour market flexibility, which would be particularly advantageous to the Randstad as would providing ethnic minority schools with the opportunity to pay higher wages to their teachers to improve teacher quality. The same would be true of any central government action taken to attract and keep foreign knowledge workers in the Netherlands by amending migration regulations as well as the more selective attraction of FDI.

There are a limited number of problems for which the Randstad-level would provide the appropriate scale. For instance, when it comes to transport, an approach that only takes city-regions or wings into account limits the potential effects of economic proximity and could become an obstacle for freight transport. On the housing and office markets, it seems necessary to determine on a larger scale than the city-region where top-end-housing and offices should be located, so as to avoid duplication. A more co-ordinated approach to tourism could make sense at the Randstad-level. Inter-provincial co-operation is currently being applied with respect to the planning issues faced by the Green Heart.

3.4. Vertical co-ordination

The seven formal and informal government levels identified above in sections 3.1 and 3.2, share many governance responsibilities necessitating vertical co-ordination between them. This section describes the management of this process and assesses its results. Problems relating to vertical co-ordination are a common phenomenon in many OECD countries. They can range from disentangling overlapping responsibilities, resolving conflicting interests, ensuring that strategic coalitions of different government levels work effectively and finding solutions where synergies between the different governance levels are missing. The character of these issues can differ according to the government level examined. Accordingly, the analysis of these issues set out below looks at them as they occur at each different level of governance.

At neighbourhood level

Municipal districts are generally perceived as a mixed blessing (Hendriks & Musso, 2003). On the one hand, they have been responsive to local needs and thus contributed to efficiency (*Commissie Tops*, 1997). On the other hand, they are viewed as a somewhat old-fashioned (mono-institutional) solution for problems that should preferably be tackled by (multi-actor) networks. Municipal districts are one of the actors involved

in neighbourhood initiatives, but they are usually not the prime mover (Hendriks & Musso, 2003).

They cause administrative overload for municipal boards and result in time-consuming discussions about overlapping tasks and conflicting interests. One of the weaknesses of the municipal district, which has led to these problems and the unnecessary politicisation of this governance level, is that it has mimicked the political structure of the municipalities and is directly elected (see paragraphs 19 and 20). There has also been an ongoing discussion about the division of tasks between the central municipality and the districts, about the unclear decision-making structures and the limited co-operation between the municipal districts (PWC, 2005). Considerable differences exist between municipal districts in relation to the standard services they provide to their inhabitants, for example, registration of resident citizens, and the ICT infrastructure that they use. There is no vision that goes beyond the local (i.e. district) level and there is not much consistency with what is happening in other municipal districts within the same municipality (Hiemstra and Overeem, 2005). Moreover, municipal district interests can run counter to interests of the municipality as a whole.

At municipal level

Municipalities co-ordinate their activities with many different government layers. They are usually part of city-regions, are controlled by their province and might be engaged in direct contact with the central government, although this is usually channelled via the Association of Municipalities (VNG). The most pressing co-ordination issues take place between the municipality and the city-region; and municipalities and the central government.

Co-ordination problems and conflicts of interest between municipalities in a city-region and between municipalities and city-regions usually arise where their interests diverge and a gain for one municipality could be considered to be detrimental to another or to the city-region. This occurs over issues such as the housing of those on low incomes, migrants and asylum seekers where large cities wish to share this responsibility with surrounding municipalities. Often these municipalities resist such dispersal. Other conflicts arise over municipalities' wish to preserve their autonomy. In 1994, for example, ROA (the Amsterdam city-region) fashioned a regional plan for regenerating older urban centres, but it was unable to implement it because it required some municipalities to give up the right to initiate development (Gualini and Salet, 2004).

Contacts between municipalities and the central government usually take place via the Association of Municipalities (VNG). The VNG

represents the interests of all municipalities in the Netherlands. It has regular official meetings with ministers, notably the Minister of the Interior. With a staff of around 400 people, the VNG is able to influence government policy to a substantial extent. As the VNG is an association, it cannot dictate to municipalities what they should do. However, it has developed several model legal instruments, such as municipal regulations, that all municipalities can use if they wish to. This creates a degree of uniformity in municipal practices.

The four large municipalities have their own connections with central government. As the VNG represents all the municipalities, the four largest municipalities usually rely on their own networks within the central government apparatus. Dutch local authorities of large cities have invested heavily in ensuring access to central government officialdom (Bogason and Toonen, 1998). National-local exchange of officials and bureaucrats is widespread. Most of the recent mayors of Amsterdam have been former cabinet members. This link between central government and large cities has several consequences. First of all, it makes it difficult to interest local politicians and bureaucrats from the large cities in building regional coalitions to pressure central government departments (Kantor, 2006). Second, it introduces discretionary elements into a local finance system that is based on objective formulae. The expenditures of the four large cities have never been taken into account in the evaluation of the allocation criteria of the general grant (Allers, 2005). This means that it is unclear whether the general grant to the four large cities bears any relation to the costs it has to meet. The grant that the four large cities receive per inhabitant is almost twice as high as that received by the other municipalities, possibly because of higher costs, but possibly, too, because of its more determined lobbying of central government (Merk, 2006).

At city-region and provincial level

Significant conflicts of interests exist between city-regions, provinces and wings when funding and responsibilities in the same area have to be co-ordinated. One example (*Commissie Geelhoed*, 2002) is the conflict that took place between the city-region of Amsterdam (ROA) and the province of North Holland over the running of the public transport system. The province and the ROA are dependent on each other as both have budgets for public transport which together are meant to provide for the areas of both governance levels. The province wanted one board, with one concession and one operational authority. This would have meant the establishment of a regional transport authority that would prepare the decisions to be taken by the governments involved, and that would be responsible for tariffs, communication, maintenance, travel information and facilities at

bus/tram/train stops as well as overseeing the concessionaire. The ROA, however, preferred to concentrate on transport at the city-region level only, which is divided between four concessions covering separate areas. This lack of co-operation made it impossible to achieve a co-ordinated public transport network throughout the North Wing and has led to continued fragmentation in public transport provision (*Commissie Geelhoed*, 2002).

Many of the Randstad provinces have unsatisfactory relations with the city-regions with the result that they have problems in playing their role effectively. The size of the city-regions means the provinces are unable to assert themselves in relation to the city-regions within their boundaries despite the existence of legal powers enabling them to do so. For example, the city-region of Utrecht is almost identical to the territory of Utrecht province and is therefore entirely dominant in the running of the province. The largest city in the province of Flevoland (Almere) is in fact part of the agglomeration of Amsterdam; the rest of the province is sparsely populated and consists of only a few municipalities. The province of North Holland is also dominated by the city-region of Amsterdam and the province of South Holland has never been able to acquire a strong position (or even a position as mediator) *vis-à-vis* the city-regions of Rotterdam and The Hague - which regularly fail to co-operate either with each other or with the province.

As for the links between provinces and central government, these are numerous. Individual provinces have contacts with the central government, but, as with municipalities, the main intermediary is an association, the Association of Provinces (IPO). In addition, groups of provinces do, from time to time, interact with the central government, as was the case with the three provinces in the northern Netherlands that co-operated closely together in their successful attempt to get more government funding.

