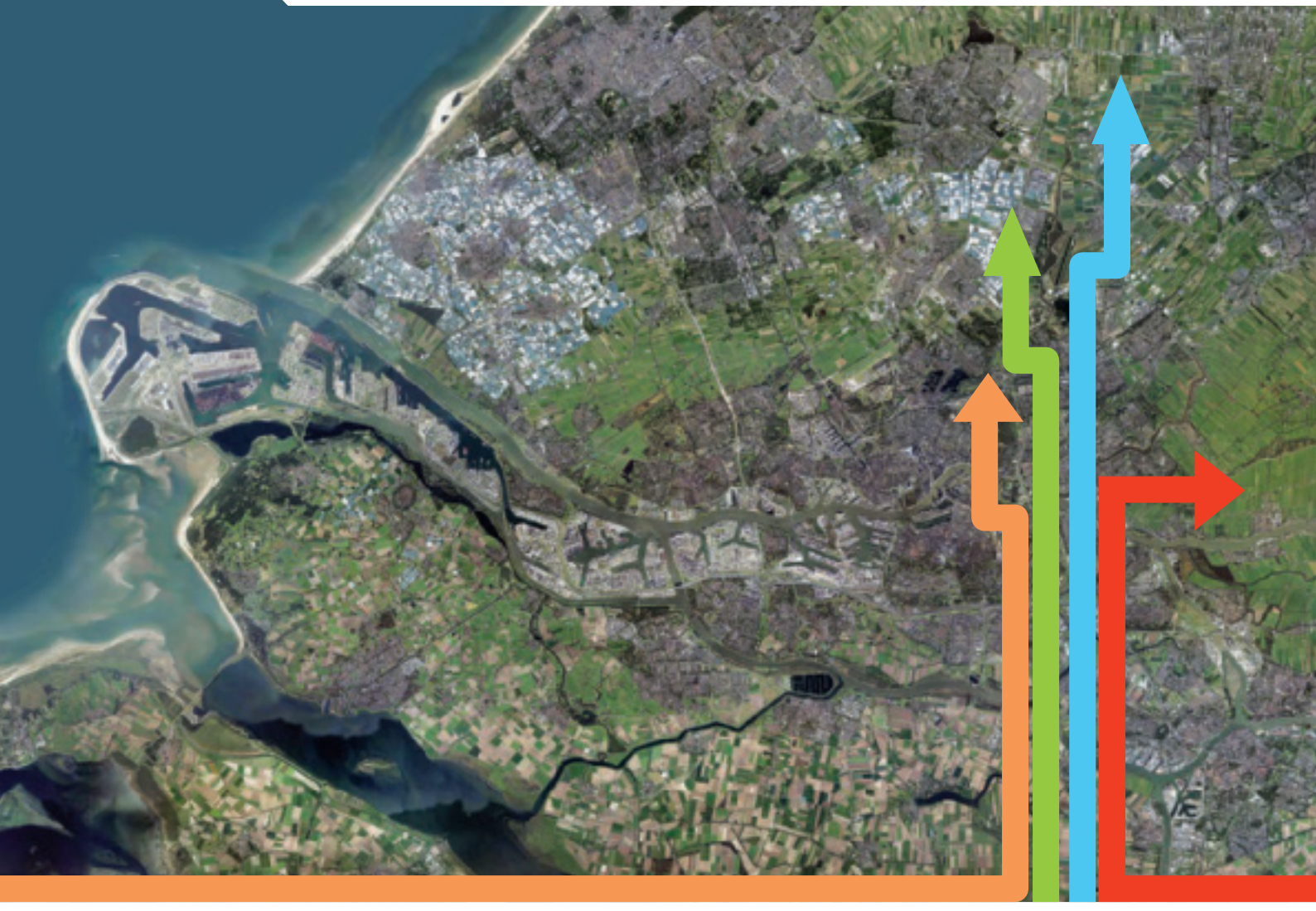
OECD Territorial Reviews

THE METROPOLITAN REGION OF ROTTERDAM-THE HAGUE, NETHERLANDS



OECD

OECD Territorial Reviews: The Metropolitan Region of Rotterdam-The Hague, Netherlands



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Foreword

Across the OECD, globalisation is increasingly testing the capacity of regional economies to adapt and exploit their competitive advantages, while also offering new opportunities for regional development. More and more, authorities at all levels of government are rethinking their strategies for building competitive, sustainable, inclusive urban areas. Central governments can no longer assume the full responsibility for development policies. Effective relations between different levels of government, as well as greater participation by citizens, firms, education and research institutions, and other non-state actors are required in order to improve the delivery and quality of public services.

The need to maintain regional competitiveness and enhance governance is particularly acute in metropolitan regions. Although they produce the bulk of national wealth, metropolitan economies are often held back not only by unemployment and distressed areas but because opportunities for growth are not fully exploited. Effective metropolitan governance is required if a functional urban region as a whole is to reach its full potential.

This review assesses the performance of the Metropolitan Region of Rotterdam-The Hague (MRDH) area and the potential of the new MRDH governing authority to achieve its ambitions for a more integrated metropolitan region, drawing on recent experiences in metropolitan governance across the OECD. The review finds that, despite progress, the MRDH is not yet a single functionally integrated urban area. To bring the economies of Rotterdam, The Hague and their surrounding municipalities closer together, the MRDH should both promote greater integration and boost the national and international profile of the region.

Responding to a need to study and spread innovative regional and metropolitan development strategies and governance in a more systematic way, the OECD's Regional Development Policy Committee (RDPC) and its Working Party on Urban Areas (WPUA) have been established as a unique forum for international exchange and debate. Among its activities, the RDPC has developed a series of territorial reviews and case studies on cities, metropolitan areas and countries that follow a standard methodology and conceptual framework. This allows countries to share their experiences and disseminate information on good policy practice.

This review of the Metropolitan Region of Rotterdam-The Hague is a unique contribution to the series of OECD Territorial Reviews in its particular focus on metropolitan governance. It builds on the findings of the 2014 *OECD Territorial Review of the Netherlands* and the 2015 flagship publication on metropolitan governance, *Governing the City*.

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Acronyms and abbreviations

AEB	Amsterdam Economic Board
AGMA	Association of Greater Manchester Authorities
AMB	Barcelona Metropolitan Area *Área Metropolitana de Barcelona*
ARTA	Auckland Regional Transport Authority
ATA	Auckland Transition Agency
BDU	Traffic and Transport Policy Funding *Brede Doeluitkering Verkeer en Vervoer*
BPZ	Administrative Platform South Wing *Bestuurlijk Platform Zuidvleugel*
C/I	Commercial/industrial
CBD	Central Business District
CBI	Confederation of Business Industry
CIPTEC	Collective Innovation for Public Transport in European Cities
COROP	Co-ordination Committee Regional Research Programme *Coördinatiecommissie Regionaal Onderzoeksprogramma*
EDS	Economic Development Strategy
EPZ	South Wing Economic Programme Board *Economische Programmaraad Zuidvleugel*
FUA	Functional urban area
GDP	Gross domestic product
GLA	Greater London Authority
GMCA	Greater Manchester Combined Authority
HRI	Helsinki Region Infoshare
IAB	International Advisory Board (Rotterdam)
ITI	Integrated territorial investment
LBB	London Business Board
LCCI	London Chamber of Commerce and Industry
MIRT	Multi-year Plan for Infrastructure, Spatial Planning and Transport *Meerjarenplan Infrastructuur, Ruimte en Transport*
MPO	Metropolitan planning organisation
MRA	Amsterdam Metropolitan Area *Metropoolregio Amsterdam*

MRDH	Metropolitan Region of Rotterdam-The Hague *Metropoolregio Rotterdam Den Haag*
MTS	Mayor's Transport Strategy
NS	Dutch Railways *Nederlandse Spoorwegen*
NUA	National Urban Agenda
ORSA	Organisation for the Planning and Environmental Protection of Athens
PIAAC	Programme for International Assessment of Adult Competencies (OECD)
PISA	Programme for International Student Assessment (OECD)
RDPC	Regional Development Policy Committee (OECD)
RGS	Regional Growth Strategy
RPPC	Rotterdam Port Promotion Council
RTP	Regional transportation plan
SME	Small and medium-sized enterprise
STIF	Ile-de-France Transport Authority *Syndicat des transports d'Ile-de-France*
TEU	Twenty-foot equivalent unit
TfGMC	Transport for Greater Manchester Committee
TfL	Transport for London
UGB	Urban growth boundary
VINEX	Supplement to Fourth National Spatial Planning Policy Document *Vierde Nota voor de Ruimtelijke Ordening Extra*
WFIA	WestHolland Foreign Investment Agency
WGR	Joint Regulation Act *Wet Gemeenschappelijke Regelingen*
WPUA	Working Party on Urban Areas (OECD)

Executive summary

Key findings

The 2014 *OECD Territorial Review of the Netherlands* suggested that the country could be getting more out of its largest cities. In search of ways to strengthen urban areas, the Dutch government has recently undertaken the development of a National Urban Agenda, known as Agenda Stad, in parallel to a series of broad institutional reforms. One such reform was the abolition of the eight city-regions (stadsregio), which had for decades managed a range of functions in the country's largest urban areas. Subsequently, Rotterdam, The Hague and 21 smaller neighbouring cities decided to form the Metropolitan Region of Rotterdam-The Hague (Metropoolregio Rotterdam Den Haag, MRDH). The MRDH and Amsterdam were the only two urban areas in the country to emerge from the latest reform with their own new metropolitan governance arrangements; in all other Dutch urban areas, the responsibilities and corresponding budgets of the city-regions were transferred to provinces and municipalities.

The current review analyses the emergence of the MRDH, both as a geographical area that spans 23 municipalities in the southern Randstad region, as well as a new metropolitan authority tasked with transport and economic development responsibilities for this territory. One of the core ambitions of the MRDH authority is to bring the economies of Rotterdam and The Hague closer together while generating growth and well-being.

Among the key findings:

- The largest Dutch cities have not benefited to the expected degree from agglomeration economies, measured in terms of labour productivity levels. In the case of the MRDH, the distinct socio-economic profiles of Rotterdam (centred on the port and logistics activities) and The Hague (specialised in public administration and services) have contributed to weak functional integration of the MRDH area, as the two cities have not traditionally considered themselves as natural partners. Public policies have also played a role in constraining the development of large urban areas, thereby limiting potential agglomeration benefits.
- Despite progress, the MRDH is not yet a single, functionally integrated urban area, as indicated for example, by relatively low commuting flows between Rotterdam and The Hague. Commuting within the MRDH area increased between 2001 and 2011, but the gains have largely been driven by travel from smaller municipalities to Rotterdam and The Hague.
- To some extent, the abolition of the city-regions in the Netherlands, which led to the creation of the MRDH, runs counter to OECD trends in metropolitan governance. Contrary to the recent reforms in the Netherlands, many OECD countries have created specific mechanisms for metropolitan governance in recent years.

Key recommendations

- The MRDH aims to bring the economies of Rotterdam, The Hague and their surrounding municipalities closer together to strengthen agglomeration economies. To do so, the MRDH could pursue two overarching strategies in parallel: focusing inward to promote greater integration of the MRDH while looking outward to boost the national and international profile of the region.
- In terms of its economic development pillar, the MRDH needs to add value in an already crowded institutional field. Concrete, federating projects that can deliver results over the short and long term are needed. This could include both small quick wins to maintain political momentum and larger flagship projects to bring the region closer together.
- In terms of its transport pillar, the MRDH may need public support to be effective. OECD experience suggests that strong public support can enable metropolitan authorities to implement more politically difficult reforms (e.g. congestion charges) over the long term. The MRDH will need to demonstrate that it can solve tough issues, such as congestion, and communicate on its progress.
- Achieving greater functional integration of the MRDH should be understood as a long-term ambition. There is no silver bullet to increase the economic ties between the former city-regions of Rotterdam and The Hague overnight, nor will the process be automatic. Rather, it will take a range of policies and programmes related to economic development, spatial planning, housing and transport, implemented at different levels of government, to further these ambitions.
- The relationships, and potential competencies, of different levels of government are likely to continue to evolve over the long term. Co-operation between the MRDH and the Province of Zuid-Holland has markedly improved in recent months; this foundation will be critical moving forward, as the MRDH and the province must work together effectively to co-ordinate economic, transport and spatial planning. However, considering recent OECD trends, governance configurations may need to evolve further over time.
- With the development of its National Urban Agenda, the central government is rethinking its role in governing the country's urban areas. In addition to the introduction of new tools to strengthen cities, national policy makers may also consider reviewing the range of policy domains that affect the performance and functioning of urban areas (e.g. housing, spatial planning, transport) to ensure that these policies are consistent with the broader objectives for cities and urban areas.
- At national level, the Dutch approach to cities and urban regions is shifting toward a more nuanced, tailored and collaborative approach to the management of urban areas. This policy shift resonates with broader trends across the OECD and should be of wider interest to policy makers beyond Dutch borders.

Assessment and recommendations

Towards more competitive, sustainable and inclusive urban areas in the Netherlands

The Dutch government is developing new tools and institutional responses to strengthen urban areas

Findings from the 2014 *OECD Territorial Review of the Netherlands* suggest that the country could be getting more out of its cities and urban areas. The rich, polycentric spatial structure of the Netherlands has contributed to high levels of gross domestic product (GDP) per capita, yet Dutch cities have not benefited to the expected degree from agglomeration economies. In search of new tools and institutional responses to strengthen urban areas, the Dutch government has in recent years undertaken the development of a National Urban Agenda (Agenda Stad), in parallel to a series of broad institutional reforms. One such reform, which became effective in January 2015, was the abolition of the eight city-regions (*stadsregio WGR+ regio*), which had for decades managed a range of metropolitan-scale functions in the country's largest urban areas. While different institutional configurations were envisaged to redistribute their competencies and corresponding resources, Rotterdam and The Hague joined forces with 21 smaller neighbouring cities to merge the 2 former city-regions of Rotterdam and The Hague (Stadsregio Rotterdam and Stadsgewest Haaglanden, respectively) to form the Metropolitan Region of Rotterdam-The Hague (Metropoolregio Rotterdam Den Haag, MRDH).

To a certain extent, the abolition of the eight city-regions in the Netherlands, which had been established in 1950 and made compulsory in 1985, runs counter to OECD trends in metropolitan governance. As urban areas continue to grow, resulting in many cases in administrative borders that no longer match the daily economic realities, many countries have created (or are in the process of creating) specific mechanisms for metropolitan governance. Co-operation can take many forms, but often shares an ambition to reduce fragmentation and manage complex issues at the right economic and social scales. Concretely, this may imply tools and platforms to co-ordinate policies across neighbouring cities and towns, or to create stronger linkages between urban and rural areas. In the Netherlands, only the two largest urban areas, Amsterdam and Rotterdam-The Hague, emerged from the latest reform with their own metropolitan governance arrangements.

The emergence of the Metropolitan Region of Rotterdam-The Hague

The creation of the MRDH thus marks an important experiment in metropolitan governance, with lessons for policy makers in the Netherlands and across the OECD. In the Netherlands, the MRDH represents the latest in a string of attempts to fill the gap

between the provincial scale (too large for addressing many socio-economic challenges adequately) and the municipal scale (too small). Yet, more broadly and of relevance beyond Dutch borders, it is also an experiment in asymmetrical metropolitan governance: an attempt to fit policies and institutions to specific contexts rather than adopt universal solutions for cities of all shapes and sizes.

This review analyses the emergence of the MRDH, both as a geographical area that spans 23 municipalities in the southern Randstad region, as well as a new metropolitan-scale institution tasked with transport and economic development responsibilities for this territory. Although the MRDH area is not yet a single metropolitan area, the ambition of the new governance body is to help it become one. How, then, can public policies deepen the functional integration of the MRDH area whilst generating growth and well-being? How can the MRDH body add value in an already crowded institutional landscape? What lessons from metropolitan governance reforms in other OECD countries could be valuable for the MRDH and the national government moving forward, and how can the MRDH experience inform policy makers beyond Dutch borders? These are among the central questions in this review.

Within the polycentric Dutch urban system, a metropolitan area in the making

The polycentric structure of the Netherlands affects the productivity of its urban areas

The dense, polycentric urban structure of the Netherlands is, in many ways, a source of economic strength. This is consistent with general trends across OECD countries, as countries with a more polycentric urban system are found to have higher GDP per capita on average. The five largest Dutch functional urban areas combined – Rotterdam, Amsterdam, The Hague, Utrecht and Eindhoven – host nearly 40% of the national population and account for about the same share of national GDP. With the exception of Eindhoven, they together form an urban network of 7.1 million people known as the Randstad. Despite their important contributions to national growth, these major urban areas, and notably Rotterdam and The Hague, register lower labour productivity than expected when compared to cities of similar size in OECD countries with levels of GDP per capita comparable to the Netherlands. Only two Dutch metropolitan areas, Utrecht and Eindhoven, perform slightly above average and register higher labour productivity levels than Rotterdam and The Hague, despite a smaller population size. These findings are consistent with the 2007 *OECD Territorial Review of the Randstad*, which highlighted that the Randstad area was not sufficiently exploiting the proximity of its four large cities.

Given the strong economic performance at national level – the Netherlands is among the top five OECD countries with respect to labour productivity – the question remains why the largest Dutch cities are not doing better. Two findings are central to understanding how agglomeration economies function in the Netherlands. First, strong performance of some smaller Dutch functional urban areas (FUAs) that are located in close proximity to the country's largest cities may help explain these surprising results. On average, larger cities are typically more productive than smaller ones. However, small Dutch FUAs (those with a population of fewer than 250 000) located in the Randstad in proximity to larger FUAs have much higher productivity levels than would be expected, given their size. This finding supports the concept of borrowed size, whereby these smaller cities benefit from borrowing agglomeration from their larger neighbours

(notably Amsterdam and the MRDH). This also implies that the MRDH benefits from a worker catchment area that extends beyond its boundaries. Second, connectivity matters for agglomeration economies, especially in the Netherlands, given the country's small size and its polycentric spatial structure. In other words, improving connectivity – reducing travel times between the MRDH and other large FUAs – could increase market access and boost the agglomeration benefits of the MRDH area.

Two cities turning towards each other

Traditionally, from both a historical and an economic perspective, Rotterdam and The Hague have not been natural partners. In contrast to many OECD metropolitan areas, the two cities have developed distinct socio-economic and cultural profiles in close proximity to each other. Transport and logistics activities are concentrated in and around Rotterdam, as the city is home to the Port of Rotterdam, which is the largest in Europe and among the top 15 worldwide in terms of cargo throughput and containers shipped, respectively. The economic and cultural roots of the city are closely connected to the port, and Rotterdam is still often seen as a working-class city, while having transformed itself into a modern urban centre. The Hague, meanwhile, is a centre for public administration and services: in 2013, about 21% of jobs in The Hague were in the public administration sector, equivalent to more than 10% of Dutch employment in this sector. It has long been the seat of the Dutch government and home to approximately 300 international organisations, including the International Court of Justice and the International Criminal Court. The Hague has a reputation as a city of white-collar public sector employees. Beyond the two main cities, the MRDH's economy is further complemented by the smaller municipalities that are specialised in horticulture and food, which form the green belt of the MRDH area, as well as knowledge institutions in Delft.

The MRDH is one of the most densely populated urban areas in the Netherlands

The MRDH area is one of the most densely populated urban stretches in the Netherlands, with 2.3 million inhabitants, comparable in size to the metropolitan areas of Amsterdam, Vancouver or Portland. Covering about 900 square kilometres, the MRDH area represents more than 60% of the population of the Province of Zuid-Holland but just 36% of its geographical area. It generates about 16% of national GDP and is responsible for the lion's share of economic activity within the province, accounting for more than two-thirds of all firms and jobs. Rotterdam and The Hague are by far the two largest cities in the MRDH, with roughly 623 000 and 515 000 inhabitants, respectively.

Accessibility, a world-class port, a well-educated workforce and high quality of life are key assets

The MRDH area possesses significant assets, including a strong infrastructure network with good accessibility to internal and external markets. Its dense transport network makes the MRDH one of the most accessible areas in the Netherlands and Europe. It is located in proximity to Schiphol airport in Amsterdam and is home to the Rotterdam The Hague regional airport. More generally, accessibility is high for households of all income levels in the MRDH, which is often a challenge in other OECD urban areas. Rotterdam is home to Europe's largest hub port, with economic impacts that

reach far beyond national borders. The regional economy is diverse, hosting several "Top Sectors" that have been identified by the central government as priorities for investment; these include agriculture and food, water, logistics, energy, chemicals, and horticulture and propagation materials. Moreover, from an international perspective, the MRDH area has a well-educated workforce, with a large share of highly skilled people and high quality education standards at all levels. These strong education outcomes reflect broader national trends: the Netherlands registers above-average results in both the Programme for International Assessment of Adult Competencies (PIAAC) and the Programme for International Student Assessment (PISA). In terms of well-being and quality of life, the MRDH exhibits a higher standard of living than most OECD regions and performs well compared to the Dutch average in terms of health, safety and a relatively young labour force. However, the MRDH lags behind the Dutch average in terms of educational attainment, disposable income and employment.

The MRDH nonetheless lags behind other Dutch urban areas in economic and educational indicators

Nevertheless, the MRDH area also faces a number of challenges. It has struggled to recover from the 2008 global crisis and continues to be outperformed by other metropolitan areas in the Randstad. GDP per capita levels in the MRDH remain significantly lower than those in the Amsterdam region, and the performance gap in per capita levels of GDP has increased since the onset of the global crisis, from 32% in 2002 to 38% in 2013. In 2014, unemployment in the MRDH was 9.1%, more than double the rate in 2008 and one of the highest across all Dutch COROP regions (a statistical unit of analysis created by researchers in 1971 and named after the committee, Co-ordination Committee Regional Research Programme). Unemployment has especially affected youth and workers with a non-Western migrant background in the MRDH. For instance, in 2014, workers of a non-Western background registered an unemployment rate of 16.9%, compared to 6.9% among all other workers. Education attainment of the working-age population in the MRDH (68% with at least an upper secondary education) is slightly below the average for other large Dutch cities (70%) and well behind Amsterdam (78%) – though from an international perspective, these levels are still high. Moreover, while the economic diversity of the MRDH may render the regional economy more resilient to sector-specific shocks, the absence of complementarities among sectors is likely to limit stronger cluster formation. Patenting output is low, both from an international and a national perspective: all Dutch urban areas lag well behind Eindhoven in patent applications.

Air pollution and intra-regional income disparities constitute additional challenges in the MRDH. Levels of PM_{10} and $PM_{2.5}$ exceed the threshold values recommended by the World Health Organization. High levels of air pollution are due in part to emissions from industries in the port area and from port-related transport, as well as high population density, large shares of urban built areas and a limited amount of green space. In addition, intra-regional income disparities exist, with Rotterdam and The Hague registering the largest share of households living below or at the social minimum within the MRDH area. Within a single municipality, the average household income can vary significantly across census areas (*buurts*); the annual income gap can reach more than EUR 50 000 in some parts of The Hague. Lower income levels are particularly common among single-parent households, young households and non-Western first- and second-generation immigrants.

Towards a more functionally integrated metropolitan region

A more integrated region could help boost agglomeration benefits

One of the central objectives of the MRDH is to bring the economies of Rotterdam, The Hague and their surrounding municipalities closer together. This ambition is supported by economic theory: agglomeration economies are an important source of productivity gains, and integrating Rotterdam and The Hague is likely to strengthen agglomeration economies. Indeed, across OECD countries, the productivity of workers and firms increases with the size of the urban agglomeration in which they operate: on average, workers in a city twice the size of another city are between 2% and 5% more productive than workers in the smaller city. Among the reasons for higher productivity levels in larger cities are the faster spread of ideas, larger local labour markets that ensure better matches between workers and jobs, as well as higher utilisation rates of infrastructure.

Despite progress, the MRDH is not yet a single, integrated functional area

Although commuting flows and economic interactions within the MRDH area have increased over the past decade, it is not yet a single, integrated functional area. Based on the OECD definition of functional urban areas, the MRDH actually consists of two separate FUAs: Rotterdam and The Hague. There is also no contiguous built-up urbanisation between Rotterdam and The Hague. Even though an increasingly dense public transport network links the two cities, along with many of the municipalities in between, most commuting flows and economic exchanges continue to occur at smaller, sub-regional scales. The share of workers commuting between Rotterdam and The Hague has increased in the past decade, but remains small relative to the short distance between the two cities (a mere 30 kilometres) and that are relatively well connected by both a rail and light-rail lines of high frequency. In 2011, less than 5% of workers commuted between the core of Rotterdam and the core of The Hague. Similarly, economic interactions among firms in the MRDH have increased, but have not yet reached their full potential. Finally, some cities in the MRDH also maintain strong economic ties to cities outside the MRDH boundaries: for instance, Rotterdam shares significant links with Dordrecht around port and logistics activities, while The Hague and Delft maintain close economic ties with Leiden to the north.

Public policies have constrained greater economic and physical integration in the MRDH

Public policies have also played a role in the weak functional integration of the MRDH. Transport investments within the MRDH area have had some success in bringing the region closer together, even if the impact on commuting has thus far been lower than one might expect. Meanwhile, policies in other fields have explicitly or implicitly constrained greater functional integration. Past national spatial and housing policies aimed to channel population growth outside cities to avoid congestion and other agglomeration costs. In this context, the growth management strategy expressly sought to prevent cities and towns in the Randstad from forming large metropolitan areas. At

provincial level, a restrictive approach to economic and spatial planning has persisted in the Province of Zuid-Holland: provincial authorities aim for balanced territorial development and a fair allocation of the regional economic pie, often overriding local planning decisions. While restrictive spatial planning may help reduce potential agglomeration costs, like congestion and pollution, it also has clear economic costs, particularly when spatial planning is used as an explicit tool to shape the regional economy.

In addition to spatial planning, social housing policies have led to greater fragmentation within the MRDH area, constraining labour mobility and further limiting the spatial integration of the MRDH. The Dutch renter-occupied social housing sector is among the largest in the OECD, representing 32% of the total housing stock. Among OECD countries, only Austria and Denmark have a similarly sized social rental housing sector. Social rental housing makes up 38% of all housing in the COROP regions of Rotterdam, The Hague and Delft, and more than 80% of all rental accommodation in Rotterdam. The MRDH area is divided into two housing regions: one corresponding to the former city-region of Rotterdam and the other to the former city-region of The Hague, each with its own waiting list and somewhat different regulations. The system makes it significantly easier for residents of social housing to move within their housing region than across housing regions. Moving to another housing region means that individuals would lose their tenure on the waiting list and be subject to an income verification (which only takes place at the time of registration on the waiting list). In practical terms, this means that an individual on the social housing waiting list in The Hague has strong disincentives to apply for social housing in Rotterdam.

Economic integration of the MRDH will not be an automatic process, and will take time

Achieving greater functional integration of the MRDH should be understood as a long-term ambition. There is no silver bullet to increase the economic ties between the former city-regions of Rotterdam and The Hague overnight, nor will the process be automatic. Rather, it will take a range of policies and programmes related to economic development, spatial planning, housing and transport, designed and implemented at different levels of government, to further these ambitions.

Advancing the dual pillars of the Metropolitan Region of Rotterdam-The Hague: Economic development and transport

As a non-elected inter-municipal authority, the MRDH is comparable to the governance models currently in place in Barcelona (Spain), Montreal and Vancouver (Canada), which have authority over metropolitan areas that range from 2.2 million to 4 million inhabitants. The combination of responsibilities in transport and economic development puts the MRDH broadly in line with the majority of metropolitan governance bodies across the OECD area, as around 80% of metropolitan governance bodies work on regional development and over 70% on transport. However, the strategic competencies of the MRDH are more modest than those in many other OECD regions, as 60% of metropolitan bodies also work on spatial planning, and more than half work on these three fields at the same time.

Two policy pillars with distinct approaches: Top-down for transport, bottom-up for economic development

The two policy pillars of the MRDH derive from different approaches, a unique feature of the MRDH in the context of other metropolitan bodies across the OECD. The responsibility for public and private transport is the founding motive of the MRDH, resulting from the abolition of the city-regions. Led by Rotterdam and The Hague, the municipalities of the two former city-regions jointly seized the opportunity for acquiring the Traffic and Transport Policy Funding (*Brede Doeluitkering Verkeer en Vervoer*, BDU), which would otherwise have gone to the Province of Zuid-Holland, as in all other Dutch regions (except Amsterdam). Parallel to these negotiations with central government authorities, leaders of the two former city-regions successfully built consensus among their member municipalities to broaden the competencies of the new body beyond transport. Ultimately, municipalities agreed to co-operate on a voluntary basis on economic development, a policy field that is also part of the province's portfolio. Nevertheless, the responsibilities of the MRDH in economic development do not include any enforcement mechanisms: its legal competencies and financial resources in this domain – its "hard tools" – are relatively limited.

The voluntary, bottom-up collaboration led by two big cities in the MRDH is uncommon and encouraging

The voluntary, bottom-up collaboration among municipalities is a positive, distinctive feature of the MRDH compared to other OECD metropolitan regions built around two large cities of roughly equal size. While across the OECD there are examples of strong co-operation between two cities within a shared metropolitan area (e.g. Copenhagen and Malmö), not all cases are as successful. For instance, the co-operative foundation of the MRDH can be contrasted with Aix-Marseille (France) and Minneapolis-St. Paul (United States), two regions characterised by long-standing antagonism between their two largest cities and for which intervention from an upper echelon of government (the central government in France, and the state government in the United States) was necessary to make metropolitan governance reform happen. In the case of the MRDH, the initiative for metropolitan co-ordination came from municipal leaders, concretised by the central government's decision to grant the significant transport funds to the new metropolitan, rather than provincial, authorities. The co-operative foundation of the MRDH is also reflected in the carefully designed balance of powers between the two largest cities, as well as between them and their smaller neighbours.

The MRDH must demonstrate that it can add value in a crowded institutional landscape

When the MRDH body came into formal existence in January 2015 it entered a crowded field of institutional actors, networks and platforms in regional economic development. While a number of economic development and promotion agencies that are primarily operated by municipalities exist in the region, the main conflict initially emerged between the MRDH and the Province of Zuid-Holland. The creation of the MRDH was problematic for the provincial authorities on two levels. Not only did the province miss the opportunity to manage the significant transport portfolio that in most

other Dutch regions was transferred to the provincial authorities; the MRDH's second policy pillar, economic development, is also a key function of the province. In particular, co-operation for economic development at the level of the so-called "South Wing" started almost two decades earlier than the MRDH under the leadership of the province (its geographic coverage includes the municipalities that are members of the MRDH, in addition to Leiden and Dordrecht and their surrounding municipalities, none of which are part of the MRDH). In recent months the long-standing tensions between the Province of Zuid-Holland and the municipalities of the MRDH have given way to a more co-operative working relationship. Nevertheless, the MRDH will need to demonstrate that it can be more than another platform for dialogue and exchange in a region that is already home to many. The MRDH must prove that it can add value and achieve real change over both the short and long term.

The MRDH could operate as an idea factory for its member municipalities

Rather than replicate the activities of existing platforms and agencies for economic development, the MRDH could align the region behind new ideas. As an "idea factory" for the region, it could complement the functions of existing actors and networks. In such a role, the MRDH could develop project proposals and work together with municipalities to organise the necessary political and financial support to implement them. In this context, a particular emphasis should fall on projects that have a metropolitan dimension. To operate as an idea factory, the MRDH would need to consider the following steps: 1) developing strong in-house analytical capabilities or good connections to universities, think tanks and the private sector in order to design effective policies; 2) ensuring that municipalities and other actors support the joint policies of the MRDH; 3) co-ordinating the activities of member municipalities to maximise their effectiveness in achieving common goals; and 4) aligning transport and economic policies for the MRDH area.

The MRDH could deepen functional integration via a dual strategy: Focus inward while looking outward

If greater economic integration is the central objective driving the actions of the MRDH, one of its core policy objectives should be to identify and rectify policies that prevent the economies of Rotterdam and The Hague from being more closely integrated. Such measures could enhance growth because they would let both cities grow more closely together in economic terms, which would produce gains from agglomeration economies. Nonetheless, it will be important for the MRDH authority to implement concrete, federating projects with an eye to both the short and long term. To do so, the MRDH could consider two overarching strategies to advance in parallel: focusing inward to promote greater integration of the MRDH while looking outward to boost the competitiveness of the MRDH relative to its national and international peers:

- By focusing inward, the MRDH could concentrate on: 1) strengthening agglomeration economies within the region while preserving existing economic connections to areas outside the MRDH; 2) facilitating the process of regional economic transition; 3) attracting outside funding to support the economic development objectives of the MRDH; 4) addressing key strategic questions for regional economic policy. Specific measures could include consolidating the two social housing waiting lists into a single regional list; improving the regional

transport network to reduce travel times between Rotterdam and The Hague; creating a regional open data portal (as has been done in Helsinki); or providing assistance to regional firms to navigate the path to innovation and growth.

- At the same time, looking outward could help boost the competitiveness of the MRDH within the Netherlands and raise its international profile. To this end, strategies could include: 1) establishing the MRDH as the voice for external relations; 2) developing an internationalisation agenda; 3) pursuing larger scale projects and flagship events (e.g. World Expo 2025). OECD experience points to both potential benefits (Barcelona) and risks (Athens) of such global events.

Public support could help the MRDH implement politically challenging – yet beneficial – mobility policies

In terms of its traffic and transport pillar, the MRDH operates with a larger budget and substantially fewer conflicts with other regional stakeholders compared to its economic policy portfolio. While the creation of transport authorities responsible for multiple jurisdictions within a functional urban area is increasingly common, international experience suggests that there is no single successful model. Compared to other metropolitan transport authorities in the OECD, the MRDH has several important assets: a strong legal framework, qualified technical staff, a solid financial base and political support from several key actors. Yet as with economic development, the MRDH will have to prove itself by delivering mobility improvements that are significant, effective and visible to the population.

OECD experience suggests that over the long term, strong public support could enable the MRDH to implement more politically difficult reforms (e.g. congestion charges). As such, the MRDH will need to demonstrate that it can solve tough issues and communicate on its progress. At the same time, the MRDH could look to broaden public support from actors whose co-operation will be critical to implement transport plans and policies. These efforts could include: 1) improving co-operation with the province and private real estate developers; 2) ensuring that smaller municipalities are also well served by the MRDH transport authority; 3) improving co-operation with the Dutch Railways to harmonise national and regional transport projects.

Ensuring that the Metropolitan Region of Rotterdam-The Hague body can be effective and sustain its momentum over the long term

To ensure that it is effective and sustains its momentum over time, the MRDH body will need to build strong partnerships with a range of public and private regional stakeholders and consider how its functions, as well as its financing, might evolve over time. There is no guarantee that effective co-operation will last beyond the political term of the two mayors of Rotterdam and The Hague. Neither the political culture in municipal administrations nor public opinion has yet fully embraced the new co-operative spirit between the two cities. Public opinion is often unaware of inter-municipal co-operation, as long as the quality of daily public services remains satisfactory. At present, there appears to be little public support in either city for conceding its own advantages for the sake of the larger region. As the experience of other OECD metropolitan regions demonstrates, metropolitan governance reforms need to reach beyond purely institutional

changes to build a long-term process of collaboration. Moreover, the presence of a metropolitan authority does not, in itself, guarantee better policy co-ordination.

The MRDH will need to engage its member municipalities to maintain momentum

The MRDH will need to engage its primary stakeholders – municipalities – to work effectively on a daily basis and achieve their longer term ambitions. Efforts by the MRDH to support municipal administrations can be beneficial in improving the quality of the public administration in the region (thus providing a direct benefit to the region), and in creating goodwill for the MRDH within administrations (increasing support and thereby the effectiveness of MRDH projects). Because several other formal and informal networks and working groups of municipalities exist that aim at co-ordinating specific policies at varying scales, the MRDH can provide support on more practical aspects. Such support could range from assisting in capacity-building efforts like knowledge-sharing programmes, particularly for smaller administrations with less specialised staff; offering secondment positions for municipal employees to work hand in hand with the permanent staff of the MRDH; and promoting networking among municipalities.

The MRDH and the Province of Zuid-Holland need to work together as partners

The long-standing competition between the provincial, municipal and (most recently) metropolitan authorities within the MRDH area is a challenge common to many OECD countries. This is especially the case in countries where metropolitan areas are emerging as young and dynamic organisations while provinces (or their equivalents) correspond to the country's traditional administrative structures. Tensions between the province on the one hand, and the MRDH and its member municipalities on the other, have subsided in recent months and should form the basis of a more co-operative working relationship going forward. In the short to medium term, the MRDH and the province need to work together effectively, particularly to co-ordinate the economic and transport planning functions of the MRDH with the economic and spatial planning functions of the province. The experience of other OECD metropolitan governance bodies demonstrates that separate authorities can exert transport and spatial planning competencies effectively – and it is often the case that these functions are managed by different authorities – so long as well-functioning co-ordination mechanisms are in place. Notably, in September 2015, the MRDH and the province signed an agreement to work together on eight concrete projects around transport infrastructure and regional development, each to be co-ordinated by a leader from the MRDH and a leader from the province. This is an extremely positive step toward a more content-based working relationship. It may also make sense in the medium term to merge the parallel regional economic agendas of the MRDH and the South Wing Economic Board into a single economic agenda for the region. However, the different strengths of each existing platform (the strong political backing of 23 municipalities in the MRDH and the triple-helix aspect of the South Wing Economic Board) should be preserved.

Engaging businesses in the MRDH will be critical to support the regional economic transition

Engaging the business community in metropolitan governance is a challenge shared across the OECD – only 9% of metropolitan governance bodies include representatives of the private sector or other interest groups in their organisational structure. However, the MRDH will need to foster close dialogue with the private sector if it is to achieve its ambition of accompanying the economic transition of the region and supporting the creation of new, innovative and sustainable types of economic activity. Closer collaboration with regional firms can help the MRDH by informing the organisation about the needs of the business community and working as partners to advance regional development goals. Across the OECD, and notably in Chicago, Vancouver, Marseille and London, metropolitan authorities have worked effectively with the private sector without necessarily giving firms a voting seat. In some cases, the business sector provided strong momentum to drive public reform processes (Chicago and Toronto). In others (Aix-Marseille), the business community helped lead a campaign to boost the image of the region; in parallel, efforts were made to raise awareness among business leaders about important metropolitan themes, such as transport, housing and business tourism.

Governance arrangements in the MRDH may need to evolve further over the long term

Over the long run, governance arrangements in the MRDH area – just as the MRDH co-operative structure itself – may need to evolve further, as illustrated by the experiences of other OECD countries. First, the MRDH body could consider expanding its geographic boundaries beyond the current 23 municipal members to include, for instance, the cities of Dordrecht, Leiden and their surrounding municipalities. This is likely one of the most natural evolutions of the MRDH, considering that strong economic links already exist between them. Second, it may be possible, over the long term, to reconsider the current regional governance structure and co-operative arrangement between the MRDH and the Province of Zuid-Holland. Like Dutch provinces, intermediate levels of government in OECD countries are often the product of history and the subject of a debate about their role in today's fast-changing environment. In some countries, the search for a streamlined, modernised system of subnational government has led to enacting substantial institutional reforms, ranging from taking a metropolitan area out of the jurisdiction of its upper tier to merging them altogether (e.g. France, Italy, New Zealand and Turkey). While most such reforms have triggered intense political debates, as they hinge on the specific history and socio-institutional framework of each country, this spectrum of experiences illustrates that many OECD countries no longer settle on maintaining a *status quo* and actively seek more efficient public policy delivery to raise quality of life and the international competitiveness of their main cities.

The MRDH financing model may also need to change with time

The budget of the MRDH is comprised of transfers from other levels of government: from the central government for the transport pillar and from municipal governments for the economic development pillar. The dual functions of the MRDH are reflected in its organisational structure as two distinct pillars, in terms of both budget and staffing. The

transport pillar employs roughly 85 full-time staff, with a budget of EUR 480 million that results primarily from a transfer from central government. The economic development pillar employs approximately 15 staff with a much smaller budget (EUR 5.5 million), which is based on an annual voluntary contribution from each member municipality of EUR 2.45 per inhabitant. The funding arrangement for the economic pillar of the MRDH is common across the OECD and its per capita budget lies within the typical range of informal metropolitan associations that do not have regulatory powers. In terms of staffing, the MRDH has a smaller secretariat compared to other OECD metropolitan governance bodies that oversee a similar population size, but this is consistent with its more limited set of responsibilities.

As the MRDH evolves, it may need to broaden its funding sources. Metropolitan governance bodies in OECD regions can draw from a mix of three main sources of finance: own-source revenues, transfers from other levels of government and capital finance – each with its own set of advantages and drawbacks. The MRDH may need to consider a different funding model if the scope of its responsibilities changes in the coming years to expand its budget. Options appear somewhat limited, however, as the MRDH is not allowed to levy taxes or impose other fees or charges; the MRDH can set user fees for public transport, but these revenues are allocated to the (separate) transport operators and would only indirectly affect the long-term financial situation of the MRDH in the form of reduced subsidies to transport companies. Capital finance, which includes revenues from asset sales and land-value capture tools, public-private partnerships and borrowing, is currently underutilised and might offer an avenue for the future. Namely, increasing land-value capture to fund infrastructure could be a useful tool to fund local infrastructure investments.

Where to for cities in the Netherlands? The Metropolitan Region of Rotterdam-The Hague and the National Urban Agenda

A new way forward for governing cities in the Netherlands

The emergence of the MRDH and development of a National Urban Agenda (NUA) is proof that the Dutch government is rethinking its role in governing the country's urban areas. Allowing for the creation of the MRDH and the Amsterdam Metropolitan Area (Metropoolregio Amsterdam, MRA) illustrates the government's willingness to tailor its urban policy to the specific needs of different urban areas, as opposed to imposing a uniform setting across the entire country. The NUA process, which is led by the Ministry of Interior with input from multiple ministries, is characterised by three key features: 1) a focus on growth, innovation and quality of life within the entire urban network; 2) an inter-governmental, multi-stakeholder process; 3) the pursuit of pragmatic tools (e.g. the United Kingdom's City Deals). At the same time, the central government is also redefining its own role in supporting new metropolitan governance arrangements. In the MRDH area, for instance, the Ministry of Interior has, for the first time, taken an active, explicit role to facilitate a better working relationship between the MRDH and the province. Such a position contrasts with the top-down strategies that have been adopted in other countries, and could be of broader interest across the OECD.

In its development of the NUA, the government could also review the impact of a range of public policies in other domains (e.g. housing, spatial planning and transport) on urban areas, and make any necessary adjustments to ensure coherence across policy

sectors. In particular, some of the policy bottlenecks observed in the MRDH in terms of housing, spatial planning and transport may also be relevant in other Dutch urban areas. Notably, in view of further taking advantage of the potential agglomeration benefits of large urban areas, national policy makers could aim to ensure that spatial planning policies are consistent with the ambitions of the NUA for greater productivity gains. The government could also consider a number of measures to increase the flexibility of the regional housing market and boost labour mobility, primarily through reforms to the social housing system and efforts to expand the private (unregulated) rental housing sector.

The shift of focus in national urban policy places the Netherlands in line with broader OECD trends and opens up a valuable window of opportunity for the MRDH to develop a stronger partnership with the national government. Many OECD countries are increasingly aware of the significant contribution of urban areas to national economic performance and have developed national visions or strategies for cities. Compared with other OECD countries, the Netherlands is focusing on a selective set of overarching priorities that aim to empower cities. The MRDH could take advantage of the NUA to speak with a unified voice and help redefine the governance of Dutch urban areas.

Chapter 1.

Trends, challenges and opportunities in the Metropolitan Region of Rotterdam-The Hague

This chapter introduces the Metropolitan Region of Rotterdam-The Hague (MRDH), which corresponds to a geographic area of 23 municipalities including Rotterdam and The Hague, as well as a new metropolitan-scale body created in 2015 to manage responsibilities for transport and economic development in this area. Rotterdam and The Hague have only recently begun to consider themselves as partners in a larger metropolitan region. This chapter begins with an analysis of the dense, polycentric spatial structure of the MRDH, which reflects urban development patterns in the Netherlands as a whole. It then assesses issues of competitiveness, quality of life and governance in the MRDH area, comparing outcomes with national and international trends. Finally, it measures the extent to which the MRDH area exists as a single, functional region, based on commuting trends and inter-municipal economic interactions.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

The Metropolitan Region of Rotterdam-The Hague within the Dutch polycentric spatial structure

The Netherlands is a densely populated country featuring a rich, polycentric urban structure. Yet it could be getting more out of its cities. Findings from the *OECD Territorial Review of the Netherlands* (OECD, 2014a) suggest that the country's spatial structure is in many ways a source of economic strength, as OECD countries with more polycentric urban systems are found to have higher gross domestic product (GDP) per capita on average. While economic activity and settlement patterns are quite dispersed, the five largest urban areas combined – Rotterdam, Amsterdam, The Hague, Utrecht and Eindhoven – host almost 40% of the national population and contribute about the same proportion of national GDP. However, there is evidence that these major urban areas are not performing as well as similarly sized urban areas across the OECD and could further exploit their economic potential. In part as a strategy to increase their agglomeration power, two of the five largest Dutch urban areas – Rotterdam and The Hague – recently joined forces to create the Metropolitan Region of Rotterdam-The Hague (Metropoolregio Rotterdam Den Haag, MRDH). The MRDH thus designates both a geographic area, comprising 23 municipalities in the Province of Zuid-Holland, as well as a new governance entity that has resulted from the merger of two now defunct city-regions (*stadsregio* or *WGR-plusregio*) of Rotterdam and The Hague (Box 1.1).[1] As the MRDH area is formed by the two similarly sized cities of Rotterdam and The Hague, which are connected by transport infrastructure but not by a contiguous built-up urban area, it reflects the polycentric structure of the Netherlands at a more localised scale.

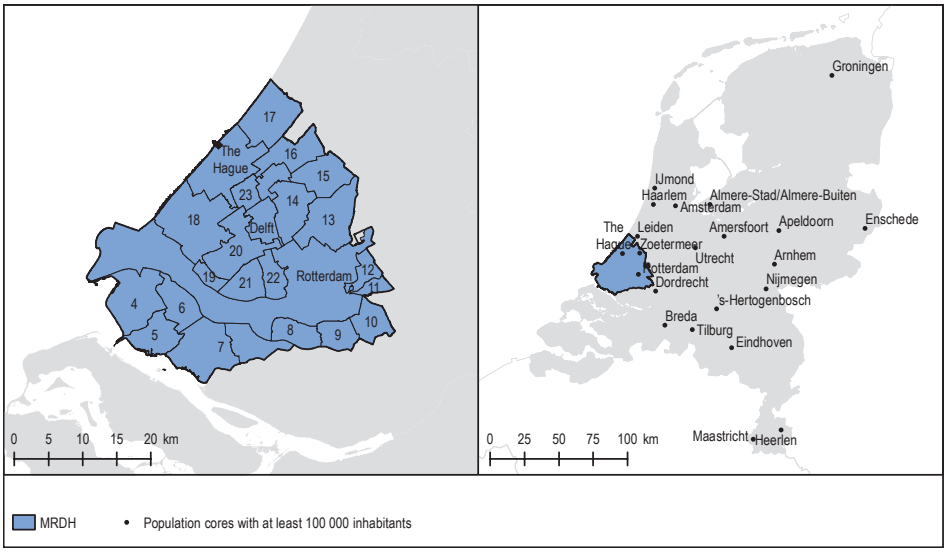
Considerable research has been devoted to the economic benefits of polycentric urban areas like the MRDH, and more broadly, the Randstad area in the Netherlands.[2] Polycentricity at national level is usually associated with more balanced, competitive and sustainable territorial development, and – in the Dutch context – has to some extent resulted from explicit public policies at different levels of government (Chapter 2). However, at regional level, less concentrated urban areas face limitations in their agglomeration power and in the efficient provision of public services when economies of scale cannot be achieved. Recent work by Brezzi and Veneri (2014) finds that a polycentric structure in OECD countries is on average associated with higher GDP per capita at the national level. Yet, this effect does not translate in the same way at regional level; regions characterised by a higher degree of monocentricity are associated with higher levels of GDP per capita. Given the contribution of urban areas to national economic performance, many national governments, and notably the Netherlands, are increasingly looking to reduce the obstacles to stronger metropolitan economic performance. Such is the aim of the development of the National Urban Agenda (Agenda Stad), an inter-ministerial, multi-stakeholder effort led by the Ministry of Interior and Kingdom Relations, which seeks to create an environment that facilitates the development of more sustainable, resilient and competitive cities (Chapter 3).