At wing level

Developments at the wing level illustrate how local-central coalitions can hinder the development of regional co-operation. The failure of planning for the South Wing (except for the two projects which were very slow in being realised, see paragraph 36) has in this respect been described as a fascinating learning experience (Salet, 2005). It demonstrates the multiple roles of the many public agencies involved, which result in their frequent participation in different settings with plainly conflicting strategies. Major cities constitute, and sometimes even chair, both the meetings to co-ordinate co-operation at the city-region level and at the wing-level and also the coalitions at the Randstad-level. Planning documents are however always permeated by the rhetoric of coherence and complementarity. Major cities never oppose planning concepts at the wing-level, instead they simply push the city-region concepts a bit harder. The Hague and Rotterdam rely

ultimately on their good relations with the central government to achieve what they regard as the best outcome for their city, regardless of their participation in other co-operative arrangements (Salet, 2005). An evaluation of the stagnation of infrastructure projects in the province of South Holland confirms the presence of hidden agendas and strategic alliance building by municipalities, city-regions, the wing and the province to achieve their separate and often conflicting goals (Provinciale Staten Zuid-Holland, 2005).

The assignment of responsibility for oversighting the developments in each wing to a different minister has improved central government co-ordination of the issues at wing-level. Since 2002, different ministers have been made responsible for the different wings: the Minister of Transport for the North Wing, the Minister of Spatial Planning, Housing and the Environment for the South Wing and the Minister of Agriculture for the Green Heart. This practice has been taken as best practice by a recent commission that advised on administrative complexity (*Commissie De Grave*, 2005).

At Randstad level

Co-ordination at the Randstad level with the national government has been modest. The BCR (Administrative Commission Randstad) is the political platform for co-ordination between the central government and the regional governments in the Randstad. It was created in 1998 and meets three times a year. Its aim is to contribute to the co-ordination between the different government levels and to the negotiations between the members of Regio Randstad (see Box 3.4) and representatives of the central government. The bureau of Regio Randstad serves as the secretariat of the BCR. It retains a low profile and has never achieved a significant policy-making role for the Randstad region on matters of regional development (Kantor, 2006). The assignment of each wing to a different minister, has increased the co-ordination within the central government when it comes to location-specific policies; it did however not create a clear liaison and co-ordination mechanism for issues needing to be tackled Randstad-wide.

At national level

Over recent decades, central government has not helped improve political co-operation between the municipalities and city-regions even though it is an important actor in Dutch metropolitan policy. This is not specific to the Netherlands; the same phenomenon has been observed in many OECD countries. Although central government can play a crucial role in promoting metropolitan co-operation, it does not seem to have done so over the last decade in the Netherlands. According to some observers, it is

the dominant role of the central state that has made local officials reluctant to push for regional coalitions to address many common problems (Kantor, 2006); resource-wise it is more important to have good relations with central government.

This dominance has also led central government to shop around selectively for sub-national alliances which are in its interests. This behaviour wastes resources as it requires more horizontal co-ordination within the central government itself. This is to keep under control the tendency of some ministries to pursue their own interests by forging alliances with certain sub-national government levels. Another significant disadvantage of this behaviour is that these vertical relationships may make it easier for central government to limit regional horizontal co-operation where it is seen as a threat to its power. This is because co-operation between regional governments can limit the power of central departments to implement their preferred policies.

3.5. Civil society

The Dutch governance system is very open to civil society in its organised form, but not so much to individuals. The very beginnings of governance in the Netherlands were bottom-up co-operative arrangements to protect land against excessive flooding. Both the involvement of civil society and co-operation by seeking consensus have continued to be characteristic traits of Dutch governance arrangements. One could argue that the current welfare state is partly a product of interactions within this highly developed civil society with pillarisation (see below) having played an important role in encouraging such interaction. The involvement of civil society has also taken the form of corporatism in the socio-economic sphere. Unlike many other countries, there is no direct link between the executive and the voter; governance in the Netherlands could thus be perceived as consensus seeking between elites. According to some observers this could explain the rise in populism that has taken place since 2002. This section focuses on describing pillarisation, economic corporatism, government interaction with citizens and the question of public leadership, as they provide the context within which governance developments in the Randstad will be described in later sections.

Pillarisation

For most of the 20th century, the Netherlands was organised into four separate pillars for catholics, protestants, socialists and liberals. The Netherlands acquired a degree of international fame for its system of pillarisation, in which the population lived in subdivisions (called pillars) of society that had their own political parties, labour organisations,

newspapers, schools, broadcasting corporations, housing corporations and sports clubs. The country was governed by the elites of each pillar that discussed amongst themselves the political management of the country. This system functioned between 1919 and 1968; after that a process of depillarisation began that went hand in hand with the decrease in the numbers of people that considered themselves religious. But despite this development, many organisations are still organised along lines dating from pillarisation. Education and public broadcasting are obvious examples.

Some argue that depillarisation necessitates a stronger role for regional government, but this case is not easy to make. It is true that the pillars had certain regional concentrations: catholics were dominant in the south of the Netherlands, protestants in the north and east; liberals and socialists in the west (Randstad). In this sense pillarisation provided a degree of intermediate level governance (Toonen, 2000). Depillarisation in the 1960s and 1970s thus caused a certain institutional void, especially since provinces concentrated more on infrastructure and spatial planning, but not on providing social services as the organisations within the different pillars had done. Some commentators (Toonen, 2005) take the view that the provinces should step into this institutional void, a line of reasoning which is, however, not undisputed. Most importantly, there does not seem to be agreement on the extent to which pillarisation was really a dominant institutional structure. For example, another view is that there were in fact only two really all-pervasive pillars, those of the protestants and the catholics. There was some pillarisation of the socialists, but this was less marked. The liberal pillar could, such commentators contend, hardly be considered to be a real pillar. This implies that depillarisation for liberals and socialists was less disruptive than for catholics and protestants. As liberals and socialists were mostly concentrated in the Randstad, the institutional void that depillarisation left there would have been modest.

Polder model

Trade unions and employers' organisations have a large influence on socio-economic policies in the Netherlands. Since 1945, the central government has developed social and economic policy in close co-operation with trade unions and employers' organisations which, in true corporatist spirit, are called social partners. The main platforms for this tripartite co-operation are the social-economic council (SER) and the foundation for labour (STAR). Both central government and the social partners are represented in the SER. In the STAR the social partners meet without the central government. The main players in these institutional settings are the trade union FNV, the Christian trade union CNV, the organisation of large employers (VNO*NCW), the organisation of employers in small and

medium-sized enterprises (SMEs) (MKB Nederland) and the Ministries of Social Affairs and Economic Affairs and, to a lesser extent, the Ministries of the Interior and Education. The rules of the game are that the central government asks for the advice from the SER on every socio-economic policy proposal that it is preparing. The goal is to reach consensus on the proposal. The idea is that, in return, trade unions moderate their wage demands and employers' organisations create jobs. The central government has sanctions that it can use if the social partners do not co-operate, namely direct interference in wage setting, but it has never used this power and has only very rarely threatened to do so.

Political interaction with citizens

Dutch politics is traditionally not focused on accountability to its citizens. Its tradition is the resolution of differences, whilst abiding by several informal rules of the political game: professional politics, pragmatic tolerance, high-level conferences, proportional representation in political bodies, depolitisation of contentious issues and secret decision-making (Lijphart, 1977). It is a political system that calls for extensive and continuous consultation with all affected organised interests. Understanding this political culture of consensus seeking is crucial to understanding the Dutch abhorrence of acknowledging differences in both the administrative and social sense (Kreukels, 2003). It could explain the reluctance to develop the Randstad into one coherent metropolitan area. The uneventfulness of Dutch governance has been a sign of the stability of the Dutch democratic system. There are not many elements of direct democracy: the executive power on all levels is appointed, not elected and there have rarely been referenda, either at a national or at a local level. This has led to an administrative class that, according to some observers, continues to resemble the governors portrayed in the Golden Age paintings of Frans Hals: a virtuous elite with benevolent countenances, of Our Kind of People, discreetly wielding power, supposedly for the common good and brooking no interference (Buruma, 2006).

When the executive interacts with citizens, it is usually via intermediary organisations. This is true at every government level, from the neighbourhood level to the Randstad level. At the neighbourhood level, for example, it has been observed that the voices and preferences of an area's inhabitants can only be expressed in a manner that is very often organised, mobilised and channelled by professionals and public administrators (Hendriks & Musso, 2003). The Delta Metropolis Association (see previous box 3.4) does not completely correspond to this profile, because it was a bottom-up initiative, but its inclusion of several non-governmental

organisations has been characteristic of Dutch administrative and political culture.

Crisis in public leadership?

The sudden rise of the populist politician Pim Fortuyn in 2002 has led many observers to question whether consensus politics as usual would continue in the Netherlands. He was not a professional politician but he succeeded in winning the 2002 municipal elections in Rotterdam and his party became the second largest after the national elections took place (also in 2002) even though he was murdered a few days before they occurred. His party became part of the Balkenende 1 coalition government that ruled between 2002 and 2003, until internal divisions in his party prompted the other two government parties to terminate the arrangement. New parliamentary elections in 2003 resulted in a diminished role for his party.

Many explanations have been given for the rise of populism in Dutch politics. An important element in most of them is that Fortuyn was able to give a voice to all those people who had concerns about immigration, a theme that was intentionally declared a taboo by the 'virtuous' political and intellectual elites (Van Westerloo, 2003). Many explanations also offer a link with the Dutch governance system. Some mention depillarisation and its destabilising effects (De Rooy & Te Velde, 2005), others mention the technocratic character of the previous government (Wansink, 2005), incidents under the previous government (Vries and Van der Lubben, 2004), weak leadership ('t Hart and Ten Hooven, 2004) and the weaknesses of a political system that created a gap between politics and voter (Peper, 2002).

Although the developments described above have had an impact, it seems that the Dutch political system has not changed much as a result of them. Some have described it as an orgy of purification that turned the country upside down but allowed it, after this temporary purge, to continue as it did before (Pleij, 2005). Others have seen in Fortuyn's rise a normalisation of Dutch politics: it resulted in a reduction of the paternalism of the Dutch elites, in discussion of issues that were political taboos (immigration and the EU) and a political style that was less technocratic and consensus minded. As such it contributed to making the Netherlands more similar to other west European states (Wansink, 2004). Although many of his themes and part of his style were adopted by other political parties, it remains to be seen if his impact results in more fundamental changes to the Dutch political system. What has been termed the drama of democracy has become more intense and public leadership will increasingly have to adapt to its requirements. At the same time, pragmatic consensus building has remained a dominant trait of Dutch administrative culture. And almost everywhere "politics as usual" has continued ('t Hart, 2004).

Conclusion

The Netherlands was created as a reaction against authoritarianism and the centralised exercise of power. The Republic of the Seven United Provinces of the 17th century was a loose political federation which prevented the concentration of excessive power into one central point by dividing its exercise between different parts of society. In this way, the Dutch political tradition was born. Pillarisation and economic corporatism conformed well to this tradition but its price, however, is interminable discussions and negotiations, a price that the Dutch have been willing to pay. Despite depillarisation, a slight reduction in economic corporatism and the rise of political populism, there does not seem to be any reason to assume that this tradition has lost its force (’t Hart, 2004). This political culture has influenced the developments in the governance structures that will be described below. Any recommendations to improve governance in the Randstad must be made taking into account its significance.

3.6. Governance trade offs

The future of regional governance in the Netherlands has recently received much attention. Several reports have been written (ROB, 2006; *Commissie Burgmans*, 2006; BZK, 2006b; BZK, 2006c). Although this issue has been dealt with several times in the past (See for example *Commissie Geelhoed*, 2002), the debate was initiated this time by regional governments themselves. In November 2005, the mayors of the four large cities and the commissioners of the four Randstad provinces wrote a pamphlet on the future of the Randstad under the name “Holland 8”. They had observed economic decline within the Randstad and proposed changes in the regional governance structure to help remedy this by merging the provinces in the Randstad into one or two Randstad provinces (Holland 8, 2005). It is in this context that the governance challenges in the Netherlands are currently debated.

Many metropolitan areas in the OECD face governance challenges (see Table 3.2). The section below will analyse the most important facing the Randstad in the context of the trade offs they lead to. Not all governance goals can be reached at the same time, as some improvement in one part of the system may lead to setbacks elsewhere. The trade offs that will be dealt with here are: *i)* administrative crowdedness and the appropriate functional scale; *ii)* local autonomy and regional decision-making power; *iii)* structure and practical improvements; *iv)* metropolitan ambition and regional egalitarianism; *v)* leadership and consensus seeking.

Table 3.2. **Institutional fragmentation and governance challenges in some OECD metropolitan regions**

	Institutional setting of the metropolitan region	Main governance challenges
Busan	The local labour market is more or less represented by the Busan Metropolitan City (higher level of local government in Korea) and includes 16 lower levels of local governments (15 autonomous districts and 1 rural unit). The largest functional area, often referred to as the Southeast Region, extends to the Gyeongnam province and Ulsan Metropolitan City.	Cope with brain drain and competition from Seoul and other Asian mega-cities, need to build better co-operation with Ulsan and Gyeongnam to design a comprehensive competitiveness strategy based on the complementary assets of the largest Southeast Region; Manage spillover problems (*e.g.* urban sprawl and environmental concerns); Enhance local capacity to design and implement strategic decisions (decentralisation is quite recent), increase local democracy (especially at the lower level of local governments) and promote a culture of citizen participation.
Helsinki	The functional urban region includes four core municipalities (that form the core Helsinki metropolitan area) and eight surrounding municipalities.	Deal with urban sprawl and risk of further spatial polarisation and disparities; increase co-operation among planning authorities of regional councils and municipalities especially for land use and housing.
	The Greater Helsinki region is comprised of four regional counties (NUTS 3).	Further integration of the Greater Helsinki area requires making major investments in infrastructure and housing (Helsinki is small in size from an international and EU perspective).
		Weak regional marketing generates unproductive competition between municipalities for FDI attraction.
Istanbul	The functional area is mainly represented by the Istanbul metropolitan municipality that includes 72 district municipalities but it also extends to two other surrounding provinces (Kocaeli and Yalova).	Manage huge transport congestion, provide better co-ordination of strategic planning at a wider regional level and better implementation and enforcement in the planning process; need for a long term strategic vision. Improve delivery of local public services, need for more decentralisation of management at the district municipality level; strengthen local capacity building.
Madrid	The functional labour market is slightly larger than the Comunidad Autonoma de Madrid (autonomous community is a regional government in Spain), which is composed of 179 municipalities (including the City of Madrid that represents 54% of the total population).	Solve the problem of overlapping responsibilities and competition between the Comunidad and the City of Madrid (*e.g.* economic development and internationalisation plans).