This chapter introduces the MRDH as both a geographic area and new metropolitan-scale governance body. It then analyses the economic trends, strengths and challenges of the MRDH area, from both a national and international perspective. Two key areas of enquiry will be pursued with respect to agglomeration benefits in the MRDH area: 1) the extent to which the MRDH area is taking advantage of potential agglomeration benefits; and 2) the extent to which the MRDH area is a single, functionally integrated region.

Two cities turning towards each other: The creation of the MRDH

The MRDH is located in the southwest of the Netherlands within the administrative boundaries of the Province of Zuid-Holland. Geographically, the MRDH is the integration of the two former city-regions of Rotterdam and The Hague, comprising Rotterdam in the south and The Hague in the north, together with another 21 small and medium-sized municipalities surrounding those 2 cities (see Figure 1.1 and Box 1.1 for details on the creation of the MRDH). In total, the MRDH area covers about 900 km² and is home to around 2.3 million inhabitants (Statistics Netherlands, 2015a). It is one of the most densely populated areas in the Netherlands, with a higher density than the metropolitan area of Amsterdam, which hosts a similar population size (2.4 million). From an international perspective, the population of the MRDH area is roughly equivalent to that of the Vancouver (Canada) or Portland (United States) metropolitan areas (OECD, 2013a). Box 1.2 provides a statistical overview of the MRDH area.

Figure 1.1. **The MRDH area within the context of the Netherlands, 2015**



Notes: Left panel: The numbers refer to following municipalities: 4: Westvoorne, 5: Hellevoetsluis, 6: Brielle, 7:Nissewaard, 8: Albrandswaard, 9: Barendrecht, 10: Ridderkerk, 11: Krimen aan den Ijssel, 12: Capelle aan den Ijssel, 13: Lansingerland, 14: Pijnacker-Nootdorp, 15: Zoetermeer, 16: Leidschendam-Voorburg, 17: Wassenaar, 18: Westland, 19: Maasluis, 20: Midden-Delfland, 21: Vlaardingen, 22: Schiedam, 23: Rijswijk.

Right panel: Cities (defined as population cores [*Bevolkingskernen*]) with at least 100 000 inhabitants are displayed.

Sources: Based on Statistics Netherlands (2015b), adjusted for municipal mergers in 2015 (left panel) and Statistics Netherlands (2011), "Bevolkingskernen 2011; steden en dorpen in Nederland", http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLNL&PA=82271NED&LA=NL (right panel) (accessed on 26 June 2015).

From an economic perspective, the MRDH area, together with Amsterdam, Utrecht and several medium-sized cities, is part of an urban network forming the economic centre of the Netherlands referred to as the Randstad region. The Randstad region does not have official administrative boundaries (OECD, 2007) and is divided into two parts: the North Wing (the urban area around Amsterdam and Utrecht) and the South Wing (the urban area within the Province of Zuid-Holland, thus extending beyond the MRDH area

to Leiden in the north and Dordrecht in the southeast [Figure 1.1]). The North and South Wings are not formal governmental bodies, but rather provide a platform for municipalities, provinces, research institutions and private stakeholders for informal co-operation, which emerged from the need to match the daily urban system to the scale at which planning occurs (Spaans and Zonneveld, 2014).

Box 1.1. **Creation and structure of the Metropolitan Region of Rotterdam-The Hague**

The Metropolitan Region of Rotterdam-The Hague (Metropoolregio Rotterdam Den Haag, MRDH) came into formal existence on 1 January 2015, following the abolition of eight city-regions. From 1985 until 2015, city-regions were designated associations of municipalities active in the policy fields of transport, spatial planning, housing and economic development, among others. Rotterdam and The Hague were each at the centre of a separate city-region (Stadsregio Rotterdam and Stadsgewest Haaglanden, respectively), which was further comprised of each city's surrounding municipalities. Currently, the 23 municipalities that formed the 2 city-regions make up the MRDH.

In terms of functions, the work of the MRDH body is organised into two pillars: transport and economic development. These two pillars are nonetheless distinct. The legal framework for co-operation (top-down for transport and bottom-up for economic development) is based on two parts of the same law: the Joint Regulation Act (Wet Gemeenschappelijke Regelingen, WGR). Accordingly, the MRDH body created two governing committees within the MRDH joint regulation, one directing the formal transferred responsibility (from central government) for public transport and one directing the (voluntary) co-operation for economic development.

In terms of the budget, the transport functions of the MRDH body receive the lion's share (EUR 480 million annually for the period 2015-18, compared to approximately EUR 5.5 million annually for economic development). Over 96% of the transport budget is from a transfer from the central government. The economic development activities of the MRDH body are funded by a EUR 2.45 contribution per inhabitant in each member municipality; the total budget for these activities in 2015 was roughly EUR 5.5 million. The MRDH body employs 85 full-time employees in its transport pillar and 15 in its economic development pillar.

Sources: Ministry for Infrastructure and Environment (2014), "Besluit van 17 December 2014 tot wijziging van het Besluit personenvervoer 2000 en van enkele andere besluiten in verband met de Wet afschaffing plusregio's", *Staatsblad van het Koninkrijk der Nederlanden*, Vol. 559; Ministry of Interior and Kingdom Relations (2010), "Rapport Plussen en Minnen. Evaluatie van de Wgr-plus", Publication No. 3 969, August, *Parliamentary Papers II 2010/11*, The Hague; Spaans, M. and W. Zonneveld (2014), "Evolving regional spaces in the southern Randstad", in: EURA-UAA Joint Conference on City Futures III "Cities as Strategic Places and Players in a Globalized World", Paris, 18-20 June 2014.

Competitiveness, quality of life and governance in the Metropolitan Region of Rotterdam-The Hague area

This section first analyses recent macroeconomic performance in the MRDH area, relative to national and international trends. It then considers the relative strengths and challenges in the MRDH area in terms of competitiveness, quality of life and social inclusion. Finally, it assesses the extent to which the MRDH and other Dutch urban areas are capturing potential agglomeration benefits, as well as the economic impacts of governance fragmentation in the Netherlands.

Several units of analysis are used in this chapter to assess the performance of the MRDH area (Box 1.3).

Box 1.2. Statistical snapshot of the Metropolitan Region of Rotterdam-The Hague

Administrative composition

- The MRDH area is comprised of 23 of the 60 municipalities in the Province of Zuid-Holland (see Table 1.1).

Population

- The MRDH covers about 36% of the area of the Province of Zuid-Holland, but more than 60% of its population. The largest cities in the MRDH are Rotterdam (623 652 inhabitants), The Hague (514 861 inhabitants), Zoetermeer (124 025), Westland (104 302) and Delft (101 030 inhabitants). The MRDH is thus one of the most densely populated areas in the Netherlands. Since 2000, population growth within the MRDH area has been higher than at provincial or national level, suggesting increased urbanisation within the MRDH.
- As of January 2015, the MRDH area had a larger share of its population with a foreign nationality (8.8%) than the Province of Zuid-Holland (7.0%) and the national average (5.0%). Among the main cities of the MRDH, the share of the population with a foreign nationality is largest in The Hague (14.6%), followed by Delft (12.1%) and Rotterdam (10.2%).
- Relative to the Province of Zuid-Holland and the national average, the MRDH area has a smaller share of people aged 65 and older. Population projections until 2040 suggest that even though this share will increase in the MRDH, it will still remain below that of the province and the national average.

Economy

- The MRDH generates about 16% of national GDP and is thus responsible for the lion's share of economic activity within the province (responsible for about 20% of national GDP) (Statistics Netherlands, 2015c).
- Approximately 67% of firms and jobs in the Province of Zuid-Holland are located within the MRDH area. However, unemployment in the MRDH (9.5%) is above the national average (7.4%), and highest in Rotterdam (12.6%).
- In terms of educational levels, the share of highly educated workers in the MRDH (35.2%) is slightly larger than the Dutch average (34.0%). Educational levels vary within the main cities of the MRDH, with highly educated workers making up the largest share of the labour force in Delft (42.6%) and The Hague (41.4%), while Rotterdam registers the largest share of workers with medium education levels (40.8%).

Table 1.1. **Key statistics: MRDH, Province of Zuid-Holland and the Netherlands**

Latest available year

	Rotterdam (municipality)	The Hague (municipality)	Delft (municipality)	MRDH area (total)	Province of Zuid-Holland	The Netherlands
Population (total)	623 652	514 861	101 030	2 244 159	3 600 011	16 900 726
Land area (km^2)	209	82	23	997	2 808	33 718
Municipalities (2015)	1	1	1	23	60	393
Nationality (%)						
Dutch	89.8	85.4	87.9	91.2	93.0	95.0
Africa	1.3	1.4	0.8	0.8	0.7	0.5
Americas	0.5	0.8	0.9	0.5	0.4	0.3
Asia	1.2	1.7	4.1	1.2	0.9	0.7
Europe[1]	6.5	10.0	5.8	5.7	4.6	3.2
Oceania	0.0	0.1	0.1	0.0	0.0	0.0
European Union[1]	4.5	7.7	4.8	4.3	3.5	2.5

Box 1.2. **Statistical snapshot of the Metropolitan Region of Rotterdam-The Hague** (*continued*)

Table 1.1. **Key statistics: MRDH, Province of Zuid-Holland and the Netherlands** (*continued*)

Latest available year

	Rotterdam (municipality)	The Hague (municipality)	Delft (municipality)	MRDH area (total)	Province of Zuid-Holland	The Netherlands
Population growth since 2000[2] (%)	5.2%	16.7%	5.1%	8.1%	6.0%	6.5%
Population projections, 2040 (% of total; percentage point change, 2015-40)						
Under 15	16 (0)	17 (-1)	14 (+1)	16 (-1)	16 (-1)	16 (-1)
15-65	62 (-7)	63 (-5)	67 (-5)	60 (-8)	60 (-6)	58 (-7)
65 and older	21 (+6)	20 (+6)	19 (+4)	24 (+8)	25 (+7)	27 (+9)
Labour force (total workers)	310 000	257 000	54 000	1 174 000	1 872 000	8 874 000
Unemployment rate (%)	12.6	10.9	9.3	9.5	8.3	7.4
Education of labour force[3] (%)						
Low	23.2	21.9	18.5	23.1	23.1	22.9
Medium	40.8	36.7	38.9	41.7	42.5	43.1
High	35.9	41.4	42.6	35.2	34.4	34.0
Firms (*vestigingen*)	25 220	38 650	5 780	121 330	180 190	1 315 350
Jobs (*banen*)	314 120	250 130	49 580	1 008 190	1 501 140	7 944 540

Notes: 1. Excluding Dutch nationals. 2. Does not account for possible municipal incorporation. 3. Low educational level: education at the level of primary education, VMBO, the first three years of HAVO/VWO or assistant training (MBO 1). Medium: highest educational attainment is high school. This includes the upper years of HAVO/VWO, basic vocational training (MBO-2), professional training (MBO-3) and middle management or specialist training (MBO-4). High: college or university-level education.

Sources: Statistics Netherlands (2015d), "Bevolking; geslacht, leeftijd, burgerlijke staat en regio, 1 januari", [Population: sex, age, marital status and region, on 1st January]; Statistics Netherlands (2015e), "Arbeidsdeelname; regionale indeling 2014" [Employment, by region 2014]; Statistics Netherlands (2015f), "Regionale prognose 2014-2040; bevolking, regio-indeling 2013" [Regional outlook 2014-2040: Population by region 2013]; Stichting Lisa website, www.lisa.nl/data/gratis-data/overzicht-lisa-data-per-gemeente (accessed June 2015); OECD (2013a), "Metropolitan areas", *OECD Regional Statistics* (database), http://dx.doi.org/10.1787/data-00531-en (accessed August 2015).

Box 1.3. **Units of analysis in this chapter**

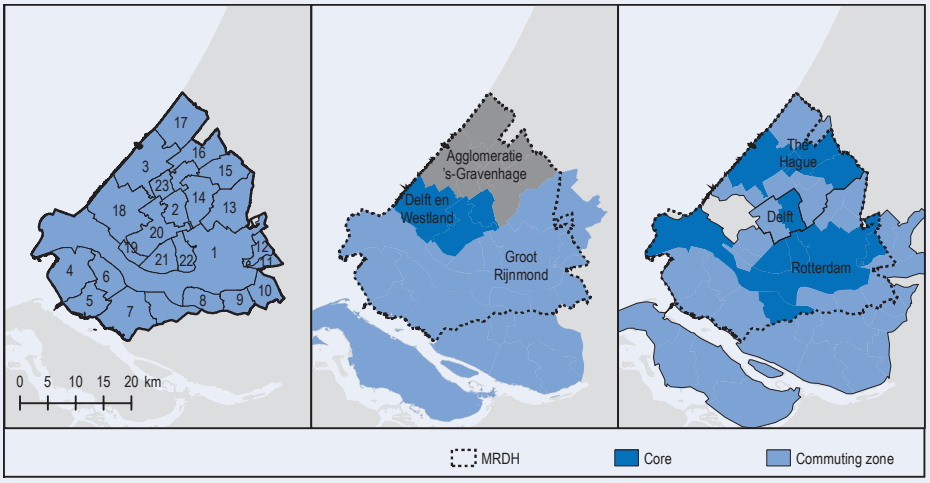
The recent creation of the MRDH implies that most statistical information is not yet available at this level. To allow for comparisons of economic and demographic trends, available data will be aggregated as close as possible to the MRDH level. To do so, the following approach is applied:

- The MRDH: Where data are available at municipal level, numbers will be aggregated to match the MRDH area (Figure 1.2).
- The combined COROP regions of Groot-Rijnmond, Delft en Westland and Agglomeratie 's-Gravenhage: When information is not available at municipal level, the area formed by three adjacent COROP regions of Groot-Rijnmond, Delft en Westland and Agglomeratie 's-Gravenhage will be considered as a second-best proxy for the MRDH (Figure 1.2). There are 40 COROP regions – equivalent to the NUTS 3 level – in the Netherlands; created in 1971, they were named after the Co-ordination Committee Regional Research Programme. These three combined COROP regions cover a geographical area that extends beyond the MRDH, including areas to the south and southeast of Rotterdam that are much less populated than the parts of the COROP regions that correspond to the MRDH.

Box 1.3. **Units of analysis in this chapter** (*continued*)

- Combined OECD functional urban areas (FUAs) of Rotterdam and The Hague: The OECD, with support from the European Commission, defined an approach for classifying urban areas based on functional integration, rather than administrative boundaries. This definition enables consistent analysis of urban dynamics, growth patterns and economic connections with surrounding areas over time. For international comparisons, this definition will be used to approximate the MRDH, by combining the FUAs of The Hague[1] and Rotterdam if no comparable data are available at municipal or COROP level. A detailed procedure for calculating FUAs, as well as a geographical overview of FUAs in the Netherlands, can be found in Annex 1.A1. Both Rotterdam and The Hague are classified as metropolitan areas in the OECD database (with a population of 500 000 and above). Internationally comparable data for Delft, however, with fewer than 500 000 inhabitants, are not generally available in the OECD database. If not otherwise indicated, data representing the MRDH based on FUA boundaries exclude the FUA of Delft, as well as a small part of the MRDH area to the west (corresponding to parts of the municipality of Westland and Midden-Delfland). The combined FUAs of Rotterdam and The Hague also extend beyond the MRDH to the east and south. Generally, the combined FUAs of Rotterdam and The Hague would thus underestimate the statistics for the MRDH area as a whole.

Figure 1.2. **Defining the Metropolitan Region of Rotterdam-The Hague: Different units of analysis used in this review**



The numbers refer to following municipalities: 1: Rotterdam, 2: Delft, 3: The Hague, 4: Westvoorne, 5: Hellevoetsluis, 6: Brielle, 7: Nissewaard, 8: Albrandswaard, 9: Barendrecht, 10: Ridderkerk, 11: Krimpen aan den Ijssel, 12: Capelle aan den Ijssel, 13: Lansingerland, 14: Pijnacker-Nootdorp, 15: Zoetermeer, 16: Leidschendam-Voorburg, 17: Wassenaar, 18: Westland, 19: Maasluis, 20: Midden-Delfland, 21: Vlaardingen, 22: Schiedam, 23: Rijswijk.

Note: 1. Referred to as 's-Gravenhage in the *OECD Metropolitan Database*.

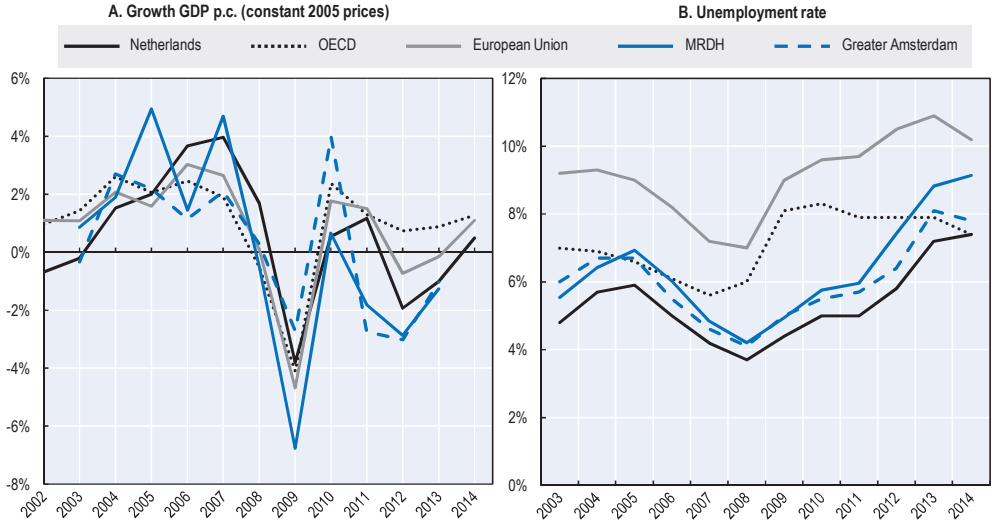
Sources: Municipalities and COROP regions based on Statistics Netherlands (2015b), Wijk- en Buurtkaart 2014 - Versie 1, www.cbs.nl/nl-NL/menu/themas/dossiers/nederland-regionaal/links/2014-buurtkaart-shape-versie-1-el.htm (accessed on 24 April 2015); functional urban areas based on OECD (2012b), *Redefining "Urban": A New Way to Measure Metropolitan Areas*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264174108-en.

The Dutch and MRDH economies have struggled to bounce back from the crisis

The Dutch economy traditionally performs well in comparison to other OECD countries. Macroeconomic indicators are strong, and the country exhibits high living standards (OECD, 2014a). While it has maintained high GDP per capita and unemployment rates below the OECD and European Union (EU) averages, the Dutch

economy has nonetheless experienced a weak overall recovery from the global financial crisis (Figure 1.3A). Unemployment has more than doubled since 2007, a trend driven primarily by the provinces of Flevoland, Groningen and Zuid-Holland.

Figure 1.3. **Recent trends in GDP per capita and unemployment, 2002-2014**



Note: 1. GDP data for sub-regional level has a break in 2010/11 as GDP numbers until 2010 are published according to ESA 95 and since then ESA 2010. See e.g. Eurostat (2014) on methodological changes between these two. The MRDH and Greater Amsterdam refer to COROP regions.

Sources: Statistics Netherlands (2015c), *Regional accounts; economic growth database* (accessed 23 April 2015); OECD (2014b), "GDP per capita and productivity levels", *OECD Productivity Statistics* (database), http://dx.doi.org/10.1787/data-00686-en (accessed 26 June 2015); OECD (2014c), "Harmonised unemployment rate (HUR)" (indicator), http://dx.doi.org/10.1787/52570002-en (accessed 26 June 2015); Statistics Netherlands (2015e), "Arbeidsdeelname; regionale indeling 2014" [Employment, by region 2014], http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLnl&PA=82208NED&LA=nl (accessed 23 April 2015).

The economy of the MRDH area, similar to national trends, has struggled to recover from the 2008 global crisis and continues to be outperformed by other metropolitan areas in the Randstad region. Figure 1.3A shows the growth of real GDP per capita since 2002 for the Netherlands in comparison with the OECD and EU averages, as well as the evolution for the two largest Dutch urban areas. Until 2007, the MRDH and Amsterdam exhibited positive growth in GDP per capita. While GDP per capita in the MRDH in 2002 (EUR 32 400) was higher than the Dutch average (EUR 30 300), it was still significantly below the average of the greater Amsterdam area[3] (EUR 47 400). The gap in GDP per capita between the MRDH and Amsterdam remained fairly stable until 2007, when the MRDH economy was hard hit by the crisis. The MRDH area experienced a negative growth rate of 6.7% in 2009, compared to just -2.7% in the Amsterdam area.

Unemployment in the MRDH has been on the rise and remains above the Dutch average

Unemployment in the MRDH area is above the Dutch average and, as in the whole of the Netherlands, has risen significantly in the aftermath of the global crisis (Figure 1.3B). The unemployment rate in the MRDH decreased from 5.5% to 4.2% between 2003 and 2008. In the years following the crisis, unemployment levels in the MRDH, which

had already been above the national level, increased to an even greater extent relative to the national average and that of the greater Amsterdam region. In 2014, unemployment in the MRDH was reported at 9.1%, more than double the rate in 2008 and thus one of the highest across all Dutch COROP regions.[4] This development has mainly been driven by higher unemployment in the municipalities of Rotterdam and The Hague: unemployment rates more than doubled in both COROP regions between 2008 and 2014. The municipalities in the COROP region of Delft en Westland fared better – 3.4% in 2008 and 6.6% in 2014 – and remained below the national average.

In line with trends across the Netherlands and the OECD, rising unemployment has especially affected youth in the MRDH. In the Netherlands overall, a sharp rise in youth unemployment since the outset of the economic and financial crisis demonstrates the particular vulnerability of young people to shocks in the labour market (Cörvers et al., 2013). This trend is also visible in the MRDH area, where unemployment among 15-25 year olds increased from 9.2% in 2008 to 15.7% in 2014, in both cases above the Dutch average of 8.6% and 12.7%, respectively. Nevertheless, despite increasing unemployment levels, the MRDH outperforms most OECD regions. Youth unemployment in the MRDH is below the OECD average of 16.2% (2013); across OECD regions, youth unemployment ranges from 4.7% in Switzerland to over 70% in Spain (2012).

Moreover, workers with a non-Western immigration background are more likely to experience unemployment, especially in the post-crisis years. Between 2008 and 2014, the unemployment rate of people with a non-Western migration background[5] in the MRDH increased from 7.9% to 16.9% while their share of the labour force remained stable. In contrast, unemployment of all other Dutch workers increased from just 2.4% to 6.9% over the same period. Thus the gap between workers with a native and non-Western immigration background increased post-crisis. The comparatively high rate of unemployment for workers with a non-Western migration background partly reflects the lower overall skill levels in this sub-group. In 2014, about 40% of non-Western immigrants aged 15-75 in the Netherlands only had a lower secondary education, in contrast to about 30% of the rest of the population (Statistics Netherlands, 2015g). Less educated workers experienced higher unemployment rates over the last decade regardless of the migration background. In the MRDH, workers with lower education levels had a higher unemployment rate over the last decade, with a sharp increase post-crisis from 7% in 2008 to 13% in 2014. In contrast, although unemployment among the higher educated doubled from 2.2% in 2008 to 4.5% in 2014, it remained well below that of the lower educated (Statistics Netherlands, 2015e).

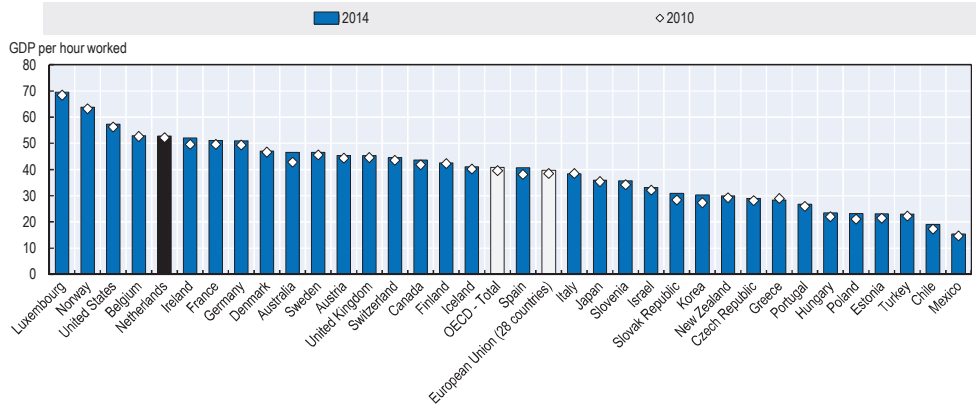
Labour productivity in the MRDH is lower than expected

Dutch urban areas are not as productive as could be expected, given the strong performance of the Netherlands within the OECD. Despite the Netherlands being one of the top five OECD countries with respect to labour productivity, its functional urban areas (FUAs, see Box 1.4 and Annex 1.A1) only perform about average compared to OECD FUAs of a similar size (Figures 1.4 and 1.5A). Only two Dutch metropolitan areas, Utrecht and Eindhoven, perform slightly above average and register higher levels of labour productivity than Rotterdam and The Hague, despite a smaller population size. For a long time, the national government favoured specialisation within urban areas as a means of creating a spatial distribution across the countries (Chapter 2). Innovation activities, which are crucial to increase labour productivity, are concentrated around the Eindhoven FUA, whereas other large Dutch urban areas tend to specialise in less

innovative sectors. Figure 1.5B displays PCT patent applications as a proxy for innovation by population. While larger European OECD FUAs are associated with a higher number of patent applications, Dutch metropolitan areas perform below average.

Figure 1.4. **Labour productivity across OECD countries**

GDP per hour worked in (Constant 2005 USD, PPP) for 2010 and 2014



Notes: 2014 values are based on estimates for Australia, Belgium, Canada, Chile, France, Iceland, Israel, Japan, Korea, Luxembourg, Mexico, New Zealand, Switzerland and the United States.

Source: OECD (2014b), "GDP per capita and productivity levels", *OECD Productivity Statistics* (database). http://dx.doi.org/10.1787/data-00686-en (accessed 26 June 2015).

The MRDH has many competitive assets, but lags behind other large Dutch urban areas

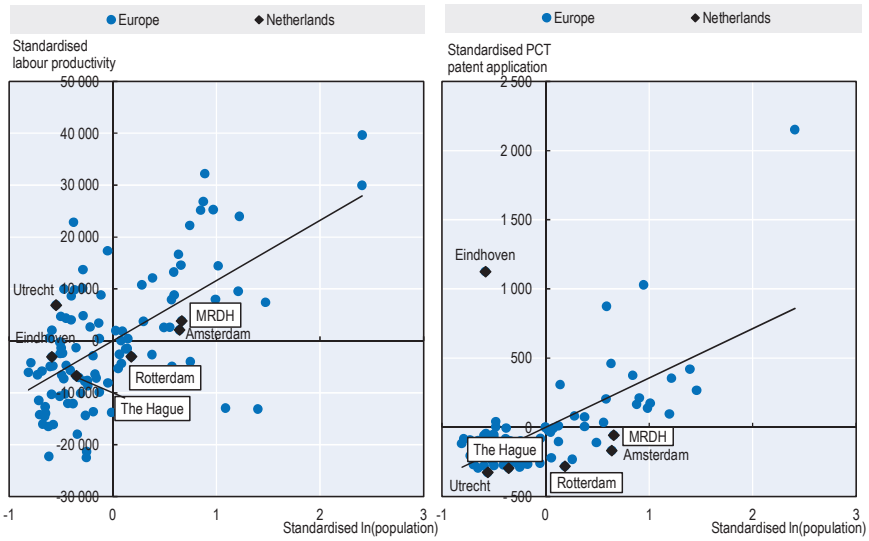
The MRDH area has significant assets, including a strong infrastructure network with good accessibility to internal and external markets; a diverse regional economy that hosts several sectors that have been identified by the central government as priority "Top Sectors"; a well-educated workforce by international standards; and high overall levels of well-being. Yet the MRDH area also faces important challenges. Its diverse economy lacks complementarities among sectors; patenting output is low; the educational attainment of workers in the MRDH, while competitive from an international perspective, lags behind most other large Dutch urban areas; and with respect to measures of well-being, air pollution levels represent one area for improvement.

A strong infrastructure network that is well connected to internal and external markets

Physical infrastructure and connections to both internal and external markets are important for economic performance. Cities that provide good infrastructure that connects inhabitants to economic centres and services are more attractive to both individuals and firms (see, for instance, Ahlfeldt and Feddersen, 2010). Findings from the 2014 *OECD Territorial Review of the Netherlands* indicate that, relative to other EU regions, Dutch regions have above-average accessibility to the European market. This is true for both road and rail accessibility (Figure 1.6). The Province of Zuid-Holland not only has higher accessibility to the European market than the average Dutch region, but also higher accessibility relative to Noord-Holland, home to Amsterdam. The higher accessibility of the MRDH is due in part to port-related infrastructure in Rotterdam, which benefits the entire MRDH area.

Figure 1.5. **Labour productivity and innovation across European OECD functional urban areas**

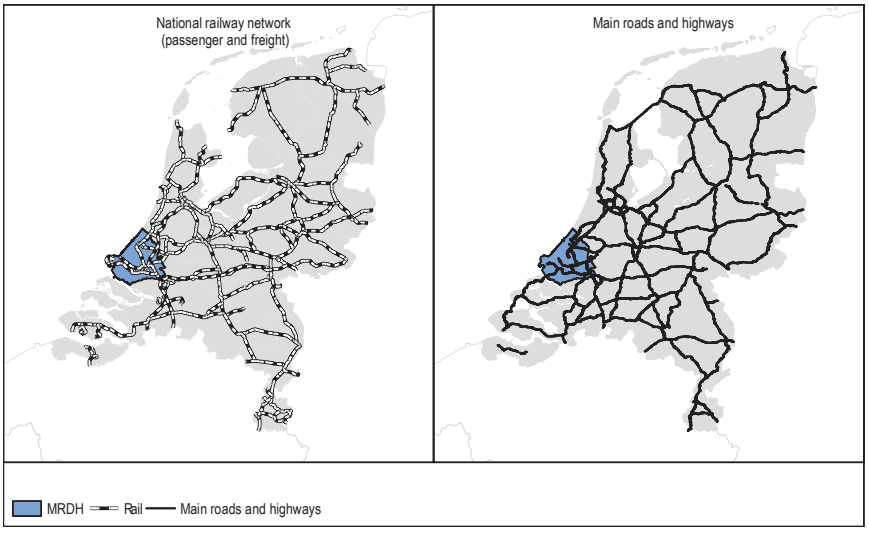
A. Labour productivity, 2010 (GDP per worker) B. PCT patent intensity, 2008



Notes: MRDH refers to the combination of the COROP regions of Groot-Rijnmond, Delft en Westland and Agglomeratie 's-Gravenhage (see Box 1.3 for a discussion of the various units of analysis used in this chapter, as well as a definition of the OECD functional urban area, FUA). Only European FUAs are displayed. Values are corrected for country fixed effects, standardised by country average.

Sources: OECD (2013a), "Metropolitan areas", *OECD Regional Statistics* (database), http://dx.doi.org/10.1787/data-00531-en (accessed 26 June 2015); Statistics Netherlands (2015c), "Regional accounts; economic growth" (accessed 23 April 2015); Statistics Netherlands (2015d), "Bevolking; geslacht, leeftijd, burgerlijke staat en regio, 1 januari", [Population: sex, age, marital status and region, on 1st January], http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLnl&PA=03759ned&LA=nl; Statistics Netherlands (2015e), "Arbeidsdeelname; regionale indeling 2014" [Employment, by region 2014], http://opendata.cbs.nl/dataportaal/portal.html?_la=nl&_catalog=CBS&tableId=82208NED&_theme=401; authors calculations based on EPO Worldwide Statistical Patent Database "PATSTAT" (accessed 26 June 2015).

Figure 1.6. **The national transport network in the Netherlands**



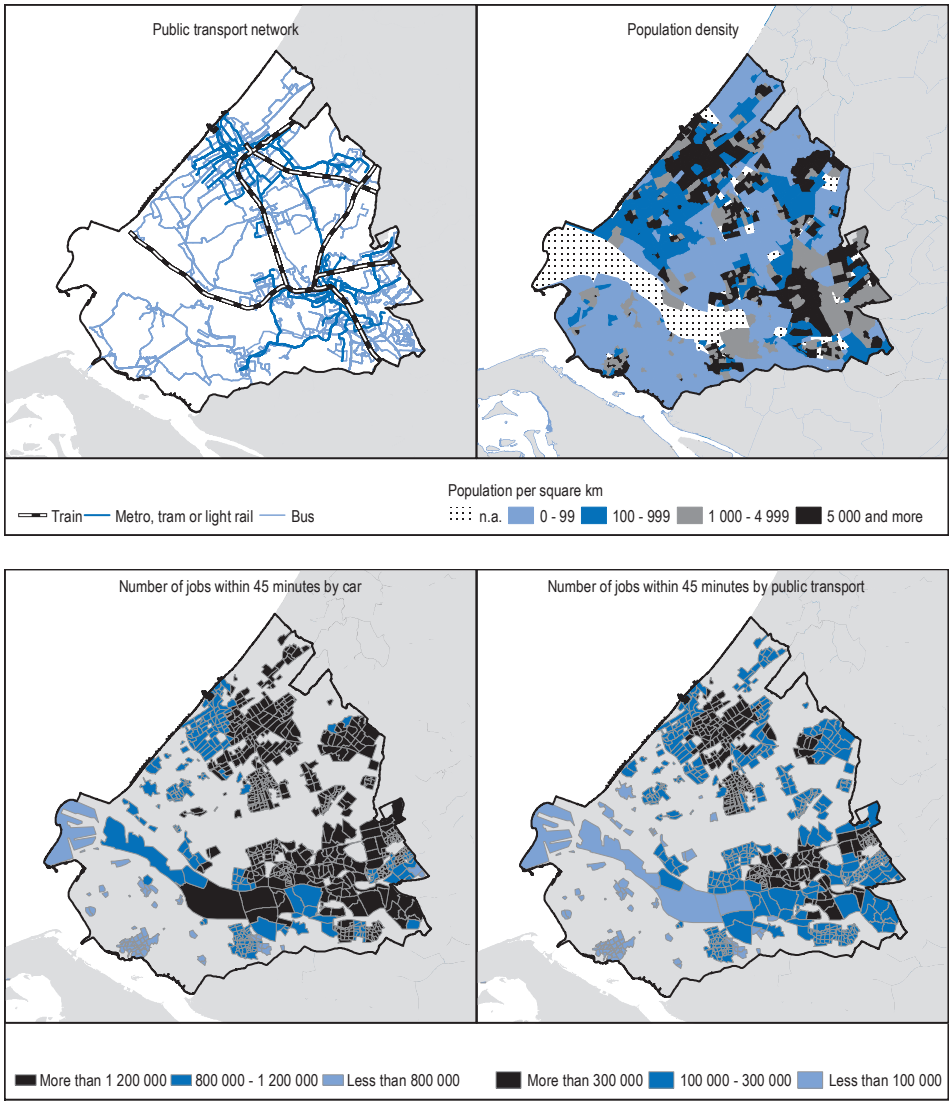
Sources: PDOK (2015a), Nationaal Wegen Bestand Spoorwegen WMS Version 1.3.0 (accessed June 2015); PDOK (2015b), Weggegevens WMS Version 1.3.0 (accessed June 2015).

In addition, overall passenger transport accessibility in the MRDH, as in most parts of the Randstad, is higher than the Dutch average. In the MRDH, the average distance for citizens to the next train station is below the national average, and similar to levels in Amsterdam and Utrecht. Within the two former city-regions, public transport like the tram and the metro are well developed and run at a high frequency. Between the two centres, there are both rail and (since 2006) light-rail connections. The Randstad rail, linking Rotterdam and The Hague, runs about every 10-15 minutes and takes approximately 40 minutes from one centre to the other. However, not all areas within the MRDH are equally accessible by all modes of public transport. More remote and less densely populated areas within the MRDH are connected only by buses (Figure 1.7, top panel). Buses often operate at a lower frequency and with schedules that do not always align with those of neighbouring jurisdictions.

Despite the well-functioning transport network, the labour market accessible to residents of some areas within the MRDH is much larger when one has access to a private vehicle. As of 2010, inhabitants of Midden-Delfland, Westland and municipalities to the south and southwest of Rotterdam (e.g. Westvoorne, Nisseward) were least connected to the economic centres. The number of jobs accessible from these municipalities within 45 minutes by public transport was less than 100 000, compared to more than 300 000 jobs for inhabitants of Rotterdam, Delft and The Hague (Figure 1.7, bottom panel). However, travelling via a private vehicle substantially increases the number of jobs within reach: up to 800 000 jobs within 45 minutes' travel time for residents of Midden-Delfland, Westland and outer municipalities, compared to more than 1.2 million jobs for inhabitants of Rotterdam, Delft and The Hague. For residents of Westland, reaching the economic centre of The Hague or Rotterdam by car, rather than public transport, halves the travel time (MRDH, 2013).

As a result, car ownership in the MRDH is higher in areas that are more remote and less connected to the public transport network. On average, the number of cars in a household increases with the distance to the next train station (Statistics Netherlands, 2013). As the number of kilometres travelled by car rises, existing road infrastructure is put under more pressure. Indeed, mileage on Dutch highways has steadily grown over the last decade, accompanied by longer travel times due to congestion during peak travel times (Statistics Netherlands, 2015h). In the first quarter of 2015, travel time losses occurred on most highways in the Randstad, including the highway connecting Rotterdam and The Hague. Especially around Rotterdam, disruptions due to traffic congestion are among the most severe in the Netherlands (Ministry for Infrastructure and Environment, 2015). To decrease the traffic burden on the highway, new infrastructure is being developed, and recent transport plans for the MRDH aim to increase access to economic centres. Public transportation plans through 2025 are expected to increase connectivity to Zoetermeer, Nissewaard and Westland, with improvements to both light-rail and bus networks. Furthermore, road infrastructure projects are planned to relieve the pressure on the main highway between Rotterdam and The Hague and further connect surrounding municipalities (MRDH, 2013). While improved infrastructure should increase residents' accessibility to economic centres, a focus on road infrastructure could create stronger incentives to travel by car, generating negative environmental consequences.

Figure 1.7. **Public transport and population density within the Metropolitan Region of Rotterdam-The Hague**



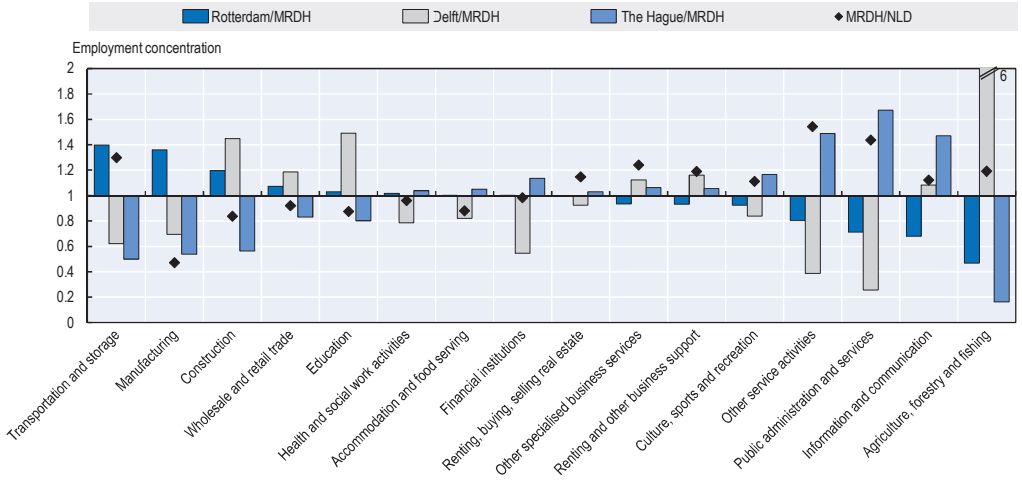
Sources: For population density based on: Statistics Netherlands (2013), "Wijk- en Buurtkaart 2012 - Versie 3", www.cbs.nl/nl-NL/menu/themas/dossiers/nederland-regionaal/links/2012-buurtkaart-shape-versie-3-el.htm (accessed on 26 June 2015); for number of jobs within 45 minutes' travel time by car/public transport, based on: MRDH (2013), *Strategische Bereikbaarheidsagenda*, Metropolitan Region of Rotterdam-The Hague.

The MRDH economy: Economic diversity without complementarity

Within the MRDH region, the structure of employment is heavily influenced by two distinct sectors: transport and logistics activities related to the Port of Rotterdam, and public administration and services in and around The Hague. Figure 1.8 shows the concentration of a range of economic sectors in different parts of the MRDH area, relative to the MRDH and Dutch averages, measured as a ratio of employment shares. A ratio above 1 indicates a concentration of employment in the sub-area (e.g. Rotterdam, Delft or The Hague), compared to the respective average. In the municipalities surrounding Rotterdam, for instance, jobs in the transport and storage sector are well above the Dutch

average. In 2012, about 8% of jobs in the MRDH were related to port activities, which makes the port one of the most important regional employers (Box 1.4). In the municipality of Rotterdam alone, about 9% of jobs in 2013 were in the transport and storage sector, well above the national average of 5%. In contrast, the economy of The Hague and surrounding municipalities is mostly unrelated to port activities. In addition to the national government, this part of the MRDH hosts approximately 300 international organisations (Meijers et al., 2014). In 2013, the public administration sector provided about 21% of jobs in the municipality of The Hague, thus concentrating more than 10% of Dutch employment in public administration and services. The share of workers in the MRDH employed in public administration and services is about 40% higher than the Dutch average.

Figure 1.8. **Employment concentration in the Metropolitan Region of Rotterdam-The Hague area, 2013**



Notes: Rotterdam refers to the municipalities of Rotterdam, Capelle aan den Ijssel, Krimpen aan den Ijssel, Lansingerland, Maasluis, Ridderkerk, Schiedam, Spijkenisse, Vlaardingen, Albrandswaard, Barendrechtm Bernisse and Brielle. Delft refers to the municipalities of Delft, Westland and Midden-Delftland. The Hague refers to the municipalities of 's-Gravenhage (The Hague), Zoetermeer, Leidschendam-Voorburgm Rijswijk and Pijnacker-Nootdorp.

Source: Statistics Netherlands (2015i), "Banen van werknemers in december; economische activiteit (SBI2008), regio", http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLnl&PA=81402NED&LA=nl (accessed 26 June 2015).

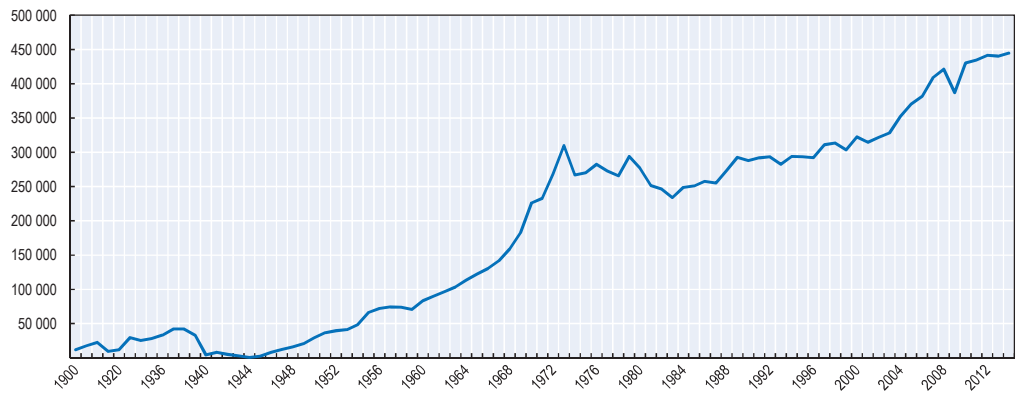
Box 1.4. **The Port of Rotterdam**

The Port of Rotterdam is the largest in Europe in terms of cargo throughput and among the top 15 worldwide in terms of containers shipped through the port. In 2013, about 10.94 million TEUs[1] of container volume were handled in the Port of Rotterdam, and container traffic was thus 15% higher than in the Port of Hamburg (9.3 million TEUs) and 24.5% higher than in the Port of Antwerp (8.3 million TEUs). Throughput of sea-going vessels has been increasing over the past decades. There was a steep rise from the late 1940s until the early 1970s. After a drop during the early 1980s, vessel traffic increased again (Figure 1.9). The main types of cargo shipped through the port are liquid bulk (47%), containerised cargo (28%) and dry bulk (20%). Besides the direct port activities, the Port of Rotterdam hosts a regional petro-chemical cluster extending beyond the Province of Zuid-Holland to Antwerp and Flanders (Belgium) (OECD, 2014d).

Box 1.4. **The Port of Rotterdam** (*continued*)

Labour productivity in the port has increased thanks to new technologies and a shift from low-skilled workers to more specialised, high-skilled workers. Moreover, Merk and Notteboom (2013) find that labour productivity is considerably higher in the port than in other economic activities in Rotterdam. With increasing labour productivity, growth in port throughput can be achieved with less work input. Despite the changing nature of the port, accompanied by increasing containerisation, the port is an important employer in the region, providing about 8% of all jobs in the MRDH. Although employment in the port decreased by roughly 2% following the crisis, it recovered quickly and in 2012 the number of jobs exceeded pre-crisis levels.

Figure 1.9. **Throughput of sea-going vessels in the Port of Rotterdam**



Source: Port of Rotterdam Authority, www.portofrotterdam.com/en/Port/port-statistics/Pages/throughput-statistics.aspx (accessed on 27 May 2015).

As identified in OECD (2014d), port and city authorities are confronted with diverging interests. Policy dilemmas may occur in different areas such as economic development, land use, employment or environment, and great differences occur in the structural logic of these areas. For example, port authorities typically target higher cargo traffic and better performance of port-related industries. In contrast, city governments are primarily interested in a port's added value to the region as well as the generation of local employment. These challenges make co-operation among the different actors crucial. In some fields, the Port of Rotterdam and the municipal government have already established co-operation mechanisms. For example, the Erasmus Smart Port Rotterdam, a research institute within the Erasmus University of Rotterdam, conducts port-specific research, provides training and education programmes and policy advice tailored to the needs of the port. To do so, the centre collaborates with diverse institutions, nationally and internationally, including the Delft University of Technology (TU Delft) and the Dutch Institute for Advanced Logistics (DINALOG).

Note: 1. Twenty-foot equivalent unit (TEU) is a standard unit to count containers and their capacity. One 20-foot ISO container equals 1 TEU.

Sources: Eurostat (2015), *Transport Database*, http://ec.europa.eu/eurostat/web/transport/data/database (accessed June 2015) ; Ferrari, C. et al. (2012), "Ports and regional development: A European perspective", *OECD Regional Development Working Papers*, No. 2012/07, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k92z71jsrs6-en; Merk, O. and T. Notteboom (2013), "The competitiveness of global port-cities: The case of Rotterdam/Amsterdam, the Netherlands", *OECD Regional Development Working Papers*, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k46pghnvdvj-en; OECD (2014d), *The Competitiveness of Global Port-Cities*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264205277-en.

The economic profile of the MRDH is further complemented by the smaller municipalities surrounding Rotterdam and The Hague, which are specialised in horticulture and food, forming the green belt of the MRDH area, as well as by knowledge institutions in Delft. Delft is home to TU Delft, which attracts many knowledge institutions in the area. Jointly with the Erasmus University in Rotterdam, the MRDH thus is home to two universities that consistently perform well in international rankings, as well as other research institutions in different fields.[6] The presence of high-quality higher education institutions can help improve the region's economic performance, as graduates often stay in the region after earning their degrees; moreover, a larger share of university graduates in the population is usually associated with higher productivity (see e.g. Moretti, 2004; Ahrend et al., 2014). The MRDH thus has great potential to benefit from high-skilled employees and further knowledge spillover effects. The start-up hub of YES!Delft, which provides support to young start-ups in various fields of economic activity, is one example of successful exchange between research and the private sector. Since its creation in 2005, it has sponsored about 150 companies.