Table 3.2. **Institutional fragmentation and governance challenges in some OECD metropolitan regions** (Cont.)

Milan	The restricted definition of the functional labour market roughly fits with the Milan Province that includes 189 municipalities (including the City of Milan). The extended definition of the functional area includes the Milan Province and 7 other provinces.	Enhance co-operation to manage sectoral bottlenecks throughout the functional area (*e.g.* transportation and congestion, housing); Build an integrated governance framework to create a sustainable "Milan community" capable of producing public goods with regional/national spillover effects.
Montreal	The functional labour market includes 82 municipalities (the largest ones being Montreal, Laval and Longueuil) and is represented by a metropolitan agency (CMM); the area is also split into three parts, each belonging to different administrative provincial regions that extend well beyond the current functional area.	Stabilisation and consolidation of institutional reforms in the region; dealing with demerger issues; implementation of decentralisation at the district level; new metropolitan community needs to be strengthened both from legitimacy and financial aspects; deterioration of municipal infrastructure puts strain on local finance.
Seoul	The functional area is referred to as the Capital region, which includes Seoul Metropolitan City (around half of the total population in the functional area), Incheon Metropolitan City and the Gyeonggi Province. Within Seoul Metropolitan City, there are 25 districts (lower levels of government) of an average size of 400 000 inhabitants.	Need to build further and more formal co-ordination between the three local governments (Seoul, Incheon, Gyeonggi) to deal with typical challenges of mega-cities (*e.g.* over- concentration of population and industries, congestion and environmental problems). Integrate sectoral co-ordination of local policies (spatial planning, land use management, transport and environment, economic development strategy) into a broader and integrated strategy for competitiveness and sustainable development. Avoid democratic deficit and inefficiency in local public services provision that could be caused by excessive centralisation in upper level of local governments (Seoul metropolitan city) in relation to lower levels of local governments that are large in scale (districts municipalities). Pursue decentralisation process.
Stockholm	The local labour market includes two counties (Stockholm County and Uppsala County) totaling 36 municipalities. A larger expanded metropolitan area, the Stockholm Mälar region, includes five counties and 65 municipalities.	Strong local autonomy and weak intermediate level (counties) do not allow co-ordination of strategic planning decisions for transport and economic development at the metropolitan level. The wish to create a wider Stockholm Mälar region requires creating a commonly agreed strategic vision and implementation and co-ordination of strategic investment projects especially for transport infrastructure.

Source: OECD, 2006c

Administrative crowdedness and appropriate functional scale

There is considerable administrative crowdedness in the Randstad for example, the average municipality is involved in 27 co-operative arrangements (Partners & Propper, 2005). This absorbs a lot of the energy and time of local politicians and does not always pay off. Administrative overload is difficult to compare internationally. On the one hand, the formal structure in the Netherlands is not exceptional. On the other hand, it seems that there are many more informal structures than elsewhere. Informal structures appear to be less frequent in other polycentric areas, such as the Flemish Diamond and the Rhine Ruhr, even if consultative platforms and co-operative arrangements nevertheless exist there. A comparison between administrative overload in the Randstad and Los Angeles County, often described as being institutionally highly fragmented, shows that the Randstad is even more fragmented (Hendriks, 2006).

Box 3.5. **Governance in polycentric metro areas: Rhine Ruhr**

The Rhine Ruhr Area in Germany is a classic example of a polycentric region. Although it contains several large cities such as Cologne, Essen, Duisburg, Dortmund, and Dusseldorf, no clear hierarchy of cities exist. The Rhine Ruhr region is neither politically nor statistically defined. It is politically fragmented and has no joint planning and development authority. Since the mid 1990s, German planning has recognised the Rhine Ruhr as a functional metropolitan entity, i.e. one of the country's European Metropolitan Regions (EMRs). This concept was introduced by the federal planning agency and has been integrated into the State Development Plan of North Rhine-Westphalia (1995) with a clear competitive objective in mind. The concept was however introduced in a top-down manner and is still at a "very early stage of the process"4.

The *Kommunalverband Ruhr* (Ruhr District Association of Local Government Authorities) consists of 11 large cities and four counties (*Kreise)* (the municipalities of Bochum, Bottrop, Dortmund, Duisburg, Essen, Gelsenkirchen, Hagen, Hamm, Herne, Mülheim and Oberhausen, and *Kreise* of Ennepe-Ruhr, Recklinghausen, Unna and Wesel). Its territory contains 5.4 million inhabitants. It was recently strengthened when the Land of North Rhein Westphalia assigned it some new planning competencies and it was renamed *Regionalverband Ruhr* (Regional Association Ruhr).

Box 3.5. **Governance in polycentric metro areas: Rhine Ruhr** (*Cont.*)

The Land had also pushed in the early 1990s for the creation of sub-metropolitan networks among cities in the Rhine Ruhr Area: the so-called 'regional conferences'. These networks or conferences are consultative platforms for dialogue, whose main activities are to prepare 'development concepts'. The functioning and organisation of the conferences are varied. For instance, the *conference of Emscher-Lippe*, in the North of the Ruhr, is composed of 26 Members: representatives of 10 large municipalities, *Kreise,* unions and two representatives of the Land. The conference is headed by the 'prefect'. It is thus a rather small structure. On the other hand, the conference of Ruhr-Est (Dortmund) has 75 members comprising representatives from consular chambers, unions, environmental groups, cultural associations, universities, municipalities, *Kreise*, etc. It is headed by a committee of the mayors of the large municipalities. It is thus a much larger and more open structure. The idea is that a culture of co-operation and joint working is created, with very little or no funding at the regional level. Observers are, however, sceptical about the achievements of these co-operation platforms, which have produced very few concrete results in respect to their primary objective, *i.e.* to devise development strategies and specific projects. The *Regional Association Ruhr* also remains at a very preliminary stage and has not yet achieved any concrete results. Overall, in spite of a growing demand by stakeholders to bundle regional tasks into politically legitimate region-wide bodies in order to simplify administrative structures and processes, current policy thinking does not include any further steps towards advancing urban networking for the Rhine Ruhr (Romein, 2004).

This governance problem of administrative crowdedness is in a way unavoidable when governments try to find the appropriate governance level at which to perform different functions. The functional scale sometimes also depends on the angle and perspective taken (Sijmons, 2006). As governments deliver a variety of local goods and services, there will be differing governance levels at which each of these should be provided, in order to do this most optimally. In addition, various attempts to adjust the government system to improve functionality, for example the proposal for a city-province, have not succeeded. In order to be able to continue to work on the right scale, institutions have been added. Abolition of governance levels or institutions rarely happens. The Green Heart Platform is one of the few institutions in the Randstad that has been abolished over the last year.

Administrative crowdedness is a particular problem at the regional level. This is not only an expression of failed attempts to reform the government structure, but also of the growing relevance of the regional level for many issues. There is huge overlap in the territories and responsibilities of the city-region of Utrecht and the province of Utrecht. Differences in boundaries between the city-region of Amsterdam, the North Wing and the province of North Holland are also quite subtle. And the South Wing is barely distinguishable from the city-regions of The Hague and Rotterdam, which in themselves make up a large part of the province of South Holland. The overlap is emphasised by the fact that the main responsibility of these institutions is for physical infrastructure. An evaluation of the reasons for the stagnation in infrastructure development in the province of South Holland, however, concluded that although crowdedness was a factor it was not the most important one (Provinciale Staten Zuid-Holland, 2005). There is less administrative crowdedness on the level that transcends the provinces; this could serve as an indication that current actors do not see much functionality on this scale. Our analysis confirms that many economic obstacles for the Randstad are located at the level of city-regions and wings.

Both central government and sub-national governments should be more alert to coherence in regional governance institutions. The central government will have to make sure that decentralisation and deconcentration in the future matches existing levels better, so that more integrated policies can be developed at the regional level. Local and regional politicians should be encouraged not to create new institutions too often and to abolish redundant organisations. A way to stimulate this could be to concentrate the main regional responsibilities in one institution as much as possible, probably at the level of the city-region. Provinces in the Randstad, especially North and South Holland, could then concentrate on their territory which is not covered by the city-regions.

Local autonomy and regional decision making power

There is a trade off between local autonomy and the decision-making power of a regional body that covers a larger territory. When local autonomy is the dominant characteristic, it will be difficult for the regional body to overrule the local actor, or go against it. This principle applies to three different types of governance relationships/associations in the Randstad: *i)* that between the Randstad-level and the four cities/city-regions; *ii)* that between a city-region and the municipalities that form part of it; *iii)* that between Amsterdam/Rotterdam and their municipal district councils.

Regional decision making at the Randstad-level and autonomy of the city/city-region

The existence of several strong cities makes arbitration necessary. The four large cities are the most powerful sub-national institutions. They have direct connections to the central government, receive more funds and have the most substantial responsibilities. Relations between the cities have always been competitive, since no city has ever developed into the obviously dominant one. The cities are, however, close enough to have roles which complement each other yet complementarity will not happen automatically as each city tends to defend its own interests. This means that co-ordination between the cities might not always be possible to reach particularly as the relevant provinces have not been able to play their roles as mediator and arbitrator.

Several recent commissions have mentioned the idea of a Randstad province (BZK 2006b; *Commissie Burgmans*, 2006; *Commissie Geelhoed*, 2002). Such a province could in principle play a strong role in regional decision making, provided that it has sufficient revenues, instruments and political legitimacy. The example of the Greater London Authority (GLA) (See Box 3.6) illustrates that lack of own revenues and decision making power *vis-à-vis* the municipalities hinders the effectiveness of an institution, even if the GLA has been able to play a constructive metropolitan role. As obstacles that currently should be solved at the Randstad-level are relatively limited, it is questionable whether a Randstad province would at this stage be able to play a strong regional decision-making role. It is also likely that were a Randstad-province to exist, the different city-regions would still retain their dominance and try to influence the provincial and national agenda, as they are doing now. A change in structure would be unlikely to result of many governance problems unless it was preceded by a more co-operative approach by the city-regions to creating a joint policy agenda.

Box 3.6. **The Greater London Authority**

The Greater London Authority was established in 2000. Its territory represents the previous metropolitan county of London, which is 1 580 km² with about 7.4 million inhabitants. It covers 32 boroughs (municipalities) and the City of London. The GLA is run by an assembly and a mayor. The assembly is composed of 25 members directly elected every four years. The mayor is also directly elected by a proportional representation electoral system with preferential voting. He is the real executive of the GLA, the assembly principally having the role of reviewing executive decisions.

Box 3.6. **The Greater London Authority** (*Cont.*)

The GLA is responsible for the elaboration of strategies in the domains of transport, spatial planning, economic development, health, culture, and the environment. It is also responsible for the management of public transport. To help in these different tasks, the GLA is assisted by four functional agencies: Transport for London for public transport, the London Development Agency for economic development, the Metropolitan Police Authority and the Fire and Emergency Planning Authority, as shown below. All in all, the GLA staff total about 600 people. The GLA has no financial resources of its own, except revenues derived from road pricing (introduced by the mayor in 2003) but which represent only a very small part of a total budget of more than GBP 7 billion. The bulk of it comes from a precept levied on the boroughs' council tax (a local tax) and grants from the central government, the largest part of which is spent on public transport.

The GLA is principally a strategic authority, strongly controlled by central government and strongly dependent on the municipalities for resources but more so for the implementation of its strategies and policies. In this context, the GLA is functionally weak. However, due to its electoral system, it is politically strong, currently with a strong leader who has succeeded in giving a 'voice' to the London area. This paradoxical situation makes the system unstable, a view which is corroborated by the fact that the governance of London is today under review, a review which should result in the strengthening of the GLA, notably of the powers of the mayor, with more responsibilities being allocated to the GLA such as in the area of housing.

The central government could, where necessary, take the perspective of the Randstad more into account even though there is no person or organisation within the central government is currently responsible for the Randstad. Over the last four years this responsibility for the Randstad has been divided between all the ministers who were participating in the BCR (Administrative Committee Randstad): the Minister of Transport was responsible for the North Wing, the Minister of Spatial Planning for the South Wing and the Minister of Agriculture for the Green Heart. This has increased central government co-ordination with respect to the different wings, as mentioned earlier. Similarly, an existing minister could be made responsible for Randstad-wide issues. However, it is questionable whether the proposal to appoint a special Minister exclusively responsible for the Randstad, as suggested by some (BZK, 2006b) would enable central government to facilitate the necessary Randstad-wide co-ordination. Instead of creating coherent central policies, this could lead to jurisdictional

conflicts and thus new compartmentalisation, whereas a co-ordinated and integrated approach is what is needed. It could also lead to imbalances in the central government, as a separate Minister for the Randstad would become a very dominant minister when it comes to spatial policy, the economy and infrastructure planning. Moreover, a separate minister has been judged as "too hierarchical and centralising" (ROB, 2006). In Europe, there is only one country that has such a minister: that is the United Kingdom, which has a Minister for London. However, this is not a politically important post and cannot be compared to the role of the Mayor of London.