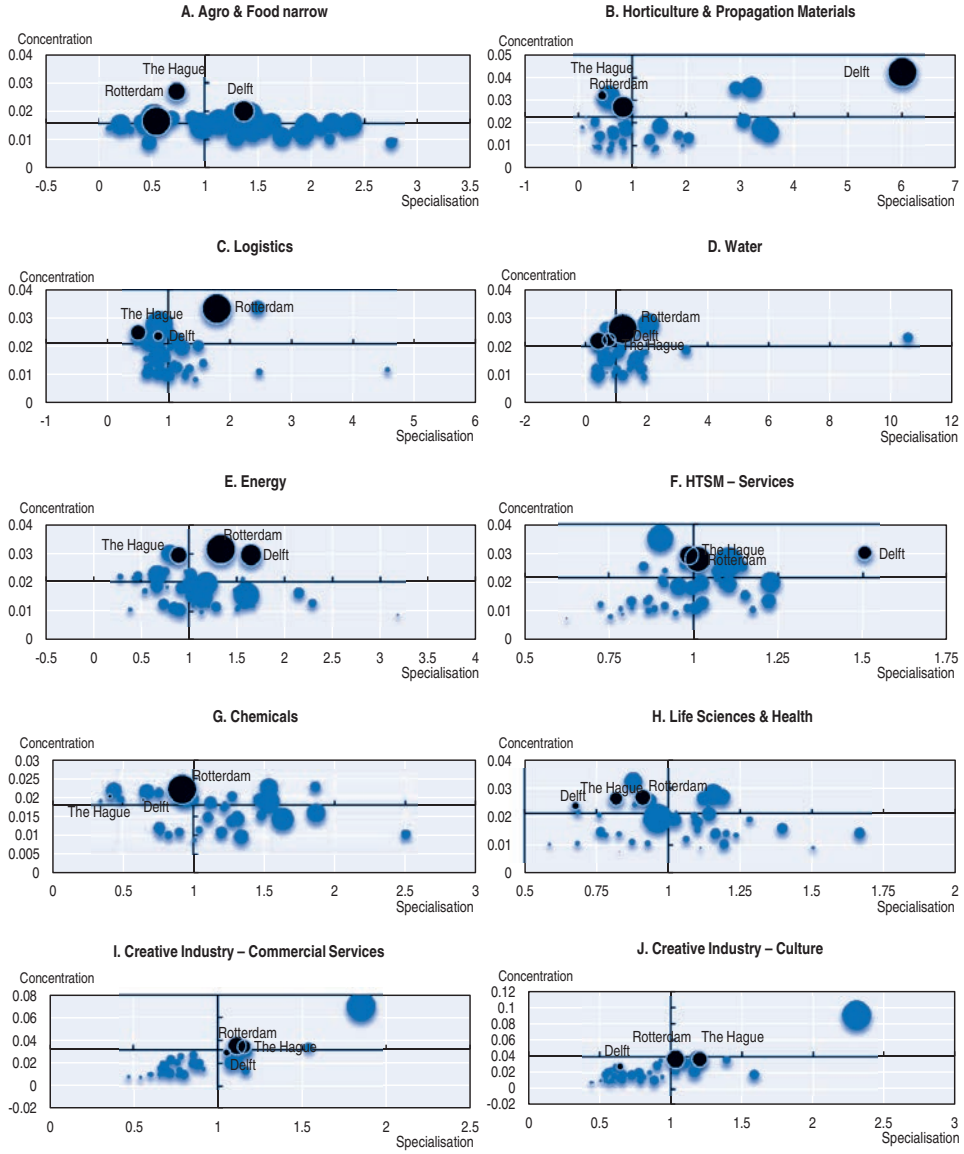
Sector diversity within the MRDH area has resulted from specialisation within the separate economies of the former city-regions of Rotterdam and The Hague. In contrast to many OECD metropolitan areas, the economies of Rotterdam and The Hague have co-developed in close proximity to each other, as their distinct economies have created some natural division of labour. On the one hand, given the roughly equal size of the two cities, some level of specialisation was required to reach the critical mass within a sector. On the other hand, specialisation has also been favoured for a long time by the national government as a means of spatially structuring urban areas across the country (Chapter 2).

As this chapter will demonstrate, the MRDH as a single, functional region has not yet been able to gain the full benefits from clustering, the diversity of economic sectors may have dampened the impact of the crisis compared to an economy with a less diversified structure. Indeed, Frenken, Van Oort and Verburg (2007) find that unrelated diversity within Dutch regions is negatively related to unemployment growth. Thus, the presence of unrelated sectors in a region acts as a portfolio against unemployment shocks. More importantly, they find that related variety enhances economic growth. Thus, existing knowledge within different sectors that is related enough to benefit from spillovers can stimulate the creation new technologies, products and services that are harder for others to replicate as they lack this joint expertise. There is also increasing evidence that new industries are deeply rooted in related activities that are present in a region and which set in motion a process of regional branching (see e.g. Asheim, Boschma and Cooke, 2011; or Boschma and Frenken, 2011 for a literature review). To improve its international competitiveness, the MRDH could thus focus on identifying areas of related activities across sectors that are likely to benefit from knowledge spillovers and ultimately increase agglomeration benefits.

The MRDH is home to several Dutch "Top Sectors"

In the MRDH, several Dutch "Top Sectors" are present, most notably agriculture and food, water, logistics, energy, chemicals, and horticulture and propagation materials. The Top Sector Policy programme was introduced by the national government in 2012 (see, for instance, OECD, 2014e) as a means of increasing competitiveness; the programme targets sectors that have been identified as essential to meet the challenges of globalisation and as both knowledge-intensive and export-oriented.[7] Figure 1.10 shows

Figure 1.10. **Regional concentration and specialisation of Dutch Top Sectors in the COROP regions, 2011**



Notes: Observations in the upper-right quadrant indicate strong specialisation and strong clustering of businesses; observations in the upper-left quadrant show strong clustering but no strong specialisation. Observations in the lower-right quadrant indicate no strong clustering but specialisation, and observations in the lower-left quadrant indicate neither strong clustering nor strong specialisation. Concentration is measured by the cluster index, defined as $D_i = \frac{1}{J-1}\sum_{j=1,j\neq i}^{J}\frac{1}{\max\{1km,d_{i,j}\}}$, where J is the number of businesses in the respective sector and $d_{i,j}$ is the distance between business i and business j. Specialisation is measured as location quotient $LQ_{s,r} = \frac{B_{s,r}/B_r}{B_s/B}$ with $B_{s,r}$ indicating the number of business locations in region r and sector s, B_r the total number of business locations in region r, B_s the number of business locations in sector s in the Netherlands and B the total number of business locations in the Netherlands. See Raspe et al. (2013) for a detailed description of methodology and data. Delft refers to the COROP region Delft en Westland, Rotterdam to Groot Rijnmond and The Hague to Agglomeratie 's-Gravenhage.

Source: Raspe, O. et al. (2013), "The rationale of spatial economic top sector policy", PBL Netherlands Environmental Assessment Agency, The Hague, available at: www.pbl.nl/sites/default/files/cms/publicaties/PBL_2013_The-rationale-of-spatial-economic-top-sector-policy.pdf, based on the data published on pp. 59-66.

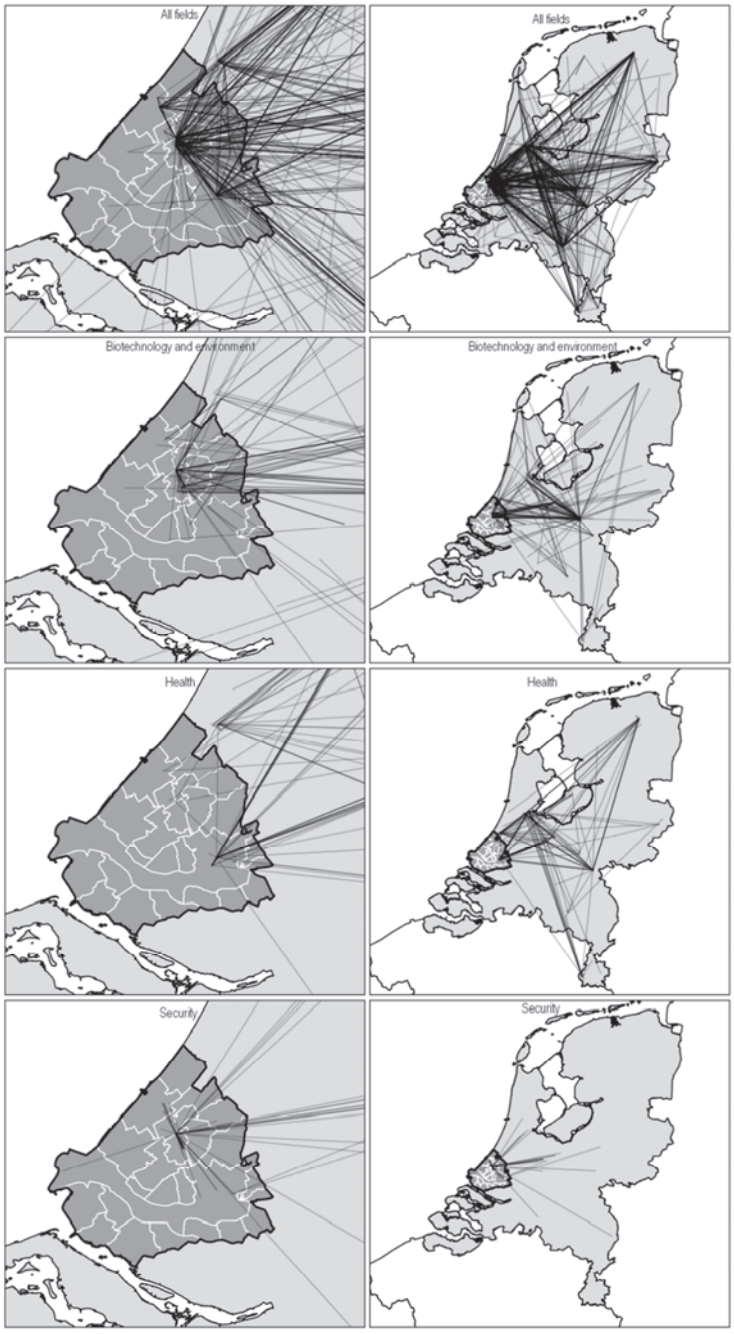
the relationship between regional concentration, regional specialisation and job mass for "Top Sectors" across Dutch COROP regions based on Raspe et al. (2013). The importance of each "Top Sector" within a given region is indicated by the total number of jobs, illustrated by the size of the circle. Regional specialisation (x-axis) in each Top Sector is measured as location quotient, with a value above 1 indicating that relatively more businesses in the region are in the respective sector compared to the Dutch average. A higher degree of regional concentration (y-axis) indicates whether the businesses within the region are clustered: the higher the values, the more businesses in a given "Top Sector" are concentrated within a 1-kilometre radius. Thus, the figure highlights the "Top Sectors" that are most important among the three COROP regions of the MRDH.

The presence of several knowledge-intensive "Top Sectors" within the MRDH indicates some potential for spillover effects and agglomeration benefits. As discussed earlier, port-related industrial and transport activities dominate in the southern MRDH (see Box 1.4). A high value of regional specialisation, clustering and number of jobs in the "Top Sectors" of logistics, energy and chemicals confirm their importance in and around Rotterdam. Delft, located between Rotterdam and The Hague, hosts many universities and research institutions, while a strong and specialised cluster of horticulture and food businesses are concentrated in the Westland, Lansingerland and Pijnacker-Nootdorp areas. As highlighted earlier, the public sector dominates in the northern MRDH. With respect to the "Top Sectors", The Hague shows a small degree of specialisation in the creative industry sector; nonetheless, businesses in this sector offer more jobs and are both more specialised and more concentrated in the Greater Amsterdam area.[8] Strengthening co-operation and facilitating knowledge spillovers in related sectors between the different COROP regions that make up the MRDH could benefit the region as a whole, as, for instance, in the water and energy "Top Sectors".

The different clusters within the MRDH operate mostly independently from each other and have few economic connections. National research co-operations (proxied by funding under the 7th framework programme of the European Union's Research and Innovation Programme) indicate a strong specialisation of different sectors within the MRDH but only limited co-operation for research among the different actors.[9] One possible explanation could be the lack of complementarities between the different economic sectors situated in the MRDH. Complementarity implies that one activity is required to make another one function well, and vice versa. Figure 1.11 shows national co-operations under the funded programmes by key scientific and technological areas for municipalities within the MRDH. While participating institutions of programmes in different sectors do cluster within the MRDH area, interactions among the clusters within the MRDH are often limited. Rather, research co-operations are undertaken with partners in the Amsterdam, Utrecht and Eindhoven areas (Figure 1.11). Participants of funded programmes in health are dominant in the Rotterdam area, indicating a strong cluster. However, participants of other projects in the same field located in The Hague and Delft operate independently with almost no connection to the Rotterdam cluster. There are exceptions, however: participants of programmes in biotechnology are clustered in Delft, with connections to the surrounding municipalities in place. Participating organisations in Delft are also clustered in the field of security, with participating actors in both The Hague and Rotterdam. It should be mentioned, however, that across the OECD, co-operation among universities and research institutions within the same region is not always automatic or appropriate.

Figure 1.11. **EU grants under the 7th Framework Programme (2007-2013)**

Participation and co-ordination within the Netherlands, by municipalities



Sources: Based on European Union (2013, 2014), CORDIS - EU research projects under FP7 (2007-2013), https://open-data.europa.eu/en/data/dataset/cordisfp7projects (accessed May 2015).

Strong education outcomes overall, but the MRDH trails other Dutch urban areas

A skilled labour force is one determinant in providing an environment that attracts firms and investments and thus in encouraging regional economic growth and facilitating knowledge spillovers and agglomeration benefits (see e.g. Raspe and Van Oort, 2006). Human capital indicators are generally strong in the Netherlands from an international perspective. This includes not only a large share of highly skilled people, but also high-quality standards in education at all levels. The overall strong education outcomes in the Netherlands are reflected in above-average results in both the Programme for International Assessment of Adult Competencies (PIAAC) and the Programme for International Student Assessment (PISA). As identified by the PIAAC, which is a tool to assess the level and distribution of skills among adults in the OECD, the Netherlands scores higher than the OECD average in literacy, numeracy and problem-solving with respect to the entire adult population (16-65 years). Scores among young adults (aged 16-24) are significantly above the OECD average in literacy and numeracy (OECD, 2013b). PISA results suggest that Dutch high school students perform remarkably well in mathematics, followed by science and reading. However, the average PISA score for mathematics has been declining since 2003 by about 2.8% (OECD, 2014f). In contrast to the overall above-average performances, first- and second-generation migrants fall behind in educational outputs measured by PISA. Even so, the 10% of the lowest performing students in the Netherlands outperform the 10% of the lowest performing students in all the other assessed countries (Van Twist et al., 2013).

While some differences in school quality are evident across Dutch cities, educational outcomes remain strong overall. To ensure similar quality standards across the country, schools are monitored and if necessary assisted. In regular monitoring cycles, schools are assessed to be non-weak, weak or very weak schools (Van Twist et al., 2013). In 2012, 5.6% of the primary schools in Rotterdam and 4.2% of the primary schools in The Hague were assessed as weak. This was more than 1.3 percentage points higher than the Dutch average (2.9%), but below Amsterdam, where 6.3% of the primary schools were classified as weak, and similar to Utrecht at 4.1%. In secondary schools, the share of schools assessed as weak is much larger for Rotterdam (15.7%) and The Hague (11.5%), and above the Dutch average (9.4%) and Amsterdam (4.3%), though lower than Utrecht (22.9%) (Inspectie van het Onderwijs, 2013). While school dropouts are generally low in the MRDH, dropout ratios are highest in The Hague (3.6%) and in Rotterdam (3.8%). Still, the performance of Dutch schools is strong from an international perspective.

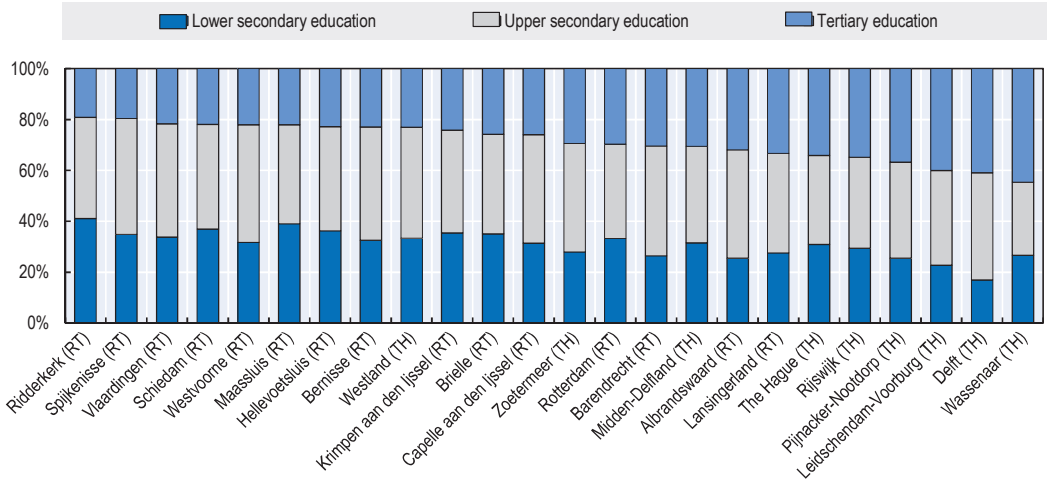
Education levels of the working-age population in the MRDH area are similar to the Dutch average, but lower than that of other large Dutch urban areas. Roughly 68% of the MRDH working-age population has at least an upper secondary education, just below the national average (70%) but well behind the municipalities of Eindhoven (77%), Amsterdam (78%) and Utrecht (82%).[10] The share of the working-age population with a tertiary degree in the MRDH (29%) is close to the Dutch average (28%), but significantly smaller than that of other large urban areas in the Netherlands, such as the municipalities of Eindhoven (38%), Amsterdam (48%) or Utrecht (53%) (Statistics Netherlands, 2014a). Even so, it is important to emphasise that the share of the working-age population with a tertiary degree in the Netherlands is larger than that in many other OECD countries, like Germany (25%) or Italy (14%).

Within the MRDH, differences in educational levels may reflect the presence of the distinct economies in the region (Figure 1.12). Over the period 2011-13, the working-age population in municipalities belonging to the former city-region of Rotterdam had, on

average, a smaller share of tertiary education graduates than in the former city-region of The Hague, ranging from 19% in Ridderkerk to 45% in Wassenaar.[11] Although the share of highly educated workers is larger in Rotterdam (30%) than in surrounding municipalities, it is still smaller than that of The Hague (34%). On the other side of the skills spectrum, the working-age population with only lower secondary school education differs significantly within the MRDH, ranging from just 17% in Delft to 41% in Ridderkerk.

Figure 1.12. **Highest educational attainment of working-age population (15-65 years) in the Metropolitan Region of Rotterdam-The Hague**

Three-year average 2011/13



Note: Data are provided as a three-year average. (RT) denotes membership to former city-region of Rotterdam; (TH) denotes membership to former city-region of The Hague.

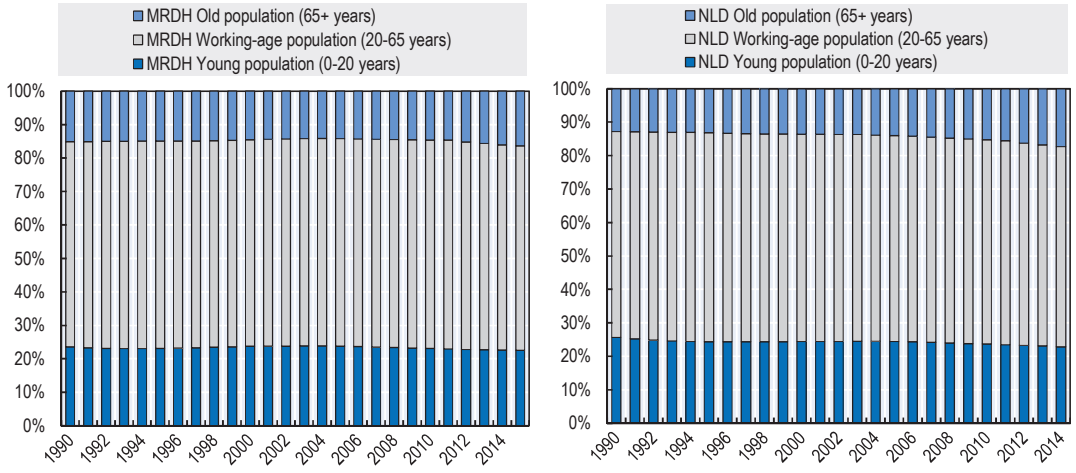
Source: Statistics Netherlands (2014a), "Beroepsbevolking; gemeenten 1996-2013" [Labour force: Municipalities 1996-2013], http://opendata.cbs.nl/dataportaal/portal.html?_la=nl&_catalog=CBS&tableId=71883ned&_theme=848 (accessed 26 June 2015).

The composition of the labour force should also be assessed in light of demographic trends and projections – notably, youth and population ageing. Overall, despite changes in its composition in recent years, the size of the Dutch labour force has remained relatively stable. Although the share of the working-aged population has been decreasing in the Netherlands, the labour force participation rate has increased as a result of higher participation levels among women and the over-65 population. The female participation rate should remain at its current level from 2015 onwards. However, the participation rate of the over-65 population is expected to continue to rise, due primarily to an increase in the retirement age (Cörvers et al., 2013; Martinez-Fernandez et al., 2013). At the same time, population projections suggest that the share of the over-65 population will continue to increase, from 17% in 2015 to about 27% by 2040. By 2040, the share of over-65s in the Netherlands will thus be smaller than in OECD countries like Germany (32%) and Italy (31%), and slightly larger than Sweden (24%) and Norway (23%) and the OECD average (24%; OECD, 2015a).

The share of the working-age population in the MRDH has remained fairly stable in recent years, with slight variation with respect to the youth and over-65 populations. The share of individuals aged 20 and younger has slightly decreased, from 24% in 1990 to

23% in 2015. Over the same period, the share of individuals aged 65 and older has increased from 15% to 16%. By 2040, the over-65 population is expected to comprise about 23% of the total population in the MRDH area in 2040, below the Dutch average (Statistics Netherlands, 2015f). Compared to the national level, where the share of the population aged 65 and older has increased from 13% to 17% and is expected to reach 27% by 2040, challenges related to an ageing society are not currently as pressing for the MRDH relative to broader national trends (Figure 1.13).

Figure 1.13. **Population composition in the Metropolitan Region of Rotterdam-The Hague and the Netherlands, by age group**



Source: Statistics Netherlands (2015d), "Bevolking; geslacht, leeftijd, burgerlijke staat en regio, 1 januari" [Population: sex, age, marital status and region, on 1st January], http://opendata.cbs.nl/dataportaal/portal.html?_la=nl&_catalog=CBS&tableId=03759ned&_theme=413 (accessed 26 June 2015).

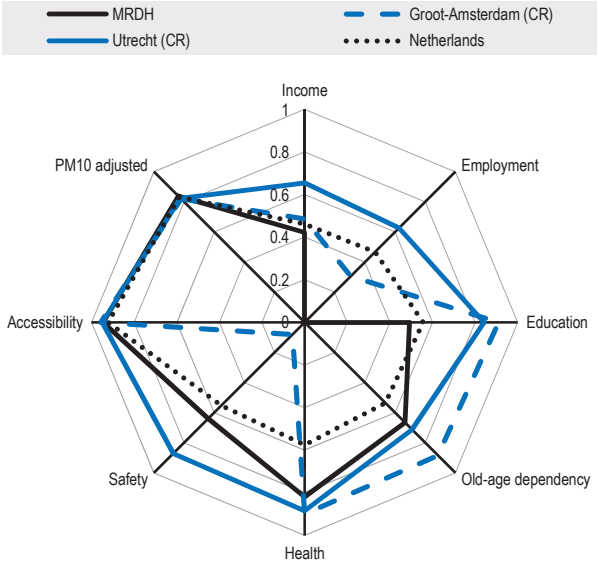
The MRDH has a high quality of life overall, with some intra-regional disparities

Consistent with national trends, the MRDH exhibits a higher standard of living than most OECD regions. The 2015 OECD Better Life Index ranks the Netherlands above average in the areas of work-life balance, jobs and earnings, housing, income and wealth, education and skills, subjective well-being, health status and social connections. Only in terms of environmental quality does the Netherlands rank below the OECD average (OECD, 2015b). Air quality in the MRDH corresponds to the average levels of the Netherlands, which exceed the threshold values of PM_{10} and $PM_{2.5}$ recommended by the World Health Organization (WHO, 2005).[12] Exposure to elevated levels of PM_{10} and $PM_{2.5}$ are associated with risks for individuals' health and thus negatively affect individual well-being. This is related to emissions from industries in the port area and from port-related transport, as well as high population density, high shares of urban built areas and limited amount of green space (Merk and Notteboom, 2013). Furthermore, estimates by OECD (2014d) suggest that about 10-15% of total PM_{10} emissions in Rotterdam are related to shipping activities of the port. Thus, even though the MRDH has followed the overall OECD trend of decreasing particulate matter concentration over the last few years, PM_{10} and $PM_{2.5}$ values are still above recommended thresholds (OECD, 2012a; WHO, 2014). In 2011, annual average levels for $PM_{2.5}$ in the MRDH area were between 17 µg/m³ in Rotterdam and 16 µg/m³ in The Hague and similar to measured

concentrations in Amsterdam (18 µg/m³) and the Dutch average (17 µg/m³). The performance of the MRDH relative to Amsterdam, Utrecht and the national average with respect to air pollution is captured in the environment indicator in Figure 1.14, which also displays additional well-being indicators adapted from the 2015 OECD Better Life Index and 2014 OECD Regional Well-being Index.

Figure 1.14. **Well-being in the Netherlands and in the Metropolitan Region of Rotterdam-The Hague**

Adapted from the OECD Regional Well-being Index, based on all Dutch COROP regions



Notes: 1. All data were normalised to a range of 0-1, where higher values mean better outcomes, based on all Dutch COROP regions. The region with the best performance has a value equal to 1, and the worst a value equal to 0.

2. MRDH refers to the aggregation of municipalities where possible. The environment indicator refers to cities, and was only available for Rotterdam and The Hague. The safety indicator for the MRDH is based on the COROP regions of Delft en Westland, Groot Rijnmond and Agglomeratie Gravenhage.

3. Income is quantified by the average standardised household income (2012). The employment indicator is defined as the share of the active labour force to the overall working-age population (15-65 years) quantified in three-year averages (2011/13). Education represents the share of the population aged 15-65 years that has attained at least an upper secondary education (2011/13). The old-age dependency ratio, expressed as "old-age dependency", measures the share of population aged 65 years and above to the working-age population (20-65 years). The indicator of environment is composed of PM_{10} air pollution, calculating the simple inverted average of the respective standardised values (2011), with a higher value indicating lower PM concentrations. Health is the inverted standardised age-adjusted mortality rate (2013). Safety is measured by the number of homicides per 100 inhabitants (2012-14), with a high value indicating a low number of homicides (2007-11).

Sources: Statistics Netherlands (2013), Wijk- en Buurtkaart 2012 - Versie 3, www.cbs.nl/nl-NL/menu/themas/dossiers/nederland-regionaal/links/2012-buurtkaart-shape-versie-3-el.htm (accessed May 2015); Statistics Netherlands (2014a), "Beroepsbevolking; gemeenten 1996-2013"; Statistics Netherlands (2014b), "Overledenen; geslacht, leeftijd (op 31 december), burgerlijke staat en regio", http://opendata.cbs.nl/dataportaal/portal.html?_la=nl&_catalog=CBS&tableId=03747&_theme=409 (accessed June 2015); Statistics Netherlands (2014c), "Inkomen van particuliere huishoudens met inkomen naar kenmerken en regio", http://opendata.cbs.nl/dataportaal/portal.html?_la=nl&_catalog=CBS&tableId=80594ned&_theme=438 (accessed June 2015); Statistics Netherlands (2015e), "Arbeidsdeelname; regionale indeling 2014" [Employment, by region 2014], http://opendata.cbs.nl/dataportaal/portal.html?_la=nl&_catalog=CBS&tableId=82208NED&_theme=401 (accessed June 2015); Statistics Netherlands (2015i), "Banen van werknemers in december; economische activiteit (SBI2008), regio", http://opendata.cbs.nl/dataportaal/portal.html?_la=nl&_catalog=CBS&tableId=81402ned&_theme=400 (accessed 26 June 2015); WHO (2014), *Air Pollution City Database.*

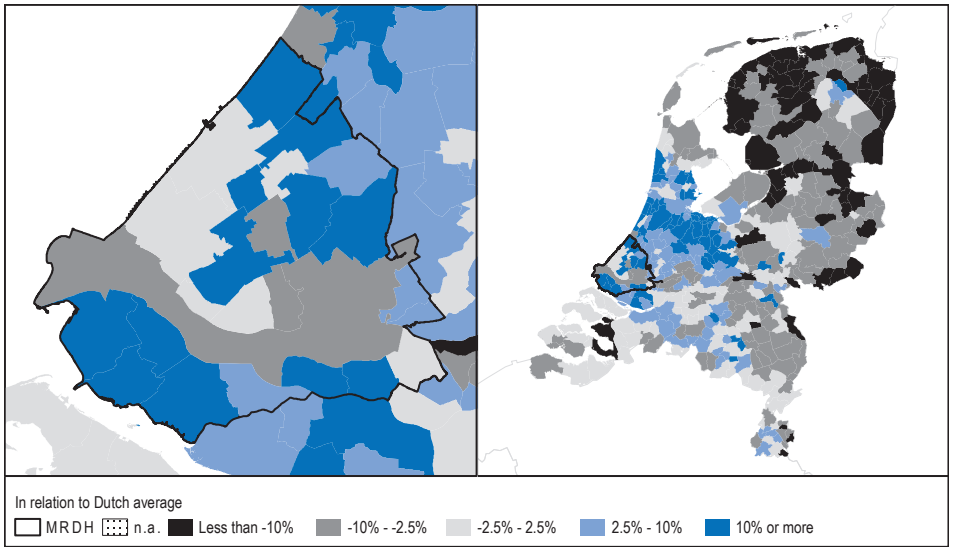
In terms of overall well-being, the MRDH performs well compared to the Dutch average in terms of health, safety and a relatively young labour force, but less well in terms of educational attainment, disposable income and employment. As discussed earlier, infrastructure in the MRDH, as in the Netherlands generally, is well developed. Thus, the accessibility indicator measuring the inverse average distance to the next train station ranks high for the MRDH, as well as for Amsterdam. The average disposable household income in the MRDH is slightly below the national average as well as levels in Amsterdam. With the highest unemployment rate of all Dutch COROP regions, the employment rate in the MRDH (91.2%) is just behind that of Amsterdam between 2011 to 2013 (92.6%), the Dutch average (93.3%) and Utrecht (94.0%). Also, as discussed earlier, the MRDH performs below the national average and Amsterdam in terms of educational attainment. As these indicators represent the average performance of the MRDH area, variations within the region are not captured. In the following section, disparities within the region and resulting social challenges will be highlighted.

Income disparities exist within the MRDH area

Although household disposable income in some municipalities of the MRDH is below the national average, some municipalities register income levels significantly above it. These disparities in average income per capita in 2012 range from EUR 20 500 in Rotterdam to EUR 35 600 in Wassenaar (Statistics Netherlands, 2013; see also Figure 1.15). Within a single municipality, the average income can vary significantly across census areas (*buurts*), reaching more than EUR 50 000 in some census tracts in The Hague, for instance. The differences across census areas in other municipalities of the MRDH area, while not as large, can still be substantial. Lower incomes are particularly common among single-parent households, young households and non-Western first- and second-generation immigrants (Salverda et al., 2013).

Figure 1.15. **Regional disparities in income, 2012**

Measured as average income per person by municipality in relation to Dutch average



Source: Statistics Netherlands (2013), Wijk- en Buurtkaart 2012 - Versie 3, www.cbs.nl/nl-NL/menu/themas/dossiers/nederland-regionaal/links/2012-buurtkaart-shape-versie-3-el.htm (accessed June 2015).

At municipal level, the two largest cities in the MRDH have the largest share of households living below or at the social minimum.[13] Lower income households are notably concentrated in South Rotterdam and in the centre of The Hague. Several districts in South Rotterdam are home to a majority of low-income households: Charlois (64% of all households are low-income), Delfshaven (61%) and Feijenoord (61%). In Rotterdam, the National Programme for South Rotterdam (Nationaal Programma Rotterdam Zuid), a programme to address the disadvantaged socio-economic situation of households in that area, focuses on reducing difficulties in attaining intermediate and higher education and removing barriers to the formal labour market (Box 1.5). In The Hague, the districts of Zuiderpark (82% of households in this district are considered low-income), Binckhorst (74%) and Moerwijk (71%) are amongst those with the largest share of low-income households. In contrast, in The Hague, the districts of Vogelwijk, Zorgvliet and Leidschenveen are among those in the MRDH with the smallest share of low-income households. The share of low-income households is also a rough proxy for the distribution of unemployment in the MRDH area, indicating which areas might need further attention to ensure that their population has equal labour market and educational opportunities.

Box 1.5. **National Programme for South Rotterdam**

The National Programme for South Rotterdam (Nationaal Programma Rotterdam Zuid), in which several partners co-operate, including the national government and the city of Rotterdam, aims to provide better opportunities for inhabitants of South Rotterdam. In the seven focal districts (Feijenoord, Afrikaanderwijk, Carnisse, Oud-Charlois, Hillesluis, and Tarwewijk en Bloemhof), levels of unemployment and poverty are among the highest in the MRDH and the Netherlands, with 21% of the labour force in search of a job, 28% of households earning less than 110% of the social minimum and 39% of primary school pupils with low-educated parents The programme is active in three areas: education, employment and living conditions.

In a time span of 20 years (project start: 2012), the programme aims to give socio-economically disadvantaged people the chance to achieve better educational outcomes, integrate them into the formal labour market and improve overall living conditions. During the implementation phase (2015-18), student performance – measured by the Cito-score[1] is targeted to increase from 528.4 in 2014 to 530.9 by 2018 by working with students in primary schools. Moreover, it is planned to help secondary school students to prepare for the labour market. Labour force integration is further developed, offering, among others, career services to match jobseekers with regional jobs. This may include jobs in the port area, the defence and healthcare sectors, among others. Living conditions are improved by undertaking investments in social and privately owned housing. Of the total 95 000 houses, 35 000 will be improved.

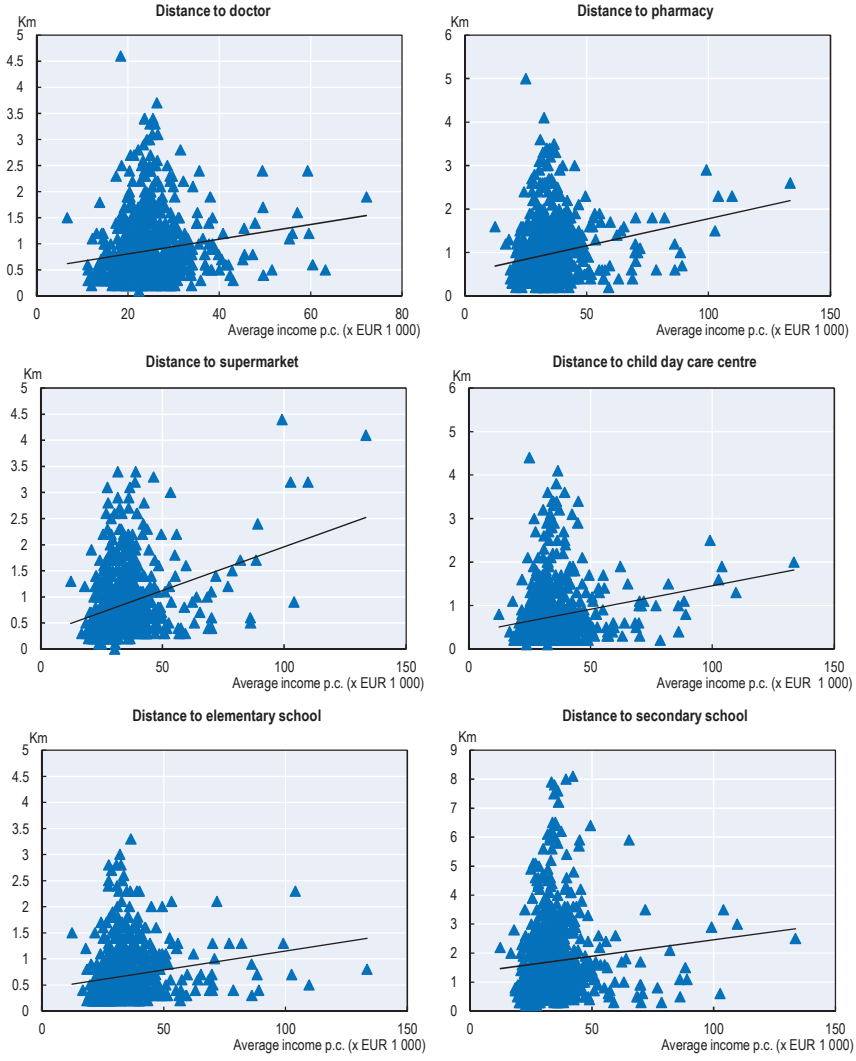
Note: 1. The Cito-score assesses primary school students' performance in language, arithmetic/mathematics and study skills in the last grade of their primary school education. Test results range from 501 to 550 and are used as a tool to choose the type of secondary schooling. With a score of 523 and higher, students are automatically accepted to vmbo-basic schools (pre-vocational secondary education). A score of 538 or higher automatically leads to the acceptance to havo (senior general secondary education), and 545 and higher to vwo (pre-university education). The Cito-test is administered voluntarily and is used by approximately 85% of Dutch primary schools.

Sources: Nationaal Programma Rotterdam Zuid (2015), www.rotterdam.nl/nprz; Programmabureau NPRZ (2015), *Nationaal Programma Rotterdam Zuid. Uitvoeringsplan 2015-2018*, www.rotterdam.nl/nprz (accessed 27 May 2015).

High access to services, regardless of socio-economic levels

Despite the income disparities present within the MRDH, access to goods and services is nevertheless high in the region, regardless of a neighbourhood's socio-demographic characteristics. In the Netherlands, and specifically in the MRDH area, there is no evidence of spatial segregation measured in terms of access to services within the region. Figure 1.16 shows the average distance to the closest service by average income of the census area (*buurt*). Most services within the MRDH are in close range, and even the least accessible areas can reach basic facilities within five kilometres. Moreover, as many low-income households are located in the urban cores of Rotterdam and The Hague, they have high access to services and goods.

Figure 1.16. **Average distance to closest services by income level**
By census tract (*buurt*), 2012



Note: 1. Average income per capita refers to the arithmetic mean of income in the census trackt (*buurt*) by population.

Source: Statistics Netherlands (2013), Wijk- en Buurtkaart 2012 - Versie 3, www.cbs.nl/nl-NL/menu/themas/dossiers/nederland-regionaal/links/2012-buurtkaart-shape-versie-3-el.htm (accessed May 2015).

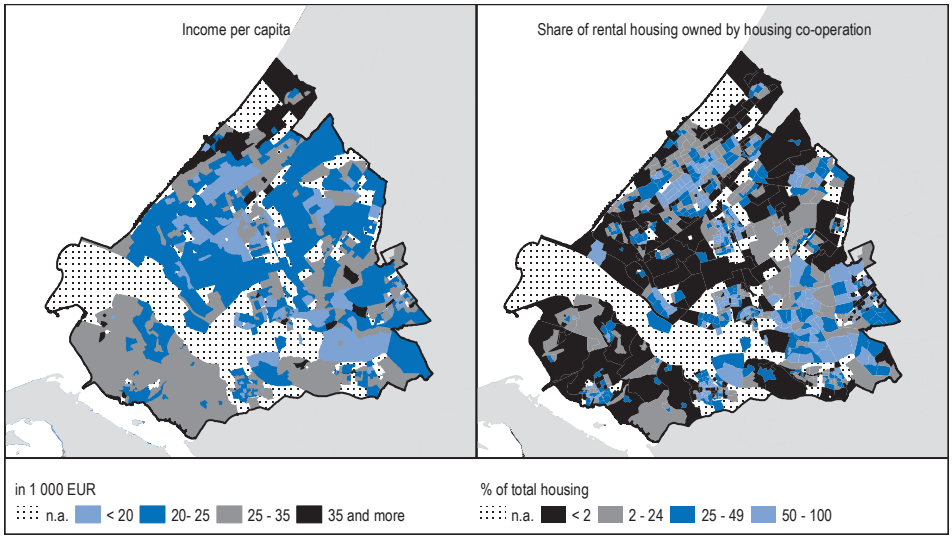
However, there remains a large variation of accessibility of services for households living outside the urban cores of Rotterdam and The Hague, and especially households located in municipalities to the south of Rotterdam, like Hellevoetluis and the former municipality of Spijkenisse, which face on average longer travel distances.

A large social rental housing stock

The Dutch renter-occupied social housing sector is one of the largest in the OECD, reflecting the composition of the MRDH housing stock as well. According to the Dutch Housing Survey, about 60% of the national housing stock is owner-occupied. Only 8% of the stock consists of private rental homes, with the remaining 32% comprised of social rental housing (Ministry of Interior and Kingdom Relations (2014).[14] Among OECD countries, only Austria and Denmark have a similarly sized social rental housing sector, both with about 22% of the total stock (OECD, 2014g). The share of rental housing (which includes social and private renter-occupied housing) in the MRDH area (50% in 2012) is above the national average. Renter-occupied housing is equally distributed between the COROP regions of The Hague and Rotterdam and mainly located within the urban cores of each region. Similar to national trends, rental housing owned by housing co-operatives dominates the rental market in the MRDH. The share of rental housing owned by co-operatives relative to the total housing stock is larger in the COROP region of Rotterdam (41%) than in the COROP region of The Hague (34%), possibly reflecting the unequal income distribution between the two regions. Unsurprisingly, low-income households in the MRDH are more likely to live in social housing than higher income households (Figure 1.17, right panel).

Figure 1.17. **Income and social housing in the Metropolitan Region of Rotterdam-The Hague**

By census level, 2012



Source: Statistics Netherlands (2013), Wijk- en Buurtkaart 2012 - Versie 3, www.cbs.nl/nl-NL/menu/themas/dossiers/nederland-regionaal/links/2012-buurtkaart-shape-versie-3-el.htm (accessed May 2015).

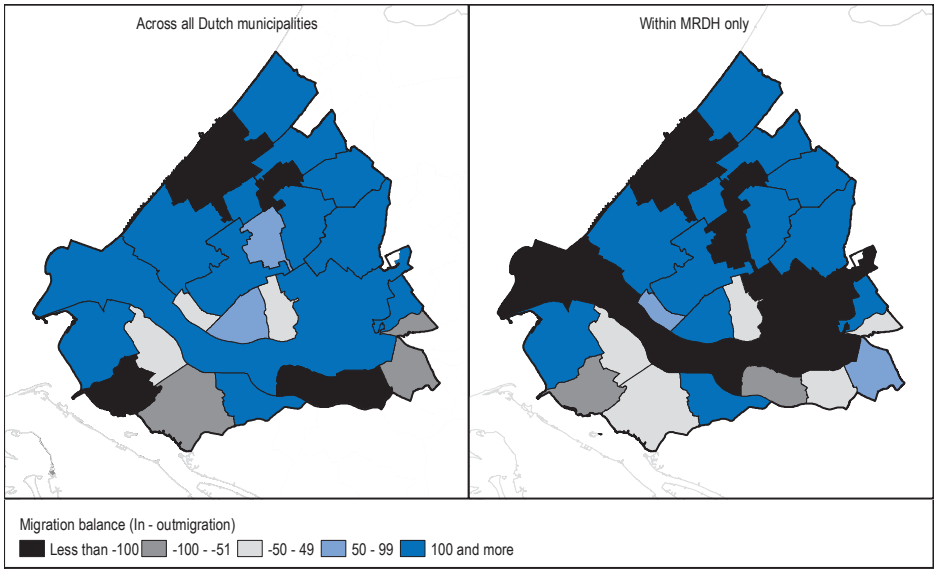
Low residential mobility in the MRDH overall, driven by urban-to-suburban migration

In total, the MRDH attracts more people than it loses as result of out-migration. Taking into account population movements across all Dutch municipalities, most municipalities in the MRDH experienced a positive migration balance in 2013 (Figure 1.18, left panel). Thus, more people were arriving in the MRDH than leaving. Tordoir et al. (2015) divide migration flows in the Netherlands into three groups: individuals moving from suburban areas to urban centres; families moving into suburban areas; and highly educated workers moving for employment between urban areas. Overall, migration flows in the Netherlands are small (about 4%) and are mainly directed towards urban areas.

Residential mobility within the MRDH, while low overall, is driven by households moving from urban centres to suburban municipalities. Just 2% of the MRDH population moved to another municipality within the MRDH in 2013 (Statistics Netherlands, 2014d). In 2013, households moving into suburban surroundings dominated in the MRDH area. Figure 1.18 shows in the right panel the migration balance considering movements within the MRDH only, which is negative for municipalities that experienced a higher out- than in-migration. While most suburban municipalities located between Rotterdam and The Hague have a positive migration balance, the urban cores of Rotterdam, The Hague and Delft experienced a negative migration balance. While there are some migration flows between the urban cores, most residential mobility occurred toward surrounding municipalities.

Figure 1.18. **Migration balance within the Metropolitan Region of Rotterdam-The Hague**

2013, migration across all municipalities (left panel); migration only within the MRDH (right panel)



Source: Statistics Netherlands (2014d), "Verhuisde personen; binnen gemeenten, tussen gemeenten, regio" [Mobility of people within and between municipalities].

The mobility of social housing tenants is a particular area of policy concern. There are separate waiting lists for social housing within the MRDH area: one associated with the former city-region of Rotterdam and the other with former city-region of The Hague. As a

result, the challenges and indirect costs associated with moving between social housing waiting lists may deter individuals from relocating to an area outside their current social housing area, even when new employment opportunities arise. In other words, individuals who may want to move from one part of the MRDH to another would be obliged to reapply for social housing (moving to the bottom of the other waiting list) and cannot transfer points acquired (e.g. which are accrued by being on the list for a longer period or always having paid rent on time). Moreover, income and therefore the eligibility for subsidised rent, is only checked at the time of application. These two conditions combined – losing points acquired and potential priority on the waiting list, as well as a new income eligibility verification – may reduce incentives to move in order to take up (better paying) employment in other parts of the MRDH.

The reduced labour mobility of social housing residents has been demonstrated in several European OECD countries. It has been found that tenants living in social housing have a significantly lower probability of moving relative to tenants in the private rental market, possibly reflecting the reluctance to give up their below-market rents and their generally more secure tenancies.[15] For the Netherlands, the impact of social renting on labour mobility was found to be negative; that is, tenants in social housing were less likely to change or take up employment than tenants in the private rental market (de Graaff, van Leuvensteijn and van Ewijk, 2009). While lower mobility does not reflect inefficiencies incurred by fragmented policies per se, early studies of Hughes and McCormick (1981; 1987) for the United Kingdom point towards that direction. They find that while public housing tenants show high mobility within local areas where the council housing exchange system seems to work well, they have significantly lower migration rates compared to both owner-occupied and private renters once regional boundaries have to be crossed.

Agglomeration benefits and the economic costs of fragmentation in the Netherlands

Effective urban management is one essential element to harness the potential agglomeration power of cities. Recent OECD work has found that the productivity of an urban agglomeration increases with better governance structures, and that addressing policies at the right scale can mitigate negative effects of administrative fragmentation. In particular, the presence of a governance body at metropolitan level can, on average, reduce by almost half the negative effect of fragmentation on productivity in metropolitan areas. This effect can be expected to be even stronger when the governance body is well funded and well functioning. Although no information on the impact of the metropolitan governance body of the MRDH is yet available, addressing joint challenges at this scale could be beneficial for the MRDH area. This section will first assess the degree to which the competitive advantages of the MRDH translate into agglomeration benefits. It will then compare the level of fragmentation of the FUAs in the Randstad area with those of other Dutch FUAs.

Agglomeration benefits: Smaller Dutch FUAs borrow size from their larger neighbours

Urban agglomerations generally have several benefits that should improve productivity performance, such as a larger and more skilled, specialised workforce; lower transport costs; and networking effects (see Box 1.6; Rosenthal and Strange, 2004; Duranton and Puga, 2004; Puga, 2010 for a literature overview). In a recent study,

Ahrend et al. (2014) analyse the agglomeration benefits of functional urban areas in five OECD countries (Box 1.7). For the five countries analysed, they find that productivity increases with city size. The positive relationship between city size and productivity remains stable when controlling for possible sorting (that is, that higher skilled individuals are more attracted to cities). The estimated elasticity of population on productivity premium ranges between 0.016 for the United Kingdom and 0.063 for the United States.