One potential solution to the need for the interests of the Randstad as a whole to be taken more into account in national policies (especially when it comes to transport) is to create a stronger central co-ordinating mechanism. This would enable a common Randstad-wide agenda to be developed, in co-operation with regional governments, in which transport should be an important element. A part of this transport agenda should be the co-ordination of the different regional public transport systems, along the lines described in section 2.1.1. A project management organisation could be created that would have the responsibility to co-ordinate regional transport systems and their tendering processes; this organisation should also have the power to sanction participating local and regional governments if agreements on co-ordination are not respected, for example the required actions (such as having extra parking places built) are not taken. An example of a possible sanction is for the project organisation to undertake the action and send the bill to the government that did not respect the agreement. Schemes like this exist in Germany, where regional transport authorities have a co-ordinating responsibility (See Box 3.7). In addition to Ministers responsible for wings, an existing minister should become responsible for implementing solutions to Randstad-wide issues.

Box 3.7. **Regional transport authority in Frankfurt**

The Frankfurt Rhein Main transport authority (RMV) organises the public transport in the area of Rhein Main, which comprises two thirds of the state of Hessen. RMV co-ordinates the regional public transport system. This is done in close co-operation with the local transport organisations that provide public transport. Decisions about transport facilities and tariffs are made at a political level with the RMV and the local transport organisations implementing these decisions. Transport enterprises, such as the national railways or bus enterprises are answerable to the RMV through performance contracts. The 130 enterprises within the territory of the RMV are independent in the way in which they carry out their contracts and achieve the required performance levels.

Box 3.7. **Regional transport authority in Frankfurt** (*Cont.*)

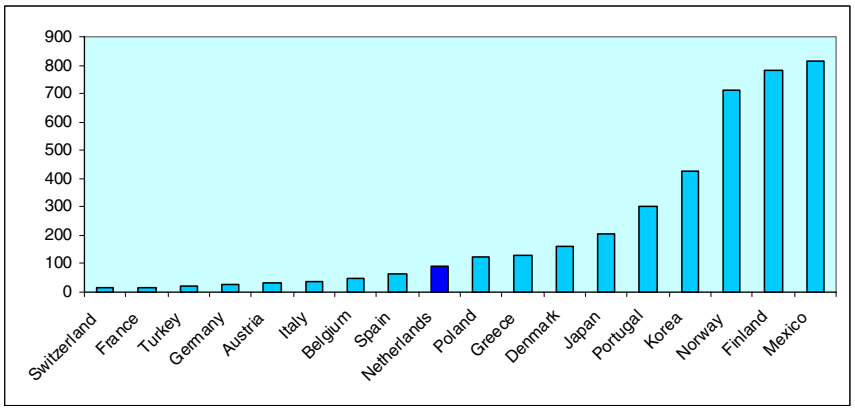
Although the RMV does not have its own rail network or materials, it can plan for the construction of new rail networks, stations and material. One of the priorities when the RMV was first created in 1995 was to harmonise about 100 tariff systems that existed in the area which it covered. It created one universal tariff and a single ticket which works on all the different means of public transport, no matter how many transfers are made. The price is dependent on the number of tariff areas one crosses. Every December the time schedules of regional transport in the RMV-area are adjusted. The RMV informs the public about the changes in the 14 local transport and the one regional transport systems.

The relationship between a city-region and the municipalities that form part of it

Many activities of their residents and firms take place on the level of the city-region and many of the current policy problems can be solved at this level. This is why the WGR plus-region governance level has developed into an important element within the Dutch governance system. However, evaluations show that co-operation within city-regions is not running smoothly. Many policy issues exist on which large cities and surrounding municipalities have different interests and which, consequently, are not solved. The province could interfere, but rarely does so. It is thus necessary to strengthen governance at the level of the city-region.

City-regions could be strengthened by more merging of municipalities. Municipalities in the Randstad and WGR plus-regions have merged less than in the rest of the country. If Parliament remains of the opinion that WGR plus-regions cannot fulfill their new responsibilities because of the lack of democratic legitimacy, the only way to reach an appropriate functional scale is the merger of municipalities. Although Dutch municipalities are relatively large (judged by the number of inhabitants per municipality) (see section 3.1), they are relatively small geographically when compared to those in other OECD countries (see Figure 3.11). The average size of a Dutch municipality is 90 square kilometres; the average size of a municipality in the Randstad is 37 square kilometres. As the Netherlands is a very flat country, the time for travelling between municipalities is presumably one of the smallest in the OECD. Evaluation of the administrative capacity of municipalities in the provinces of North Holland, South Holland and Utrecht indicates that there are large differences in their abilities to provide local services. For some of the 49 municipalities that were subject to this evaluation, merging with other municipalities would, on this basis, be recommended (Eenhoorn and Rozenberg, 2006).

Figure 3.11: **Average surface per municipality in various OECD countries**



Source: OECD Database 2006

Merging municipalities could be done in different ways. The most radical way is to merge all the municipalities that are currently part of a WGR plus-region. It is questionable whether this merger process is desirable and politically feasible. The process would remove the focus from the practical problems such a merger would be designed to resolve and much energy would be consumed by devising the new institutional arrangements. In addition, the added value of a huge merged municipality when compared to enhanced co-operation between municipalities remains to be seen. Moreover, it will require a lot of courage to devise another top-down master plan after the failure of the one for the creation of city-provinces in the 1990s.

A more selective approach to mergers seems desirable. Such enlargement should begin by merging some of the surrounding municipalities of the four large cities. This will take away the impression that they are insignificant compared to the large city. Moreover, it could increase their administrative capacity and thus the quality of co-operation. In this way, administrative crowdedness would also be reduced.

Some OECD countries have engaged in municipal and regional mergers at the same time. This has, for example, occurred in Denmark (see Box 3.8). Commissions in the past (for example *Commissie Montijn*, 1989) have advised a simultaneous enlargement of municipalities and provinces. The number of municipalities since 1990 has been reduced and the responsibilities of city-regions have increased whilst the size of the provinces has remained the same. Although these are factors that would

favour the scaling up of provinces, the actual number of policy obstacles to be addressed at such a level seem to be relatively limited in the short term, making it less of a priority.

Box 3.8. **Regional government reforms in Denmark**

The Municipal Reform Act, to be implemented in 2007, aims at improving local and regional governance by the simultaneous enlargement of municipalities and counties. In 2006 Denmark had 14 counties and 271 municipalities. The Reform Act will replace the 14 counties by five regions and will reduce the number of municipalities to 98. Most of the provincial tasks will be delegated to municipalities. The regions will focus on health care, regional development and public transport. The regions will not have tax revenues, but be financed by grants. Some of the current county responsibilities will be centralised, such as tax collection, secondary education and spatial planning.

The reform will lead to municipalities with more inhabitants: three quarters of the municipalities will have more than 30 000 inhabitants; the average number of inhabitants will be around 55 000. The average size of a municipality will be 440 square kilometres (*Indenrigs- og Sundhedsministeriet*, 2005).