Box 1.6. **What are agglomeration economies?**

The mechanisms that create agglomeration benefits can be broadly split into three groups: sharing, matching and learning. The outline below follows Duranton and Puga's contribution to the *Handbook of Regional and Urban Economics* (2004) and builds on a long history of research, with early discussion of the concept of agglomeration benefits ranging back to the 19th century economist Alfred Marshall and his "Principles of Economics" (Duranton and Puga, 2004; Marshall, 2009).

- Sharing: Sharing of facilities or inputs by a large number of firms is one way of creating critical mass. The provision of certain goods or facilities requires a critical mass of beneficiaries. For example, branching a river to provide a constant stream of fresh water for an industrial site involves large fixed costs that are only worth paying if there are enough firms benefiting from this investment. A similar argument applies to the provision of specialised goods and services. Specialisation creates gains, but also requires a large enough demand to sustain the business model.
- Matching: Larger labour markets result in better matches between employers and employees. A better match means that the person who is hired for a job is better suited for his or her position and hence more productive. Most people tend to look for jobs primarily within their city. In larger cities, they have more choice between different potential employers and are more likely to find a matching one.
- Learning: Another cause that is often considered to be relevant is so-called technology spillovers. Businesses tend to learn from other nearby located businesses about the latest production methods. In larger cities, more businesses that are similar to each other exist. Therefore, there are more opportunities for them, e.g. enforced by labour market mobility, to learn about the most efficient production methods and to adapt accordingly.

In addition to these main mechanisms, agglomeration benefits are often thought to also be related with higher "connectivity" of individuals in larger cities, and to possibly arise in the context of higher levels of "knowledge-based capital" (intangible assets) in enterprises located in larger cities.

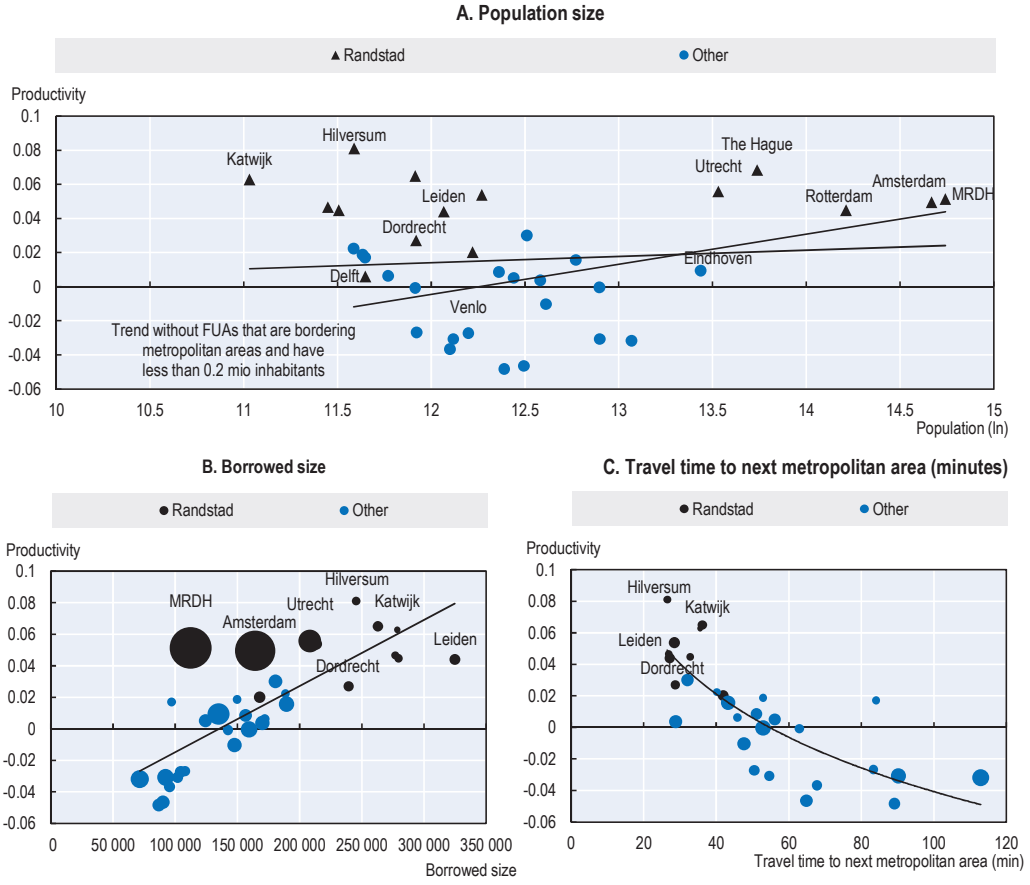
Lastly, a larger number of businesses can also increase the level of competition within a city. Fiercer competition ensures that unproductive businesses leave the market, which increases the average level of productivity within a city and raises its GDP.

Sources: OECD (2015c), *The Metropolitan Century: Understanding Urbanisation and its Consequences*, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264228733-en; Duranton, G. and D. Puga (2004), "Micro-foundations of urban agglomeration economies", in: Henderson, J.V. and J.F. Thisse (eds.), *Handbook of Regional and Urban Economics*, Vol. 4, Ch. 48, pp. 2 063-2 117; Marshall, A. (2009), *Principles of Economics: Unabridged Eighth Edition*, Cosimo, Inc.

Extending the analysis of Ahrend et al. (2014) to urban areas (FUAs) in the Netherlands, the positive relationship between city size and productivity can only be confirmed when taking into account the dense urban network structure of the Netherlands. If only individual characteristics of certain Dutch FUAs are accounted for,

no significant positive correlation of productivity and city size can be established. The polycentric structure of the Netherlands may help to explain this striking result. In contrast to the five countries under study in Ahrend et al. (2014), the Netherlands features a dense and closely connected network of small and medium-sized cities. For small and medium-sized cities, connectivity seems to be more relevant for productivity than size (see e.g. OECD, 2006; McCann and Acs, 2011; Dijkstra, Garcilazo and McCann, 2012). In the Netherlands, smaller FUAs benefit from the polycentric structure and close proximity to larger FUAs: as a result, smaller Dutch FUAs located in close proximity to larger FUAs in the Randstad area register comparatively high productivity levels (Figure 1.19A). Hilversum, for instance, an FUA with fewer than 200 000 inhabitants located between Amsterdam and Utrecht, benefits from the higher productivity levels of the two neighbouring metropolitan areas. If small FUAs located in the Randstad that border at least one large FUA (e.g. more than 500 000 inhabitants) are excluded from the analysis, a positive relationship between city size and productivity is obtained for the Netherlands.

Figure 1.19. **Agglomeration benefits in the Netherlands, 2010**



Note: 1. Driving distances and travel times calculated with Stata's command traveltime3.ado.

Source: Based on original analysis from De Groot; authors' calculations.

Within the dense urban network of the Randstad, the ability to "borrow" agglomeration is more important for the productivity of smaller cities than city size. The concept of borrowed agglomeration dates back to Alonso (1973), who describes that the

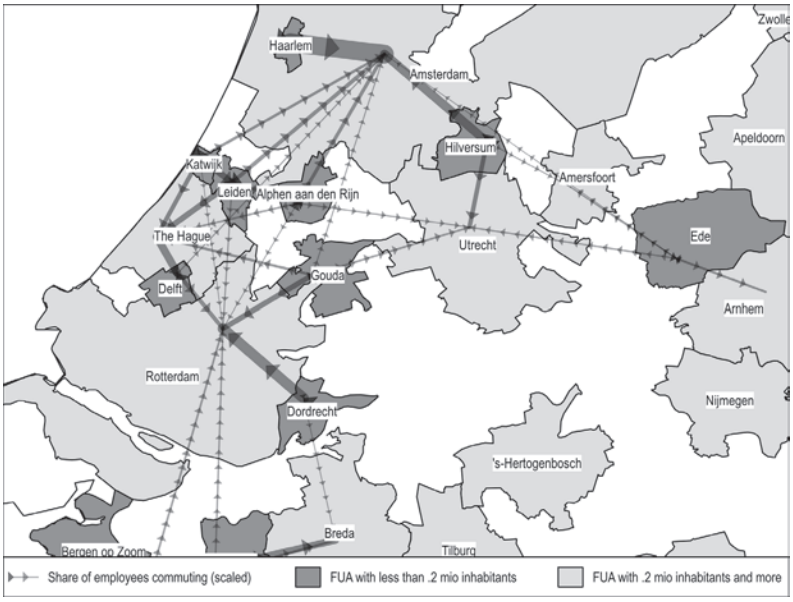
"population potential" – in other words, the opportunity to interact with people in other places – is closely correlated to a city's own population size. Figure 1.19B displays the relationship between productivity and borrowing agglomeration measured as population in other FUAs weighted by the inverse distance to the respective FUA. A strong positive correlation indicates a greater importance of borrowed size for smaller FUAs. These smaller FUAs have the main advantages of a small size (e.g. reduced levels of congestion), while at the same time benefit from the advantages of the larger size of their neighbour(s) through close proximity to a larger market. Thus, firms and individuals might be attracted to those areas as they provide access to and for highly skilled employees. Analysing job-related migration in the Netherlands, Van Ham (2005) shows that in a dense polycentric urban network, strategic residential location in between the major cities is as favourable as within the cities themselves in terms of avoiding high spatial mobility costs. Thus, locating between the MRDH and Amsterdam, for example, would allow individuals to access both labour markets in a reasonable timeframe, as well as benefit from the higher wage premiums of those areas.

Moreover, increasing connectivity between the MRDH and other large FUAs could increase market access and improve the agglomeration power of the MRDH area. In a recent study, Ahrend and Schumann (2014) find that: 1) regions across OECD countries benefit from proximity to urban centres, and 2) economic growth is negatively correlated with travel time. Thus, as travel time increases, the effect of proximity on regional economic performance decreases. Linking driving time between FUAs in the Netherlands with productivity confirms this relationship (Figure 1.19C). FUAs of all sizes in the Randstad area can reach at least one of the large FUAs (with over 500 000 inhabitants) within less than 40 minutes travel time.

The finding that smaller FUAs in the Randstad region "borrow size" from their larger neighbours underscores the potential of the borrowing size concept within a polycentric network. Figure 1.20 highlights commuting flows of FUAs in the Randstad with fewer than 200 000 inhabitants and in which at least 2% of the labour force commutes to another FUA. A thicker line is associated with a larger share of employees commuting between the respective FUAs. Within the Randstad region, smaller municipalities located between the MRDH, Amsterdam and Utrecht show strong connectivity to each of the larger FUAs, thereby acting as links between the larger cities. In this way, the worker catchment area of the MRDH reaches well beyond its boundaries, extending to the surrounding FUAs of Dordrecht, Gouda, Leiden and Katwijk. Individuals (and firms) located in the smaller surrounding FUAs can benefit from access to more than one market in close distance (see Figure 1.20 and Figure 1.A1.1 in Annex 1.A1 for a geographical overview of all FUAs in the Netherlands).

Ultimately, from an international perspective, the agglomeration power of Dutch cities is constrained by their comparatively smaller size. To compensate for the small size of Dutch FUAs, the benefits of polycentric urban structure should be exploited more fully. While the concept of borrowing size seems to work on a lower spatial scale, it has not yet translated to a higher level. Thus, the metropolitan areas in the Randstad region operate mostly independently from each other and are not yet benefiting from each other's size.

Figure 1.20. **Commuting flows of functional urban areas with 50 000-200 000 inhabitants in the Randstad area, 2011**



Note: Population refers to 2011.

Source: Statistics Netherlands and OECD (2013a), "Metropolitan areas", *OECD Regional Statistics* (database), http://dx.doi.org/10.1787/data-00531-en (accessed 26 June 2015).

Box 1.7. **Agglomeration benefits and the cost of fragmentation across OECD countries**

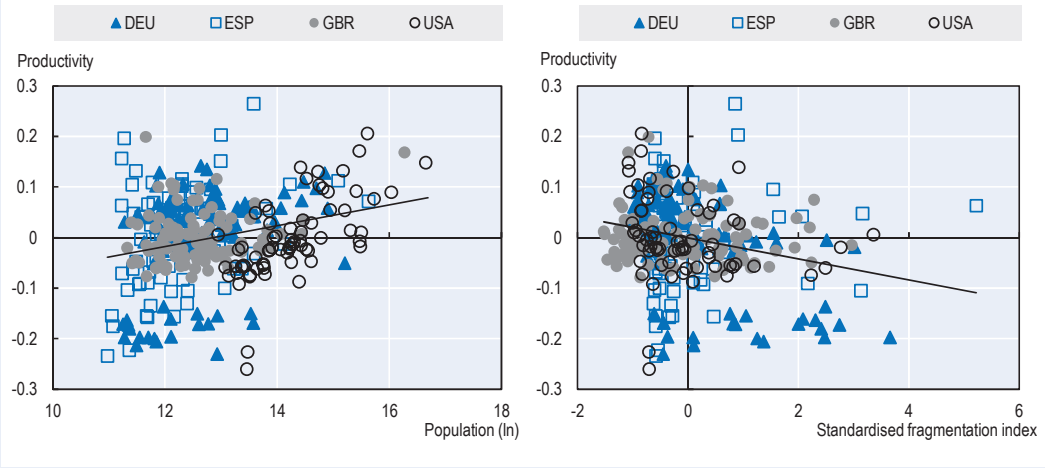
Across the OECD, as countries continue to urbanise, urban agglomerations have become an increasingly important driver of labour productivity. Metropolitan areas are home to about half of the OECD population and account for an even larger share of total GDP. Economies of scale and networking benefits attract firms as well as skilled labour, making cities more productive than rural areas. Empirical evidence suggests that individual productivity is positively influenced by the size of the city. However, administrative fragmentation may hinder productivity in the form of inefficiencies.

A study by Ahrend et al. (2014), analyses the agglomeration benefits of cities relative to city size in five OECD countries: Germany, Mexico, Spain, the United Kingdom and the United States. In all five countries, productivity increases with the size of the functional urban area. The estimated elasticity of population on productivity premium ranges between 0.016 for the United Kingdom and 0.063 for the United States. Furthermore, the study finds that the productivity of an urban agglomeration is linked to the functioning of its governance. While an increasing size of an urban agglomeration is usually associated with higher productivity, this process is often accompanied by a higher governmental fragmentation that increases the complexity of co-ordination that can diminish the agglomeration benefits. After accounting for the sorting of more productive individuals into urban agglomerations, the study finds that among two cities of the same size within the same country, a city with twice the number of municipalities within its functional boundaries is on average about 3.4% less productive.

Interestingly, the negative effect of fragmentation on productivity is mitigated by almost half when a governance body at the metropolitan level exists. Thus, while poorly organised cities may lose potential agglomeration benefits, this effect can be offset by better co-ordination across actors. In fact, the larger a city gets, the more likely it is to address fragmentation by setting up a metropolitan governance body: a 10% increase in population is associated with a 0.8% increase in the likelihood of having a metropolitan governance body (Ahrend, Gamper and Schumann, 2014).

Box 1.7. **Agglomeration benefits and the cost of fragmentation across OECD countries** (*continued*)

Figure 1.21. **Agglomeration benefits and administrative fragmentation, 2007**



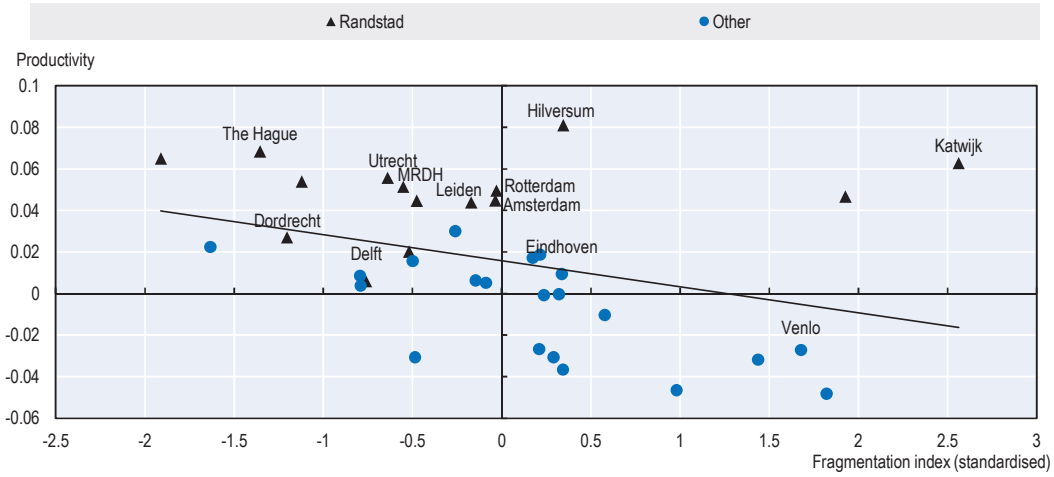
Notes: 1. City productivity is defined as a wage premium associated with each city once the characteristics of the city workforce are taken into account. Individual wage regressions are estimated with controls for the individual characteristics of the workforce, in order to account for sorting of individuals to cities. The city is defined at the functional urban area (FUA) level, so that it allows comparison of meaningful spatial entities based on functional economic criteria rather than on administrative boundaries. 2. For better readability, Mexico is not included in the figures above.

Sources: Ahrend, R. et al. (2014) "What makes cities more productive? Evidence on the role of urban governance from five OECD countries", *OECD Regional Development Working Papers*, No. 2014/05, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jz432cf2d8p-en; Ahrend, R., C. Gamper and A. Schumann (2014), "The OECD Metropolitan Governance Survey: A quantitative description of governance structures in large urban agglomerations", *OECD Regional Development Working Papers*, No. 2014/04, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jz43zldh08p-en.

FUAs in the Randstad may be less fragmented than other Dutch FUAs

Based on one measure of territorial fragmentation, FUAs located in the Randstad region (e.g. the FUAs of Amsterdam, Rotterdam, The Hague and Utrecht) appear to be less fragmented than other Dutch FUAs (Figure 1.22). Territorial fragmentation within a given FUA is measured as the number of municipalities per 100 000 inhabitants, which could indicate potential co-ordination problems within FUAs that have many different administrative jurisdictions. However, the particular spatial structure of the Randstad may render this measure less meaningful than in other countries with a more monocentric spatial structure. Within the dense urban network of the Randstad, complex commuting flows result, by definition, in the formation of several separate, smaller FUAs, rather than a single large FUA. As the smaller FUAs are comprised of only a few municipalities, they appear to be less fragmented, even though their daily urban systems may overlap. While recent OECD research suggests that addressing policies at the right scale can mitigate negative effects of fragmentation, the optimal scale of policy co-ordination is not obvious within the Randstad region. Daily networks can stretch over several administrative boundaries or even FUAs and thus – from the perspective of the entire Randstad – this fragmentation may negatively affect its agglomeration benefits.

Figure 1.22. **Agglomeration benefits and administrative fragmentation of Dutch functional urban areas, 2010**



Notes: Fragmentation index is measured as municipalities per population standardised by the country mean.

Source: Based on original analysis from De Groot.

Progress towards greater functional integration in the Metropolitan Region of Rotterdam-The Hague

As has been discussed, the MRDH is a densely populated area within a larger, polycentric urban network. Analysing the functional integration of the municipalities within the MRDH area, and with respect to other cities in the Randstad, allows for a more in-depth picture of the potential agglomeration power of the MRDH area.

Functional integration implies that cities can benefit from each other's size and reinforce agglomeration benefits, regardless of administrative boundaries. On the one hand, two different administrative regions can be considered functionally integrated if high levels of commuting and economic interactions occur between them. On the other hand, belonging to a single administrative region does not automatically imply functional integration and could result in lower agglomeration benefits than would be expected. Identifying and removing potential barriers to economic interactions and urban dynamics can therefore increase functional integration and ultimately agglomeration benefits.

It is important to keep in mind that the emergence of the MRDH area is not based on functional integration, but is rather a product of history and political negotiations (see Box 1.1). With the merger of the two former city-regions of Rotterdam and The Hague, the MRDH combines two distinct economies that operate to a large degree independently from each other. In contrast, strong functional relationships are found between municipalities in the MRDH with municipalities outside the MRDH area. For instance, firms located around the Port of Rotterdam are more likely to be connected to Dordrecht (situated to the south of the MRDH) than to The Hague, whereas firms and institutions in The Hague tend to be more oriented towards Amsterdam and Leiden (north of the MRDH) than towards Rotterdam (Meijers, Hoogerbrugge and Hollander, 2012).

The degree of functional integration in the MRDH is analysed based on two dimensions: commuting trends and economic interactions. Based on these dimensions, initial findings suggest that while the MRDH is not yet a single functional

urban area, the region has become more functionally integrated over the past decade. Chapter 2 will assess the extent to which certain policy fields, such as spatial planning, economic development and housing, have tended to hinder greater functional integration.

Commuting has increased in past decade, but remains limited between the main cities

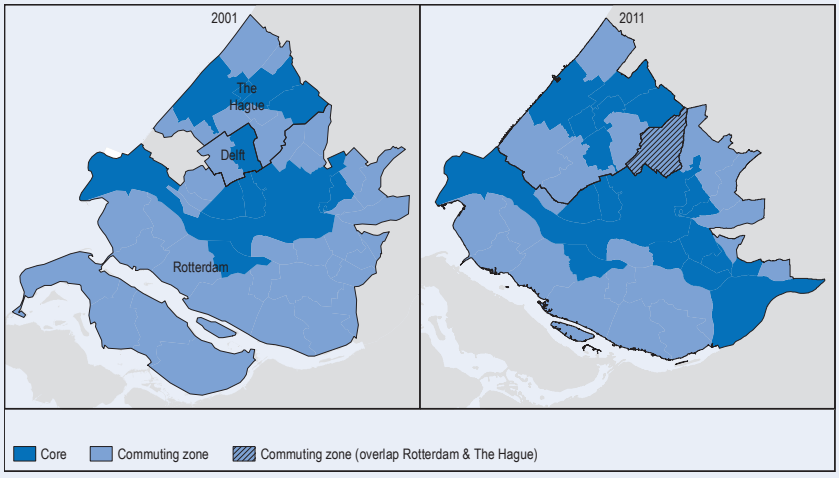
Based on commuting trends, increased transport connectivity appears to have contributed to greater functional integration among the municipalities that make up the MRDH. The share of workers commuting between the two former city-regions of Rotterdam and The Hague has increased over the last decade. Commuting flows are one indicator of functional integration of cities, and one of the main determinants in the OECD method for calculating FUAs. The increased commuting flows within the MRDH point towards greater functional integration in recent years, although the MRDH is still not categorised as a single FUA (Box 1.8).

Box 1.8. **Recalculating functional urban areas in the Metropolitan Region of Rotterdam-The Hague based on 2011 commuting trends**

The definition of OECD functional urban areas (FUAs) is based on population and commuting data from the 2000-01 census. While comparing urban dynamics and trends within the boundaries of that base year has several advantages, the question of how the functional integration has changed over time requires a recalculation of FUAs based on more recent data.

Two main components are needed for the calculation of functional urban areas: a population grid and information on commuting flows. To recalculate the functional urban areas in the MRDH area, the LandScan Population Grid referring to the year 2013 and commuting data for 2011 are used. The left panel in Figure 1.23 shows the original OECD FUAs in the MRDH area based on 2001 data. The right panel shows how the FUAs would be defined when using the more recent data, and based on the municipal boundaries of 2014.

Figure 1.23. **Comparison of functional urban areas in the Metropolitan Region of Rotterdam-The Hague, 2001 and 2011**



Note: 1. Commuting zone (overlap) identifies the municipalities from which more than 15% of employees commuted to both cores (The Hague and Rotterdam), preliminary results.

Sources: see OECD (2012b), *Redefining "Urban": A New Way to Measure Metropolitan Areas*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264174108-en. Calculations for 2011 are based on LandScan 2013 and commuting data from 2011 (provided by Dr. Henri de Groot for the OECD) based on the administrative boundaries of 2014.

Box 1.8. **Recalculating functional urban areas in the Metropolitan Region of Rotterdam-The Hague based on 2011 commuting trends** (*continued*)

The updated calculation of FUAs in the MRDH produces the following results:

- An increase in population density resulted in the integration of The Hague and Delft into one contiguous urban core, whereas in 2001 two distinct urban cores were observed. In other words, Delft and The Hague are now a single FUA. However, despite increased population density, commuting flows between the two cities remained stable.
- The FUAs of Rotterdam and The Hague, however, were still not integrated in 2011, as the share of workers commuting between the two urban cores remained small. In 2001, 3.2% of the employees living in Rotterdam commuted to The Hague, and about 3.7% of workers living in The Hague commuted to Rotterdam. The share of workers commuting between the two cores only slightly increased over the years, and by 2011, about 4.7% of workers commuted from the core of Rotterdam to the core of The Hague. Commuting in the opposite direction was slightly higher: 6% of workers in 2011.
- The increasing functional integration within the MRDH area is driven by increased commuting from the surrounding municipalities to the two urban cores. Thus, employees living in the commuting zone of either of the largest FUAs in the MRDH (Rotterdam FUA and/or The Hague FUA) also display increasing commuting flows to the other urban core. The municipality of Lansingerland, for example, is located between Rotterdam and The Hague. In 2001, it was categorised as part of the hinterland of the FUA of Rotterdam. In 2011, it was connected to both FUAs, with more than 30% of workers commuting to Rotterdam and about 17% commuting to The Hague.

Sources: Commuting data, 2001 based on census information adjusted for municipal boundary changes, 2011 data based on data provided by Dr. Henri de Groot to the OECD.

Increased commuting driven by better connectivity, travel from smaller municipalities to main cities

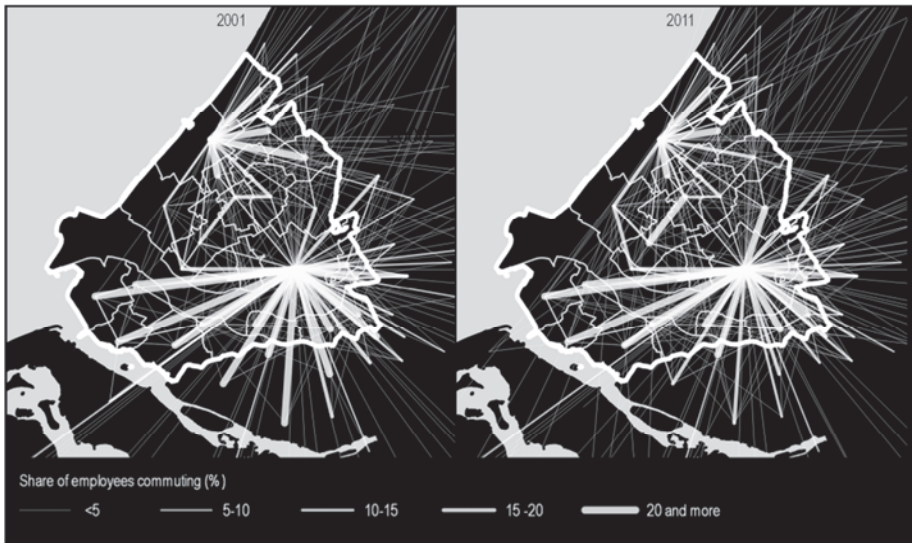
The region's increasing functional integration is driven by a larger share of commuting from smaller municipalities toward Rotterdam and The Hague, rather than an increased share of commuters between the two main cities. Figure 1.24 shows the commuting flows as share of employees for 2001 on the left, and for 2011 on the right. With commuting flows originating from smaller municipalities toward the cores, the two former city-regions can be easily distinguished. Despite a distance of less than 30 kilometres, the share of employees commuting between the municipalities of Rotterdam and The Hague has remained extremely small: in 2001, as well as 2011, only 2.7% of employees living in Rotterdam commuted to The Hague. Commuting in the other direction was slightly higher, with 3.1% in 2001 and 4.1% in 2011.

Higher commuting flows may be the result of increased transport connectivity. Within the former boundaries of the two city-regions, public transport modes like the tram and the metro are well established. Between the two centres, there is a main train connection, and since 2006 the Randstad rail runs between Rotterdam and The Hague, with a train running approximately every 10-15 minutes. The introduction of this new light-rail connection benefited several municipalities located between Rotterdam and The Hague, in the form of higher accessibility to public transport and connectivity to the main cities. In these municipalities, the share of employees commuting to the urban cores of Rotterdam and The Hague increased between 2001 and 2011: from 23% to 32% for

commuting between Lansingerland and Rotterdam, and from 12% to 17% to The Hague. The share of employees commuting from Pijnacker-Nootdorp, another municipality connected by the Randstad rail, to the urban core of Rotterdam increased from 6% to 10%, and from 25% to 46% to the core of The Hague.

Figure 1.24. **Commuting flows within the Metropolitan Region of Rotterdam-The Hague area, 2001 and 2011**

Commuting by all transport modes, to and from municipalities in the MRDH area



Sources: 2001, census results; 2011 data provided by Dr. Henri de Groot to the OECD.

Education levels affect commuting distances

Although commuting behaviour in the Netherlands tends to differ by educational level, residents of the MRDH, regardless of educational level, travel shorter distances to work than in the rest of the country. Nevertheless, within the MRDH and across the Netherlands, on average, higher educated people commute longer distances than lower educated people (Table 1.2). This descriptive evidence is supported by Burger, Meijers and Van Oort (2013), who explore the impact of socio-demographic characteristics on commuting behaviour for the Randstad region. Controlling for the educational level, they also find that higher net income increases the likelihood to travel between urban cores. This pattern might indicate that the cost of commuting affects the mobility of lower income households. Even though there might be a good public transport connection between the cities in the MRDH, public transport is not equally affordable to individuals of all income groups. For example, in order to take public transit from South Rotterdam to the Central Station in The Hague on a 5-day basis (work week), an average household of South Rotterdam would spend roughly 15.11% per person of its weekly income.[16]

Economic interactions have intensified, but have not yet reached their full potential

Commuting flows only describe one dimension of functional integration; another key measure of the functional relationships within the MRDH is the level of economic interactions between different parts of the region. Economic interactions in the MRDH have increased, but have not yet reached their full potential. To assess the functional

integration of the Randstad region, Van Oort, Burger and Raspe (2010) analyse business relations (based on 2005 data), focusing on the sources and destination of an individual firm's ten most important selling and purchasing relations. To avoid biased results, they only include firms in manufacturing, wholesale and business services, as they are not bound to consumers for their location. While the authors conclude that the Randstad region is not spatially and functionally integrated, they also find business interactions between Rotterdam and The Hague lower than to be expected given their size.

Table 1.2. **Average commuting distance and travel time by educational level in 2010**

Road distance and time travelled, km/minute

	Residents living in the MRDH	Residents living in the rest of the Netherlands (without MRDH)	Residents living in Amsterdam (municipality)	Residents living in Utrecht (municipality)	All of the Netherlands
Low education	11/12	12.9/13	11.1/12	13.3/13	12.6/13
Medium education	12.3/13	15.4/15	12.8/14	16.8/16	15/15
High education	15/15	19.7/19	15.8/16	22.5/21	19/18

Note: Commuting distances and travel times between municipalities were calculated using the Stata command traveltime3.ado and refers to distance travelled on roads. Commuting within the residence municipality is counted with zero travel time/distance and therefore the numbers underrepresent the actual average times spent commuting.

Source: Based on data provided by Dr, Henri de Groot to the OECD.

The distinct economies of Rotterdam and The Hague may explain low levels of business interactions

One possible explanation of these lower-than-expected interactions may be related to the distinct economies in the MRDH. Such diversity may, in fact, hamper the functional integration of the region, as clusters are not necessarily related to or complement each other. The shares of business relationships across core cities are shown in Table 1.3. For both Rotterdam and The Hague, business relations are highest within their urban cores. Thus, about 31% of business relations originating from Rotterdam are with other businesses located in its own core region, and only 3% of the business relations occur with the core of The Hague. Similarly, 39% of business relations originating in The Hague are with other businesses in its own urban core, and only 5% occur with the core of Rotterdam. Moreover, despite the close proximity of Rotterdam and The Hague, both cities have more business relations with Amsterdam than with each other.

Table 1.3. **Economic relationships between the urban cores of the largest cities in the Randstad region**

Share of relationships (%)

To / From	Amsterdam	Rotterdam	The Hague	Utrecht	Other Netherlands	International	Total sum of share of relationships
Amsterdam	44.0	2.9	4.3	3.4	34.3	11.1	100
Rotterdam	5.2	30.7	2.8	3.0	45.5	12.8	100
The Hague	5.8	5.1	38.7	2.9	43	4.5	100
Utrecht	6.1	2.9	4.7	25.4	51.6	9.3	100
Randstad	6.6	3.2	2.5	1.5	71.1	15.1	100

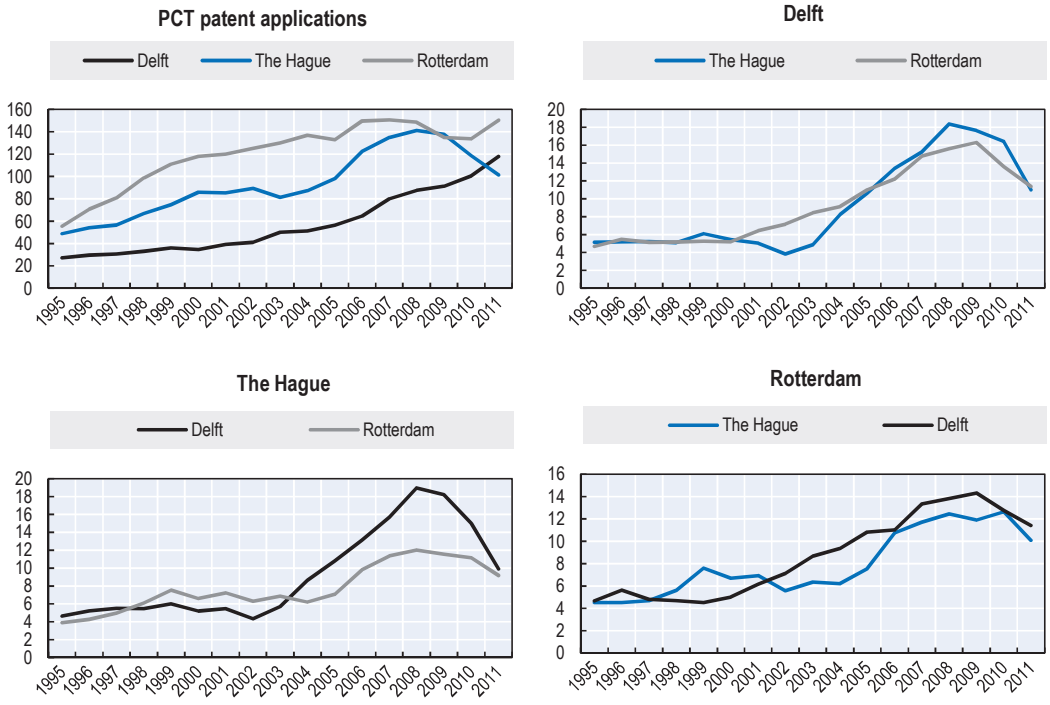
Note: Highlighted fields in grey show the share of relationships within the same city.

Sources: Ruimtelijk Planbureau (2006), *Vele steden maken nog geen Randstad*, Ruimtelijk Planbureau, The Hague, p.61; same dataset as in Van Oort, F., M. Burger and O. Raspe (2010), "On the economic foundation of the urban network paradigm: Spatial integration, functional integration and economic complementarities within the Dutch Randstad", *Urban Studies*, Vol. 47, No. 4, pp. 725-748, April, http://dx.doi.org/10.1177/0042098009352362.

Co-patenting activities have increased in the past decade

Co-operation and economic interactions within the MRDH have nonetheless been increasing over the last decade, as measured by co-patenting activity. Figure 1.25 shows the co-patenting activity between the COROP regions of Rotterdam, Delft and The Hague. The upper-left panel shows the total number of PCT patents filed within the MRDH by COROP region. The remaining panels indicate the number of applications in which an inventor from one of the other two COROP regions in the MRDH was involved. Up until the crisis in 2009, the number of total applications was increasing in all three regions, with most patents filed in the Rotterdam area. Only from 2003-04 onwards, The Hague and Delft showed a higher increase in patent applications. Co-patenting activities between Delft and The Hague increased during this period, which may have been stimulated by the increasing presence of research institutions in this area. Co-patenting activities between Rotterdam and The Hague and Delft were lower, but have also increased over time.

Figure 1.25. **Co-patenting within the Metropolitan Region of Rotterdam-The Hague**



Note: Three-year moving average.

Source: Authors' calculations based on EPO Worldwide Statistical Patent Database "PATSTAT".

Road map for this report

This chapter discussed the creation of the MRDH, both as a geographic area and a new governance body created in 2015 with responsibilities in transport and economic development. Traditionally merely co-existing, Rotterdam and The Hague have only recently begun to consider themselves as partners in a larger metropolitan region. The chapter analysed the strengths, challenges and opportunities for the MRDH area, concluding that the MRDH performs relatively well based on a majority of indicators

corresponding to competitiveness and quality of life. Nevertheless, even though overall performance of the MRDH is strong from an international perspective, the MRDH trails behind other large Dutch cities in several respects, such as educational attainment and patenting output. Moreover, there is evidence that the MRDH has not yet taken full advantage of potential agglomeration benefits; strong connectivity within the MRDH and between the MRDH and other cities in the Randstad region could strengthen agglomeration potential. Finally, based on an assessment of commuting trends and economic interactions within the region, it is evident that the MRDH is not yet a single, functional region; rather, it operates at two (or more) smaller functional scales.

The next chapter will look at the public policies that have prevented stronger functional integration of the MRDH in the past and propose strategies to help the MRDH area grow closer together. Chapter 3 will focus on the mechanics of governance in the MRDH: what steps could the MRDH body take over the short, medium and long term to enhance its effectiveness in an already crowded institutional landscape? How can the MRDH be most effective in achieving its objectives and in working with other key public and private actors? Opportunities for the MRDH will be presented against the backdrop of metropolitan governance reforms across the OECD and within the broader context of the Dutch National Urban Agenda.

Key findings and recommendations

- The Metropolitan Region of Rotterdam-The Hague (Metropoolregio Rotterdam Den Haag, MRDH) came into formal existence on 1 January 2015. It is both a geographic area comprised of 23 municipalities (including Rotterdam and The Hague, its 2 largest cities, along with 21 smaller neighbours) as well as a new metropolitan-scale authority created to manage responsibilities for transport and economic development. The MRDH was formed by the integration of the two former city-regions of Rotterdam and The Hague.
- As part of the Randstad region, the MRDH area is located in the economic centre of the Netherlands. It accounts for more than 60% of the population of the Province of Zuid-Holland, but just 36% of its land area, making it one of the most densely populated stretches of the country. The MRDH generates about 16% of national GDP and is responsible for the lion's share of economic activity within the province: 67% of firms and jobs in the province are situated in the MRDH area. The MRDH has a rich, polycentric spatial structure.
- Similar to national trends, the MRDH economy has struggled to recover from the 2009 global crisis and continues to be outperformed by other metropolitan areas in the Randstad region. Compared to other Dutch urban areas, the MRDH struggles with high levels of unemployment and a large share of low-income households. Labour productivity of the MRDH is lower than expected (about average compared to OECD functional urban areas [FUAs] of a similar size), given the strong performance of the Netherlands within the OECD.
- Traditionally, Rotterdam and The Hague have not been natural partners, in large part due to their distinct economic profiles. The structure of employment in the MRDH is heavily influenced by two distinct economies: transport and logistics activities related to the Port of Rotterdam, and public administration and services in The Hague. The lack of relatedness of these two economies, as well as their different skill profiles, has led to a natural division of labour, possibly limiting knowledge spillovers.

Key findings and recommendations (*continued*)

- The MRDH area has significant competitive assets: a strong infrastructure network with good accessibility for populations of all income levels; a diverse regional economy with several "Top Sectors" that have been identified by the Dutch government as priorities for investment (e.g. agriculture and food; water; logistics; energy; chemicals; and horticulture and propagation materials); a well-educated workforce by international standards; and high overall levels of well-being.
- Challenges faced by the MRDH include a regional economy that may lack complementarities, low patenting output, educational attainment levels that lag behind other Dutch urban areas and high levels of air pollution.
- Dutch FUAs are smaller than many of their international peers, which may constrain their agglomeration power. While smaller functional urban areas in the Randstad compensate for their size by "borrowing agglomeration" from larger surrounding metropolitan areas, the larger metropolitan areas in the Randstad operate mostly independently from each other.
- The MRDH is not yet a single integrated functional urban area, although both commuting flows and economic interactions have increased over the past decade. While recent commuting trends suggest that the MRDH is slowly growing together, commuting flows between the two main cities remain minimal. Sectoral diversity has generated fewer co-operative projects and economic interactions between Rotterdam and The Hague than expected, given their size. The functional integration of the MRDH can and should improve. To do so, the MRDH could focus on infrastructure and accessibility, clustering of economic sectors, and agglomeration power (discussed in greater detail in Chapter 2).

Notes

1. As will be discussed further in this chapter and in greater detail in Chapter 3, the creation of the MRDH was the result, in part, of a political negotiation within a broader context of territorial reforms that led to the abolition of the city-regions.
2. The Randstad is commonly understood as 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 Randstad region remains an elusive concept as it has no official boundaries and does not correspond to any administrative boundaries or functional urban area (see e.g. OECD, 2007).
3. Greater Amsterdam (Groot-Amsterdam) comprises the municipalities of Aalsmeer, Alkmaar, Amstelveen, Amsterdam, Beemster, Diemen, Edam-Volendam, Haarlemmermeer, Landsmeer, Oostzaan, Ouder-Amstel, Purmerend, Uithoorn, Waterland and Zeevang.
4. Unemployment in the exact MRDH boundaries based on aggregated municipal data for 2014 indicates an even higher unemployment rate of 9.4% in 2014, and thus the MRDH recorded the highest unemployment in the Netherlands across all COROP regions (Statistics Netherlands, 2015e).

5. Someone with a non-western background is defined as originating from a country in Africa, South America or Asia (excluding Indonesia and Japan) or Turkey.

6. See, for instance, the CWCU (2015) or Times Higher Education Ranking (2015).

7. The nine "Top Sectors" are: agro-food, horticulture/propagation, high-tech materials and systems, energy, logistics, creative industries, life sciences, chemicals and water.

8. Creative industry refers to architecture, design, gaming, fashion, art, cultural heritage, media and entertainment industry.

9. The 7th framework programme was the predecessor of Horizon 2020 and lasted from 2007 until 2013 and funded activities should have a "European Added Value", which could have either been cross-national co-operation to address complex challenges on the European level or individual teams without transnational co-operation to raise the competitiveness between scientists in fundamental frontier research from the national to the European level. Co-operation between universities, industry, research centres and public authorities were supported with an overall budget of EUR 50 billion, of which EUR 3.29 billion were managed by organisations in the Netherlands. In total, Dutch institutions participated in 8 067 programmes, of which 16% were co-ordinated with a Dutch counterpart. Universities, research institutions, public authorities and industry representatives located within the MRDH area participated in about 1 800 programmes, taking a co-ordinating role in 15% of the programmes.

10. Although based on a slightly different definition, about 76% of the population aged 15-65 across the OECD had attained at least an upper secondary level of education in 2012.

11. Data are provided as three-year averages (Statistics Netherlands, 2014a).

12. Particulate matter, PM_{10} and $PM_{2.5}$, are particulates that are small enough to penetrate and lodge deep inside the lungs. Exposure to particulate matter increases the risk for respiratory and cardiovascular diseases, as well as lung cancer. Sources of particular matter are typically emissions from vehicles, industry and energy generation. Suggested upper threshold values are 10µg/m³ for $PM_{2.5}$ and 20µg/m³ for PM_{10} (www.who.int/mediacentre/factsheets/fs313/en, accessed June 2015).

13. The social minimum is a political threshold value below which households are counted as poor. The amount varies according to number and characteristics of household members and the composition of households. The amount for people aged 65 years or older is equal to the pension payments (Statistics Netherlands, 2015k).

14. Social rental housing refers to housing corporations that provide the majority of regulated rental homes. Households in the Netherlands with an annual income up to EUR 29 325 may apply for a rental housing allowance provided by the central government. This allowance is only applicable to regulated rental homes, i.e. homes with a maximum monthly rent of EUR 710 in 2015. While the number does not necessarily imply that all housing owned by housing corporations are social housing units, it serves as proxy for social housing units.

15. See, for instance, Caldera Sánchez and Andrews (2011); Menard and Sellem (2010); Battu, Ma and Phimister (2008); Flatau, Forbes and Hendershott (2003).

16. A household living in one of the seven low-income districts of Rotterdam has an average annual income of EUR 17 500, or average weekly income of EUR 330.

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Annex 1.A1. Defining OECD functional urban areas

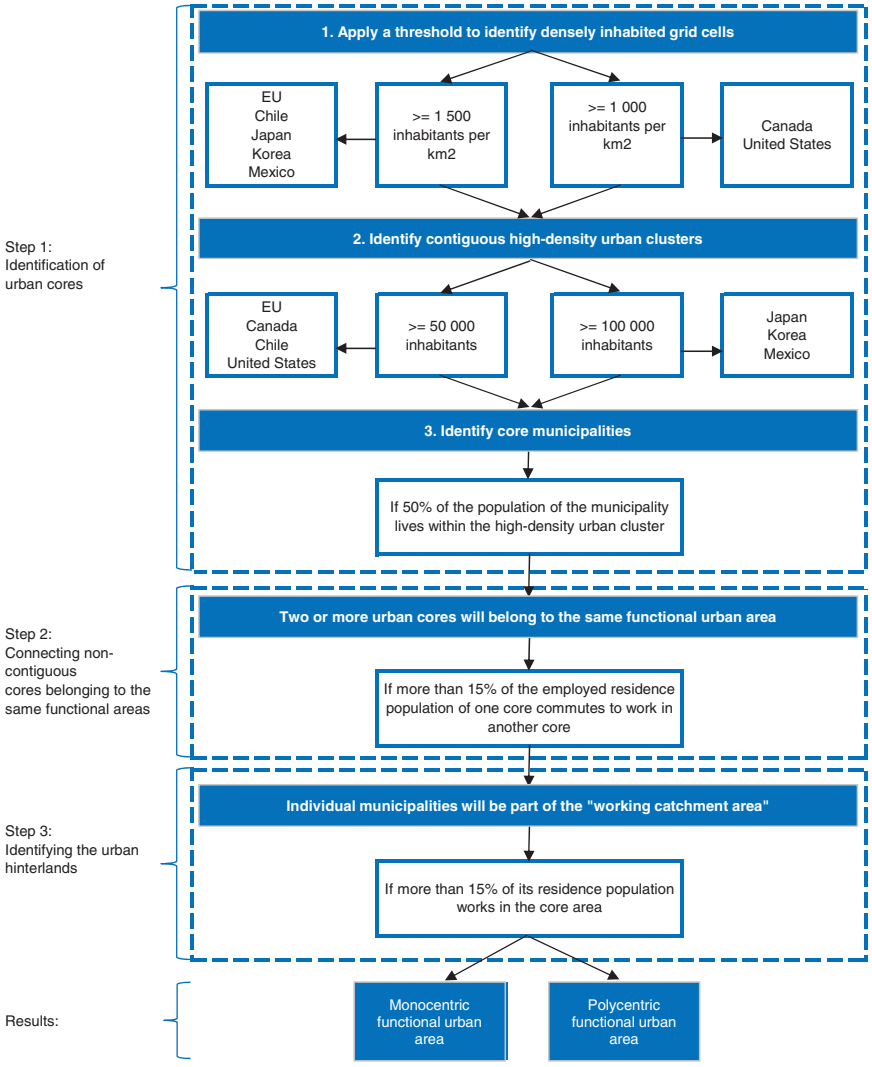
The OECD, with support from the European Commission, defined an approach for classifying urban areas based on functional integration rather than administrative boundaries that allows a consistent analysis of urban dynamics, growth patterns and economic interconnections with surrounding areas over time.

This method, illustrated in Figure 1.A1.1, takes into account population density and commuting between urban areas in order to define the boundaries of cities that correspond to functional entities rather than administrative ones (see OECD, 2012). An urban core consists of a high-density cluster of contiguous grid cells of 1 km² with a density of at least 1 500 inhabitants/km². A lower threshold of 1 000 people/km² is applied to Canada and the United States, where several metropolitan areas develop in a less compact manner. In Mexico, as well as Japan and Korea, small clusters that host 100 000 people or less are dropped, whereas in Europe, Canada, Chile and the United States small clusters are defined as inhabiting 50 000 people or less. A municipality is defined as being part of an urban core if at least 50% of the population of the municipality lives within the urban cluster.

Two urban cores are considered integrated, and thus part of the same metropolitan area, if more than 15% of the employed residence population of any of the cores commutes to work to the other core.

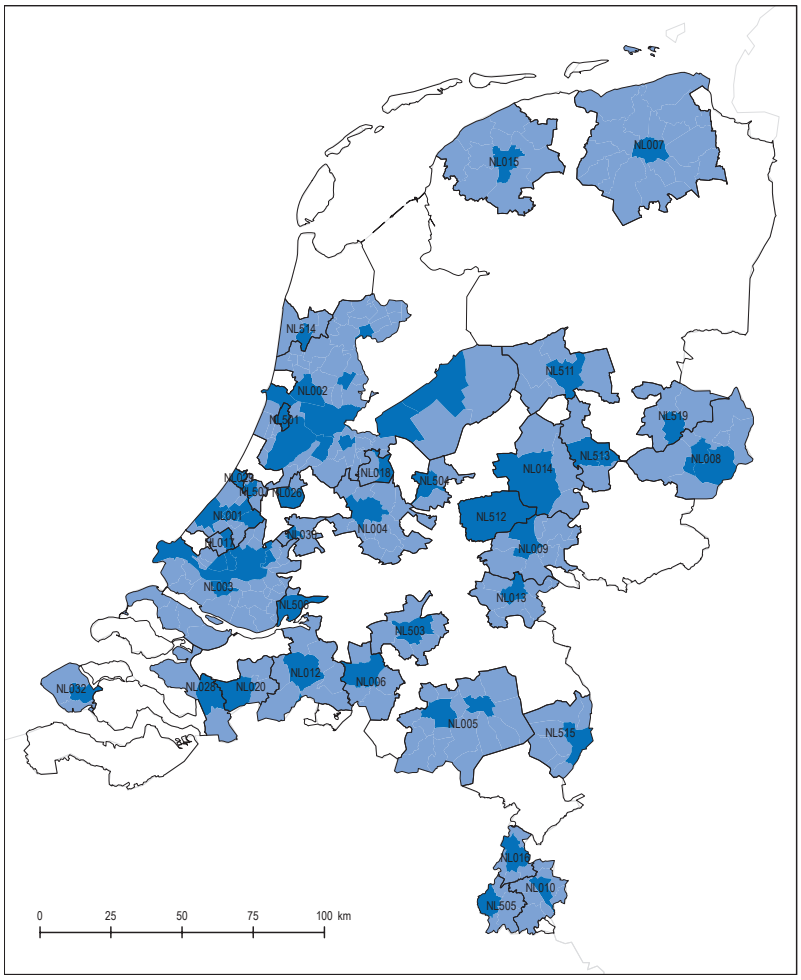
Urban hinterlands are defined as all municipalities with at least 15% of their employed residents working in a certain urban core. Municipalities surrounded by a single functional urban area are included and non-contiguous municipalities are dropped.

Figure 1.A1.1. **Procedure for defining functional urban areas in OECD countries**



Source: OECD (2012), *Redefining "Urban": A New Way to Measure Metropolitan Areas*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264174108-en.

Figure 1.A1.2. **Functional urban areas in the Netherlands**



Note: 1. NL001: The Hague ['s-Gravenhage]; NL002: Amsterdam; NL003: Rotterdam; NL004: Utrecht; NL005: Eindhoven; NL006: Tilburg; NL007: Groningen; NL008: Enschede; NL009: Arnhem; NL010: Heerlen; NL012: Breda; NL013: Nijmegen; NL014: Apeldoorn; NL015: Leeuwarden; NL016: Sittard-Geleen; NL017: Delft; NL018: Hilversum; NL020: Roosendaal; NL026: Alphen aan den Rijn; NL028: Bergen op Zoom; NL029: Katwijk; NL030: Gouda; NL032: Middelburg; NL501: Haarlem; NL503: 's-Hertogenbosch; NL504: Amersfoort; NL505: Maastricht; NL506: Dordrecht; NL507: Leiden; NL511: Zwolle; NL512: Ede; NL513: Deventer; NL514: Alkmaar; NL515: Venlo; NL519: Almelo.

Source: OECD (2012), *Redefining "Urban": A New Way to Measure Metropolitan Areas*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264174108-en.

Reference

OECD (2012), *Redefining "Urban": A New Way to Measure Metropolitan Areas*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264174108-en.

Chapter 2.

Policies for growth and well-being in the Metropolitan region of Rotterdam-The Hague

This chapter explores the role of public policies in facilitating greater economic integration within the Metropolitan Region of Rotterdam-The Hague (MRDH) as a means of boosting growth and well-being. It first assesses how past policies in transport, spatial planning, economic development and housing have contributed – or, in many cases, inhibited – greater functional integration in the MRDH area and, by extension, the realisation of expected agglomeration benefits. It then proposes a series of strategies to mobilise the two main tools and competencies of the new MRDH body, economic development and transport, towards a more cohesive region. The chapter concludes with a series of considerations with respect to potential changes to the MRDH co-operative structure over the long term.

One of the central objectives of the new governance body for the Metropolitan Region of Rotterdam-The Hague (Metropoolregio Rotterdam Den Haag, MRDH)[1] is to bring the economies of Rotterdam, The Hague and their surrounding municipalities closer together (MRDH, 2014a). This ambition is supported by economic theory: so-called agglomeration economies are an important source of productivity gains, and integrating Rotterdam and The Hague is likely to strengthen agglomeration economies. Rosenthal and Strange (2004) and Puga (2010) demonstrate that the productivity of workers and firms increases with the size of the urban agglomeration in which they operate (see Chapter 1). On average, workers in a city twice the size of another city are 2-5% more productive than workers in the smaller city. Importantly, this effect is unrelated to the individual characteristics of the workers in both cities; that is, in a hypothetical example, if an individual worker could be picked from the smaller city and moved to the larger city, his or her long-term productivity would on average increase by 2-5% (Ahrend et al., 2014). Among the reasons for higher productivity levels in larger cities are the faster spread of ideas, larger local labour markets that ensure better matches between workers and jobs, as well as higher utilisation rates of infrastructure (see Box 1.5 in Chapter 1).

Further economic integration within the MRDH area, and in particular between the two major urban cores of Rotterdam and The Hague, could increase agglomeration benefits, thereby boosting the competitiveness of the area. Given that, historically, the economies of Rotterdam and The Hague have operated mostly independently from each other, the cities have not benefited from each other's size as much as they could. As demonstrated in Chapter 1, agglomeration economies in the Netherlands are evident so long as one takes into account the country's dense polycentric urban structure. If, eventually, the two separate functional urban areas (FUAs) of Rotterdam and The Hague were to become completely integrated and form a single FUA, they could be expected to reap a productivity benefit equivalent to their combined population size, instead of a smaller productivity benefit equivalent to their individual size as is currently the case.[2]

This chapter considers potential strategies to help the MRDH area grow closer together – that is, operate as a single, functional urban area, rather than two (or more) separate urban areas. The chapter is divided into four parts. The first section will assess how public policies have contributed – or, in many cases, inhibited – greater functional integration in the MRDH area and the realisation of potential agglomeration benefits. The next two sections will focus on how the MRDH body can leverage its tools and resources in its two main competencies – economic development and transport – to achieve its ambition for a more functionally integrated, competitive region. These sections will focus primarily on the role of the MRDH, but will also consider how other actors and levels of government can support these efforts. The final section will discuss potential changes to the co-operative framework of the MRDH over the long term.

Three additional points are nevertheless important to mention. First, greater functional integration of the MRDH area should be seen as a means to an end, rather than an end in itself. Policy makers will thus need to keep in mind what they hope to achieve by a more integrated MRDH area. The MRDH body has, for instance, clearly indicated that one central ambition is to improve the economic performance and boost the international competitiveness of the MRDH area. Second, while the pursuit of greater economic integration within the MRDH area should help boost productivity levels and thereby overall competitiveness, a more economically integrated MRDH area should also boost the well-being of all residents. All residents should have the opportunity to benefit from regional economic gains, in the form of a high-quality living environment, high levels of well-being as well as access to services and educational and workforce

opportunities.[3] Finally, as will be discussed later in this chapter, the economic integration process of the MRDH area will take time. There is no "silver bullet" to deepen integration, and it is unlikely to occur automatically. Rather, greater functional integration is likely to result from a range of economic, transport and spatial planning policies at different levels of government, which focus both internally (within the region) and externally (to boost the competitiveness of the MRDH relative to other Dutch urban areas and cement its global position).

The role of public policies in contributing to economic integration in the Metropolitan Region of Rotterdam-The Hague

While Chapter 1 looked at whether the MRDH area could be considered a single metropolitan area from a functional perspective, this chapter will focus on why stronger functional links have not materialised within the region. Based on an assessment of commuting data and economic interactions, the MRDH is not yet a single, integrated functional area (see Chapter 1). Stronger economic links have begun to develop in the past decade among the 2 main cities and 21 surrounding municipalities, yet these interactions remain smaller than what one might expect given the mere 30 kilometres that separate Rotterdam and The Hague. In addition to the distinct economic profiles within the MRDH area, past public policies have played an important role in limiting the formation of such interactions.

Distinct socio-economic profiles within the MRDH inhibits greater economic interactions

The limited economic links within the MRDH are anchored, in part, in the distinct economic profiles of the two cities and their surrounding municipalities. Given the large differences in their socio-economic histories, Rotterdam and The Hague have cultivated very distinct identities so far. The economic and cultural roots of Rotterdam are closely connected to the port, and the city is often seen as a working-class city that has transformed itself into a modern urban centre. In contrast, The Hague has long been the seat of the Dutch government and has a reputation as a city of white-collar public sector employees. The municipalities in between are specialised in the horticulture and food sectors, as well as knowledge institutions. The different characteristic sectors within the MRDH operate independently from each other and have few economic connections, which may have its advantages.[4] However, there is also a potential drawback: the absence of highly complementary economic sectors within the MRDH limits the possibility of developing strong interactions across the different economic sectors located throughout the region (see Chapter 1).[5]

Public policies have also limited agglomeration

The historically distinct economic profiles within the MRDH area are not, however, the only factor limiting stronger regional functional integration. Public policies, both in terms of their objectives and their fragmented design and delivery among competing actors, have also played an important role. First, the objectives of different public policies implemented at all levels of government have often run counter to the development of a single, functionally integrated region. Many policies for economic development, spatial planning and housing have, implicitly or explicitly, constrained the development of greater functional integration and agglomeration benefits. Second, historic political tensions between different administrations operating within the region – namely, the

provincial authorities of Zuid-Holland on one side, and the authorities from the two leading municipalities and former city-regions on the other – have been another obstacle to greater functional integration in the MRDH area. Indeed, one of the rationales behind the creation of the MRDH body is the argument that Rotterdam and The Hague represent a coherent, yet unrealised, functional economic area that could be achieved through improved co-ordination between regional actors.

Recent transport investments have strengthened intra-regional links to some extent…

Transport investments within the MRDH area have had some success in bringing the region closer together, even if the effects on commuting patterns have thus far been lower than one might expect. As discussed in Chapter 1, commuting flows within the region grew following the completion of the Randstad Rail in 2006, a light-rail linking Rotterdam, The Hague and numerous municipalities in between. These higher levels of commuting are driven by increased travel from smaller municipalities toward one of the two main cities, rather than increased travel between Rotterdam and The Hague, which has remained extremely limited given the proximity of the two major cities. Increased connectivity within the MRDH and between the MRDH and other large Dutch urban areas could help the MRDH "borrow" size from its large neighbours and thereby boost its national and international competitiveness.

…while national spatial planning policies have impeded greater functional integration

While transport policies have aimed to stimulate greater functional integration, the same cannot be said for policies in other related fields. The Netherlands has traditionally pursued active spatial planning policies that strongly influence urban form and the structure of the economy. In the Randstad region for decades the central government pursued an aggressive growth management strategy as a means of enhancing quality of life and relieving demographic pressures in a context of land scarcity and the costly process required to prepare non-urban land for development (see Eickmann, 2009). In the past, this growth management strategy was anchored in an overarching ambition to distribute equally economic and territorial development across the territory. This approach was driven in part by environmental sustainability and liveability concerns, which have remained high on the political agenda (see Ministry of Housing, Physical Planning and the Environment, 1994; van der Valk, 2002).

Past nationally driven spatial planning policies have thus been an explicit obstacle to greater functional integration within the MRDH. Until the 1980s, a series of spatial planning policies developed at national level – the "growth centre" strategy – sought to prevent the towns and the cities of the Randstad from "grow[ing] into one another," or in other words, forming large, continuous urban agglomerations (Faludi, 1994). These policies promoted the development of smaller, more contained urban areas and dispersed urbanisation patterns as a means of preventing the development of large cities; Faludi (1994: 488) characterised Dutch planners as "abhor[ing] metropolitan development". As early as 1958, the Working Commission for the Western Netherlands was formed by the national government to "encourage outward expansion and retain the historic cities as physically distinct entities" (Faludi, 1994: 491).[6] One such strategy was to channel urban growth into pre-determined "overspill towns" and alternative "growth centres" to alleviate congestion in the major cities of the Randstad (as identified in the 1976 Third

National Spatial Planning Policy). Within the MRDH, the municipalities of Capelle aan den Ijssel, Hellevoetsluis, Spijkenisse and Zoetermeer were identified as such growth centres. Another strategy was to create green buffer zones of at least four kilometres between cities, which were designed to preserve open space and limit development (Ministry of Infrastructure and the Environment, 2012). In the MRDH area, the Midden-Delfland area between Rotterdam and The Hague was identified as one such green buffer.[7] A brief evolution of Dutch spatial planning since the 1960s is summarised in Box 2.1.

Box 2.1. **Polycentricity and the green heart: Dutch spatial planning since the 1960s**

Relieving growth pressures on the main Dutch cities

Beginning in the 1960s, the Dutch government pursued a growth management strategy that sought, on the one hand, to establish and maintain the country's "green heart" (in which new development was precluded or stringently limited so as to protect agricultural activities) and, on the other hand, to develop a dense polycentric urban network. The establishment of the First and Second National Memoranda on Spatial Planning (VROM) in the 1960s concretised this spatial approach with a "dispersal strategy" that aimed to relieve growth pressures in the main cities and the Randstad by directing growth to other parts of the Netherlands. The Third Memorandum on Spatial Planning in the 1970s favoured concentrating population growth in new growth centres outside the four main cities.

Towards a "compact city" approach

The Fourth Memorandum, in the 1980s, marked a significant shift toward a "compact city" spatial development approach, with the introduction of the 1991 Supplement to Fourth National Spatial Planning Policy Document (*Vierde Nota voor de Ruimtelijke Ordening Extra*, VINEX). VINEX aimed to steer growth in and around existing urban areas by identifying "expansion areas" near cities to absorb future residential growth (Kreukels, 2002; Eickmann, 2009). The Fifth National Memorandum on Spatial Planning (2001) aimed to manage urban growth through the application of strict urban growth boundaries and a network of cities, supported by urban investments by the national government.

Sources: Kreukels (2002); Eickmann, A.J. (2009), "Dutch spatial planning: The coordination of compact development and affordable housing", *Dissertations and Theses*, Paper 360, PDX Scholar, Portland State University, http://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1359&context=open_access_etds. (accessed 27 May 2015); Faludi, A. (1994), "Coalition building and planning for Dutch growth management: The role of the Randstad concept, *Urban Studies*, Vol. 31, No. 3, pp. 485-507, http://dx.doi.org/10.1080/00420989420080441.

For decades, the close alignment of national spatial planning and housing policies – housing subsidies, in particular – was instrumental in channelling growth to specific areas of the country. Priemus (1997: 77-78) characterised the relationship between spatial planning and housing policy as "a long and happy marriage," with spatial planning essentially as the "locational policy for residential construction". The housing boom that followed the end of World War II consisted primarily of the development of social rental housing, most of which was constructed with subsidies from the central government; in the early 1980s, for instance, 90% of new housing development was subsidised by the central government (Faludi, 1994). Spatial planning policies, to a large extent, guided where such residential development could and could not take place. It was not until the deregulation of the housing market in 1989, coupled with the introduction of a more "compact city" approach to spatial planning (VINEX; see Box 2.1) in 1990, that spatial

planning and housing policies appear to have decoupled to some extent at national level, creating some contradictions between the two. While housing policies became more market-oriented, spatial planning retained its restrictive nature (see Priemus, 1997).

There are clear benefits to such a spatial planning approach and, given the geographic constraints of the Netherlands, it is understandable that public authorities would seek, to some extent, to actively guide the country's spatial structure. By international standards, the Netherlands has high levels of quality of life and well-being, and disparities are relatively low across the four regions of the Netherlands (see Chapter 1). Moreover, the national government's active spatial planning policies have helped to ensure to a large extent relatively strong integration of spatial planning, housing and transport investment. At national level, the country's spatial development has, for the most part, been well connected to an expansive transport network, while housing subsidies have helped spur development in certain, well-connected locations. At a more local scale, although transport-oriented development has had more mixed success on the ground, it has nonetheless been an explicit ambition of national spatial policies in recent years. Finally, some level of restrictive spatial planning is understandable given the spatial constraints in the western part of the Netherlands. Three features make the Randstad a particularly challenging environment for development: 1) it is the most densely populated area of the country; 2) it is home to the best agricultural land in the country (van der Valk, 2002); and 3) it registers a large share of land below sea level – land that requires extensive, costly preparation in order to be developed (see Guers and van Wee, 2006; Eickmann, 2009).

Yet there are also economic costs to highly restrictive spatial planning, even if they are not always obvious.[8] These costs can lead to substantial efficiency losses. Cheshire and Sheppard (2002) show that for the United Kingdom, restrictive land-use planning has welfare costs equivalent to a tax of 3.9% on household incomes. For example, a company might like to move to a particular location but is prevented by planning regulation and instead chooses to move to another location, where it can obtain planning permission. On one level, this could be seen as a success of planning policy. However, it is possible that restricting the company from moving to its preferred location has hidden costs that reduce economic growth in the future, potentially reducing the company's productivity. Similarly, Barker (2006) argues that restrictive planning policies can lead to a lack of competition in the retail sector, which causes higher prices for consumers. These hidden costs need to be carefully weighed against the potential benefits of strict land-use regulations, such as higher residential quality and environmental protection.

The role and approach of the national government with respect to spatial planning and housing has changed considerably in recent years. If previously the national government assumed a direct role in defining the overall spatial strategy for the Netherlands, spatial planning competencies have been increasingly decentralised to provinces and (until their abolition in 2015) city-regions (Savini, 2013). As will be discussed in Chapter 3, the national government is now in the process of rethinking its role in territorial development, with a series of territorial and administrative reforms in addition to the development of a National Urban Agenda (Agenda Stad). With the transfer of transport competencies to the MRDH and the Amsterdam Metropolitan Area (in all other Dutch urban areas, these functions were transferred to the provinces), the central government is demonstrating a shift from a "one-size-fits-all" approach to governing urban areas toward more tailored, asymmetric solutions that aim to fit institutions to specific contexts (see Chapter 3). In terms of housing, as well, much has changed since 1989, with the deregulation of the housing market and the shift towards a more market-based approach (Box 2.2).

Box 2.2. **The changing Dutch housing model**

The introduction of VINEX (Supplement to Fourth National Spatial Planning Policy Document, *Vierde Nota voor de Ruimtelijke Ordening Extra*), which signalled an important shift in national spatial planning policies in 1990 (see Box 2.1), coincided with the deregulation of the housing market in 1989 and a drastic shift in emphasis for housing policy. While social rental housing had been the preferred type of new residential construction between the end of World War II and the 1980s, negotiations between the central and local governments with respect to the development of VINEX locations required that most new housing had to be market-rate (with new social rental housing capped at 30% of the total new development) (Priemus, 1998).

According to Cao and Priemus (2007), the major changes in the housing policies of the Netherlands towards a more market-based approached can be summarised as follows:

- fiscal: drastic reduction in housing subsidies and the state housing budget; in 1995, elimination of subsidies for new housing construction
- tenure preference: transition from most new residential development in the social rental sector toward the owner-occupied for-sale sector
- governance: Dutch housing associations are more independent (including fiscally independent from the Dutch government) than previously
- more choice for housing consumers: a broader policy shift to allow more consumer choice in housing options.

Source: Cao, L. and H. Priemus (2007), "Spatial disparities and housing market deregulation in the Randstad region: A comparison with the San Francisco Bay Area", *European Urban and Regional Studies*, Vol. 14, No. 4, pp. 362-381, http://dx.doi.org/10.1177/0969776407076289; Priemus, H. (1998), "Spatial planning and housing policy: On the ties that bind", *Netherlands Journal of Housing and the Built Environment*, Vol. 12, No. 1, pp. 77-90, http://dx.doi.org/10.1007/BF02502624; Faludi, A. (1994), "Coalition building and planning for Dutch growth management: The role of the Randstad concept, *Urban Studies*, Vol. 31, No. 3, pp. 485-507, http://dx.doi.org/10.1080/00420989420080441.

Economic and spatial planning at provincial level: Fair distribution of the regional economic pie

Despite changes to spatial planning policies at national level, the aim for balanced territorial development has persisted to a large degree in the MRDH area, and more broadly in the South Wing of the Randstad. Municipalities are responsible for land-use planning on the local level, but municipal plans must be aligned with the six sub-regional spatial plans developed by the Province of Zuid-Holland. In cases of conflict, the province has the power to veto local land-use plans. This makes spatial planning arguably one of the most important means of the province to influence local policies. According to OECD interviews with public authorities within and outside the MRDH, the Province of Zuid-Holland adheres to an activist spatial planning philosophy that tends to be more restrictive than that of other Dutch provinces. During interviews, municipal actors contended that the province has vetoed planning decisions even though they had been agreed upon by all concerned municipalities. According to Spaans and Stead (2013: 18-19), provincial authorities in Zuid-Holland have "taken the lead in cancelling potential new housing, office and retail locations", suggesting that such decisions make it easier to reach regional objectives of the provincial-led transport-oriented development initiative, StedenbaanPlus.

The provincial approach to spatial planning appears to be a legacy of national spatial planning of the past that aimed to actively guide new urban development to specific locations. Part of the rationale appears to be driven by a desire to ensure that each municipality receives a roughly equal share of the regional economic pie. The Agenda Spaces (*Agenda Ruimte*) that guides the spatial development policies of the province designate economic functions to particular geographical areas and leave little room for unplanned development of businesses (see Provincie Zuid-Holland, 2014). For instance, the province authorises each municipality, or small grouping of municipalities, a certain amount of new development. During OECD interviews conducted within the MRDH, it was suggested that the province often restricted new commercial and office development in various municipalities in part to avoid high vacancy rates. Although the high vacancy rates in office space in Rotterdam[9] and other Dutch cities are cause for concern, governmental actors are unlikely to know better than the market where sufficient demand for development exists. In this context, it is encouraging that the province has acknowledged the importance of the MRDH area as the centre of economic activity within the province and supports stronger economic growth there (see Provincie Zuid-Holland, 2014).

Furthermore, the OECD recommends that planning authorities do not use so-called "adverse impact" tests (OECD, 2010b). In other words, planning authorities should not consider the impact of a planning decision on incumbent businesses, because this would reduce competition and would make it more difficult for competitors to start new businesses. Such adverse impacts were cited by several interviewed actors from the MRDH region as a reason for withheld planning permissions. Moreover, unsuccessful investment projects are an integral part of a dynamic market economy; in the construction industry, unsuccessful investments manifest themselves in the form of empty buildings. Only if actors are willing to take risks and governments to let them do so will the economy grow and become more productive. The downside of this process is that, inevitably, some projects fail. This is the case no matter whether the investment project in question is a start-up company or the construction of a new office building. From a public policy standpoint, it is desirable to tolerate such failures because preventing them would imply imposing severe restrictions on entrepreneurial activities, which could potentially create high costs. For example, Tian and Wang (2014) find that firms that are more tolerant to failure are more innovative.

Social housing policies further limit the spatial integration of the MRDH

The functioning of the social housing market has also led to greater fragmentation within the MRDH area. Social rental housing makes up 38% of the housing stock in the COROP region of Rotterdam, The Hague and Delft, and more than 80% of all rental accommodation in Rotterdam (IMF, 2014). It is primarily owned and operated by housing co-operations[10] and thus must abide to a particular set of regulations and a monthly rent ceiling of roughly EUR 710 in 2015.[11]

There is strong evidence that the allocation of social housing restricts labour mobility and, by extension, the development of a single, regional housing market. The MRDH area is divided into two housing regions: one corresponding to the former city-region of The Hague and the other to the former city-region of Rotterdam. Each sub-region has a separate waiting list and somewhat different regulations with respect to the social housing sector. Moreover, different housing co-operations, which have their own application procedures, operate within these smaller sub-regions; The Hague area, for instance, is home to three housing corporations. The system makes it significantly easier for residents

of social housing to move within their housing region than across housing regions. Moving to another housing region means that individuals lose their tenure on the waiting list. Thus, it can require long waits to get an offer for housing, and if the tenant's income level has increased, he or she may no longer be eligible for social housing. In practical terms, this means that an individual on the social housing waiting list in and around The Hague has strong disincentives to apply for social housing in and around Rotterdam.

Concerns about the rigidity of the Dutch housing market on the country's labour mobility rate are not new, although empirical evidence as to the precise nature of these links is mixed (see, for instance, OECD 2010a). While the relationship between different tenure types and labour mobility is not clear, there is robust evidence that renters of social housing have lower mobility rates and higher local unemployment levels, concluding that "generous social housing policies have aggravated mobility problems" (see OECD, 2010a; De Graaf, van Leuvensteijn and van Ewijk, 2009; Battu, Ma and Phimister, 2009). In addition, as Dohmen (2005) shows, frictions in the housing market can reduce labour mobility, which in turn can increase unemployment. Vandevyvere and Zenthöfer (2012) argue that the waiting list system for social housing makes it unattractive for residents to move to another housing region in order to accept a better paying job, which reduces mobility. Meanwhile, the rental price ceilings on social housing in the Netherlands create strong lock-in effects for sitting tenants (De Boer and Bitetti, 2014).

Historic tensions among leaders in the region, though recent progress is promising

In addition to the policies described above that have often constrained functional integration in the MRDH, there is a long, conflictual history of unhelpful competition, "turf wars" and territorialism among some leaders within the region that has until recent months made it difficult to advance a more cohesive regional agenda.

On the one hand, the increased intentional co-operation between the mayors of the region's two largest cities is a recent phenomenon. Even though inter-municipal co-operation in the MRDH area has been common at smaller scales[12] and among the large cities and their smaller neighbours, Rotterdam and The Hague have not, traditionally, been partners and have tended to operate largely independently of each other. Co-operation between the two cities has developed only in recent years – first project-based and civil servant-led, then politically led at the personal initiative of the two mayors (Spaans and Zonneveld, 2014). In 2008, the city-regions of Rotterdam and The Hague had commissioned their respective "regional structural plans 2020" to the same external consultancy, and as the officials decided to put the two plans together to check what a combined map looked like, they realised that the plans reinforced each other. When new mayors were appointed in both Rotterdam and The Hague that same year, they formed a well-functioning working relationship, even though they belonged to different political parties. One visible illustration of the growing collaboration between the two cities was the renaming of the Rotterdam Airport as the Rotterdam-The Hague Airport in 2010. The central government's decision to abolish city-regions (announced in 2010 to take effect in 2015) and the earlier creation of the Metropolitan Area of Amsterdam in 2007 (see Box 3.15 in Chapter 3) prompted the two mayors to propose a new governance arrangement in the region. With the backing of the then 22 surrounding municipalities,[13] the two mayors led the creation of the MRDH, in which the municipalities would jointly take over the transport authority functions from the defunct city-regions. During the summer of 2012, all 24 municipalities were invited to discuss and join the formation of this new metropolitan region. The creation of the MRDH has

thus allowed for an attempt to deepen and institutionalise the emerging co-operation between Rotterdam and The Hague, which would prevent a relapse into decades of unhelpful competition.

On the other hand, conflicts between the provincial and municipal authorities in the MRDH area have historically been another source of political standstill. One political leader interviewed for this review reported that in past years little could be achieved during regional co-ordination meetings due to conflicts between the two main municipalities and the province. In short, forging and implementing a more coherent political vison for the region – one that is shared across administrative boundaries, levels of government and policy fields – has heretofore been a challenge. The creation of the MRDH is seen as a way to overcome a past policy of poor co-ordination within the region, and a means of removing the barriers to closer economic integration of the MRDH. There has been important progress on the relations between the MRDH and the Province of Zuid-Holland since the provincial elections in March 2015. Both parties appear more willing to find ways to co-operate than in the past. This is critical progress and should form the basis of a more productive working relationship moving forward.

Mobilising economic policies for a more competitive, functionally integrated Metropolitan Region of Rotterdam-The Hague

This section considers how economic policies in the MRDH area could be adapted to achieve the ambition of the MRDH for a more functionally integrated, competitive metro region. First, it identifies the different tools and objectives of the MRDH. Second, it considers how this new body can provide added value in an already crowded institutional environment. It then proposes two overarching strategies for the MRDH to guide its economic agenda: 1) focusing inward to promote greater integration of the MRDH while 2) looking outward to boost the competitiveness of the MRDH relative to other Dutch urban areas as well as its international profile. Both sets of strategies should be advanced in parallel to have the greatest impact. Finally, this section considers several broader areas of reflection on economic policies for the MRDH, and more generally for other Dutch urban areas. First, how might policy makers at all levels weigh the costs and benefits of targeted sector-specific support versus broader improvements in economic conditions? Second, in what ways can support to specific economic sectors be robust to failure? And third, under what conditions might inter-municipal competition – rather than the co-operation sought by the formation of the MRDH authority – be desirable?

What are the tools and objectives of the MRDH?

The MRDH works in two fields: economic development and transport (refer to Box 1.1 in Chapter 1). In the field of economic development, the legal competencies and financial resources of the MRDH – its "hard tools" – are relatively limited. Its responsibilities are based on a voluntary agreement that does not include any enforcement mechanisms. The MRDH thus relies fully on the co-operation of its members to implement its policies. It has an economic development budget of EUR 5.5 million. In total, roughly EUR 3.2 million are allocated for projects in 2015, with the remainder to cover staffing costs (MRDH, 2014b). As the newly appointed transport authority for the MRDH area, the MRDH is responsible for the strategic management of public and private transport with a budget of approximately EUR 475 million.[14] Given the complementarities between the fields of transport and economic development, the MRDH body plans to facilitate its economic ambitions through strategic transport policies and

investment. Concrete strategies for the MRDH to mobilise its policy toolbox and, in some cases, to co-operate with other public and private actors to deliver public value, are discussed later in this chapter. In the initial stages of the formation of the MRDH body, it had been contemplated that its portfolio could include additional responsibilities, such as spatial planning and natural resources management. However, municipalities in the MRDH ultimately agreed to co-operate voluntarily on economic development only, in addition to the transport competencies allocated to the MRDH by the central government.

Despite the lack of hard tools on economic policy and the MRDH's small budget for economic development, it has the potential to be an influential actor. It has the political backing of 23 municipalities that have committed themselves to support its activities. Thus, it is strategically well placed to shape the policy priorities of its members and make use of their combined strengths.

Prioritising objectives within the MRDH's programme of work on economic policy

The MRDH has developed a preliminary programme of work (MRDH, 2014a; 2014b) that takes stock of the strengths and challenges of the MRDH area, develops a vision and identifies specific policy measures and projects to support. The strategic elements of the programme synthesise the MRDH authority's response to five global trends (Table 2.1). The specific policy measures it proposes cover eight themes in support of the strategic elements (Table 2.2). The programme of work includes a broad set of objectives that contribute to the general goals of strengthening the economy in the MRDH area and bringing Rotterdam and The Hague closer together. As a next step, the MRDH will need to develop concrete policies to achieve the ambitious goals outlined in its programme of work.

Prioritisation of economic development objectives and activities covered by the MRDH's ambitious economic agenda will be necessary. Working on all issues at the same time would exceed the administrative and fiscal capacity of the MRDH. Moreover, the wide-ranging programme of work for the MRDH economic agenda – which contains eight projects that are supported by the MRDH with contributions between EUR 150 000 and EUR 750 000 (MRDH, 2014b) – could create the risk that the efforts of the MRDH are too widely diluted to have a transformative impact in the targeted policy fields. When deciding on which tasks to focus, the MRDH should consider its own strengths and weaknesses, but also those of other organisations in the region. It must aim at filling gaps in the public policy within the region instead of duplicating existing efforts. The following section discusses this issue with a particular focus on the relation between the MRDH and the South Wing Economic Board.

Adding value in a crowded field for economic policy

To be successful in achieving its ambitions, the MRDH will need to demonstrate that it can add value in a policy field for economic development in which numerous organisations and platforms co-exist. The crowded institutional landscape reflects the historically long-standing and complex search for a relevant scale of policy intervention (Box 2.3). In particular, co-operation at the level of the South Wing started almost two decades earlier than the MRDH, with a geographic coverage that includes the municipalities that are members of the MRDH, in addition to the cities of Leiden and Dordrecht and their surrounding municipalities (none of which are part of the MRDH). Both the South Wing co-operation and the MRDH were initially motivated by a central

Table 2.1. **Metropolitan Region of Rotterdam-The Hague's response to global trends**

Global trend	MRDH's response
Metropolis formation	– Creating a well-functioning public transport network making the economic centres accessible within 45 minutes – Encouraging optimal use of regional road transport infrastructure – Further strengthening regional infrastructure networks, including the transport hubs – Developing a shared vision for the location of firms – Strengthening crossovers between the main clusters in the region (the port, the medical sector, the horticulture sector, security, clean-tech, food and safety) – Creating a common brand under which existing brands can be promoted – Co-ordinating the acquisition goods and services across municipalities – Strengthening vocational education infrastructure by offering good trainings in the vicinity of economic clusters
Increasing importance of knowledge as a production factor	– Strengthening clusters in clean-tech, medical technology, advanced horticulture and creating connections to other regional industries – Developing the region as an internationally recognised leader on peace, security, food and sustainability – Creating lightly regulated space for pilot projects and other experimental approaches – Improving the quality of environments designed for knowledge exchange – Improving financing options for innovative and fast-growing businesses – Supporting the co-operation between the universities of Leiden, Delft, Rotterdam and Wageningen – Linking local business networks with regional top sectors – Using labour market dynamics as an engine for knowledge, ideas and application of existing skills – Developing The Hague as a global centre for peace, justice and security – Developing Rotterdam as a global centre for sustainable living and production in a highly urbanised delta region
New opportunities for the manufacturing sector	– Providing sufficient space for new industrial activity even in urban areas – Providing locations for small-scale manufacturing – Encouraging crossovers between manufacturing and knowledge-intensive sectors – Providing lightly regulated space for pilot projects and other experimental approaches – Developing business cases in the manufacturing sector – Increasing the international recognition of the MRDH as a location for new manufacturing – Linking local business networks with regional top sectors
Towards a greener economy	– Scaling-up and cross-linking a network for excess heat distribution from the port with the existing network for CO_2 use and storage – Scaling-up of local initiatives for recycling – Providing lightly regulated space for labs, incubators and other experimental approaches – Jointly improving the sustainability of procurement – Increasing the international recognition of the region in the field of sustainability – Developing business cases to finance energy infrastructure
The city and its surroundings as attractive areas for consumers	– Marketing the region as international tourist destination – Strengthening the region as a location for congresses in the field of peace, security, food and sustainability – Strengthening the network of entrepreneurs – Developing a joint visitor's card for (inter)national visitors – Developing business cases in the tourism and leisure sector – Exploiting opportunities for ICT development in the retail sector

Source: MRDH (2014a), *Agenda Economisch Vestigingsklimaat*, Metropolitan Region of Rotterdam-The Hague, The Hague, available (in Dutch) at: http://mrdh.nl/sites/mrdh.nl/files/files/140411%20Agenda%20Economisch%20Vestigingsklimaat%20MRDH%20-%20Concept.pdf.

government programme and its related financial support (i.e. the MIRT programme in the South Wing, the transport funding in the case of the MRDH) and added an economic development component (i.e. the Economic Programme Board in the South Wing, EPZ, the economic development pillar in the MRDH). Moreover, a number of economic development and promotion agencies that are primarily operated by municipalities exist

in the region (Box 2.4). Providing simply another platform for dialogue will not be enough in a region that already has such platforms in abundance and where existing networks are sufficient to manage information exchange and to provide a basic level of co-ordination.

Box 2.3. The crowded institutional landscape of economic development in the MRDH area: The South Wing

The MRDH operates within the southern part of the Randstad, often called the South Wing. In contrast to the greener, northern part of the Randstad (North Wing), the South Wing is a relatively densely populated urban region. The term South Wing has different meanings: not only a geographical area (of which different delineations exist), but also a concept and a social construct (Minnesma and Rotmans, 2007, as quoted in Spaans and Zonneveld, 2014).

Administrative Platform South Wing

Targeted by the government at the end of the 1990s as a key area in need of intense co-operation, the Administrative Platform South Wing (Bestuurlijk Platform Zuidvleugel, BPZ) was created in 1997. A similar arrangement was set up in the North Wing of the Randstad. The platform was initially supposed to be a temporary network of administrators, without any transfer of competencies but with the task of conducting preparatory work towards a new agreement between the area and the central government on housing and infrastructure investment. It was composed of eight partners from different government tiers: the Province of Zuid-Holland (chairing the platform); five regional co-operation bodies including the city-region of Rotterdam (Stadsregio Rotterdam) and the city-region of The Hague (Haaglanden); Holland Rijnland (the northern part of the province with Leiden as the largest city); Drechtsteden (Dordrecht and surrounding municipalities) and Midden-Holland (Gouda and its environs); as well as the municipalities of Rotterdam and The Hague. Two ministries had initially delegated an observer to the platform, but this is no longer the case.

In 2000, the platform was converted into a permanent structure supported by a small secretariat of a dozen employees, hosted by the Province of Zuid-Holland. In 2011, the platform was renamed South Wing Co-operation (Samenwerkingsverband Zuidvleugel). It is still not intended as a decision-making organisation, but rather as a space in which to reach agreement about investment projects. Impaired by challenges of internal trust and politics, co-operation has remained focused on a limited number of issues for which provincial deputies and aldermen have gradually taken the lead over mayors and the King's Commissioner. In particular, it provides the organisational setting for annual negotiations with the central government about financing infrastructural and other spatial projects in the South Wing area as part of the Multi-year Plan for Infrastructure, Spatial Planning and Transport (Meerjarenplan Infrastructuur, Ruimte en Transport, MIRT).[1]

South Wing Economic Programme Board, EPZ

Under its umbrella, the South Wing general co-operation has recently established a more specific, triple helix form of co-operation called the South Wing Economic Programme Board (Economische Programmaraad Zuidvleugel, EPZ). Created in 2014, the board is composed of mayors and aldermen, high-level representatives from some of the most important companies of the region, and from the three universities (Erasmus University Rotterdam, Delft University of Technology and Leiden University) and two universities of applied sciences. In July 2014, the board published an Economic Agenda 2020, comparing the region's dormant development potential to a "sleeping beauty" and calling for action in the following fields: branding, labour markets and education, innovation and valorisation, international connectivity and energy.

Box 2.3. **The crowded institutional landscape of economic development in the MRDH area: The South Wing** (*continued*)

Furthermore, the MRDH needs to co-ordinate its work with a variety of other business promotion and development agencies that are active in the region. They are outlined in Box 2.4.

Notes: 1. The MIRT programme is an investment programme set up by the national government with the goal to improve coherence between investments in spatial planning, economic development, mobility and liveability. In order to ensure co-ordination between the MIRT programme and regional policy, concertation practices (*bestuurlijk overleg MIRT*) were introduced according to "regional agendas" (*gebiedsagenda's*), which are discussed annually between the national government and local governments (provinces and municipalities). The regional agendas take stock of the region's specific characteristics, existing national policies, expected developments and challenges, and serve as the basis for co-ordination and consensus-building. The MIRT programme formally extends beyond the life of a single parliament and provides a coherent framework for ensuring consistency and concentration in investments. These plans operate on the basis of projects which progress through a series of phases including initiation, planning, realisation, completion and maintenance.

Sources: Various sources including Spaans, M. and W. Zonneveld (2014), "Evolving regional spaces in the southern Randstad", in: EURA-UAA Joint Conference on City Futures III "Cities as Strategic Places and Players in a Globalized World", Paris, France, 18-20 June 2014, pp. 18-20, available at: http://repository.tudelft.nl/assets/uuid:a54b52c6-4888-4be9-a2b3-20100c0812e3/311746.pdf; OECD (2014b), *OECD Territorial Reviews: Netherlands 2014*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264209527-en; South Wing Co-operation website (n.d.), www.zuidvleugel.nl; South Wing Economic Programme (n.d.), www.epzuidvleugel.nl (accessed June 2015).

The MRDH and EPZ platforms each have their own strengths. The MRDH is strong due to the political backing of 23 municipalities (Table 2.2). The Economic Programme Board of the South Wing (EPZ) benefits from a "triple helix" co-operation (Leydesdorff and Etzkowitz, 1996), which involves representatives from the public sector, from the private sector and from universities. Both strengths need to be exploited in a complementary manner. Interviewed actors highlighted this aspect of the EPZ as one of its distinct strengths. The EPZ convenes many important actors with respect to regional economic development, including the municipalities that have founded the MRDH. While they do not play a leading role in the EPZ, they are well represented on it through the membership of several mayors and aldermen.

Box 2.4. **Business promotion and development agencies in the Metropolitan Region of Rotterdam-The Hague**

Delft Marketing

Delft Marketing is a foundation that was created by the municipality of Delft in 2004 and is funded by it. Primarily, it aims to promote Delft to tourists, but also offers support and advice to local businesses that work in the tourism sector. It aims to make Delft more attractive as a tourist destination and encourages travel agencies and other tourism companies to provide trips to the city.

Den Haag Marketing

Den Haag Marketing is the city marketing agency of The Hague, Scheveningen and Kijkduin. It tries to attract events and conventions and promotes the area to business visitors and tourists. Furthermore, it runs the tourist office in the Hague and provides a wide range of information to tourists. Den Haag Marketing is controlled by the municipality and has a staff of 67.

Box 2.4. **Business promotion and development agencies in the Metropolitan Region of Rotterdam-The Hague** (*continued*)

InnovationQuarter

InnovationQuarter is a business promotion and development agency for the region of West Holland. It works to promote the region nationally and internationally, attract foreign direct investment (e.g. by helping interested companies to find suitable sites), organise networking events and connect companies to research organisations. It targets particularly the following sectors: life sciences and health, clean-tech (including water and delta technology, bio-based economy, sustainable energy, industrial biotech), security, horticulture and agri-food, high-tech systems and maritime industry. InnovationQuarter is jointly financed by the Ministry of Economic Affairs, the cities of Rotterdam and The Hague, and universities. It operates its own investment fund (with contributions from the ministry, the province and municipalities) to support fast-growing businesses, as well as its own investment programme for major economic development activities (co-financed by the province and EU funds).

Rotterdam Partners

Rotterdam Partners is the business promotion agency of the city of Rotterdam. Its task is to link companies and private investors to the city administration and other public institutions within Rotterdam. It supports domestic and international companies in setting up operations in Rotterdam by providing information and advice, helping firms to receive applicable subsidies, putting them in touch with service providers and assisting them in administrative matters. As another major activity, it promotes the city of Rotterdam as a business location, tries to attract events and congresses, and advertises Rotterdam as a tourist destination and encourages travel companies to offer trips to the city. In this role, it also runs the Rotterdam tourist information and operates the website rotterdam.info, which contains information for visitors, residents and expats.

Besides its activities as a business promotion agency, Rotterdam Partners also serves as the secretariat for the International Advisory Board (IAB) of Rotterdam. The IAB is a board of high-level private and public sector representatives as well as academics. It meets biannually and advises the municipal government on strategic policy issues. Approximately every second year it prepares a report that summarises important international developments and gives recommendations how the city of Rotterdam can position itself to benefit from them.

Rotterdam Port Promotion Council

The Rotterdam Port Promotion Council (RPPC) is a private sector association that promotes the port and the businesses that are located within it. It organises marketing activities, brings members in contact with each other and with potential customers and also provides support for public relations and marketing activities of individual members.

The RPPC has primarily private businesses that rely on the part for their activities as members, but includes also trade associations and the Port of Rotterdam Authority. It is controlled by a board that consists of a member of Deltalinqs, the Port of Rotterdam Authority (the trade association of businesses in the port), as well as several members of private sector companies and trade associations. The RPPC has a staff of seven.

WestHolland Foreign Investment Agency

The WestHolland Foreign Investment Agency (WFIA) promotes economic development and investment in the northern part of the MRDH region as well as in the city of Leiden. It was founded in 2000 by an initiative of the municipalities in the region, the former Haaglanden city-region and the chamber of commerce. It primarily targets foreign companies that plan to invest abroad and provides support and advice to them before and after the decision to invest in the region has been taken.

Box 2.4. **Business promotion and development agencies in the Metropolitan Region of Rotterdam-The Hague** (*continued*)

The WFIA has a staff of 14 and a budget of approximately EUR 1.2 million. The budget comes primarily from contributions of member municipalities, but the national government contributes 20% of it, too. Furthermore, the city of The Hague pays an additional EUR 200 000 that contribute directly to initiatives specifically located in The Hague.

Sources: Delft website (n.d.), www.delft.nl/Toeristen/Delft_Marketing/Over_Delft_Marketing (accessed May 2015); Denhaag Marketing website (n.d.), www.denhaagmarketing.com (accessed May 2015); InnovationQuarter website (n.d.), www.innovationquarter.nl (accessed May 2015); IAB Rotterdam (2015a), "Rotterdam Discovery City", International Advisory Board Rotterdam, Rotterdam, Netherlands; IAB Rotterdam (2015b), "Rotterdam: Fit for the future", International Advisory Board Rotterdam, Rotterdam, Netherlands; Rotterdam Partners website (n.d.), http://www.rotterdampartners.com (accessed June 2015); West Holland Foreign Investment Agency (2014), "Jaarverslag 2014", www.westholland.nl (accessed 27 May 2015).

Table 2.2. **Comparison of the economic agendas of the South Wing Economic Programme Board and the Metropolitan Region of Rotterdam-The Hague**

	South Wing Economic Programme Board (EPZ)	Metropolitan Region of Rotterdam-The Hague
Year of creation	2014	2015
Members	– Province of Zuid-Holland – Mayors and aldermen of seven municipalities (Rotterdam, The Hague, Delft, Leiden, Dordrecht, Westland, Alphen aan den Rijn) – Major companies (e.g. Siemens, Port of Rotterdam, etc.) – Universities and research institutions (Erasmus University Rotterdam, Delft University of Technology, Leiden University, Netherlands Organisation for Applied Scientific Research)	– 23 municipalities
Economic agenda	Economic Agenda 2020 (July 2014)	Economic Agenda for the Business Climate (April 2014)
Main issues in economic agenda	– Branding – Labour markets and education – Innovation and valorisation – International connectivity – Energy	– Work places – Energy infrastructure – Branding – Clustering – Financing – Education and employment – New economic support for rural areas – Locations
Budget	No independent budget	EUR 5.5 million (Each of the eight above-mentioned issues is endowed with a budget allocation for 2015)

Sources: author's own research based on South Wing Economic Programme website, www.epzuidvleugel.nl; MRDH (2014a), *Agenda Economisch Vestigingsklimaat*, Metropolitan Region of Rotterdam-The Hague, The Hague, available (in Dutch) at: http://mrdh.nl/sites/mrdh.nl/files/files/140411%20Agenda%20Economisch%20Vestigingsklimaat%20MRDH%20-%20Concept.pdf; MRDH (2014b), *Agenda Economisch Vestigingsklimaat. Bijlage: Werkprogramma*, Metropolitan Region of Rotterdam-The Hague, The Hague, available (in Dutch) at: http://mrdh.nl/sites/mrdh.nl/files/files/140411%20Agenda%20Economisch%20Vestigingsklimaat%20MRDH%20-%20Concept.pdf.