The relationship between Amsterdam/Rotterdam and their municipal district councils

Decentralisation to municipal districts seems to have gone too far: there are now considerable differences between municipal districts in what should be standard levels of service provision and standardised bureaucratic procedures. This illustrates the way in which municipal districts work against the interests of the city as a whole, as a certain uniformity in the provision of local public goods and services is needed. This indicates the necessity for centralised standard setting by the municipalities. This is done for metropolitan districts in Stockholm (see Box 3.9). In addition, although decentralised provision of services in large cities needs to be retained, an elected municipal district council is not needed to deliver these. This could be done through deconcentrated local offices of the municipal council administration.

Box 3.9. **Municipal districts in Stockholm**

Stockholm has 18 municipal districts. They are responsible for providing local services, such as welfare and education. Sixty percent of the budget of the municipality of Stockholm is divided between the municipal districts. The boards of municipal districts are indirectly elected, that is, they are elected by the municipal council of Stockholm. The number of municipal districts has over the years been reduced to 18. Although sometimes concerns have been raised about the extent to which municipal districts can be held democratically accountable, no major changes are foreseen.

Structure and practical improvements

Reforming government structure takes a lot of energy and time, without solving many practical problems in the short run. Moreover, in a new structure it is important to work together with many different new actors, so changing structures will never be the definitive solution in situations in which networks are more important than formal structures in solving problems (Cerfontaine, 2005). As a result, forcing such change, though possible, may be counterproductive. Although the ambitious plans for city-provinces of the 1990s would have been closer to an ideal type regional governance, much energy at that time was spent in activities connected to the governance structure of the proposed city-provinces instead of examining how to solve the practical problems by, for example, focusing on how the changed structure would assist in housing low-income people. Current merger processes between municipalities appear likely to reduce co-operation instead of increasing it (B&A, 2002). Although it seems a good idea to link the urban policy process more to WGR plus-regions, this should not disrupt existing arrangements that are just starting to produce results.

In many circumstances pragmatic institutional compromises (such as the WGR plus-region) have proved to be useful and could continue to be used as a vehicle for governance within the Randstad. That is not to say that everything runs smoothly in city-regions, but adjustments could be made to improve their functioning. Part of this could be the introduction of positive incentives to co-operate. Provinces have the means by which they can force an increase in co-operation within a city-region, but there are not many positive incentives for this to occur. The urban policy of the central government is not currently focused on regional co-operation but if city-regions are retained, positive regional incentives could be introduced. For example, urban plans aiming to promote regional co-operation could be rewarded by financial incentives. This is common practice in France (see Box 3.10). Another issue that is raised regularly with respect to WGR plus-regions is accountability. Accountability within a city-region currently takes place indirectly, via the municipal councils of the participating municipalities. This procedure is defensible on the basis that budgets of city-regions are relatively

limited. Moreover, several evaluations show that the existing mechanisms for democratic control are currently used insufficiently. Democratic legitimacy could thus be increased by increased awareness of the availability, and greater use, of, these mechanisms.

Box 3.10. **The French** *contrats d'agglomération*

France has been one of the countries most consistent in pursuing policies aimed at the creation of metropolitan institutional arrangements. This process has been accelerated since 1999 when the central government established metropolitan authorities in the 150 largest urban areas. In addition to creating these new *communautés urbaines* and the *communautés d'agglomération*, central government drafted specific model agreements that urban areas must adopt and projects that urban areas must undertake if they want to receive government grants. These have been specified in two 1999 Acts on National Territorial Planning and Inter-municipal Co-operation.

Following these two acts, councils for *communautés urbaines* and *communautés d'agglomération* must approve a so-called territorial project. This territorial project is a five to 10-year plan which concerns infrastructure, economic development, social housing, culture, environment, etc at the metropolitan level. But it is more than a plan since it specifies the amount of funding and details all the operations to be performed to achieve the plan's objectives. Once approved by the *communauté* council, the project is then discussed with the central government. When it is approved by the central government, there is an agreement signed between it and the *communauté*, called a *contrat d'agglomération*.

This agreement guarantees that the central government will finance some of the actions decided in the territorial project (there are therefore negotiations between the central government and the *communauté* regarding government funding). In addition the law states that the *contrat d'agglomération* must also be signed by the regional council. This means that the actions envisaged in the *contrat d'agglomération* will also be financed by the region and as such will be part of the *contrat de Plan*, a larger five-year agreement signed by the central government and the region. Moreover, this means that European structural funds will feed the general budget of the territorial project.

For instance, the Bordeaux the *contrat d'agglomération* amounts to EUR 1.2 billion over a seven-year period. It has been signed by the *communauté urbaine* of Bordeaux (CUB), the provincial (*département*) council of Gironde, the City of Bordeaux, the regional council of Aquitaine and the central government's representative (the regional prefect). The central government contributes 17% of the total funding while the CUB contributes 36% and the regional council, 15%. Other contributors are the EU, the Department of Gironde, municipalities and national public agencies such as the National Railways (SNCF) or the National Centre for Aerospace (CNES).

Metropolitan ambitions and regional egalitarianism

A history of income redistribution and maintenance of a balance of power between cities has led to the absence of a leading metropolitan area in the Netherlands. None of the cities in the Randstad could be considered predominant. Nor could the western part of the Netherlands be considered to dominate the rest of the Netherlands, even if it is the most populous.

The trade off between metropolitan ambition and regional egalitarianism will remain a relevant theme in the Dutch debate. As mentioned earlier, a more metropolitan-focused structure for government is needed to increase economic competitiveness. Creating a governance structure on a Randstad-wide scale would mean a huge concentration of economic activity, as 45% of Dutch GDP is created in the Randstad (and more than half of it, if one takes the four western provinces together). The creation of a province covering the Randstad, as proposed by several commissions, would thus run contrary to a long Dutch tradition of regional egalitarianism. The dominance of the Randstad as compared with other regions in the Netherlands has been used as an argument against forming one province specifically for the Randstad (ROB, 2006). Although national governments in OECD countries have sometimes created a special status for large metropolitan areas, none of these areas have the economic significance that the Randstad would have for the Netherlands. Only Seoul, for which a special administrative status is created, comes close to the same relative economic significance for the national economy (see Figure 1.8 in Chapter 1).

The ambition to create a new metropolitan-centred governance structure should be approached realistically in terms of what it is likely to be possible to achieve. Not many cities have succeeded in creating effective governance at the metropolitan level (see Box 3.11). Many economic interactions and knowledge networks are global and regional governance at the Randstad level is not the panacea for many problems. Focus on the Randstad-level should not prevent the necessary interregional co-operation within the Netherlands and across national borders.