A central issue that has yet to be resolved is the relationship between the MRDH and the EPZ. At the time of writing, new efforts to co-ordinate the work of the MRDH and the EPZ have been made. As a result, the concrete policy priorities of the MRDH and of the EPZ are not identical, but they overlap to some degree, given that they were developed in

parallel by some of the same actors of the MRDH and the province (Table 2.3). In contrast to the recent steps towards greater co-operation between the province and the MRDH, co-operation between the province and municipalities in the EPZ has been difficult in the past. Even though local actors describe the co-operation within the South Wing Economic Board as better than the co-operation within the South Wing initiative, the EPZ has still suffered from the same political conflicts as its umbrella organisation. The province and municipalities compete for leadership and the resulting tensions make it difficult to agree to joint policies that align all actors behind a common goal. Furthermore, interviewed actors mentioned substantive policy differences, with the province advocating more strongly for government intervention than the municipalities.

Table 2.3. **Economic policy priorities of the South Wing Economic Programme Board and the Metropolitan Region of Rotterdam-The Hague**

South Wing Economic Programme Board (EPZ)	Metropolitan Region of Rotterdam-The Hague
Connectivity – Increasing physical, digital and organisational connections within the regions	**Spatial planning** – Balancing supply and demand of space for retailing, offices and business parks – Ensuring that enough room for growing companies exist and clusters can form – Ensuring that also smaller centres provide sufficient amenities – Allowing small-scale business activities outside of traditional business locations **Renew the economic support for rural areas** – Strengthening tourism and agriculture as an economic driver in rural areas **Public spaces** – Creating an attractive urban environment by investing in public spaces
Innovation – Strengthening higher education institutions through better branding and closer exchanges among each other – Attracting more EU funding aimed at strengthening innovation – Ensuring appropriate funding mechanisms for innovative businesses	**Clustering** – Facilitating a strong economic network between companies and knowledge institutions – Aiming at economic diversification to create economic growth in the long run – Creating regulatory and physical space for pilot projects and living labs
Education and labour market – Strengthening vocational training in key sectors – Improving labour market mobility on the regional scale – Making the region more attractive to international students and professionals	**Education and labour** – Working with the education sector on a long-term strategy to create a flexible and well-educated labour force – Improving the mobility of workers between companies and sectors
Energy – Improving the sustainability of the regional energy supply by identifying new business opportunities in the field	**Energy infrastructure** – Building a renewable energy infrastructure grid – Shaping the transition of the economy towards a more sustainable energy use – Improving recycling in the region – Contributing to pilot projects in the above-mentioned fields
Branding – Creating a story for the region that unifies the different successful economic approaches and provides a common identity to the region	**Branding** – Developing a coherent brand that incorporates the already existing local brands
	Financing – Improving the links between national and international investors and local initiatives

Sources: MRDH (2014a), *Agenda Economisch Vestigingsklimaat*, Metropolitan Region of Rotterdam-The Hague, The Hague, available (in Dutch) at: http://mrdh.nl/sites/mrdh.nl/files/files/140411%20Agenda%20Economisch%20Vestigingsklimaat%20MRDH%20-%20Concept.pdf; MRDH (2014b), *Agenda Economisch Vestigingsklimaat. Bijlage: Werkprogramma*, Metropolitan Region of Rotterdam-The Hague, The Hague, available (in Dutch) at: http://mrdh.nl/sites/mrdh.nl/files/files/140411%20Agenda%20Economisch%20Vestigingsklimaat%20MRDH%20-%20Concept.pdf; South Wing Economic Programme (n.d.), www.epzuidvleugel.nl (accessed June 2015).

Due to the similarities between the tasks of the EPZ and the MRDH, it is not obvious how the MRDH can best position itself to add value for the MRDH area. Given its triple-helix structure, the EPZ could be better platform to agree on policies that require close involvement of academia and the private sector. Nevertheless, the MRDH has two advantages over the EPZ. First and most importantly, it is an organisation that is founded and controlled by municipalities and has their strong support.[15] As such, it may be in a better political position to drive a fundamental reform process that requires the involvement of all of the municipalities of the region. With its two pillars, the MRDH is ideally placed to co-ordinate economic policies with transport policies. Transport is an important enabler for economic policies and the joint responsibility for economic development and transport allows the MRDH to use transport as a tool to achieve better economic outcomes. The MRDH could make use of these advantages by aligning its member municipalities behind common goals and ensuring that they effectively mobilise their resources to achieve these objectives. The necessary co-ordination process may be easier to achieve in a smaller organisation, because the absence of outside actors allows municipal representatives to discuss issues more openly within the MRDH than within the EPZ. Furthermore, it could be easier for municipalities to take ownership of ideas and initiatives that have been developed by an organisation that is closely associated to them than by an organisation that is considered to be connected to another level of government.

The MRDH as an idea factory for its member municipalities

Rather than replicate the activities of the EPZ and those agencies, the MRDH should align its 23 member municipalities behind new ideas. As an idea factory for the region, it could complement the functions of existing actors and networks. In such a role, the MRDH would develop ideas and work together with municipalities to organise the necessary political and financial support to implement them. In this context, a particular emphasis should fall on projects that have a metropolitan scale, i.e. projects that involve all or most municipalities in the MRDH.

To operate as an idea factory, the MRDH would need to consider the following steps:

- Develop strong in-house analytical capabilities or good connections to universities, think tanks and the private sector in order to design effective policies. It would not necessarily have to devise its own ideas, but could also decide to move forward existing ideas and projects from within or outside the region. To ensure that inputs from academia and the private sector are used in the policy design phase, it has to be well connected to these actors.
- Ensure that municipalities and other actors support the joint policies of the MRDH. To do so, the MRDH has to communicate its strategies and argue convincingly why the region would benefit from them. Success in this area can be partly measured by the MRDH's ability to speak in the name of all its member municipalities, for example in forums such as the EPZ, but also more broadly to the business community and to investors from inside and outside the Netherlands. If the MRDH is able to present a common far-reaching position of all municipalities on the major policy initiatives in the region, it is likely to have achieved a sufficient degree of support.
- Co-ordinate the activities of member municipalities to maximise their effectiveness in achieving common goals. Even if all municipalities agree on common policies, the details of their implementation have still to be co-ordinated

among them in order to achieve maximum effectiveness. The MRDH is the natural organisation to achieve this co-ordination.

- Align transport and economic policies for the MRDH area. The MRDH has the opportunity to pursue well-aligned economic development and transport policies to facilitate greater economic and functional integration within the MRDH area. Moreover, the MRDH would be well positioned *vis-à-vis* the Province of Zuid-Holland to effectively co-ordinate both areas with the spatial planning activities of the province. Over the medium to long term, it could be beneficial to have a joint spatial, transport and economic policy plan for the area, as has been done in London, for instance (see discussion later in this chapter).

Focusing inward to promote further integration of the MRDH

Strengthen agglomeration economies

One core policy objective of the MRDH – and the actions of other levels of government to support this ambition – should be to identify and rectify policies that prevent the economies of Rotterdam and The Hague from being more closely integrated. Such measures can enhance growth because they would let both cities grow more closely together in economic terms, which would produce gains from agglomeration economies. However, this should not be achieved by intervening directly in the regional economy through place-based subsidies to firms, because such measures could reduce economic growth (Glaeser and Gottlieb, 2008).[16] The current economic structure in the region is the result of firms' decisions in response to fundamental conditions (such as the supply of labour, the existing infrastructure, the availability of land, and the location of customers and suppliers). Government policies that aim at changing the location of firms without first affecting the underlying conditions could create distortions that reduce the productivity of the economy. Instead, public policy should aim, for example, at transport, spatial planning and housing policies that allow the region to grow together by making it more attractive for firms to operate where they deem it most productive.

Preserve existing economic connections to areas outside the MRDH

First, it will be important that the pursuit of greater functional integration within the MRDH should not inhibit economic interactions and/or functional integration with actors outside the MRDH. As has been seen, the MRDH is not yet a functionally integrated region and its boundaries, which are derived from the former city-regions, are largely a political construction. Dutch provinces, meanwhile, are among the country's oldest institutions, meaning that provincial boundaries in most cases do not reflect current functional realities yet are also politically difficult to change (see Chapter 3). Attempts by the MRDH to foster economic connections between Rotterdam and The Hague should avoid disrupting existing economic connections to other areas. This is especially important in Rotterdam and its surrounding functional urban area. The MRDH covers only parts of the FUA of Rotterdam, as defined by the OECD. Of the 35 municipalities that comprise the FUA of Rotterdam, 14 are members of the MRDH. Around 24% of the population of the FUA of Rotterdam does not live in municipalities that belong to the MRDH. While this suggests an expansion of the MRDH involving those municipalities in the medium term, in the short term it is important to keep them closely involved in the policy-making process.

Specifically, strong connections to Dordrecht are important for Rotterdam, while the northern parts of the MRDH need to maintain and strengthen existing connections to cities like Leiden that lie outside the MRDH. The problem is most pressing in the field of transport policy, but is also relevant in economic policy. The policies of the MRDH need to be designed in a way that allows surrounding municipalities to participate. Ideally, this implies involving policy makers from surrounding areas in their design. As a first step, the MRDH needs to ensure that neighbouring municipalities are informed about its plans. For example, it could invite representatives from the neighbouring municipalities to its steering group meetings. Further, it could consider objections to its plans that come from neighbouring municipalities and, as far as reasonably possible, strive to win their support for MRDH programmes. In this context, the closely overlapping programmes of the MRDH and the EPZ is an advantage, as it ensures that Dordrecht and Leiden (which are members of the EPZ but not the MRDH) agree to the same policy priorities as the MRDH.

Facilitate the process of regional economic transition

Second, the benefits of policies that remove barriers to closer integration will be realised only in a mid- to long-term perspective. Thus, policies aimed at removing barriers to economic integration can be placed in the greater context of policies aimed at addressing the economic transition process within the MRDH. The government and international institutions, horticulture and port-related activities that characterise the economy of the MRDH are generally mature sectors and unlikely to create strong growth in the future. In the case of horticulture and many port-related activities, increasing automation makes it likely that the number of jobs provided by these sectors will decrease. Although this will not necessarily coincide with a decrease in the value-added provided by these sectors, it will reduce the number of jobs that they provide, especially for low-skilled workers. Meanwhile, other sectors will become more important. This transition is essential to develop new sources of growth. Nevertheless, it is not an unproblematic process. Often, it creates high levels of unemployment among some social groups, as laid-off workers struggle to find jobs in emerging sectors for which they do not, at least initially, have the adequate skills. Analysing the case of the United States, Sahin et al. (2014) find that around one-third of unemployment can be explained by such a mismatch between the skills of workers and the available jobs. As mobility is generally lower in Europe than the United States, the corresponding figure for Europe and the Netherlands could be even higher.

Rotterdam is in the midst of such a transition process, as the nature of jobs provided by the port has been changing. It is moving from low-skilled jobs that required few qualifications to medium- and high-skilled jobs that require specialised expertise. Laid-off workers without such skills face difficult employment prospects. This is reflected in an overall unemployment rate of 12.6% in Rotterdam and an even higher one of 20.4% for those with low skills. Given current trends in automation, the skills needed to work in the port are likely to change further, which will harm unskilled workers.[17] Additional uncertainty is created by the strong reliance of the port economy on the petrochemical sector.[18] Currently, all major countries are committed to reducing the consumption of fossil fuels to limit climate change. If they are successful, the importance of the petrochemical sector will decrease drastically. While it is impossible to predict with certainty if and how strongly fossil fuel consumption will decline, a strong decline of the petrochemical sector in the medium term cannot be ruled out.[19]

In contrast to Rotterdam, the economy of The Hague appears less likely to change fundamentally in the medium term. Around 21% of all jobs in The Hague are in the public administration, primarily in the national government. Together with the presence of several international organisations, this provides a stable economic foundation for the local economy that is likely to lead to high employment levels in the long term.[20] Nevertheless, The Hague's economy also suffered during the exceptional downturn in the aftermath of the financial crisis in 2008 and additional growth is necessary to reduce unemployment levels. It could, for example, be supported by the emergence of the cyber-security cluster that is still in the early stages of its development (de Wijk and den Bruinen, 2013).

In order to encourage long-term growth, the MRDH could strengthen and support the regional economic transition process that is already underway. This can be achieved by increasing the flexibility and mobility of firms and workers and by fostering the emergence of new and innovative business models. A range of policies could contribute to a successful transition process.

Educating and training the workforce

Human capital is one of the most important determinants of the economic performance of a region (see, for example, Gennaiola et al., 2013). As discussed in Chapter 1, the MRDH area performs well on most measures of education by international standards, but could nevertheless improve on certain dimensions (for example by increasing the quality of weak secondary schools). Going beyond the issues discussed in Chapter 1, another important aspect of an education system is vocational training. Due to its character as a network organisation, the MRDH is well suited to be active in this field. Vocational education and job training requires close co-operation between the private and the public sector to guide youth into the education and training programmes that help them to find jobs and to ensure that these programmes teach the right skills. The MRDH could be well placed to play such a co-ordinating role.

In 2013, the Netherlands launched the Techniekpact 2020, an initiative to create regional pacts for vocational training similar to those frequently found in Germany (Box 2.5). These pacts involve voluntary commitments by private and public actors to provide more vocational training, especially for low-skilled youth. Although few systematic evaluations exist, they are generally considered to have contributed to an increase in the share of low- and mid-skilled youth in vocational training. The Techniekpakt 2020 is structured into five regional programmes. Within these regional programmes, sub-regions propose their own initiatives to promote vocational training and increase its quality. In the MRDH area, separate initiatives are proposed for the Rotterdam area and for The Hague area (Techniekpakt, 2014). The MRDH could play a role in the regional programme of the Techniekpact by co-ordinating and harmonising the distinct initiatives in the Rotterdam and The Hague areas. In particular, it should be ensured that any measures are targeted and promoted to youth from both areas and that the future skill needs of the entire MRDH area are taken into account.

Increasing the quality of life in the MRDH to attract high-skilled workers

Whereas high-quality vocational training matters most for low- and mid-skilled professions, the availability of high-skilled workers is equally important in determining the competitiveness of a region. A larger number of highly qualified people boosts the productivity of existing firms in a region and makes it more likely that new ones emerge.

Especially important in this context are people with entrepreneurial skills. As mentioned above, the MRDH has tools to influence the education system in the region, but many important decisions in this regard are beyond its control. Another strategy for increasing the education level of the region is to attract more highly educated people from other areas by increasing the quality of life in the region. This is especially important in the competition with Amsterdam, which is internationally very well-known and has a competitive advantage in attracting high-skilled workers from abroad.

Box 2.5. **Regional pacts for on-the-job vocational training in Germany**

Many regions in Germany have established pacts to foster on-the-job vocational training and increase the number of on-the-job training positions offered to youth in the region. The agreements commonly involve municipalities, schools, employment agencies, regional trade associations, regional chambers of commerce, labour unions and sometimes big companies and vocational colleges. Together with a similar pact on the national level, they have contributed to a significant increase in offers of on-the-job vocational training, especially for low-skilled youth.

Generally, the agreements are political declarations and do not include any enforcement mechanisms. Nevertheless, they send an important signal to involved actors and help to focus the attention on the issue. Often, they contain explicit targets, such as increasing the number of vocational training offers by a certain amount or reducing the share of youth that are not in employment, education or training to a certain share. In some cases, they include the promise to offer at least one suitable proposition of on-the-job vocational training to every youth. As these targets are made public, the involved actors need to show a credible commitment to achieving them. The pacts also contain provision to monitor progress towards achieving the targets. Thereby, they make sure that progress towards achieving the agreed targets is transparent.

The pacts help to increase the overall number of on-the-job vocational training offers and benefit especially low-skilled youth and school drop-outs. Trade associations encourage their member firms to ease the entry into an on-the-job vocational training programme for youth who lack necessary qualifications by providing internship and entry-level trainee programmes. In return, employment agencies and other public actors push unemployed youth to accept these offers and schools commit to teach more relevant skills demanded by employers. Sometimes, municipalities provide support to firms who agree to offer training programmes to particularly vulnerable youth.

Sources: KMK (2006), *Schule und Betriebe als Partner: Ein Handlungsleitfaden zur Stärkung von Berufsorientierung und Ausbildungsreife*, Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany, available at: www.kmk.org/fileadmin/pdf/Bildung/AllgBildung/Handlungsleitfaden-Staerkung-Berufsorient-Ausbildungsreife.pdf; Bundesministerium für Bildung und Forschung (2014), *Berufsbildungsbericht 2014*, available at: https://www.bmbf.de/pub/Berufsbildungsbericht_2014_barrierefrei.pdf.

When deciding where to work and live, people consider many factors, such as job quality, income, cost of living and the general attractiveness of a place. By improving the quality of life, a region becomes more attractive for well-qualified individuals even if firms do not pay higher wages. Quality of life is hence an important factor in determining the economic competitiveness of a region.[21] As long as they are not targeted at a narrow slice of the population, measures to increase the attractiveness of the region could have the double advantage of making life more pleasant for the current population while also increasing the economic strength of the region. Furthermore, policies to attract new residents should be connected with measures to prevent the displacement of current residents, such as measures to allow for the construction of sufficient new housing to accommodate the inflow of people. Otherwise, there is the risk that increased

attractiveness of the region could crowd out current residents. Working with its member municipalities to identify and implement strategies to boost quality of life could be another possible focus area for the MRDH.

Increasing labour mobility through targeted housing policies

It is not only important for the region to have qualified workers, it also matters that workers are employed in jobs that match their qualifications. The MRDH can contribute to improving the matches between workers and jobs by creating a more unified housing market in the MRDH area. The more flexible people are in choosing where they work, the more likely they are to find a job that is a good match to their skills because they can choose from a greater number of potential job offers. Moreover, beyond the direct effect of increasing labour mobility, making the housing market more flexible has a second benefit. By allowing people to live closer to where they work, it reduces the need for commuting. Thus, policies that make it easier to move from one place to another will also reduce congestion and ease commuting for people who do not move closer to their place of work.

In general, geographical labour mobility can be increased in two ways: 1) commuting to work can be made easier and/or 2) moving to another place can be made easier. Some reforms to social housing policies to enhance labour mobility (e.g. boosting the private rental sector as a viable alternative to home ownership and social rental housing) must undoubtedly be made at national level (see OECD, 2015c).[22] Yet the MRDH could also contribute to increased flexibility in the regional housing market to increase labour mobility. First, and most importantly, it has major competencies in transport policy (a more detailed discussion of transport policies can be found later in this chapter). Second, the MRDH may also be able to influence housing policy in several ways:

- Be a regional watchdog to ensure that sufficient housing is available throughout the MRDH in different price categories. As the IMF (2014) argues, strict land-use regulation is restricting the supply of housing in the Netherlands and should be eased. Within the MRDH, land prices are high compared to other parts of the Netherlands (de Groot, 2012), which generally implies scarcity of land. Nevertheless, in some municipalities within the MRDH, planned housing developments stalled after the financial crisis and large amounts of space are available for residential construction (many municipalities have purchased large land parcels, which now sit idle). Thus, rather than applying a blanket policy, the MRDH could help its member municipalities target areas where unmet demand for housing exists and aim to increase supply there.
- Increase the flexibility of the social housing sector by lobbying national government to merge the two waiting lists for social housing in the MRDH area. Merging the two housing regions would require aligning the regulations in the social housing sector, but would create potentially large benefits in the long term for the region by increasing the mobility of low-income residents substantially.
- Consider using the MRDH as platform for member municipalities to join forces as a stronger counterpart to the historically powerful social housing corporations. Together, the MRDH municipalities and the housing corporations could develop a shared strategy to meet regional housing needs at the MRDH scale, rather than the more localised, sub-regional scales that currently exist. Co-operation on housing – and particularly social housing – within the MRDH has, in the past, been relatively successful at a more localised, sub-regional scale, guided by

inter-municipal agreements with guidance from the province. However, these agreements would benefit from a larger regional perspective.

Helping regional firms navigate the path to innovation and growth

In addition to increasing the mobility of residents, the mobility of firms should also be increased. As discussed earlier in this chapter strict land-use regulation increases land prices, which makes it more expensive for businesses to operate (see, for example, Glaeser and Ward, 2009). This problem is particularly acute in a region as densely populated as the MRDH. Throughout its economic agenda, the MRDH (2014a) mentions the importance of providing regulatory space for businesses to innovate and grow. This is an important ambition that can foster the economic transition and contribute to the closer integration of Rotterdam and The Hague. The MRDH could therefore work towards improving the flexibility of the land market. Given the troubling vacancy rate for office space in the MRDH area, this does not necessarily imply increasing the share of land to be developed. Instead, firms could be given greater flexibility in developing land that is already zoned for commercial use or in renovating or re-purposing existing sites. As responsibility for land-use and spatial planning in the Netherlands is divided between municipalities and the provinces, this requires close co-ordination between the MRDH and the Province of Zuid-Holland. Increasing the flexibility of spatial planning would not only provide direct benefits to businesses, it could also foster the economic integration of the region. When businesses locate to a new location, they also create new connections that could help to bring the region closer together.

In addition to increasing the flexibility of existing business, the MRDH should support the creation of new ones. In this role, the MRDH would need to co-ordinate its work with several existing initiatives. For instance, the region is home to YES!Delft, a successful business incubator that is a joint initiative of the Technical University Delft, the city of Delft and TNO companies, a business development company controlled by the Netherlands Organisation for Applied Scientific Research. It is closely associated with the Technical University, but is open to applicants from outside the university. YES!Delft runs a strict selection process that ensures a high success rate of its supported businesses. More than 100 of the 159 start-ups that have been admitted by YES!Delft have successfully left the business incubator for other premises. The province is also active in supporting young companies. InnovationQuarter, a regional development agency that is jointly financed by the national government, the province and the municipalities of Rotterdam and The Hague, provides support and invests in innovative companies (see Box 2.4). A further step towards making the region more attractive for start-up companies is expected in 2016, when a new innovation centre will be opened that provides space for start-up companies.

However, despite the success of YES!Delft and the support for innovative companies given by InnovationQuarter, the southern part of the MRDH area in particular still lags behind in the creation of new businesses compared to other large regions in the Netherlands (Raspe and van de Berge, 2014). Policies to support the creation of new businesses and the growth of young firms, especially those with innovative business models, should hence be a priority for the MRDH. Given the existing support programmes, not only at the regional, but also at the national (and potentially European level), the MRDH could inform firms about the possibilities for public support. Furthermore, it could help them to find suitable support programmes and to navigate the formalities to receive support.

Attract outside funding to support its economic development objectives

Given the small budget of the MRDH, it should actively try to obtain funding from other sources. Additional revenues could expand the scope of its work and ensure that financial means correspond to its broad ambitions for the region. For example, the MRDH could pursue funds from investment programmes at the national and European level, but could also explore possibilities for collaborations with other public sector institutions or the private sector. Some progress on this front has already been made: for instance, the MRDH has secured a grant of EUR 300 000 from the European Commission as part of the first Work Package of the Collective Innovation for Public Transport in European Cities (CIPTEC).[23] In particular, the MRDH could try to obtain funds for integrated territorial investments (ITIs) from the European Commission. ITIs are used to fund multi-dimensional interventions aimed at a designated territory (typically a functionally integrated area). The designated territory does not have to correspond to administrative boundaries, but an implementing body needs to be in place that can administer the investments.[24] The MRDH is well placed to apply for such funds, as it is meets all three criteria. It covers a territorially integrated area, pursues multi-dimensional policies and satisfies the criteria for implementing bodies of ITIs as defined by the European Commission. While the nature and work of the MRDH corresponds especially closely to the intentions behind ITIs, it should of course also try to obtain funds from other EU programmes.

Looking outward to boost the national and international competitiveness of the MRDH

Just as important as focusing inward to deepen economic links within the region, it will be critical for the MRDH to turn its attention outward to cement its position as an important national and global player. There is little doubt that the MRDH area has a number of world-class assets: a highly accessible region to both internal and external markets, one of the most important ports in Europe, world-renowned technical universities, a well-educated international workforce – notably in public administration in The Hague – and a world-class horticulture industry. However, the region as a whole is a little-known brand on the international stage. A number of public and private sector representatives interviewed by the OECD for this report commented that in terms of international relations, the MRDH area does not present itself with a single voice or a common agenda. As the MRDH area strives to grow together, a key part of the strategy should be to "look big" from a global perspective.

Establish the MRDH as the voice for external relations

The MRDH could aim to establish itself as the main spokesperson for the area in external relations. Building on the political commitment of all 23 member municipalities, it could speak with a unified and stronger voice at national, European and international levels. The MRDH could co-operate with the national government, i.e. be strongly involved in the national decision-making process regarding EU issues and jointly lobby for smarter ("metropolitan-friendly") regulation in the EU, together and via its own networks. The MRDH could also co-ordinate economic and institutional relations with other European and worldwide metropolitan regions, as well as with firms and other potential investors interested in the MRDH area. It could participate in EU policy making, co-ordinate access to EU funding (e.g. Horizon 2020, Interreg), and participate in European and international networks. In this regard, the experience of Manchester

(United Kingdom) displays compelling similarities with the MRDH. Initially created as a joint organisation of ten local authorities, the Association of Greater Manchester Authorities (AGMA) acted as a co-ordinating and lobbying organisation, before it became one of the two pilot "City Regions" in 2009 and the first Combined Authority in the United Kingdom in 2011, now scheduled to have an elected metropolitan mayor from 2017 onwards (Box 2.6).

Box 2.6. From a lobbying association to an elected metropolitan authority: The example of Manchester (United Kingdom)

The Association of Greater Manchester Authorities (AGMA) was created in 1986 after the Local Government Act (1985) abolished the Greater Manchester County Council. It is a voluntary joint committee of the ten local authorities within Greater Manchester (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan), which together represent about 2.6 million inhabitants. The AGMA performs metropolitan-wide responsibilities delegated from local councils and inherited from the Greater Manchester County Council (such as public transport and waste management control). The AGMA has played an important lobbying role to voice the collective interests of the constituent authorities to the UK government and the European Commission. The AGMA has an EU office in Brussels.

As the AGMA progressively expanded its competencies to new policy fields (e.g. housing, environment), it also equipped itself with an Executive Board. The Executive Board meets every month and co-ordinates economic development, housing, planning and, together with the relevant statutory bodies, transport policies for Greater Manchester with a supporting structure of seven thematic commissions.

The 2009 UK budget announced that two areas in the United Kingdom – Greater Manchester and the Leeds City Region – would be awarded the status of Statutory City Region Pilot, giving their constituent councils the possibility to pool resources and become statutory combined authorities with powers comparable to those of the Greater London Authority (GLA). Following extensive consultations with the ten councils, including on matters such as the name, the voting system and the competencies of the new authority, a proposal was submitted to the central government in 2010.

The ten authorities in Greater Manchester were the first in the United Kingdom to develop a statutory combined authority called the Greater Manchester Combined Authority (GMCA), which co-ordinates key economic development, regeneration and transport functions. The GMCA came into force on 1 April 2011, together with the Transport for Greater Manchester Committee (TfGMC). The GMCA is composed of ten members (indirectly elected councillors) selected from among the councillors of Greater Manchester's constituent authorities. Each member has one vote. The GMCA elects a Chair and Vice-Chair from amongst its members. Most questions are decided by a simple majority vote, except a few strategic questions that require an enhanced majority of seven votes (e.g. decisions on the annual budget and setting the transport levy). If a vote is tied, it is considered to be lost. The TfGMC has a nominated pool of 33 councillors from the 10 constituent authorities of Greater Manchester, develops transport policy for the region and manages Transport for Greater Manchester (TfGM).

The AGMA continues to act as the voice of the ten local authorities of Greater Manchester, but as part of a stronger partnership through the GMCA. It helps raise awareness on EU developments that are relevant for the Greater Manchester area, co-ordinate European lobbying and strengthen networking activities with other international partners.

In November 2014, it was announced that there would be an elected Mayor of Greater Manchester from 2017 onwards, with similar powers to those of the Mayor of London. In the meantime, the GMCA appointed an interim mayor in May 2015.

Sources: Drawing from various sources, including the website of the Association of Greater Manchester Authorities, www.agma.gov.uk (accessed 30 June 2015); and OECD (2013), "Vers une croissance plus inclusive de la métropole Aix-Marseille: Une perspective international", OECD, Paris, available at: www.oecd.org/regional/regional-policy/Aix-Marseille.pdf.

Develop an internationalisation agenda for the MRDH

As presented in Box 2.4, several business development agencies exist in the MRDH region aim to promote it nationally and internationally. However, each of these promotes only a part of the territory of the MRDH and all use varying strategies. This presents the risk that an incoherent image of the region is present to outside investors. The MRDH could co-ordinate the activities of local business development. It could help them to develop a marketing strategy that promotes the entire MRDH area while highlighting the particular strengths of the territory for which they are responsible. Furthermore, the MRDH might not only focus business promotion and communication targeted at investors; it could also try to network and co-ordinate with public sector actors outside the Netherlands, for example to organise the exchange of experiences and develop joint strategies.

Pursue larger scale projects and flagship events

Larger scale projects, such as flagship events, can both build regional identity and generate substantial economic benefits for the MRDH area. At the initiative of companies, the city of Rotterdam is currently considering the possibility to bid for the World Expo 2025. The idea of a joint application at the MRDH level is under discussion. Such projects provide a promising axis to spur metropolitan-wide action, which can reach beyond initial cultural objectives to such areas as urban transport, environment and economic development. For example, in France, the nomination of Marseille as the European Capital of Culture 2013 fostered new forms of co-operation among municipalities and with civil society in a historically highly fragmented region (Box 2.7). It should be noted, however, that large-scale events often entail overwhelming sunken costs and require a realistic strategy to manage the post-event usage of facilities.

Box 2.7. **A cultural project as a building block for a metropolitan dynamics: The example of Aix-Marseille (France)**

In 2004, the city of Marseille decided to apply for the title of European Capital of Culture 2013. In December 2006 an association, "Marseille Provence 2013" (MP2013), was set up and the project was selected by a European jury in September 2008. The association MP2013 covers 97 municipalities, mainly from the 6 inter-municipal authorities (*établissements publics de coopération intercommunale*, EPCI). About 15% of its EUR 90 million budget comes from private patronage. The association was able to mobilise a wide range of institutional, cultural, associative and economic stakeholders: the European Union, the central government, the region, the *département*, municipalities and inter-municipal authorities, the Chamber of Commerce and Industry Marseille-Provence, the University Aix-Marseille, Euroméditerranée, the Grand Maritime Port of Marseille (GPMM), public and private companies, etc. All those different partners were brought together not only around a common cultural project but also a shared vision of transforming Marseille-Provence 2013 into a sustainable flagship territory of the Euromediterranean. The cultural project focused on exploiting the territorial diversity, including mobile events across the region and the creation of a 360-kilometre metropolitan hiking trail across natural and urban territories (GR®13). Beyond cultural and artistic events, the MP2013 also allowed for the construction or renovation of cultural monuments across the region. Within Marseille, in particular, several key sites were inaugurated (e.g. MuCEM, Villa Méditerranée). Urban regeneration projects were also conducted, such as the pedestrianisation of the old port of Marseille. The MP2013 also led to new investments in the airport and the cruise terminal. The results of the European Capital of Culture 2013 largely exceeded initial expectations, with more than 10 million visitors and around EUR 600 million estimated economic spillover effects.

Source: OECD (2015a), *Governing the City*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264226500-en.

The metropolitan dynamics created by flagship events also need to be sustained over time. In some OECD metropolitan areas, preparations for the Olympic Games sparked a push for a greater level of metropolitan integration, albeit with sometimes highly divergent outcomes in the long term. For example, in Athens, the first spatial plan with an explicit metropolitan scale was adopted in 1985 together with the creation of the Organisation for the Planning and Environmental Protection of Athens (ORSA). The selection of Athens in 1997 as the host city of the 2004 Olympics led to an unprecedented wave of infrastructural and urban investments across the entire metropolitan area. However, the metropolitan spatial plan was soon enough bypassed to accommodate and accelerate Olympic projects, and ten years later the debate on the metropolitan governance of Athens has not led to any substantial results while ORSA was recentralised into the Ministry of Environment, Energy and Climate Change in 2014. In contrast, Barcelona accompanied Olympic preparations with an iterative process of strategic planning, starting from the core city and gradually enlarging it to the metropolitan scale through the involvement of sectoral inter-municipal authorities. The process was sustained after the Olympics and culminated in the creation of a new metropolitan authority in 2011 (Box 2.8). A key insight for the MRDH is that hosting major events is an important tool or catalyst to accelerate the implementation of existing priorities – not an alternative to doing so (OECD, 2008).

Box 2.8. **The Olympic Games as a catalyst for the metropolitan governance debate: The contrasted experiences of Athens and Barcelona**

Athens

In 1985, the first Regulatory Master Plan of Athens was adopted, and the Organisation for the Planning and the Environmental Protection of Athens (ORSA) was created with the responsibility to monitor the implementation of the plan. The plan marked an ambitious effort to curb further sprawl, reduce social disparities and enhance environmental protection, for the first time using the metropolitan agglomeration as an institutional and regulatory scale.

In practice, the 1985 Regulatory Master Plan was rapidly bypassed as the preparations for Olympic projects entailed major transformations of the urban area that ran into contradicting provisions of the Master Plan. For example, the creation of multiple Olympic nodal activities in the periphery of the metropolitan area (such as the Olympic Village and the equestrian centre) would further promote sprawl while the Olympic ring road and proposed road network extensions would aggravate car dependence, in direct conflict with the Master Plan's stated objectives of urban containment and environmental protection. Some other Olympic projects, such as the development of high-impact athletic activities in the Faliron area, would also seriously damage one of the few natural habitat areas in Athens and impede the opening of the waterfront to the public as it had been initially provided by the Master Plan. Strong mobilisation from various groups (e.g. municipalities, non-governmental organisations, local interest groups, the National Technical University of Athens) against locational and infrastructural choices was still unable to help incorporate Olympic projects into a wider urban planning reform process within the Master Plan. No municipality except that of Athens was represented in the Athens 2004 Organising Committee and ORSA was only given a secondary, advisory role at best, while the central government retained control powers over planning and decision-making processes.

Following 2004, the government's search for the valorisation of Olympic facilities made permanent some of the temporary exclusions from the planning framework in order to attract investment in profit-generating activities. In this context, ORSA supervised the revision of the regulatory master plan, which was presented in April 2009 with the main goal to sustain post-Olympic competitiveness, but the proposed plan was immediately abandoned with the change of government following the elections in October 2009.

Box 2.8. **The Olympic Games as a catalyst for the metropolitan governance debate: The contrasted experiences of Athens and Barcelona** (*continued*)

Despite its unique metropolitan-wide mandate, ORSA struggled with limited formal competences, insufficient implementation powers and the structural deficiencies of the Greek planning system. ORSA was recentralised and absorbed by the Ministry of Environment, Energy and Climate Change as of October 2014.

Barcelona

The Spanish central government created a Metropolitan Corporation of Barcelona (Corporación Metropoliana de Barcelona, CMB) in 1975, which encompassed 27 municipalities. However, it was dissolved in 1987 when long-standing political tensions escalated between the city of Barcelona and the autonomous community of Catalonia. Preceding the 1992 Olympics, three sectoral inter-municipal authorities were created in 1987, each covering a different geography:

- a planning authority (Mancomunitat de Municipis de l'Àrea Metropolitana de Barcelona, MMAMB), covering 31 municipalities (3.1 million people)
- a transport authority (Entitat Metropolitana del Transport, EMT), covering 18 municipalities (2.9 million people)
- an environmental authority (Entitat del Medi Ambient, EMA), covering 33 municipalities (3.2 million people) in charge of the water network and waste treatment.

Before and after the Olympics, an important process of strategic planning took place, starting with a focus on the core city and gradually evolving towards the metropolitan scale. The city of Barcelona published its first strategic plan in 1990, its second one in 1994, and together with the three sectoral inter-municipal authorities, its third one in 1999. These strategic plans involved many actors from the regional government, all municipalities, universities, the private sector, the port and civic organisations. The Association for the Strategic Plan of Barcelona (Plan Estratégico Metropolitano de Barcelona, PEMB), a non-profit organisation created in 2000 with around 300 members from political, economic and social communities, launched a first metropolitan strategic plan in 2003, which covered 36 municipalities. A new strategic plan, Barcelona Visio 2020, was published in 2010 in the continuity of the 2003 plan. Finally, a metropolitan authority was set up in 2011 by Law 31/2010 of the parliament of Catalonia. The Barcelona Metropolitan Area (Àrea Metropolitana de Barcelona, AMB) brings together the three sectoral inter-municipal authorities (MAAMB, EMT and EMA). Its Metropolitan Council is composed of the 90 members, i.e. mayors and selected city councillors from all 36 municipalities (including the city of Barcelona) covered under the strategic plan. The AMB is in charge of planning, transport, water, waste treatment, social cohesion and economic development. In 2013, it commanded a budget of around EUR 600 million, composed mainly of subsidies and transfers (56%), fees and user charges (24%), and own taxes (17%). There is also a specific authority in charge of public transport (Autoritat del Transport Metropolità, ATM), which runs an integrated public transport network and a harmonised fare system.

Source: OECD (2015a), *Governing the City*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264226500-en.

Greater economic integration of the MRDH is a long-term process

It cannot be stressed enough: achieving greater functional integration of the MRDH should be understood as a long-term ambition. There is no silver bullet to increase the economic ties between the former city-regions of Rotterdam and The Hague overnight, nor will the process be automatic. Rather, it will take a range of policies and programmes related to economic development, spatial planning, housing and transport, implemented at

different levels of government, to further these ambitions. Moreover, there is no single factor that renders a region "integrated."

Addressing key strategic questions for regional economic policy

Three strategic questions for regional economic policy makers are considered in this section: 1) should policy provide targeted support for individual sectors or aim for general improvements in economic conditions? 2) In what ways can sectoral support policies be robust to failure? 3) In what instances can inter-municipal competition – rather than co-operation – be beneficial?

Targeted support for individual sectors or general improvements in economic conditions?

A fundamental issue in economic policy is whether to provide targeted support to selected industries (for example, through regulatory interventions or financial support) or to focus on the general improvement of economic conditions. The first approach would be in line with the Dutch "Top Sector" policy that aims to support selected industries that are of national importance for the Netherlands (see Chapter 1). In contrast, the second approach would refrain from targeting particular sectors. Instead, it would attempt to foster market-driven economic growth without selecting the sectors in which growth is supposed to occur. Both approaches offer varying advantages and disadvantages.

Targeted support policies have been discussed in the context of the Dutch "Top Sector" policy in the *OECD Economic Survey of the Netherlands* (OECD, 2012a) and in the *OECD Review of Innovation Policy of the Netherlands* (OECD, 2014a). Both reports have identified the challenges of targeted support for selected economic sectors. Several of them are also relevant for decisions taken by the MRDH. First, government choices regarding which sector to support might be captured by interest groups. Large companies and businesses, for example, are better in communicating their needs and lobbying for desired solutions than small and medium-sized enterprises (SMEs). They are more likely to be successful in influencing decisions concerning which sectors and companies to support. Second, there is a tendency for governments to back incumbent firms against challengers. For governments, lay-offs are typically more important considerations than newly created jobs. Lay-offs affect a clearly defined group of employees that can voice vocal opposition, whereas new jobs are typically scattered across the entire economy. This creates the risk that scarce public resources are used to prop up stagnating or declining companies that do not offer much growth potential.

The MRDH is home to numerous industries supported by the "Top Sector" policy (see Chapter 1). However, Manshanden (2014) conjectures that this may actually be actually a disadvantage for the region and – for the reasons mentioned above – contributes to the continuing dominance of low-growth industries. By binding capital and labour (especially highly qualified employees) into low growth sectors, the "Top Sector" policy could prevent them from being employed more productively in faster growing sectors. Without the "Top Sector" policy, economic transition towards sectors with higher growth rates could occur faster and growth rates could increase.

The potential drawbacks of policies that target individual sectors provide arguments in favour of an approach that tries to improve economic conditions without picking winners. However, despite their drawbacks, Rodrik (2008) shows that arguments in favour of targeted support programmes for individual sectors exist. He argues that several types of market failures exist that prevent the emergence of new economic activity. For

example, a new economic activity requires simultaneous large investments at different points of the value-added chain, which in decentralised markets is difficult to co-ordinate. To overcome this collective action problem, the government could therefore subsidise new fields of economic activity to ensure that private actors pursue their development at socially optimal levels. Furthermore, OECD (2012b) shows that different regions possess different strengths, which makes them more suited for some economic activities than for others. In order to maximise the potential of a region, its economy must make use of these strengths.

The discussion above implies that targeted support policies can be justified in special circumstances and could play a role in the economic transition of the MRDH area. However, they should be used only in response to a clearly identified market failure and designed in a way to avoid the above-mentioned pitfalls. When they are used they should always be employed in conjunction with other reforms that strengthen market forces and support self-sustaining economic growth. The MRDH area has several strengths that can form the basis of a successful economy. It is among the best connected European regions and contains Europe's most important port. Furthermore, it is less than one hour from one of Europe's largest airports and has very good road and train connections to north-western Europe. As discussed earlier, the cluster of international organisations focusing on international law and justice in The Hague is globally unique. For the MRDH, the challenge is to balance the potential drawbacks of targeted support programmes with the goal of making use of the region's strengths to support its main pillars of economic activity.

None of the strengths mentioned above is fully utilised by the regional economy. While an important cluster of port-related activities exists around it, Rotterdam does not offer the full range of maritime services found in, for instance, London or Singapore (Merk and Notteboom, 2013). In The Hague, a cluster of firms working on security (in particular cyber-security and critical-infrastructure protection) is developing, spurred by the presence of the international law and justice institutions in the city. While it already encompasses 400 companies that employ 13 400 workers, it has not yet reached its conceivable size. De Wijk and den Bruinen (2013) claim that the number of firms and employees in the sector could potentially increase to 900 and 30 000, respectively, by 2025. As this would require a large number of experts and well-trained support staff, the MRDH could work together knowledge institutions and the private sector to ensure that sufficient education and training programmes exist to enable this growth.

If the MRDH pursues a strategy of targeted sectoral support, it is important that it is co-ordinated with the Dutch "Top Sector" policy, no matter which priority sectors are chosen. OECD (2014b) argues that the "Top Sector" policy needs to be more responsive to regional conditions and better aligned with regional policies. National and local policies are complementary and will achieve their maximum effectiveness only if both use co-ordinated tools. The MRDH would have to co-ordinate its policies closely with those on the national level. In return for the MRDH's attempts to co-ordinate its policies with the national "Top Sector" policies, national policies should allow for sufficient flexibility to let the MRDH set its own regional priorities. This especially concerns policies that do not need to be applied uniformly across the entire country. Likewise, investment projects that do not have national relevance should in particular be planned with substantial input from local and regional authorities.

Sectoral support policies should be robust to failure

Lerner (2009) provides many examples of failed attempts by governments to foster entrepreneurship and shows that with a high probability such policies will be ineffective. He argues that this is either because programmes are poorly designed or poorly implemented. Furthermore, many initially successful public programmes are difficult to shut down and operate beyond their useful lifespan. Thus, policies should take the risk of failure into account and be designed to provide benefits, even if the primary goal of strengthening a particular sector or economic cluster is not achieved. The need to strengthen existing sectors can be aligned with the potential drawbacks of sectorally targeted policies by developing policies that are robust to failure. Policies that are robust to failure are beneficial even if they do not achieve their primary objective. In other words, they take into account that it is not possible to guarantee that a supported economic sector will grow. While such policies primarily aim at strengthening an individual sector, they also provide benefits for the region if they do not achieve their primary objective.

The difference between a targeted support policy that is robust to failure and one that is not can be illustrated with a simple example. Assume the goal is to strengthen the innovative potential of SMEs, for example in the horticultural sector. A possible strategy to achieve the objective is to provide direct subsidies to firms to allow them to do more research and development. Another strategy is to spend money on better technical training in higher secondary and vocational education. Both strategies are plausible and could under the right circumstances be effective in achieving the goal of strengthening the R&D of SMEs and thus the entire sector. However, they differ from each other in an important aspect. The first strategy will provide little benefits if – for whatever reasons – the importance of the horticultural sector declines, whereas the second one would still be beneficial. If the sector declines for reasons beyond the control of policy makers, the public funds that are spent on subsidising their R&D activities are lost and will provide little benefit to the region. In contrast, if public funds are spent on educating people and the firms that employ them go out of business, the workers that lose their jobs might still benefit from their better education.

More generally, targeted support policies that are robust to failure improve the general economic environment with the goal of strengthening a particular sector. However, in contrast to policies that are not robust to failure, they can also benefit other sectors than those initially targeted by policy makers. Among the many possible measures that fall into this category are regulatory improvements, better education and better infrastructure. Importantly, such policies do not contradict the goal of strengthening specific sectors. For example, attracting international professionals is a precondition to establish a service industry around the theme of international law and justice.[25] While this supports firms providing international legal services, it also helps all other sectors that rely on international staff and would benefit the region even if a cluster around international law and justice would not prove viable.

Limited economic competition between municipalities can benefit the region

During interviews with local actors, one of the most frequent explanations of the recent below-par performance of the region in terms of unemployment and GDP growth was the excessive degree of competition between municipalities. In the past, competition was especially intense between Rotterdam and The Hague and prevented the region from developing comprehensive strategies for regional development. This has harmed the

region, for example because it lacks a coherent image of itself that it can present to foreign investors.

Despite these undesirable effects, not all forms of competition between municipalities are undesirable. Under the right conditions, competition between municipalities can also contribute to better outcomes as long as it occurs within certain limits.[26] It can be an important driver of reform in the public sector and provides an incentive for municipalities to become more attractive for businesses and residents. For example, Revelli and Tovmo (2007) find that competition with neighbouring municipalities is likely to increase the efficiency of municipal administrations. Moreover, the positive effects of competition in some policy domains do not contradict the need for better co-operation in others. In fact, a lack of co-operation is one of the primary factors obstructing effective development of many metropolitan areas (OECD, 2015a; 2015b). It is therefore important to ensure that competition does not impede co-operation between municipalities in fields in which it is necessary. The MRDH is in a good position to encourage healthy competition while preventing it from reaching undesirable scales or obstructing co-operation in other policy fields.

Competition between municipalities can be desirable when three criteria are met:

- First, competition should be constrained to those policy fields that do not require co-operation with neighbouring municipalities, such as transport policy and land-use policy.[27] For example, it is beneficial if municipalities compete with each other by making their town centres more attractive, but they should not compete by enacting particularly lenient land-use regulations close to their neighbours' borders.
- Second, competition should occur in the form of positive-sum games instead of zero-sum games. In other words, competition should improve the general economic conditions and thus increase economic activity in general rather than just reallocating existing economic activity from one place to another. The difference between positive-sum competition and zero-sum competition can be illustrated as follows. In a positive-sum game, municipalities can try to attract companies by providing better services, for example by processing building permits and other necessary applications quickly or by cutting unnecessary regulation. In such cases, even municipalities that lose the competition to attract a company are likely to benefit in the long run. By improving their general business environment, they foster the growth of existing companies and are more likely to attract additional ones in the future. In contrast, zero-sum competition does not lead to generally improved conditions. For example, municipalities can try to attract companies by providing indirect subsidies through the sale of land below market prices. This benefits companies at the taxpayers' expense without increasing the capacity of the economy.[28] Even though the municipality that manages to attract a company through such measures will benefit, it would not do anything to improve overall economic growth. No overall increase in economic activity will occur as a consequence of this form of competition.
- Third, competition should not lead to a race-to-the-bottom in areas where it is undesirable to move below certain minimum standards. For example, these might be tax rates, environmental regulation, labour laws or welfare provision.[29] Thus, there needs to be an explicit or implicit understanding among municipalities that certain policy instruments are not used to compete among each other or are used only within limits.

The MRDH can contribute to maximising the gains from positive-sum competition while minimising the degree of undesirable competition. For example, it is possible to implicitly acknowledge the need for some competition by outlining strategies for regional economic development that identify policy fields where competition is not desirable, while leaving out those in which competition is considered beneficial. A solution that explicitly acknowledges the potential gains from competition could involve agreements on policy fields where competitive behaviour between municipalities does not contradict the general spirit of co-operation in the region.

Furthermore, the MRDH can play a mediating role to prevent competition between municipalities from damaging the general relations between them. This is important in order to ensure that limited competition does not harm the prospects for co-operation. The MRDH can communicate that some forms of competition do not contradict the overall spirit of co-operation and will be beneficial for the entire region in the long term. It can also serve as a platform to arbitrate and solve conflicts that might arise out of competition between municipalities.

Leveraging the MRDH as the single transport agency for the Rotterdam-The Hague area

The creation of transport authorities that are responsible for multiple jurisdictions within a functional urban area is increasingly common. Some of the most successful examples are the Regional Consortium of Transport (Consorcio Regional de Transportes, CRTM) in Madrid, Transport for London (TfL) and the Ile-de-France Transport Authority (Syndicat des transports d'Ile-de-France, STIF) in Paris. International experience in the creation of such authorities makes clear that there is not a single successful model. Rather, assessing the transport authority of the MRDH from an international, comparative perspective helps identify both valuable assets that MRDH can leverage, as well as important challenges that it may face.

The World Bank identifies three conditions as essential for ensuring the sustainability and effectiveness of urban transport institutions: 1) ability to deliver public value; 2) legal authority and political support; 3) strong internal capacity. Two of these conditions (delivering public value and broadening public support) will be the focus of this section; a summary of the MRDH's situation with respect to the third condition (internal capacity, in terms of staffing and budget) is provided in Table 2.4, with a more detailed discussion in Chapter 3.

Delivering public value in the field of regional mobility

As a new institution, the MRDH must demonstrate that it can deliver public value in its two primary policy fields. Table 2.5 provides an international perspective on the importance of meeting this condition for the MRDH as a single transport authority for the area. The section then analyses some of the ways in which the MRDH could aim to deliver public value.

Table 2.4. **An effective transport authority: Strong internal capacity**

Description and rationale	Two critical elements for the effectiveness of urban transport authorities are: 1) **qualified staff** for transport planning and implementation; and 2) **secure sources of funding** to carry out operations.
Assessment of current situation in the MRDH	**Staffing:** The staff of the transport pillar of the MRDH has been transferred from the previous two city-region transport authorities. The MRDH's large, qualified transport team of 80 people is one of its strongest assets. Additionally, the MRDH also benefits from the established technical competencies of the two public transport operators in the region, which combined account for roughly 3 000 employees efficiently managing fares, ticketing and timetables. The companies also have qualified personnel for giving advice on network expansion, as well as for monitoring and ensuring safety standards in services provided. **Budget:** Another important asset of the MRDH is its solid financial base via transfers from the federal government, EUR 475 million annually. Nevertheless, the MRDH would do well to consider strategies for broadening its funding base should transfers diminish in the future. Strategies are discussed in Chapter 3.
Status of the MRDH	**Staffing:** Acquired. **Budget:** Acquired – but broadening funding sources should be envisaged.
International examples	**Staffing:** Successful urban transport authorities such as LAMATA in Lagos, LTA in Singapore and TfL in London have all been distinguished by having highly qualified staff. In the three cases this has been possible, to a great extent, because the financial resources they have contemplate not only costs of projects implemented but also the need to pay competitive salaries to an internal team. **Budget:** Sources of funding may vary widely among urban transport authorities. In the case of the STIF (Paris), TransLink (Vancouver) and LAMATA (Lagos), a large share of funding is secured by using dedicated funding sources. In the case of Paris, about one-third of regional operation expenditures for the STIF comes from the *Versement Transport* (VT). This is a dedicated tax levied on employers and based on payroll mass that the STIF (and other transport authorities) are entitled to collect. In the case of Vancouver, fuel taxes and property taxes are earmarked as funds for TransLink. Together these two taxes make up 40% of TransLink's budget. In the case of Singapore, a large share of the LTA budget comes from national government grants (50%). LTA also receives a management fee from the government (38%) and local charges (e.g. vehicle parking certificate fees, vocational license fees, vehicle inspection fees, RTS license fees).

Sources: OECD based on Kumar, A. and O.P. Agarwal (2013), "Institutional labyrinth. Designing a way out for improving urban transport services: Lessons from current practice", World Bank Group, Washington, DC, http://documents.worldbank.org/curated/en/2013/01/18821689/institutional-labyrinth-designing-way-out-improving-urban-transport-services-lessons-current-practice (accessed 6 July 2015); complemented with information from Aguilar Jaber, A. and D. Glocker (2015), "Shifting towards low carbon mobility systems", *International Transport Forum Discussion Papers*, No. 2015/17, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jrvzrjggnhh-en; and EMTA (n.d.), "Just launched: Metropolitan region Rotterdam-The Hague", European Metropolitan Transport Authorities, www.emta.com/spip.php?article966 (accessed 6 July 2015).

The MRDH has authority over a range of mobility policies

One important advantage of the MRDH is its authority over a wide range of elements of mobility policy. Previously, the transport agencies of the two former city-regions that have since merged into the MRDH could take decisions regarding planning and management of all modes of public transport (e.g. new investments, maintenance and network development), with the exception of national rail links operating within the region. They also managed many other elements of mobility policy (e.g. highways, traffic management, bicycle lanes, park and ride facilities, and traffic safety). The MRDH has retained these wide-ranging transport competencies. Cases such as TfL in London and the LTA in Singapore have shown that authority over an extensive range of mobility policy can enable these institutions to construct a more effective mobility policy overall. TfL is responsible for the London Underground, the London Overground, the Dockland's Light Rail and the tramway services. It is also in charge of regulating public bus, taxis and

private-hire services and coach operations. TfL also manages roads, including parking and loading regulations, and operates the congestion charging scheme and the Low Emission Zone. In addition, it is responsible for walking and cycling facilities, road safety, transport policing in public transport, traffic enforcement and management of the ticketing system (TfL, 2015a). LTA is responsible for planning, operating and maintaining of land transport infrastructure. LTA regulates rail, bus and taxis services and also conducts rail and some of the bus operations. LTA is also responsible for developing road safety measures, conducting vehicle licencing and managing the electronic road pricing system (LTA, n.d.). Having this comprehensive authority has enabled both TfL and LTA to devise a strategy in which improvements to the public transport and non-motorised transport infrastructure are accompanied by complementary transport demand management tools. This has, in both cases, been key to delivering solid improvements in travel conditions.

Table 2.5. **An effective transport authority: Ability to deliver public value**

Description and rationale	Urban transport authorities need to identify specific ways in which they can deliver mobility improvements that are significant, effective and visible to the population. Across the globe, the acquisition of public support has often made it easier for transport authorities to implement the necessary policies for attaining ambitious, inclusive and sustainable mobility goals – particularly those that may be politically difficult (e.g. congestion charging).
Assessment of current situation in the MRDH	The MRDH is a new institution. A major challenge will be to demonstrate that it can deliver public value at the scale of the MRDH area.
Status of the MRDH	To be acquired.
International examples	**Transport for London (TfL):** Marked improvements in London's public transport system since the creation of TfL in 2000 are reflected in significant increases in public transport use (from 34% to 45%), while car use has declined (from 43% to 33%). These results have been achieved by accompanying public transport improvements with stringent transport demand management policies (such as the congestion charging scheme). To a great extent, public acceptance of restrictions on car travel resulted from the TfL's demonstrated ability to improve public transport. Public transport improvements (e.g. increased frequencies and capacity, decrease in total journey times in different modes and lines, etc.) and traffic conditions in different parts of the city are measured regularly and communicated to the public in the TfL's annual report, "Travel in London". Public acknowledgement of improvements in the travel experience is reflected in a steady rise in the indicators measuring customer satisfaction, which are also included in the *Travel for London* report (see Annex 2.A1). **Lagos Metropolitan Area Transport Authority (LAMATA):** Following years of neglected maintenance of the road network, LAMATA was able to prove its ability to deliver good roads shortly after its creation. Recognition as a professional entity helped the institution advance difficult policies (e.g. raising bus fares to improve financial sustainability of private bus enterprises, generating support for public-private partnership projects and preparing long-term integrated plans).

Sources: OECD based on Kumar, A. and O.P. Agarwal (2013), "Institutional labyrinth. Designing a way out for improving urban transport services: Lessons from current practice", World Bank Group, Washington, DC, http://documents.worldbank.org/curated/en/2013/01/18821689/institutional-labyrinth-designing-way-out-improving-urban-transport-services-lessons-current-practice (accessed May 2015); complemented with information from Aguilar Jaber, A. and D. Glocker (2015), "Shifting towards low carbon mobility systems", *International Transport Forum Discussion Papers*, No. 2015/17, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jrvzrjggnhh-en; TfL (2014), "Travel in London Report 7", Transport for London, London, available at: https://tfl.gov.uk/cdn/static/cms/documents/travel-in-london-report-7.pdf.

In the case of Singapore, for instance, geographic conditions impose a heavy constraint to tackling congestion through road space expansion. A congestion pricing scheme was implemented as early as 1975. Initially it was a manual system by which users with non-exempt vehicles had to purchase licences that were sold in petrol stations, post offices or convenience stores, in order to enter the restricted zone. Meanwhile,

enforcement personnel had to be stationed at control points. An electronic road pricing system was introduced in 1995. This improved enforcement and enabled periodic adjustments to charges to optimise the usage of road space. As a result, rates have been set to ensure that the traffic flows are kept at practical levels (between 20-30 kilometres per hour on urban roads and between 45-65 kilometres per hour on expressways); rates are reviewed every three months. Success in maintaining speeds has helped gain public support.

Analysis of the Singapore case also highlights the importance of: 1) implementing publicity programmes to ensure that the rules and functioning of the scheme are easily understood by the population; 2) conducting careful and periodic analysis of travel behaviour to design necessary adjustments. Another major change was requiring users to pay for each entry into the restricted zone, rather than permitting an unlimited number of entries into the Central Business District (CBD) with a single payment. This change was considered necessary since it was estimated that about 23% of trips that entered the CBD were repeated trips. As a result, the level of traffic volume to the CBD reduced by 10-15%, while the charges needed to attain target speeds were lower than before its introduction. Periodic analysis of travel behaviour has also been important to expand congestion charging from the CBD to other areas of the city and tailor rules according to different uses of road space. Congestion charging has been extended to an outer cordon of the city, and additional gantries were introduced into a shopping zone inside the CBD. Pricing of these gantries is a response to the particular traffic flows in the shopping belt. Part of the strategy to gaining public acceptability of congestion pricing in Singapore has been to make clear that it is not a revenue tool, but rather a traffic management instrument. Therefore, adjustments in taxes have been conducted to achieve revenue neutrality (ITF, 2010).

In addition to the introduction of congestion charging, Singapore has strict policies for vehicle ownership. One of the most evident is the vehicle quota system that has been in place since 1990. The system, also managed by LTA, sets an annual quota of new vehicles of different types that can be registered, and individuals bid to be granted a vehicle registration permit. According to ITF (2010: 18), "if ownership policies were less restrictive, the congestion charges would have to be higher to attain similar service levels". Transport demand management strategies are set in parallel to constant improvements and expansions to the public transport network. For instance, between 2014 and 2030, LTA has in its pipeline projects to make extensions to three of the existing rail lines and to build five additional lines. This is equivalent to an additional 172 kilometres of rail network (LTA, 2014). LTA also aims to have 80% of households within a 10-minute walk from a rail station and 85% within a 10-minute walk to a public transport station by 2030. The overall strategy has been effective in achieving a high percentage of trips by public transport. In 2012, 63% of trips during morning and evening peak times were made on public transport (Aguilar Jaber and Glocker, 2015).

Congestion charging was introduced in central London in 2003. The introduction of the scheme was the culmination of a policy transformation that had started in the 1990s, which recognised that previous policies based on predicting and providing additional road infrastructure could not continue indefinitely. While aiming at reducing congestion, the introduction of the scheme was also considered a way to conduct radical improvements to bus services, offer journey time reliability for car users, and improve efficiency of goods and service delivery (TfL, 2008). In contrast to the case of Singapore, the congestion charging scheme in London gained public acceptability through having transparency and accountability for managing the extra revenues, rather than by announcing revenue

neutrality (ITF, 2010). The commitment to spend net revenues from the congestion charging system on improving bus and underground services was made explicit in documentation available to the public before the scheme's implementation. The very visible improvements to public and non-motorised transport have played an important role in continued public support to maintain congestion charging in place. Net revenues from the congestion charge represent 5% of TfL's GBP 12 billion annual budget (TfL, 2015a).

The timely creation of the MRDH transport authority can anticipate future regional mobility needs

Paradoxically, a second advantage of the MRDH transport authority is its timely creation – that is, before the MRDH area is highly functionally integrated. The timing could, in fact, constitute an opportunity for the MRDH to anticipate the mobility needs that could be generated by future metropolitan growth. In many cases around the world, responsibilities for transport planning and management within a multi-jurisdictional urban area have been merged into a single institution only after the functional integration of the metropolitan area is well advanced. While this has the advantage of providing more clarity on the problems generated by fragmented transport planning that can be solved by a metropolitan-wide authority, it also means that new metropolitan transport authorities face the challenge of providing transport solutions in a context where the location of employment and population has not taken into consideration the feasibility of offering necessary transport connections. In the MRDH area, commuting flows are still concentrated within the two former city-regions, and, while interactions across the whole area are growing, they are still low (Chapter 1). The MRDH thus has the potential to develop a mobility strategy and a transport network that can effectively accompany the employment and population dynamics generated by policies that aim at increasing integration of the MRDH area, for example through labour and housing market policies.

The MRDH authority aims to transition toward economically driven transport policies

In order to take advantage of its timely creation, the transport and economic pillars of the MRDH will need to work in close co-ordination to develop parallel plans for the region. TfL has been highly successful in generating economically driven transport policies that are well aligned with population and employment dynamics and effectively promote public and non-motorised transport modes. For instance, well-integrated transport, spatial and economic policies have contributed to making it possible for 90% of morning journeys to use public transport or non-motorised modes (TfL, 2015b). TfL's success highlights the importance of developing a transport strategy as an integral part of a broader long-term economic planning framework. For London, TfL is responsible for developing the Mayor's Transport Strategy, which is the long-term transport plan for Greater London. The development of the transport strategy is undertaken by taking into account the economic, spatial and environmental objectives set out in the Economic Development Strategy and the London Plan (the spatial development strategy), both developed by the Greater London Authority (see Annex 2.A1).

The MRDH will need to create a transport network that can help it meet the accessibility demand that could be generated by higher integration of the MRDH area. Development of long-term economic and urban planning strategies and forecasts of employment and population dynamics at the MRDH scale should be an essential input of

the regional transport strategy. Since the MRDH holds parallel strategic competencies for transport and economic development, it should be relatively straightforward to create a framework for long-term co-ordinated planning across these two areas. In the case of the mobility plan, the MRDH could play an important role in co-ordinating the development of an urban mobility plan for the MRDH with those of the 23 municipalities. The absence of competencies in spatial planning will have to be compensated through close co-ordination with the Province of Zuid-Holland. Co-ordinated land-use/mobility planning is essential for advancing transport-oriented development initiatives, such as Stedenbaan, mentioned earlier in the section on spatial planning.

The MRDH needs to demonstrate that it can address long-standing transport challenges: Congestion

In addition to supporting broader economic objectives, the MRDH transport authority should also address pending issues that have for decades hindered efficient and sustainable mobility in the region. A critical challenge is vehicle congestion: the Randstad region has lower than average commuting distances relative to the national average, yet longer travel times (Van der Waard, Immers and Jorritsma, 2012). Thus far, congestion has been addressed to a great extent via major expenditures on road improvements, such as increasing capacity by adding lanes, adding missing links to the network and improving dynamic traffic management systems (Stead and Meijers, 2015). Nonetheless, because additional road supply also induces increased car travel (known as "induced demand"), congestion remains a challenge.

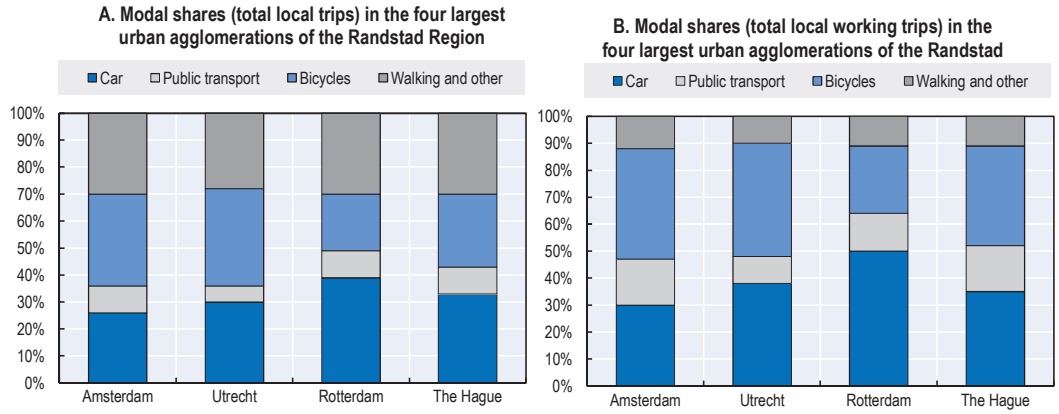
Data on modal share suggest that there is considerable potential to reduce congestion by shifting trips from private to public and non-motorised modes. Rotterdam and The Hague both have a higher share of travel by private vehicle than the other two large cities in the Randstad, Amsterdam and Utrecht (Figures 2.1A and 2.1B). In addition, Rotterdam and The Hague also show significantly lower participation of bicycles in the modal share than Amsterdam and Utrecht. In the case of work trips, in particular, Rotterdam has a much higher share of private car use than the other cities. Moreover, despite the existence of the Randstad Rail connecting Rotterdam and The Hague, around 65% of work trips between the two cities are via private vehicle (compared to almost half of trips via public transport between Amsterdam and Utrecht; see Figure 2.2). Travel between from Rotterdam and The Hague to Amsterdam also remains highly car-oriented.

Increasing reliance on public and non-motorised transport – both within the MRDH area and beyond – will be important for the MRDH to make significant progress toward alleviating congestion. Success in this area could bring important, visible quality of life improvements to residents of the MRDH area, and to the Randstad region as a whole. Previous analyses have concluded that it is necessary to invest in network extensions in order to increase both the capacity and the quality of public transport in the Randstad region (Wiegmans, 2009). Given the expanded geographic scope of the MRDH transport authority (with respect to those of the former city-regions), the MRDH should undertake a metropolitan-wide analysis to identify the necessary connections to increase public transport shares in the MRDH area. Metropolitan-wide analysis is also important to identify potential co-ordination improvements across modes and service providers – especially since public transport providers are different in Rotterdam and The Hague. Together, these efforts could complement the present strategy to improve public transport attractiveness by increasing frequency levels (Vervoersautoriteit Metropoolregio Rotterdam Den Haag, 2013). While information and ticketing are well integrated between the two areas, cross-border infrastructure and service connections need to be improved to

increase the attractiveness of public transport (Wiegmans, 2009). Some of the issues worth analysing are better co-ordination of schedules, increasing the role of buses as feeder services to mass transit and improving multi-modal connections. Also, even when bicycle infrastructure across the Netherlands is an international example of good quality, it would be worth analysing possible improvements in bicycle accessibility to public transport and inter-city nodes.

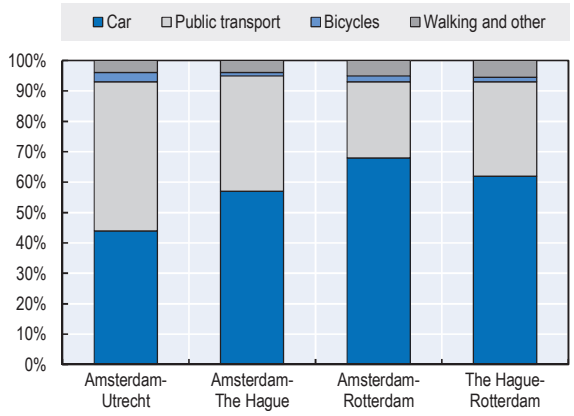
Figure 2.1. **Modal shares in the four largest urban agglomerations of the Randstad region**

Total local trips (Panel A) and total local working trips (Panel B)



Source: KiM (2014), *Mobility Report 2014*, KiM Netherlands Institute for Transport Policy Analysis, Netherlands.

Figure 2.2. **Modal share of trips between the largest cities in the Randstad region**



Source: KiM (2014), *Mobility Report 2014,* KiM Netherlands Institute for Transport Policy Analysis, Netherlands.

Enabling convenient origin-destination trips through improvements to public transport and non-motorised infrastructure will be important to attain more balanced mobility shares in the MRDH. However, as demonstrated in London and Singapore, among others, the MRDH should take advantage of its authority over a wide range of mobility policy to develop an integral strategy that combines increasing the attractiveness of public and non-motorised travel with active transport demand management to foster a significant modal shift (and alleviate congestion). While implementation of a congestion

charging scheme across the entire MRDH area would be politically difficult in the short term, other options could be explored by the MRDH.[30] For instance, the use of electronic road charging in specific corridors where high-quality public transport connections are available could be an important instrument to generate modal shift and alleviate congestion. This strategy could also help enlarge financial sources for the MRDH to invest in improvements to public transport services and non-motorised facilities. This strategy has been successful in Seoul (Korea), where a congestion charge has been implemented exclusively in a tunnel connecting the central and southern business districts. Charges are used to fund public transport improvements (ITF, 2013). Prices of the charges could be set in accordance with travel times, since the concentration of vehicles at peak hour is one of the major issues in the MRDH area (EMI, 2012). The MRDH could also generate further analysis on the social costs of car travel that could help raise public awareness about the importance of improving management of car use in the Metropolitan Region of Rotterdam-The Hague area. This could effectively enlarge public acceptance of more stringent transport demand management policies over the longer term.

The MRDH should communicate transport objectives and progress to the population

The transport objectives of the MRDH should be made clear to the population, and the MRDH should communicate periodically on progress toward these objectives. The overarching objectives developed to guide the MRDH transport plan should be easily accessible to the public (e.g. improving accessibility across the MRDH area, increasing the share of public transport and cycling, etc.). It will also be important to measure and communicate success periodically. For instance, TfL's annual publication, "Travel in London", reports progress on a wide set of indicators outlined in the Mayor's Transport Strategy (see Annex 2.A1).

Broadening political support for co-operation on transport plans and policies

This section discusses some actions that could be taken by the MRDH in order to attain political support from actors whose co-operation will be important for implementing transport plans and policies. Table 2.6 provides a first analysis of the MRDH's current conditions in terms of the legal authority that it has been granted. It also discusses the political actors that fully support the institution and those from whom support will be essential for advancing sustainable and inclusive mobility policies.

The support and political leadership from the Ministry of Infrastructure and the Environment, the Ministry of the Interior and the Mayors of Rotterdam and The Hague have been essential for the establishment of the MRDH, and will be an important asset for future development and implementation of its policies. The political support acquired by the MRDH from key actors – though some political challenges remain – has enabled it to secure a larger budget for transport that in most other areas in the Netherlands. Nonetheless, the ability of the MRDH to deliver public value through improved transport outcomes will depend on effective co-operation with a wider range of political actors as well as private stakeholders, among the most important being the Province of Zuid-Holland, all 23 of its municipalities, commercial developers and Dutch Railways (NS).

Table 2.6. **An effective transport authority: Strong political support**

Description and rationale	Leadership from key political actors has in many cases facilitated the creation and consolidation of an urban transport authority. In addition, support from other authorities, such as relevant ministries, can often be extremely important.
Assessment of current situation in the MRDH	**Legal authority:** As a transport authority, the MRDH has been developed under a formal legal arrangement with explicit competencies. Its solid legal framework as an independent institution is an important asset for the MRDH, and could significantly facilitate decision making and bring continuity to policies and projects. **Political support:** The MRDH has important leadership from the mayors of the two large cities in the area (Rotterdam and The Hague). It also has important support from the Ministry of Infrastructure and the Environment. Acquiring support from a wider range of political actors will be important for ensuring success of plans and projects and a solid future for the institution. In particular, it will be important to co-ordinate well with the province as well as to ensure future support from smaller municipalities in the region.
Status of the MRDH	**Legal authority:** Acquired. **Political support:** The MRDH has support from key actors but it is advisable to aim at widening support from a larger number of political actors
International examples	**Legal authority:** LAMATA (Lagos) received important support from the state governor in its initial years and its director was well recognised as a technically capable person. This support allowed LAMATA to increase its scope of influence to a larger set or projects. Initially LAMATA was set up to be in charge of the Lagos Urban Transport Project, which included implementation of a bus rapid transit project and the construction and maintenance of a core road network. Translink (Vancouver) has been able to enlarge its funding base by gaining **political support** from the municipalities. Thus it has been transferred the right over some transport-related charges, creating dedicated revenue sources for funding its activities (e.g. fuel tax, parking site tax).

Sources: OECD based on Kumar, A. and O.P. Agarwal (2013), "Institutional labyrinth. Designing a way out for improving urban transport services: Lessons from current practice", World Bank Group, Washington, DC, http://documents.worldbank.org/curated/en/2013/01/18821689/institutional-labyrinth-designing-way-out-improving-urban-transport-services-lessons-current-practice (accessed 27 May 2015); complemented with information from Aguilar Jaber, A. and D. Glocker (2015), "Shifting towards low carbon mobility systems", *International Transport Forum Discussion Papers*, No. 2015/17, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jrvzrjggnhh-en.

Improved co-operation with the province, private real estate developers should be priorities

As explained before, co-ordination between the MRDH and the province will be essential to ensure integration between spatial and transport planning. A third group of stakeholders with whom both institutions could work more closely is private developers. Co-ordination between public transport plans and the development of new office space has been particularly weak in the past. Overall lack of certainty in investment by private developers has hindered the success of public transport projects (Wiegmans, 2009). In addition, the mismatch between urban development and public transport connections has generated car-oriented mobility trends, which, once established, can be hard to reverse. For instance, the VINEX spatial planning strategy, described earlier in this chapter, channelled residential development to sites adjacent to existing cities, but often did not provide public transport connections. Convincing residents who had already begun commuting via car to shift toward public transport at a later stage proved to be extremely challenging (Stead and Meijers, 2015). Improving co-ordination between transport planning and urban development could be facilitated by creating better public-private co-ordination mechanisms. TfL, for example, has a team that closely communicates with property developers to ensure that development proposals are consistent with the Mayor's Transport Strategy. The team also offers guidance in the development of transport assessments, an evaluation of existing and necessary multi-modal transport connections in

the new development required for construction permits. The team also negotiates contributions for additional transport needs created by the developments in some cases. The MRDH can build on this example for the development of the public-private investment strategy for spatial and economic development. This initiative began in April 2015. The province is already a partner and the MRDH expects that the national government will also join. Investors are also being involved. If successful, this initiative could become an important platform for the development of a co-ordinated transport-spatial strategy, developed with inputs from the relevant public entities and which is also well co-ordinated with the private developer's actions. The development of an agreed portfolio of projects and an investment plan to enable their implementation would be important outputs of this initiative.

Smaller municipalities must also be well served by the MRDH transport authority

The MRDH would also benefit from ensuring the support of all municipalities in the area – not just the bigger ones. First, this could allow for better co-ordination of local policies and investment with a metropolitan-wide strategy. Second, it could increase long-term political certainty for the MRDH, reducing its dependency on the support of particular political leaders (e.g. the current Mayors of Rotterdam and The Hague), whose eventual successors could be less supportive of the institution. Currently, many of the smaller municipalities in the MRDH are under the impression that former city-regions have prioritised investment in projects that bring more benefits for larger cities.[31] It will be important for the MRDH to develop an inclusive transport strategy that identifies missing transport links and ensures high levels of accessibility throughout the metropolitan area.

The MRDH could improve co-operation with the national railways authority

Finally, an important step to improve the attractiveness of public transport within the MRDH area, and between the MRDH and the rest of the Randstad, will be for the MRDH to ensure co-operation from Dutch Railways (NS) to harmonise regional and national transport projects. National railway infrastructure plays an important role in trips across the Randstad region. For decades, local transport authorities have lacked a voice in the planning of national railway infrastructure running through the Rotterdam-The Hague area (OECD, 2010a). Spaans and Stead (2013) report that the NS prioritises services for long-distance, rather than local, travellers. This has hindered the co-ordination of local and national transport infrastructure development into a single strategy that improves the convenience of using both local and national connections for reaching desired origin-destination. Now with authority over a larger part of the Randstad, the MRDH may be in a better position than the former city-regions to improve co-ordination with the NS and attain better planning between local public transport and the national railway network.

Envisioning further changes to the structure of co-operation over the long term

At this point in time, it is difficult to predict how co-operation within the MRDH will evolve and what role the organisation will play in the coming years. The current context of "reform fatigue" following a series of territorial reforms (or attempted reforms) in the Netherlands would suggest that there is likely little scope to reform the existing structure of the MRDH body in the short term. Over the longer term, however, additional changes in the structure of co-operation in the MRDH may be needed, and may also be more

politically feasible. This final section considers three possible ways in which the MRDH could evolve over the longer term, presenting some of the advantages and disadvantages of each potential evolution.

Would it be desirable to expand the MRDH area?

One of the most natural evolutions of the MRDH could be to expand the geographic participation of the MRDH to include, for instance, Dordrecht and its surrounding municipalities to the south of the MRDH (highly connected with the economic activities of Rotterdam) and Leiden and its surrounding municipalities to the north (which maintains strong connections to The Hague and to the universities in Delft). This chapter has argued that policies that pursue stronger functional integration within the current MRDH area should be careful not to jeopardise the existing interactions between the municipalities within and outside the MRDH area. It is possible that eventually one or both of these municipalities might decide to join the MRDH. The MRDH appears open to this possibility, although it would require changes to the legal framework of the institution. Given the strong links between Dordrecht and Rotterdam, the involvement of Dordrecht in the MRDH would likely be a welcome development. In the case of Leiden, even though it has strong interactions with both The Hague and Amsterdam, its proximity to The Hague and the knowledge institutions in Delft could also make participation in the MRDH desirable.

Is it sustainable to maintain parallel regional economic agendas?

The existence of two parallel regional economic agendas – the EPZ led by the province and the economic strategy of the MRDH – represents a more immediate challenge for the region moving forward. These parallel agendas represent the difficulty in identifying a clear regional leader or "voice" to help guide the economic future of the region. One interviewed private sector executive described the unclear, overlapping responsibilities and initiatives in the public sector, notably between the province and the municipalities, as the most pressing problem for regional economic policy. As such, over the long term, one solution could be to streamline responsibilities for regional economic development in the region. Further centralisation could also be advisable because communication is an important aspect of regional economic policy: the public sector must be aware of the needs of businesses to be able to react to them, and businesses must know about opportunities provided by the public sector in order to react to them. Having a single organisation responsible that is responsible for economic policies can allow for a clearer communication strategy in both directions. Streamlining and centralising responsibilities could make economic development policy in the region more transparent and help businesses to benefit better from it. It would be important, however, to find a solution that merges both the political backing of the municipalities that is inherent to the MRDH and the triple-helix element of the EPZ.

However, it should be mentioned that other Dutch urban areas – namely, Amsterdam – operate in a similar fashion as the current MRDH situation, with one economic agenda led by the Amsterdam Metropolitan Area (a voluntary, bottom-up co-operative platform that will be discussed in detail in Chapter 3) and another led by the Province of Noord-Holland. These parties work together as partners, rather than competitors, and find their dual economic strategies to be complementary visions for the future of the region. Certainly, if the MRDH and the Province of Zuid-Holland could develop a stronger partnership and find a way to speak with one voice, the parallel economic agendas may not pose a problem.

Would it be desirable to expand the competencies of the MRDH to include other policy areas?

Another issue for reflection is the current allocation of ideally complementary policy fields across different institutions. The responsibilities for spatial planning (which has remained a function of the Province of Zuid-Holland), economic development (which is a competency of the province, but also a field of work of the MRDH) and transport (a competency of the MRDH) are particularly relevant. Achieving the ambitions of both the MRDH and the province in this region will require that these three areas are well co-ordinated: for instance, the MRDH aims at increasing the economic growth in the region by fostering economic integration of the region, and spatial planning policies can contribute to this goal by providing sufficient space for the economy to grow, and to grow together. It should also be mentioned that the former city-regions had competencies in all three fields, some of which were also shared with other levels of government (Chapter 3).

Over the long term, and depending on the evolution of broader institutional arrangements in the Netherlands (Chapter 3), one possibility that has been put forward would be to centralise the responsibilities for spatial planning and transport in this particular area of the Netherlands within a single institution, such as the MRDH. Such a change could help to ensure better integration of the different policy fields and develop synergies among them. While a transfer of spatial planning competencies from the province to the MRDH could eventually be a natural evolution in this particular area of the Netherlands, it may not at all be an appropriate solution in other parts. The central government has been experimenting with a more asymmetric approach to governance; an evolution in the allocation of responsibilities between the MRDH and the Province of Zuid-Holland may be possible over the longer term, while provincial functions in other parts of the Netherlands are maintained, or even strengthened (see OECD, 2014b).

However, a formal transfer of competencies is not necessarily inevitable. Experience in other OECD countries has shown that while alignment of spatial planning, transport and, in many cases, economic development policies is extremely important, these areas are regularly managed by different authorities in many OECD metro regions (such as Vancouver [Canada] and Portland, Oregon [United States]). Integrated spatial and economic policies are thus not exclusively the product of a single metropolitan authority; separate bodies can manage these policy fields with success, so long as effective co-ordination mechanisms are in place between municipalities, metropolitan authorities and regional/state agencies (see Chapter 3 for details). A more productive way forward could be for both the MRDH and the Province of Zuid-Holland to find ways to work as partners (discussed in detail in Chapter 3). In the short to medium term, the focus of the MRDH should be to work with provincial authorities to ensure that these three policy fields are well aligned and mutually consistent. Beyond the complementarities of these policy fields, close co-operation with the province on spatial planning is desirable for the MRDH, as the staff of the province is highly experienced in spatial planning and could provide valuable contributions to any spatial strategy of the MRDH. The province, meanwhile, could consider adopting a more flexible approach to spatial planning than it has in the past. The highly restrictive practices in recent decades could be relaxed to support the development of a more dynamic regional future.

Key findings and recommendations

- Public policies that have either explicitly or implicitly stymied agglomeration economies, in addition to complex relationships among regional actors, have impeded the functional integration of the MRDH area. National spatial planning policies of the past sought to prevent cities from forming large, continuous urban agglomerations. The provincial authorities have adopted an activist approach to spatial planning to guide new development to specific locations so as to promote more equal distribution of economic and residential activities throughout the region. Social housing policies further limit the spatial integration of the MRDH by constraining labour mobility. Historic tensions between the municipalities that make up the MRDH and the Province of Zuid-Holland have also discouraged the development of a single, unified region.
- The MRDH body has formal competencies in two fields: economic development and transport. Its legal competencies and financial resources for economic development are limited: it does not possess any "hard tools" as its responsibilities are based on a voluntary agreement among member municipalities without any enforcement mechanisms, and its budget is small (EUR 5.5 million). In the field of transport, the MRDH is responsible for the strategic management of public and private transport and has a significantly larger budget (EUR 475 million).
- To achieve its economic policy objectives, the MRDH could consider two overarching strategies:
  - Focusing inward to promote greater integration of the MRDH: The MRDH could: 1) focus on strengthening agglomeration economies within the region whilst preserving existing economic connections to areas outside the MRDH; 2) facilitate the process of regional economic transition; 3) attract outside funding to support its economic development objectives; 4) address key strategic questions for regional economic policy. In particular, in addition to the co-operative platforms already in place, it will also be important to consider in what ways limited economic competition – rather than co-operation – between municipalities could benefit the region.
  - Looking outward to boost the competitiveness of the MRDH relative to other Dutch urban areas as well as its international profile: At the same time, the MRDH could help to cement its position on the national and global stage by: 1) establishing the MRDH as the voice for external relations; 2) developing an internationalisation agenda; 3) pursuing larger scale projects and flagship events.
- While greater economic integration could reap important agglomeration benefits for the MRDH area and potentially the country as a whole, it is neither an automatic nor a simple process. It will take time and likely result from a range of economic, transport and spatial planning policies at different levels of government. Greater economic integration should thus be conceived as a complex, long-term ambition.
- In terms of its transport competences, the MRDH could focus on two aspects to ensure that it can leverage itself effectively as the single transport agency for the area:
  - Demonstrate that it can deliver public value in the form of mobility improvements that are significant, effective and visible to the population by: 1) designing economically driven transport policies for the region; 2) addressing long-standing regional transport challenges, like congestion; 3) communicating transport objectives and progress to the population.

Key findings and recommendations (*continued*)

  - Broaden political support from actors whose co-operation will be critical to implement transport plans and policies by: 1) improving co-operation with the province and private real estate developers; 2) ensuring that smaller municipalities are equally well served by the MRDH transport authority; 3) improving co-operation with Dutch Railways to harmonise national and regional transport projects.

- The MRDH co-operative structure may need to evolve over the long term. First, it may consider expanding its geographic boundaries to include, for instance, the cities of Dordrecht, Leiden and their surrounding municipalities. Second, it could be valuable to merge the parallel regional economic agendas of the MRDH and the South Wing Economic Programme Board (EPZ) into a single agenda for the region. Finally, although it can be desirable to have transport and spatial planning functions managed by a single entity, it is not required. Rather, it is most important to ensure effective co-ordination between the two policy fields.

Notes

1. As discussed in Chapter 1, the Metropolitan Region of Rotterdam-The Hague (MRDH) is comprised of the 23 municipalities that previously formed the city-regions of Rotterdam and The Hague. It came into existence in January 2015 following significant political negotiations between local and central government authorities upon the abolition of the city-regions in the Netherlands.

2. This argument is supported by Brezzi and Veneri (2014) who find that on the regional level, a more polycentric city structure is correlated to lower per capita GDP levels. Thus, reducing the degree of polycentricity can be expected to increase per capita GDP levels in the region.

3. In the case of the Aix-Marseille metropolitan region in France, for instance, better connectivity within the region could help more residents – especially the most marginalised – access educational and employment opportunities that are not currently possible (OECD, 2013).

4. If the entire region depended on a single economic sector, a decline in this sector would have much more severe consequences than a decline in any given sector would have in the current economic configuration of the region. Thus, the region is less likely to be subject to severe economic fluctuations than it would otherwise be.

5. See, for example, Meijers et al. (2014). Complementarity implies that one activity is required to make another one function well and vice versa, which is generally not the case for the sectors mentioned above. For example, port-related activities in Rotterdam are likely to work just as well without the presence of the government or of international organisation in The Hague. Similarly, the other economic sectors in

the region operate mostly independently of each other and would not be severely affected if another sector suddenly disappeared. See Chapter 1 for further details.

6. The aims of this working commission were threefold: 1) assess the challenges relating to present and future development in the Western Netherlands; 2) recommend public policies, with special attention to the North Sea Canal and The Hague areas; 3) achieve these aims in co-operation with other strategic partners at the provincial and municipal levels.

7. The management of these areas is now the responsibility of the province.

8. Such policies might be planning policies, but could also be other measures such as subsidies for economic activity in specific regions. Glaeser and Gottlieb (2008) show that such policies can be beneficial under specific conditions, but tend to reduce overall economic activity in most cases. See also Kline and Moretti (2014).

9. The vacancy rate of office space in Rotterdam reached 18.5% in the fourth quarter of 2013 in Rotterdam, equivalent to 800 000 square metres, and up to 28% in some neighbourhoods within the city (Kleeton, 2014).

10. As De Boer and Bitetti (2014) demonstrate, the position of social housing corporations is crucial to understanding the Dutch housing market. Housing associations are not-for-profit private actors with a dominant market position that provide social housing and own 77% of all rental dwellings in the Netherlands. They work within a public legal system and are obliged to reinvest any surpluses in social housing and related fields (regulated in national decrees). There is a substantial system of state aid in place that safeguards the "societal capital" of the housing associations.

11. The rental ceiling for a given social dwelling is based on characteristics such as size, amenities and neighbourhood factors; however, the location and market value of the dwelling are not part of this calculation (see De Boer and Bitetti, 2014; www.government.nl/issues/housing/rented-housing).

12. OECD (2007), for instance, reported that a typical local authority will have close to 30 co-operative arrangements, which are task-specific and confined to a single policy field.

13. The MRDH is now comprised of Rotterdam, The Hague and 21 surrounding municipalities, following the merger of Spijkenisse and Bernisse into Nissewaard as of January 2015.

14. Additional funds for investments in local or regional infrastructure projects can be made available at national level (the Multi-year Plan for Infrastructure, Transport and Spatial Planning [*Meerjarenplan Infrastructuur, Ruimte en Transport*, MIRT]).

15. Support for the MRDH is especially strong from Rotterdam and The Hague. Smaller municipalities are more ambivalent towards the MRDH, but generally see it in their interest to follow the leadership of the big cities. Moving forward, the MRDH will have to solidify the support from smaller municipalities by making sure their interests are taken into account.

16. The potentially distortive effects of place-based subsidies to firms do not imply that other place-based policies are harmful. To the contrary, the OECD advocates, for example, for public service provision that is tailored to the requirements of a place.

17. See Autor (2014) for a general overview of trends in automation and its impact on employment and the demand for skills.

18. Liquid bulk goods (such as crude oil and oil products) made up 49.3% of the freight handled in the Port of Rotterdam, compared to an average of just 36.3% in other European ports (excluding Rotterdam).

19. Both, the Port of Rotterdam Authority and the city of Rotterdam are aware of the potential implication and are working on a strategy to manage the transition of the port economy away from the petrochemical sector.

20. Faggio and Overman (2014) find that on the local level public sector employment does not crowd out private sector employment and thus increases total local employment levels. It does, however, affect the composition of the local private sector and causes a shift from the tradable to the non-tradable sector.

21. Florida (2002) is a well-known proponent of this argument.

22. As De Boer and Bitetti (2014) point out, the private rental market in the Netherlands is marginal since it is "crushed" between a large social rental sector (which is dominated by non-profit housing associations) and the owner-occupied sector (where owners receive substantial fiscal benefits). The private rental market is primarily accessed by younger and/or flexible people, who need housing on short notice, are unable to buy or who do not get access to social housing. Boosting the private rental market could be achieved, in part, by relaxing rent regulations: 93.5% of all rental dwellings are regulated and thus subject to central government rent controls for existing and new tenancies (see Høj, 2011; De Boer and Bitetti, 2014; OECD, 2014c, 2010a). Additional reforms could aim to continue recent reforms to differentiate social housing rents by income levels and introduce tighter conditions for eligibility to ensure that social housing associations target their stock to those most in need.

23. The Collective Innovation for Public Transport in European Cities (CIPTEC) project is a research and innovation project of the European Union Horizon 2020 programme for fostering modern, creative and innovative transport sectors. For further information, see: http://ciptec.eu/news/analysis-of-market-and-social-trends-in-public-transport.

24. See: http://ec.europa.eu/regional_policy/en/information/publications/guidelines/2014/guidance-fiche-integrated-territorial-investment-iti for further information on ITIs.

25. Such services are, for example, offered by Rotterdam Partners, the business development agency of the city of Rotterdam. To provide a coherent image of the region and strengthen its attractiveness as a whole, they would ideally be provided by a single organisation for the entire MRDH region.

26. The idea that competition between municipalities is welfare enhancing was formally introduced in a seminal contribution by Tiebout (1956). Oates and Schwab (1988) provide a further exposition of the conditions under which competition between municipalities can be welfare enhancing.

27. OECD (2015a) discusses policy fields that particularly require co-ordination between local governments.

28. As shown by Oates and Schwab (1988), such competition can be welfare reducing.

29. Brueckner (2000) provides some evidence for the existence of such a race to the bottom in welfare policy and Engel (1997) argues that a race to the bottom exists in the context of environmental policy in the United States.

30. The Dutch Coalition Agreement released by the national government in 2012 specifically mentioned that the government would not introduce road pricing in the form of a kilometre levy; instead, the government indicated a preference for making better use of transport infrastructure to reduce congestion (see: www.government.nl/government/coalition-agreement).

31. Based on OECD interviews with a range of municipal authorities in the MRDH.

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Annex 2.A1. Integrated planning in London

London's integrated planning framework is based on three key documents: the London Plan, the Economic Development Strategy and the Mayor's Transport Strategy. The planning framework is complemented with other strategies (e.g. the Mayor's Climate Change Mitigation and Energy Strategy, the Air Quality Strategy). The strategies outlined in the three main planning documents are closely related.

The London Plan: Long-term spatial development strategy

The London Plan sets out the long-term spatial development strategy (currently to 2036) (GLA, 2010a). It identifies the main objectives for London:

- a city that meets the challenges of economic and population growth
- an internationally competitive and successful city
- a city of diverse, strong, secure and accessible neighbourhoods
- a city that delights the senses; a city that becomes a world leader in improving the environment
- a city where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities.

The London Plan addresses specific planning policies that can, on the one hand, help Transport for London (TfL) cope with the impacts of demographic growth and, on the other hand, foster urban development conditions that are favourable to more sustainable mobility. Examples of these policies are:

- housing densities, which are linked directly to public transport accessibility levels
- maximum car parking limits that are also linked to public transport accessibility
- minimum cycle parking standards for all different types of land use
- requirements for electric charging provision in new developments
- construction and servicing management plans.

The Economic Development Strategy

The Economic Development Strategy (EDS) outlines the long-term economic vision and goals for London (GLA, 2010b). Long-term projections of continuing growth in London's economy and population (various scenarios are examined in the London Plan) are an essential input to the EDS. All proposals in the EDS must be consistent with the spatial strategy set out in the London Plan. The EDS in force (developed in 2010) sets out the following objectives:

- promote London as the world capital of business, the world's top international visitor destination, and the world's leading international centre of learning and creativity
- ensure that London has the most competitive business environment in the world
- make London one of the world's leading low-carbon capitals by 2025 and a global leader in carbon finance
- give all Londoners the opportunity to take part in London's economic success, access sustainable employment and progress in their careers
- attract the investment in infrastructure and regeneration which London needs, to maximise the benefits from this investment and in particular from the opportunity created by the 2012 Olympic and Paralympic Games and their legacy.

The Mayor's Transport Strategy

The Mayor's Transport Strategy (MTS) lays out the strategic direction for TfL to 2031 (TfL, 2010). TfL is the statutory authority responsible for ensuring the delivery of the MTS. The MTS takes into account the emerging policies in the London Plan and the EDS and is supported by a detailed evidence base, including the "Travel in London" report (Box 2.A1.1), strategic transport models and recommendations from the Outer London Commission.

The MTS currently in force identifies six major objectives:

- support economic development and population growth
- enhance the quality of life for all Londoners
- improve the safety and security of all Londoners
- improve transport opportunities for all Londoners
- reduce transport's contribution to climate change and improve its resilience
- support delivery of the London 2012 Olympic and Paralympic Games and its legacy.

Box 2.A1.1. **Overview of the "Travel in London" annual report**

"Travel in London" is the annual report issued by Transport for London (TfL). It provides key statistics and communicates the progress of TfL and its partners toward delivering quality transport in London. The document is divided into two main parts: 1) travel demand and the performance of transport networks; 2) monitoring and assessing progress with the implementation of the Mayor's Transport Strategy. As part of the second section, TfL reports on the evolution of a wide range of indicators that measure its progress in delivering the objectives set by the Mayor's Transport Strategy. The following indicators are used by TfL:

- Total number of trips.
- Total number of journey stages.
- Modal shares.
- People's access to jobs: number of jobs available to people within a 45-minute travel time by public transport.
- Journey time reliability indicator: percentage of vehicle journeys completed within five minutes of a typical average journey time.

Box 2.A1.1. **Overview of the "Travel in London" annual report** (*continued*)

- Average traffic speed.
- Public transport reliability: extra time that people have to wait over and above that if the service was running exactly to schedule (for buses and the underground); percentage achievement of operational or reliability targets (other rail modes).
- Public transport capacity: place-kilometres offered by the principal public transport modes.
- Operating costs per passenger kilometre (both gross and net expenditure per passenger kilometre).
- Asset condition: asset deemed, according to benchmarks previously set by TfL, to be in "good" condition.
- Emissions from particulate matter (PM_{10}) from ground-based transport (as a total over the calendar year).
- Emissions of nitrogen oxides (NO_x) from ground-based transport.
- Perception of customer satisfaction with aspects of the transport environment that contribute to quality of life: six indicators are used to measure this. They are all scaled from 0 to 100 and scores are derived from annual surveys conducted among Londoners or users of particular parts of the transport system (as appropriate). The six indicators are: 1) public transport customer satisfaction; 2) public transport crowding (satisfaction indicator); 3) road user customer satisfaction; 4) perception of journey experience; 5) perception of noise; 6) perception of the urban realm.
- Number of road traffic casualties (killed or seriously injured).
- Crime rates on public transport.
- Perception of crime/safety while travelling: percent of people that feel safe when travelling in public transport.
- Access to jobs and services: local area score of average journey time by public transport, walking and cycling to jobs and local services.
- Physical accessibility to the transport system: level of step-free access across the TfL public transport and streets networks, expressed as a weighted average according to the relative use made of each mode. It is expressed as a percentage score.
- Real fares levels: average actual fare paid in London per kilometre travelled. It is a composite measure, covering bus and underground only.
- Emissions of CO_2 from ground-based transport in London.