In the longer run it might be necessary to merge the four provinces in the Randstad. At the moment, the city-region is still the daily urban system, but activities increasingly take place on the level of the wings. Policy initiatives have thus been directed at these levels. If proposals to combat congestion at the Randstad-level and to strengthen a Randstad-wide public transport system were to be implemented, commuting flows which were Randstad wide would increase. This could then mean that housing markets, labour markets and the markets for recreation and other activities would become increasingly Randstad-oriented – and that policy should be more focused on this level. At this point it would make sense to merge the four provincies in the Randstad into one

Randstad-province. Some parts of the different provinces (such as the east of Flevoland) might have greater connections with other provinces than with the Randstad and should thus become part of other provinces. An interesting question is whether, if this situation arose, the other provinces in the Netherlands should also merge. This idea might be promoted to avoid the Randstad becoming too dominant to be acceptable in the Dutch context. As many provinces, such as the northern provinces, already co-operate on several issues, merger could be considered a next step. One could however also argue that this co-operation makes merger less necessary, especially since provinces outside the Randstad have a stronger regional profile than within the Randstad. Thus merging some of the provinces outside the Randstad could prove to be more politically sensitive than merging provinces within the Randstad. The main consideration should, however, be that the areas concerned connect with each other through the daily urban systems and through the relevant levels of intervention in many policy areas.

Box 3.11. **The VerbandRegio Stuttgard**

The Verband Regio Stuttgard (VRS) was created in 1994. It is a regional government body which covers themetropolitan area of Stutggart. It comprises 2.7 million inhabitants, 3 654km^2, 179 municipaliies (the city of Stuttgart being the largest by far with about 1/5 of the VRS population) and 5 counties (*Kreise*). The VRS is administered by a regional assembly of 90 members which is directly elected by a proportional representation electoral systme of a five year term. While the President, appointed by the assembly, is honorary, the actual head of the VRS, also appointed by the assembly, is the General Director who services an eight-year term. He runs an administration of about 40 people.

The VRS does not have many responsibilities: regional planning, public transport, business promotion and marketing are the main ones. Among them, public transport is by far the most important, the VRS serving as the public transport authority (*Verkehrsverbund*) for the whole metropolitan area. The budget of the VRS is very small (about EUR 260 million in 2005) and comes entirely from other government sources (Federal, Land, *Kreise* and municipalities) as it has no resources of its own. The bulk of its expenditure (85%) is spent on public transport. As a consequence, the VRS is a very weak government body. Even though it was established 12 years ago, its existence is still contested by local governments. However, some positive achievements, besides the efficient management of public transport, can be pointed to: it acts as a go between among local governments, it has been able to gradually produce a 'metropolitan attitude' among public and private actors in the region and it has helped in promoting the Stuttgart metropolitan area abroad.

Leadership and consensus seeking

The Dutch governance system seems almost designed to avoid fostering strong leadership as many elements in the institutional arrangements make its development difficult. The political election system is an extreme example of a proportional representation voting system; there is no threshold for representation in elected bodies, so there are coalition governments on every level. The political culture is dominated by the wish to find consensus with other political parties and representatives of civil society interests. This can easily give Dutch politics a technocratic and unimaginative approach.

There appears to be a need for more inspiring and outspoken leadership. When politics becomes technocratic, it tends to become comprehensible only to insiders. This reduces broad public involvement – and in that way the quality of decision making. Frustration with the political process will further increase if decision-making processes are lengthy, as appears to be the case in the Randstad. Finding a new balance in which not only can consensus be reached, but public leadership is also stimulated seems to be necessary.

It is questionable whether local politicians have sufficient opportunities to exert leadership. Mayors are not elected and so do not have a popular mandate, board members are bound to a coalition agreement and local fiscal autonomy is limited. At the same time, the local level offers the most promising prospects for increasing public leadership.

The local population could be asked to vote on policy priorities and on how to spend additional budgets. This would provide an opportunity to the citizen to determine which issues they find important and would give local politicians the mandate to do something about it. The fiscal autonomy of municipalities is limited. They cannot introduce a new local tax and there is a cap on the increases to local tax rates. More local differences should be allowed. Local politicians should have the freedom to convince citizens of the necessity of new municipal projects and new local taxes. It should become possible for municipalities to ask their citizens by referendum to agree to a new local tax or a tax rate increase that goes beyond the rate increase that is allowed. The possibilities for forming local partnerships with firms should be increased, so that firms that benefit from certain public investments will contribute financially to this investment.

Box 3.12. **Recommendations for improving governance in the Randstad**

- Improve co-ordination for Randstad-specific issues. Issues for co-ordination: Randstad-wide transport, top-end housing and offices, foreign direct investment and tourism. For public transport in the Randstad a project management organisation could be created to co-ordinate the coherence of regional public transport systems in the Randstad. In addition to the current scheme in which existing ministers are made responsible for a wing of the Randstad, one of the existing ministers could also be made responsible for the Randstad as a whole.
- Consider a Randstad province in the longer term. When more issues develop a Randstad-wide character and the Randstad increasingly becomes a daily urban system, merger of the four Randstad provinces should be considered.
- Strengthen the city-region. This could be done by enlarging through merger municipalities in the Randstad to give the city-region more implementation power. The current WGR plus-arrangement could also be used, but then additional measures (to increase accountability and introduce positive incentives for regional co-operation) should be introduced. Possible additional tasks for city-regions could include firm locations.
- Abolish municipal district councils in Amsterdam and Rotterdam.
- Increase local leadership by more direct democracy. More local referendums could be held to prioritise neighbourhood budgets.

NOTES

1. Decentralisation means the transfer of powers and responsibilities from central to intermediate and local governments.

2. Deconcentration is the transfer of certain planning, financing and management tasks to the local units of central government agencies.

3. There were seven WGR+ regions until 2006. In 2006, Parkstad Limburg (seven municipalities of Heerlen, Kerkrade, Landgraaf, Brunssum, Simpelveld, Voerendaal en Onderbanken) also became a WGR+ region.

4. For instance, the idea of a high speed Metro-Rapid as a metropolitan "flagship" in the Rhine Ruhr failed, following the opposition of regional stakeholders. The planning of this flagship failed to create, in short, a regional discourse about whether it was needed and created little support for it from most regional and local stakeholders.

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Randstad Holland, Netherlands

The Randstad is a poly-centric urban area in western Netherlands, comprising Amsterdam, Rotterdam, The Hague, Utrecht and several smaller cities. It is one of the most densely populated areas in the OECD, and has developed into an advanced urban economy with many leading sectors, such as logistics, horticulture and financial services. The Randstad has one of the lowest unemployment rates in all OECD countries, and it is one of the most attractive metropolitan areas for Foreign Direct Investment.

However, even though the Randstad had high growth rates over the 1990s, it performed less well in the 2000s. In particular, the Randstad has witnessed relatively low labour productivity growth over the last decade.

This Review aims to provide a detailed diagnosis and solutions for improving the competitiveness of the Randstad. The Randstad does not seem to exploit well the proximity of its four large cities, and it does not represent an integrated functional urban system. Key recommendations are: improve internal accessibility within the area; facilitate knowledge transfers to the private sector; increase flexibility in housing and labour markets; and strengthen the co-ordination of the economic specialities of its cities, such as higher education and tourism. Changing the governance framework is a key condition of success: individual city-regions within the Randstad should be strenghtened, and a Randstad agenda should be created, prioritising improvement of regional public transport.

This Territorial Review of the Randstad is integrated into a series of thematic reviews of metropolitan regions undertaken by the OECD Territorial Development Policy Committee. The overall aim of these case studies is to draw and disseminate horizontal policy recommendations for national governments.

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