Source: TfL (2014) "Travel in London Report 7", Transport for London, London, available at: https://tfl.gov.uk/cdn/static/cms/documents/travel-in-london-report-7.pdf.

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Chapter 3.

Metropolitan governance in the Metropolitan Region of Rotterdam-The Hague and in the OECD

This chapter explores the mechanics of governance in the Metropolitan Region of Rotterdam-The Hague (MRDH). It first provides an overview of the key features of the MRDH body against the backdrop of recent metropolitan governance reforms across the OECD. It then explores ways to enhance the effectiveness of the MRDH in the short term and in the long term. Finally, the chapter places the MRDH initiative in the broader context of the Dutch National Urban Agenda as a renewed effort to strengthen urban areas.

Introduction

The creation of the Metropolitan Region of Rotterdam-The Hague (Metropoolregio Rotterdam Den Haag, MRDH) marks an innovative experience of metropolitan governance among both Dutch and OECD regions. While in the rest of the Netherlands, the abolition of city-regions redistributed their responsibilities either to the upper level (provinces) or to the lower level (municipalities), in this case, the two former city-regions of Rotterdam and The Hague gave way to a single, renewed metropolitan authority on their consolidated perimeter. Composed of 23 municipalities, the MRDH combines the competency for transport, transferred from the city-regions by the central government, and the competency for economic development, voluntarily delegated by member municipalities. This hybrid initiative builds on a strong new momentum for co-operation, spurred by the mayors of two cities that have not been traditional partners: Rotterdam and The Hague. Operational since January 2015 in a crowded institutional landscape, the MRDH is the latest player in a string of attempts to fill the gap between the provincial scale (too large for addressing many socio-economic challenges adequately) and the municipal scale (too small). Against the backdrop of "reform fatigue" in the Netherlands after a series of territorial reforms, there is a widely shared desire to move beyond political battles about institutional structures, together with an urge for tangible results in a relatively short period of time. Further to the city-regions, the MRDH – together with the Metropolitan Region of Amsterdam (Metropoolregio Amsterdam, MRA) – also represents a renewed experiment of asymmetrical metropolitan governance for the Dutch government, which is currently working on elaborating a National Urban Agenda and seeking new tools for strengthening urban areas.

This chapter is divided into three sections. The first section offers an overview of the MRDH's key features against the backdrop of recent metropolitan governance reforms across the OECD. The second section explores possible ways to enhance the effectiveness of the MRDH in the short and long term. Finally, the third section puts the MRDH initiative in the broader context of the Dutch National Urban Agenda.

Overview of the Metropolitan Region of Rotterdam-The Hague in the context of OECD metropolitan governance trends

As urban areas continue to grow, resulting in administrative borders that often no longer match our daily economic realities, many OECD countries have created specific mechanisms for metropolitan governance. Co-operation can take many forms, but often share an ambition to reduce fragmentation and manage complex issues at the right economic and social scales. Concretely, this may imply tools and platforms to co-ordinate policies across neighbouring cities and towns or create stronger linkages between urban and rural areas.

Nevertheless, in 2014, the Netherlands decided to abolish the eight compulsory metropolitan-level co-ordination mechanisms that had previously been established under the name of city-regions. The lack of democratic legitimacy of the city-regions was a major reason for giving back their responsibilities to provinces and municipalities, effective as of January 2015. Only the two largest urban areas in the Netherlands, Amsterdam and Rotterdam-The Hague, came out of the latest reform with their own new metropolitan governance arrangements. Whether such arrangements will stand the test of time remains to be seen, as the Dutch institutional framework for metropolitan governance has been evolving every ten years or so since the mid-1980s (Table 3.1).

Comparable to the models currently in place in Barcelona (Spain), Montreal and Vancouver (both in Canada), the MRDH is a non-elected inter-municipal authority (Table 3.2). This section briefly reviews the promising assets with which the MRDH has debuted in the Dutch institutional arena. Such assets include: a bottom-up approach of collaboration; the political backing of not only two mayors of large cities (Rotterdam and The Hague) but also 21 surrounding municipalities; key strategic competencies; a sizeable stream of financing; permanent staff; and a medium-term timespan.

Table 3.1. **Chronology of main metropolitan governance reforms leading to the Metropolitan Region of Rotterdam-The Hague**

Year	Reform
1950	Joint Regulations Act (*Wet Gemeenschappelijke Regelingen*, WGR Act): introduces the possibility for municipalities and other authorities (e.g. water boards) to engage into voluntary co-operation
1985	Revision of WGR Act: makes collaboration compulsory for regions that have "major co-ordination problems", especially related to spatial planning and transport; also allows for the creation of new regions by municipal proposal
1994	Framework Law on Changing Governance (*Kaderwet Bestuur in Verandering*): temporary law that made it compulsory for municipalities in seven "city-regions" to co-operate on spatial planning, mobility and economic development issues
2005	WGR+ Act: gives a permanent legal status to the "city-regions"
2015	Abolition of the eight city-regions[1] in the Netherlands: their competencies are given back either to the provinces or to the municipalities
2015	The Metropolitan Region of Rotterdam-The Hague (MRDH) came into force
2024	A decision will be taken about the continuation or termination of the MRDH (see discussion later in this chapter).

Note: 1. The eighth city-region was created in 2006 under the name of Parkstad Limburg. However, it differed from the other seven city-regions in that it did not receive the traffic and transport grant from the central government and its competencies were not specified in a special law.

Source: Author's own elaboration.

An encouraging form of bottom-up co-operation between two cities

The current *modus operandi* of the MRDH reflects the carefully designed balance of powers between the two largest cities, as well as between them and their smaller neighbours (Figure 3.1). The mayors of Rotterdam and The Hague rotate every two years as the chair of the highest decision-making organ of the MRDH, the general management (*algemeen bestuur*), which meets four or five times a year. The general management is composed of 27 people: from Rotterdam and The Hague respectively, the mayor, 1 alderman in charge of transport and 1 alderman in charge of economic development; and 1 representative from the other 21 member municipalities. Representatives in the general management have a varying number of votes, depending on the population size of the municipality they represent. For instance, each representative of Rotterdam has 15 votes, each representative of The Hague has 13 votes, the representatives of Delft, Zoetermeer and Westland have 9 votes and so on, up to the smallest municipalities, whose representatives have 2 votes each. Decisions within the general management require an absolute majority of votes, which Rotterdam and The Hague together do not have (although they represent more than half of the inhabitants of the MRDH), as the allocation of the number of votes is not strictly proportional to population size. Given the Dutch culture of political consensus, it is also generally expected that most decisions will be taken unanimously. Member municipalities are also represented in two sorts of committees: 1) two administrative committees (*bestuurscommissie*), for transport and economic development, respectively, which are composed of 23 aldermen each,

Table 3.2. **Overview of selected metropolitan governance models in OECD countries**

Examples	Metropolitan governance structure	Coverage of metropolitan governance structure	Competencies
Non-elected inter-municipal authorities			
Metropolitan Region of Rotterdam-The Hague (MRDH)	– General management of 27 members – Executive Board of five members	2.2 million people across 23 municipalities	– Transport – Economic development
Barcelona (Área Metropolitana de Barcelona, AMB)	– Metropolitan Council composed of 90 members (the mayors from all 36 municipalities and city councillors appointed by their municipalities) – President of AMB (Mayor of Barcelona) – 485 staff (as of 2014)	3.2 million people across 36 municipalities	– Strategic planning – Spatial planning – Transport and mobility – Water – Waste treatment – Social cohesion – Economic development
Montreal (Montreal Metropolitan Community, MMC/Communauté métropolitaine de Montréal, CMM)	– Community Council composed of 28 members (mayors and city councillors) – President (Mayor of Montreal)	4 million people across 82 municipalities	– Spatial planning – Transport – Economic development – Social housing – Metropolitan infrastructure and services – Waste management planning – Wastewater sanitation
Vancouver (Metro Vancouver)	– Board composed of 38 members representing the 23 local authorities – 1 500 staff	2.5 million people across 23 local authorities (21 municipalities, 1 electoral area, 1 treaty First Nation)	– Regional services, including three core utilities (water, liquid waste, solid waste) – Regional planning (Regional Growth Strategy, RGS)
Elected metropolitan governments			
Portland (Portland Metro)	– Metropolitan Council composed of six members (one in each district), directly elected every four years – President of the Council, directly elected region wide every four years	1.5 million people across 25 municipalities	– Land-use planning (e.g. urban growth boundary) – Transport planning (as a Metropolitan Planning Organisation, MPO) – Managing several park facilities – Handling waste disposal – Maintains landfills and recycling transfer stations – Owning and operating some major facilities (e.g. zoo, convention centre, exposition centre)
Stuttgart (Verband Region Stuttgart, VRS)	– Regional assembly of 93 members directly elected every 5 years by proportional vote – President of the regional assembly and regional director, both elected by the members of the regional assembly	1.96 million encompassing the city of Stuttgart and 5 surrounding districts (total of 179 cities and municipalities)	– Regional spatial planning – Transport infrastructure and operation (including suburban rail S-Bahn) – Regional economic and touristic development

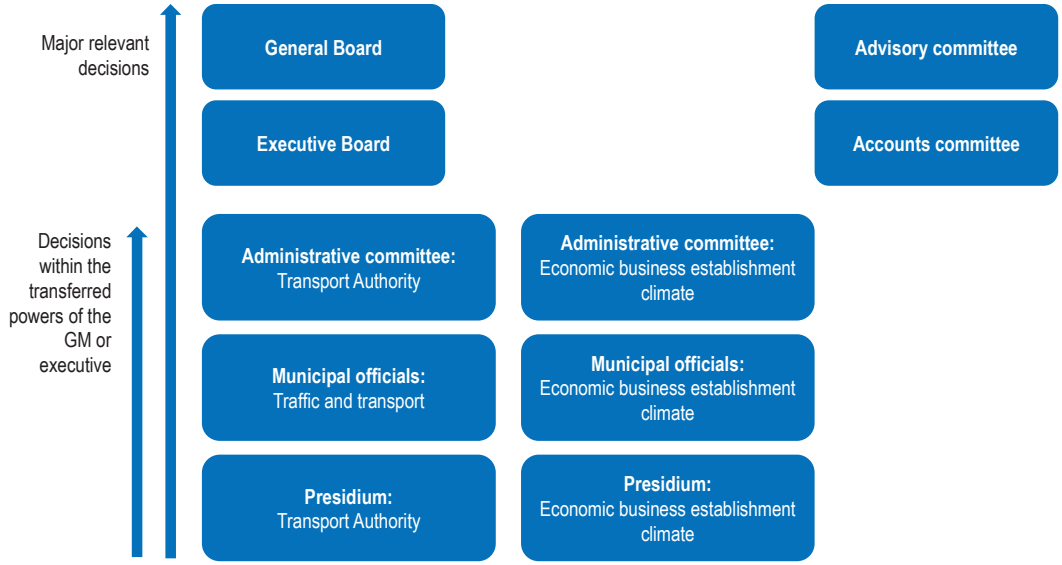
Table 3.2. **Overview of selected metropolitan governance models in OECD countries** (*continued*)

Examples	Metropolitan governance structure	Coverage of metropolitan governance structure	Competencies
London (Greater London Authority, GLA)	– London Assembly of 25 members directly elected by proportional representation – Mayor of London directly elected every four years	8.2 million across the city of London and 32 boroughs	– Land use (London Plan) – Transport (Transport for London) – Policing (Mayor's Office for Policing and Crime) – Fire and rescue (London Fire and Emergency Planning Authority) – Development (GLA Land and Property)

Source: Author's own elaboration based on OECD (2015a), *Governing the City*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264226500-en.

appointed by the general management; and 2) two advisory committees (*adviescommissie*), for transport and economic development, respectively, which are composed for 46 municipal councillors (2 councillors per municipality) each, and other advisory committees on different subjects. The mayors of Rotterdam and The Hague serve as the chair and the vice-chair of the Executive Board (*dagelijks bestuur*), which includes three representatives from other municipalities and prepares decisions for the general management.

Figure 3.1. **Organisation chart of the Metropolitan Region of Rotterdam-The Hague**



Source: Adapted by authors based on documents provided by the MRDH authority.

The voluntary, bottom-up collaboration among municipalities is a positive, distinctive feature of the MRDH compared to other OECD metropolitan regions built around two large cities. In this regard, two examples offer an interesting contrast to the MRDH: Aix-Marseille (France) and Minneapolis-St. Paul (United States), two regions characterised by long-standing antagonism between their two largest cities (Table 3.3). The deeply rooted rivalry between Aix and Marseille (and more broadly among different local governments in the larger area around them) has never quite subsided, and the central government has taken decisive action to make metropolitan governance reform happen in this context by adopting two major laws despite fierce local resistance (Box 3.1). In the case of Minneapolis-St. Paul, the Minnesota legislature created the Metropolitan Council as a regional planning body, with the support of local officials and business and civic leaders (Box 3.2). In both examples, the drivers for metropolitan governance reform originated from the upper levels of government rather than bottom-up from the municipalities as in the MRDH. Rotterdam and The Hague share a similar population size (accounting for 28% and 23% of the MRDH total population, respectively), whereas in the Aix-Marseille-Provence area, for example, one city clearly outweighs the other (Marseille accounts for 47% of the Aix-Marseille-Provence population, against only 8% for Aix).

Table 3.3. **Governance structures of selected OECD metropolitan regions that include two large cities**

Rotterdam-The Hague, Aix-Marseille, Minneapolis-St. Paul

	Rotterdam-The Hague (Netherlands)	Aix-Marseille (France)	Minneapolis-St. Paul (United States)
Current metropolitan governance structure	– Metropolitan Region of Rotterdam-The Hague (MRDH) – Operational since January 2015	– Métropole Aix-Marseille-Provence – Scheduled to be operational as of January 2016	– Metropolitan Council (often called Met Council) – Created in 1967 by the Minnesota legislature, and responsibilities were expanded in 1974, 1976 and 1994
Population covered by the metropolitan governance structure	– 2.2 million – 23 municipalities	– 1.8 million – 93 municipalities	– 3 million – 7 counties
Share of the two large cities in total metropolitan population	– Rotterdam: 616 295 inhabitants (27.9% of MRDH population) – The Hague: 505 855 (22.9%)	– Aix: 140 000 inhabitants (7.8% of the Aix-Marseille-Provence population) – Marseille: 850 636 inhabitants (47.2%)	– Minneapolis: 400 070 inhabitants (13.5% of the Twin Cities population) – St. Paul: 294 873 inhabitants (9.8%)
Internal structure	– General management – Executive Board of five members	– Metropolitan Council, initially elected by municipal councillors, then to be directly elected by citizens – President to be elected by the Metropolitan Council – Subdivided into "*territoires*" (sub-units corresponding to the previous inter-municipal organisations)	– Board of 17 members appointed by the Governor of Minnesota (16 representatives of geographical districts and 1 chair)
Previous governance structure (before the reform)	– Two distinct city-regions (Rotterdam and The Hague)	– 6 inter-municipal authorities	
Budget	– 98% from grants from the central government (EUR 475 million) – 2% from voluntary contributions from member municipalities (EUR 5.5 million)	– Estimated to be around EUR 524 million – Upon its creation, it is expected to receive an additional transfer of EUR 50 million from the central government	Operating budget of USD 936 million (in 2015) coming from: – 38% from user fees (e.g. transit fares and wastewater treatment charges) – 50% from state, federal and local government funds – 9% from metropolitan-wide property tax – 3% from other sources
Staff	95 employees	9 000 employees	3 700 employees
Responsibilities	– Transport – Economic development	– Transport – Economic development – Spatial planning – Housing – Environmental protection – Various public services (e.g. water, waste)	– Transport (includes Metro Transit, the largest public transportation operator) – Economic development – Regional planning – Housing – Environmental services (e.g. wastewater) – Parks – Tax base sharing programme
Next upper level of government	Province of Zuid-Holland	– Département des Bouches-du-Rhône – Région Provence-Alpes-Côte d'Azur (PACA)	State of Minnesota

Sources: Author's own research drawing on various sources, including OECD (2013b), "Vers une croissance plus inclusive de la métropole Aix-Marseille: Une perspective international", OECD, Paris, available at: www.oecd.org/regional/regional-policy/Aix-Marseille.pdf; website of Metropolitan Council, www.metrocouncil.org (accessed 9 June 2015).

Box 3.1. Central government intervention to enhance metropolitan governance around two large cities: The example of Aix-Marseille-Provence (France)

A long history of competition between Aix and Marseille

The history of competition between Aix and Marseille dates back to more than centuries, even millenniums according to some researchers. Tremendous economic, social and cultural differences prevail between the two cities, even though they are located only 25 kilometres from each other. While Marseille has thrived as a major port and trade city, much smaller Aix has traditionally been the city of politics, justice and universities. Marseille concentrates massive challenges related to unemployment, poverty and insecurity, whereas Aix continues to create jobs. Aix and Marseille are part of a wider area scarred by administrative fragmentation, not only between the two of them, but also between their respective inter-municipal collaboration bodies (Aix belongs to the communauté d'agglomération du Pays d'Aix-en-Provence, while Marseille is a member of the communauté urbaine Marseille Provence Métropole).

The key role of the national government

The French government has played a powerful role in reforming metropolitan governance in the area by adopting two successive laws. First, the law of 16 December 2010 introduced the possibility to create *métropoles* (metropolitan areas for areas of over 500 000 inhabitants) and *pôles métropolitains* (metropolitan poles with over 300 000 inhabitants). In Marseille, this law facilitated the organisation of *conférences métropolitaines* ("metropolitan conferences"). Second, the law of 27 January 2014 on the modernisation of territorial public action and affirmation of *métropoles* (*Loi de modernisation de l'action publique territoriale et d'affirmation des métropoles*, often called the MAPTAM law) enhanced the governance of the *métropoles*, including the creation of a new metropolitan authority Aix-Marseille-Provence.

The government has also set up a specific inter-ministerial taskforce that is to accompany the transition towards the creation of the new metropolitan authority (for further information, see Box 3.17 later in this chapter).

The future metropolitan authority

The metropolitan authority Aix-Marseille-Provence will be operational as of 1 January 2016. It will replace the six existing inter-municipal authorities (communauté urbaine Marseille Provence Métropole, communauté d'agglomération du Pays d'Aix-en-Provence, communauté d'agglomération Salon Etang de Berre Durance, communauté d'agglomération du Pays d'Aubagne et de l'Etoile, syndicat d'agglomération nouvelle Ouest Provence and communauté d'agglomération du Pays de Martigues). It will aim to accelerate economic development, co-ordinate transport supply and develop a coherent housing policy.

Like the other *métropoles*, Aix-Marseille-Provence will be administered by a metropolitan council, composed of one metropolitan councillor per member municipality plus one more councillor for each municipality per 25 000 inhabitants. For the initial creation of the metropolitan council, councillors will be elected by the municipal councils of member municipalities. They will later be directly elected by citizens, starting from 2020 onwards. The President and vice-presidents of the council will be elected by the councillors.

On 29 May 2015, the French Prime Minister chaired the Inter-ministerial Committee of Aix-Marseille-Provence. Together with nine ministers, he highlighted the four priorities of the future *métropole*: to put the republic into action; to act for transport; to support the Mediterranean and international clout; and to accompany economic development and innovation potential.

Sources: Various sources including Prime Minister of France (2015), "Accompagner le développement de la nouvelle métropole Aix-Marseille-Provence", press kit prepared for the Interministerial committee for Aix-Marseille-Provence held on 29 May 2015; OECD (2013b), "Vers une croissance plus inclusive de la métropole Aix-Marseille: Une perspective international", OECD, Paris, available at: www.oecd.org/regional/regional-policy/Aix-Marseille.pdf.

Box 3.2. The Twin Cities region around Minneapolis-St. Paul (United States)

Geographic coverage

Different definitions of the Minneapolis St. Paul metropolitan region co-exist:

- The term of "Twin Cities" is often used to refer to the seven-county region around the two cities, Minneapolis and St. Paul (the city with the largest population in Minnesota and the state capital, respectively). This region is governed by the Metropolitan Council (often referred to as the Met Council), which serves as the metropolitan planning organisation in Minnesota. The seven member counties are Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington.
- The Minneapolis-St. Paul-Bloomington MN-WI Metropolitan Statistical Area as defined by the United States Office of Management and Budget covers 16 counties (of which 14 are located in Minnesota and 2 in Wisconsin).
- The broader Minneapolis-St. Paul MN-WI Combined Statistical Area has a population of around 3.8 million according to 2013 Census estimates.

Rivalry between Minneapolis and St. Paul

The histories, architecture and cultures of Minneapolis and St. Paul are quite distinct. Episodes of harmful rivalry have abounded in the history of Minneapolis and St. Paul. It was reported that during the 1890 United States Census, the two cities arrested and/or kidnapped each other's census takers, in an attempt to keep either city from outgrowing the other. In the late 19th and early 20th centuries, an architect practicing in one city was often refused business in the other. After St. Paul completed its cathedral in 1915, Minneapolis quickly followed up with the Basilica of St. Mary in 1926. Games between the baseball teams of the two cities occasionally erupted into inter-city violence, as in 1923. There even was a brief period of a few weeks in the mid-1960s where people in Minneapolis were one hour behind anyone living or travelling in St. Paul because the two cities could not agree on a common calendar for daylight saving time.

Governance of the Metropolitan Council

In 1967, the Minnesota Legislature created the Metropolitan Council in response to growing issues of septic tank wastewater contamination. It was acknowledged that there were systematic problems that transcended the co-ordination of any one agency among the more than 200 municipal agencies in existence then. Additional acts of the legislature passed in 1974, 1976 and 1994 expanded the role and powers of the Met Council, merging it with transit and waste control commissions to become a unified regional authority. The Met Council is granted regional authority powers in state statutes by the Minnesota legislature. These powers can supersede decisions and actions of local governments. The legislature entrusts the council to maintain public services and oversee the growth of the state's largest metro area.

The Met Council currently has 17 members, 16 of which represent a geographic district (historically drawn by the presence of major natural resources) and one chair who serves "at large". All members are appointed by the Governor of Minnesota and are reappointed with each new governor in office. The Minnesota Senate may confirm or reject each appointment.

The council manages a series of regional services, including public transport, sewage treatment, regional planning, urban planning for municipalities, population forecasts, affordable housing, maintenance of a regional park and trails system; it also provides a framework for regional systems for aviation, transport, parks and open space, water quality and water management.

Box 3.2. **The Twin Cities region around Minneapolis-St. Paul (United States)** (*continued*)

- **Public transport.** The Met Council supervises Metro Transit, the authority that provides about 95% of the public transport rides in the region with nearly 900 buses and operates 3 light-rail lines and commuter rail lines. Additional public transit agencies also exist under an agreement in state law that allows them to "opt-out" of Metro Transit service. The metropolitan highway system is planned in co-ordination with the Minnesota Department of Transportation. Road and street corridor planning is left to county and city governments.
- **Environmental services.** The council is mandated to address water quality, water supply and sewage treatment. It also has full jurisdiction of the wastewater treatment system. This includes maintenance and construction of wastewater interceptors and operation of seven wastewater treatment plants throughout the metro area. Treatment of drinking water and storm run-off water management are left to municipalities.
- **Urban growth boundary.** Rather than limiting development per se, the Met Council limits the services and infrastructure needed for development, most importantly the connection to the wastewater treatment system. The Met Council therefore delineates the Metropolitan Urban Service Area (MUSA).

Source: Various sources including website of the Metropolitan Council, www.metrocouncil.org (accessed 9 June 2015).

Two strategic competencies: Transport and economic development

The MRDH is in charge of both transport and economic development, although the two responsibilities derive from different approaches.[1] The responsibility for transport is the founding motive of the MRDH. Led by Rotterdam and The Hague, municipalities jointly seized the opportunity for acquiring the Traffic and Transport Policy Funding (*Brede Doeluitkering Verkeer en Vervoer*, BDU) would otherwise have been recuperated by the Province of South Holland, as in all other Dutch regions (except in Amsterdam). The BDU is calculated by the national government according to objective criteria related to the task of local governments in terms of mobility (such as density and the number of homes). Negotiations between municipalities in the two former city-regions of Rotterdam and The Hague and the central government resulted in the decision to maintain the responsibility for transport at an inter-municipal level, equivalent to the combined geographic scope of the former two city-regions, but smaller than the province. This illustrates a continuous search for the relevant scale at which to manage transport in large Dutch urban areas, considering that transport had already been one of the key competencies that motivated the creation of city-regions (Box 3.3). This also means that in contrast to other Dutch provinces, the Province of Zuid-Holland is responsible for transport only in areas outside the MRDH (i.e. serving 22% of the population of the province). Other competencies of the Province of Zuid-Holland include: spatial planning (including water); environment, energy and climate; rural areas; regional economy; cultural heritage; and good governance.

The combination of responsibilities in transport and economic development puts the MRDH broadly in line with the majority of metropolitan governance bodies across the OECD. According to the OECD Metropolitan Governance Survey (which covered 263 metropolitan areas of at least 500 000 inhabitants),[2] around 80% of metropolitan governance bodies work on regional development and over 70% on transport

(Figure 3.2). Unlike the MRDH, over 60% of metropolitan governance bodies also work on spatial planning, and more than half work on these three fields at the same time.

Box 3.3. **Allocation of the responsibility for transport in large Dutch urban areas**

Under the Joint Regulations Act (Wet Gemeenschappelijke Regelingen or WGR Act), first adopted in 1950 and amended several times since then, municipalities, provinces, regional water authorities, and other public bodies and legal entities can co-operate with one another to jointly provide public services. The number of inter-municipal arrangements concluded under the WGR Act dropped from 1 500 in 1985 to around 700 in 2010, but remains sizeable. Traffic and transport represented the second largest expenditure item for such WGR arrangements (21%), just after social services (46%) (OECD, 2014c).

However, deadlocks in negotiations on transport infrastructure investment (and commercial/residential centres) were particularly difficult to overcome in large metropolitan areas such as Amsterdam, Rotterdam and The Hague. In the 1990s, in response to the shortcomings of voluntary co-operation among municipalities in those large urban areas due to the reluctance of the municipalities to give up their autonomy and divergent interests (Hulst, 2005), the Dutch government embarked on a reform to create more effective co-operation structures.

In 1994, a temporary law called the Framework Law on Changing Governance (Kaderwet Bestuur in Verandering) made it compulsory for municipalities in seven so-called "city-regions" to co-operate on spatial planning, mobility and economic development issues. This law was supposed to offer a transitional framework towards creating directly elected "city-provinces" (*stadsprovincies*), but the idea was massively rejected by citizens when put to referendum both in Amsterdam and in Rotterdam in 1995. The government therefore dropped that idea and instead extended the temporary framework by adopting the Joint Provision Act Plus (Wet gemeenschappelijke regeling plus, WGR+ Act) in 2005. The WGR+ Act gave a permanent legal status to the seven (subsequently eight) "city-regions" (*stadsregio* or WGR-*plusregio*). Each city-region encompassed a large city (e.g. Amsterdam, Utrecht, Rotterdam, The Hague) and the surrounding municipalities that form a common urban system. Each city-region was governed by a council composed of municipal representatives, who were accountable to their respective municipal council. The voting system was designed in a way to avoid an excessive predominance of the largest city. The law prescribed co-operation among municipalities for the provision of specific public services, particularly transport, but also housing, infrastructure and economic affairs. Some city-regions also co-operated in other policy areas such as spatial planning, child welfare, health, safety and environment (Stadsregio's, 2010).

After the abolition of the city-regions, all provinces except those of Zuid-Holland and Noord-Holland were given back the responsibility for transport, which they had officially lost since the 2005 WGR+ Act.

Sources: Drawn and updated from various sources including OECD (2014b), *OECD Territorial Reviews: Netherlands 2014*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264209527-en; Allmendinger, P. et al. (2015), *Soft Spaces in Europe: Re-negotiating Governance, Boundaries and Borders*, Routledge.

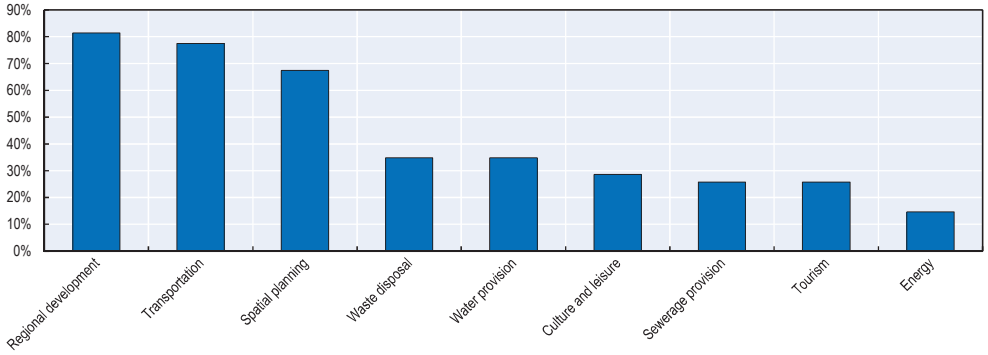
A dual budget and permanent staff

The MRDH can rely on a clearly identified, stable and predictable funding stream, as long as it retains the political support of member municipalities. The budget of the MRDH is divided into two parts along the two thematic pillars of the organisation. First, the budget of the transport pillar is currently EUR 475 million per year. Approximately 98% of this amount is provided through grants from the Ministry of Infrastructure and Environment, while the remaining 2% are contributed through transfers from

municipalities in the former city-region of The Hague (for the time being, to be used exclusively for transport investment in these municipalities). For reference, the budget of the Province of Zuid-Holland is EUR 693 million per year. Except for funds dedicated to particular investment projects, the MRDH is free to choose the modes of transport on which it spends its funds. Second, the economic development side of the MRDH is funded by a voluntary contribution that member municipalities pay on a per capita basis. Each municipality contributes EUR 2.45 per inhabitant per year, which amounts to a total budget of around EUR 5.5 million. This is estimated to be approximately 50% of the amount that municipalities previously contributed to the city-regions (which had broader functions than the MRDH). The funding arrangement for the economic pillar of the MRDH is common across the OECD and its per capita budget lies within the typical range of informal metropolitan associations that do not have regulatory powers (OECD, 2015a). On top of its regular budget, the MRDH has also been able to secure funds from the European Commission (e.g. a grant of EUR 300 000 as part of the first Work Package of the Collective Innovation for Public Transport in European Cities, CIPTEC)[3] and aims to obtain further EU funds.

Figure 3.2. **OECD metropolitan governance bodies mostly work on regional development, transport and spatial planning**

Share of OECD metropolitan governance bodies active in a field



Source: OECD (2015a), *Governing the City*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264226500-en.

The MRDH has just under 100 permanent staff, also divided into the two thematic pillars. The transport pillar of the MRDH is staffed by around 80 full-time equivalent employees (including technical and support staff), many of whom also worked for the former city-regions. The economic development pillar of the MRDH employs the equivalent of around 15 full-time employees, composed of 9 senior staff, several supporting staff and others employed by the individual municipalities to work on specific projects. Thus, the MRDH has a smaller secretariat than other OECD metropolitan governance bodies that oversee a similar population size (e.g. 485 employees in the Área Metropolitana de Barcelona, 1 500 employees in Metro Vancouver), but this is consistent with its more limited set of responsibilities (see Table 3.2).

A renewable 12-year mandate grounded in its legal framework

Initially, it had been envisaged to adopt the MRDH for an indefinite term in order to ensure certainty, both *vis-à-vis* the central government and the transport companies. It was also argued that the MRDH needed time to prove itself. However, the proposal needed to offer an alternative if the MRDH did not prove to be the right vehicle for

realising its stated objectives. In this case, a decision to terminate the regulations had to be taken with enough notice to give all councils an opportunity to absorb the staff and manage the financial and legal consequences (e.g. related to contracts and concessions). The regulations creating the MRDH therefore include a date for decision making on a possible termination. In line with the suggestion of various municipal authorities, a horizon of 12 years was set and an explicit decision on the continuation or termination must be taken 2 years prior to that. With a view to ensure synchronicity with municipal executive terms, a decision will be taken in 2024 on the future of the MRDH from 2026 onwards. This implies that the MRDH faces two different time scales: a short-term one to maintain the political momentum and a medium-term one (as it has about ten years to prove it can make a real change).

Making the Metropolitan Region of Rotterdam-The Hague body more effective in the short and long term

Building on the political and institutional capital accumulated during the inception process, the MRDH body is now challenged to move forward with concrete action. This is a critical task, as tremendous effort was put into convincing member municipalities and the central government to set up this atypical organisation. Proactive steps need to be taken to prevent the MRDH collaboration from running out of steam, when member municipalities are expecting some return on investment and other stakeholders are waiting to see results before forming an opinion (and potentially joining, like the municipalities of Leiden and Dordrecht).[4] The task of the MRDH is complicated by the lack of a shared identity in the region. As discussed throughout this report, the territory covered by the MRDH is not a historically, culturally or economically cohesive area at the moment. This implies that the MRDH cannot count on a common sense of belonging as a natural justification for its ambition of speaking with one voice for the region. Important progress has been achieved in terms of improving collaboration between Rotterdam and The Hague, but there is no guarantee that it will last beyond the political term of the two mayors. Neither the political culture in municipal administrations nor the public opinion has yet fully embraced the new co-operative spirit between the two cities. Municipal administrations have different working practices. Public opinion is often unaware of inter-municipal co-operation, as long as the quality of daily public services remains satisfactory. There is little public support in either city for conceding its own advantages for the sake of the larger region.

While the creation of the MRDH will not automatically solve all the challenges in the region, well-targeted action from the MRDH can be instrumental in improving policy coherence for delivering stronger growth and well-being for citizens. In this regard, the following section reviews six possible lines of action: 1) further strengthening the legitimacy of the MRDH; 2) building a new partnership with the province; 3) developing concrete projects to rally municipalities and public opinion; 4) engaging municipal administrations; 5) involving the business community; 6) strengthening metropolitan finance.

Further strengthen the legitimacy of the MRDH

Several stakeholders raised the specific question of the democratic legitimacy of the MRDH. This section discusses this aspect and concludes that, in its current structure, the MRDH has sufficient democratic legitimacy.

While the MRDH has the ability to influence important aspects of public policy, it works largely out of public sight. This is because, from its onset, the MRDH was not meant to be an additional layer in an already crowded institutional arena, but to operate as "extended local governance" building on existing layers. Since January 2015, in most parts of the country its functions are the responsibility of the province, which is an elected level of government. According to several studies (including Spaans and Zonneveld, 2014), the MRDH is virtually unknown among voters. This raises two important issues. First, on a fundamental level, there is the question of whether the MRDH has sufficient democratic legitimacy given its tasks and responsibilities. Second, there is the question of whether the absence of public awareness has practical consequences for the work of the MRDH.

However, several arguments show that a lack of democratic legitimacy is not a major concern for the MRDH. As such, delegating responsibilities to the MRDH is comparable to delegating responsibilities to other government agencies over whose leadership the electorate also has only indirect control. The transport authority is a public body (*openbaar lichaam*) that was created with the approval of the concerned municipalities. It has received a clearly defined set of formal competencies and acts on behalf of the municipal governments that it represents. While it is not directly elected itself, it is under the oversight of directly elected municipal councils. The economic development pillar of the MRDH is an entirely voluntary co-operation of local governments that does not have any formal competencies over them and manages a limited budget.

Nevertheless, as the MRDH evolves in the future, the question of legitimacy might become more important. This relates both to input legitimacy and to output legitimacy (Box 3.4). A central motivation behind the creation of the MRDH (in particular of the economic development side) is the desire to co-operate more closely. This involves the professed willingness of key local decision makers to put the joint interest of the region before the interests of their constituencies. In some cases, acting for the common interest could mean acting against the wishes of a large minority of the electorate. To realise the ambitions of the involved municipalities, the MRDH will need to assume further responsibilities that go beyond its current scope of work. While this does not necessarily mean that it will acquire the status of an independent local government, further transfer of powers to the MRDH may increase the need for a more direct electoral mandate.

While the structure of the MRDH and its responsibilities raise no fundamental democratic legitimacy concerns, steps to create greater legitimacy could still be beneficial to support its long-term objectives. Legitimacy is closely connected to the degree of public support for an organisation and to its long-term viability. Given the weak institutional anchoring of the MRDH and its current strong reliance on the support of the mayors of its member municipalities, increasing its legitimacy could strengthen the support base of the MRDH and help to ensure its long-term viability.

As discussed with respect to its transport competencies in Chapter 2, the MRDH should aim at building output legitimacy by showing that it can help to solve pressing problems in the region. As a new organisation, the MRDH has no proven track record. If the legitimacy of the MRDH is entirely output-based, a failure of one or two high-profile projects, while it may not imply that the MRDH is unsuited to solve the problems of the region, could drastically affect the organisation. Due to its young age, the MRDH has not yet had the chance to build a history of success that would allow it to retain a degree of output legitimacy in the case of a major failure in the coming years. Building greater input legitimacy could alleviate legitimacy problems in such cases.

Box 3.4. **Input legitimacy and output legitimacy**

Within the field of political philosophy, a large variety of approaches to political legitimacy exist that differ in terms of their practical relevance. From a practitioner's perspective, one of the most relevant approaches is the distinction between input legitimacy and output legitimacy that was developed by Scharpf (1970). Input legitimacy refers to legitimacy that is derived from the political participation of individuals and their possibilities to influence the political process. In contrast, output legitimacy refers to legitimacy gained by a government through the creation of desirable outcomes. Both concepts were developed and have gained prominence with regard to the political legitimacy of the European Union (Schmidt, 2013).

Input legitimacy and output legitimacy are both based on the public perception of an institution. Input legitimacy is derived from the general perception of the processes that determine its members, its leadership and the way it takes decisions. If these processes are perceived as allowing appropriate democratic influence on the decision-making process, the organisation enjoys input legitimacy. Thus, input legitimacy is to a large degree derived from the structural characteristics of an organisation. In contrast, output legitimacy depends on the performance of an institution. It is achieved if an organisation creates outcomes that are appreciated by the public (Sharman, 2008).

For people not involved in the policy-making process, it can be tempting to assume that output legitimacy matters more than input legitimacy because results are more important than the choice of instruments to achieve them. However, this argument ignores the inherent uncertainty in the policy-making process. Sometimes, organisations that are well designed to represent the interests of the local population fail to achieve good outcomes for reasons that go beyond their responsibility. Vice versa, organisations that are fundamentally unsuited to represent the interests of the local population can nevertheless achieve good outcomes if the general conditions are favourable for them. Thus, institutions should possess at least some degree of input legitimacy.

Input legitimacy matters for another reason. A lack of it can be the result, but also the cause, of the absence of public scrutiny of an organisation. If the public cannot vote on an organisation, it has little reason to seek information about it. The resulting lack of public scrutiny can have detrimental consequences for an organisation. Most institutions will perform poorly at some point of their lifecycle. In such a situation, public scrutiny can be an important driver to initiate necessary reforms. In the absence of public scrutiny, organisations need strong internal or external supervision mechanisms, which are not always in place. Many institutions fail to initiate necessary reforms because they lack the mechanisms to assess the quality of their own work. Even if shortcomings are identified, institutional inertia and vested interest make reform difficult without sufficient levels of outside pressure.

At the same time, the MRDH can take steps to ensure greater input legitimacy within the limits of its existing structures. This is possible because input legitimacy can be built in different ways, many of which require the involvement of stakeholders but no formal role in the decision-making process for them. A first step towards greater input legitimacy can be developed by a commitment to transparency. Only if the public is aware of the work of the MRDH can it take informed choices about its usefulness and hold politicians to account for their role within it. As discussed in Chapter 2, the ability of metropolitan transport authorities in many urban areas to communicate progress toward their objectives can enable them to implement a range of policy measures – particularly those that may be politically difficult (e.g. congestion charging). More generally, since its inception, the MRDH has created a website to share information, including the data on the MRDH area and objectives of the MRDH for transport and economic development, with the public.

Another possibility could be to consider developing an open data platform, as has been created in Helsinki (Box 3.6).

In the long term, however, the need for substantially greater input legitimacy that would require structural changes will be determined by the evolution of functions of the MRDH. Under a scenario that involves substantially expanded rights and responsibilities for the MRDH, it might be necessary to improve input legitimacy to the point of introducing direct elections for a leadership body of the MRDH. It is not certain that such a transformation of the MRDH will occur. Nevertheless, by committing to transparency and greater public awareness, the transformation towards more direct democratic accountability will be made easier should it ever be decided to do so.

Co-operating for what?

Co-operation within the Province of Zuid-Holland is characterised by a paradox. On the one hand, numerous networks and platforms of regional actors aim at co-ordinating policies. On the other hand, such networks partly overlap with each other, do not always lead to concrete results and have recurrently locked themselves in internal disputes. Even though the consensus-oriented Dutch political culture generally minimises disruptive disagreements and allows for compromises on technical issues, the oversupply of co-ordination channels has generated inertia and inaction in the MRDH area. The MRDH has an opportunity to effect real change by taking clear action.

The MRDH needs to define both high-level and low-level objectives

As in the case of any new organisation, the first task of the MRDH consists in defining objectives (Box 3.5). Structuring objectives into a hierarchy of higher and lower level objectives can help clarify their importance and illustrate how they affect each other. Objectives at the top of the hierarchy tend to be the most important ones, while objectives at the lower end of the hierarchy are more closely associated with individual policies. Low-level objectives contribute to achieving a higher level objective, which in turn contributes to achieving an even higher level objective. Figure 3.3 shows four hypothetical policy objectives for the MRDH and illustrates how they are related to each other. At the top of the hierarchy is the overarching strategic objective to increase economic growth. It could potentially be achieved by a variety of policies. Among them are policies to increase the economic integration of Rotterdam and The Hague, which belong to the objective in the second row of Figure 3.3. Again, this objective can be achieved by a variety of measures, for example by improving labour mobility, which in turn can be achieved by policies that make it easier for residents in social housing to move from one part of the MRDH to another (discussed in Chapter 2).

In order to operationalise its high-level objectives, the MRDH needs to define low-level objectives that can be used to develop individual policies. As discussed in Chapter 2, the MRDH has taken an important step towards defining its high-level objectives with the publication of its Economic Agenda for the Business Climate (MRDH, 2014), which is further implemented in work programmes. The Economic Agenda contains a mission statement of the ambition of the MRDH for the region. It also describes regional trends that the region faces and provides a general outline of how the MRDH intends to react to them. Most of the objectives in the document are high-level objectives that are not directly associated with a specific policy, but could be achieved by a variety of different policies for which lower level objectives need to be identified.

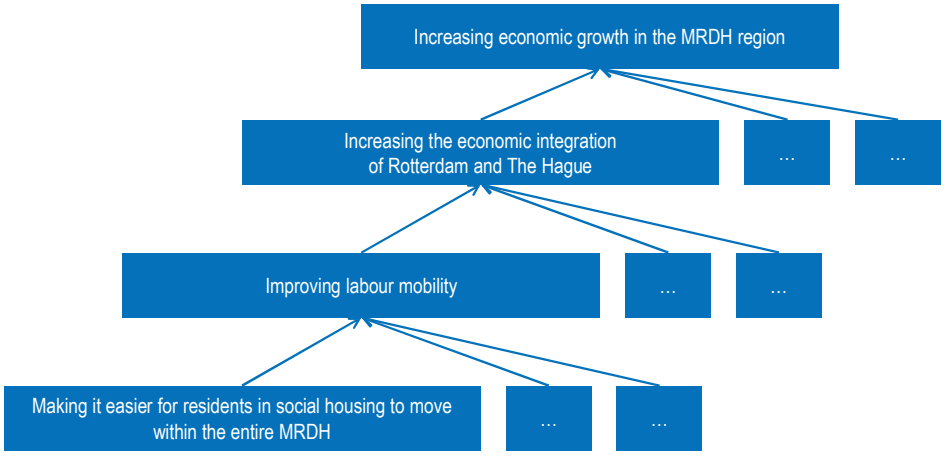
Box 3.5. **Defining policy objectives**

Defining objectives serves several purposes:

- First, and most importantly, objectives are necessary to steer and co-ordinate the work of the organisation. Without explicitly defined objectives, there is a risk that the efforts of an organisation are undirected or even that parts of its work have counteracting results. Well-defined and precise objectives can be a tool to streamline the work of an organisation and make it more efficient.
- Second, objectives help create transparency. They show external stakeholders what the organisation aims to do and can serve as an important communication tool for the organisation. Especially when the objectives are agreed by a large group of stakeholders, they can help to rally relevant actors around the jointly agreed goals. In this way, agreeing on objectives can already serve as a first step towards achieving them.
- Third, they create accountability by making it possible to judge the success of an organisation. Only when objectives have been defined in advance of policy measures is it possible to judge whether the policy measures are effective in achieving the desired outcomes. Without objectives it is generally not clear what a policy aims to achieve. Thus, the definition of objectives is a prerequisite for the construction of a functioning monitoring and evaluation system. They provide the yardstick along which policies can be monitored and evaluated.

Source: Schumann, A. (forthcoming), "Policy indicator systems: Methods, design strategies and implementation", *OECD Regional Development Working Papers*, OECD Publishing, Paris, forthcoming.

Figure 3.3. **An example of hierarchically structured policy objectives in the Metropolitan Region of Rotterdam-The Hague**



Source: Author's own elaboration, based on the arguments developed in Schumann, A. (forthcoming), "Policy indicator systems: Methods, design strategies and implementation", *OECD Regional Development Working Papers*, OECD Publishing, Paris, forthcoming.

At the same time, the MRDH needs to acknowledge that creating low-level objectives involves trade-offs. It is not possible for the MRDH (or any other organisation) to pursue all policies that contribute to a given high-level objective at the same time. By choosing its low-level objectives, the MRDH will necessarily need to prioritise some outcomes over others. Deciding which low-level objectives to pursue in order to achieve a

high-level objective should take two considerations into account: first, the effectiveness of low-level objectives in contributing to achieving high-level objectives; and second, how well placed the MRDH is to achieve an objective compared to other institutions.

The MRDH could identify and implement concrete, federating projects

Once the MRDH has defined its hierarchy of objectives, it could work on achieving them by developing concrete projects, ranging from a small scale to a larger scale. Comparatively smaller scale projects may not make a decisive contribution when considered individually, yet their advantage lies in their low cost and the relative ease with which they can be implemented. In many cases, only small one-time costs ensue, but the benefits continue to accrue over time. Not only do they help create a joint identity, but they can also make the region more attractive. While such small projects are generally beneficial, they should not distract from larger projects that have a potentially transformative impact.

In particular, policies to strengthen the mobility of citizens across the MRDH area can contribute to shaping a stronger sense of regional identity. Given the cultural differences between its different parts, the more citizens identify with the MRDH region as a whole, the more likely they are to support policies and compromises that are beneficial for the entire region. Closer social and cultural ties between the different parts of the MRDH can also foster greater economic integration in the long run. The projects discussed below are only examples of measures that could be taken by the MRDH:

- The benefit cards that allow low-income residents free/reduced entry to public facilities such as museums and swimming pools could be merged. Currently, existing cards are valid in either Rotterdam or in The Hague, but not in both cities. Merging them is not straightforward, because eligibility criteria and benefits vary between both cities and would need to be harmonised. Nevertheless, an integrated system could be introduced.
- On the transport side of the MRDH, small steps towards greater regional coherence are possible. The general objective could be that public transport passengers do not notice any difference in the transport provision across the MRDH area. A first step towards this goal could be a standardisation of the maps that display public transport lines. Maps could show all transport offers, whether they are operated by Rotterdamse Elektrische Tram NV (RET), HTM Personenvervoer NV (HTM) or another provider. This helps identify potential new itineraries to go from one place to another within the MRDH area. By extension, one of the concrete co-operative projects of the MRDH and the Province of Zuid-Holland, agreed in September 2015, to introduce a single public transport card for the region, is a step in the right direction.
- The MRDH could also consider developing other types of regional public goods to improve public service delivery and quality of life at a larger scale. One example of such an initiative could be an open data portal, such as the one jointly set up by the four cities of Helsinki, Espoo, Vantaa and Kauniainen in Finland (Box 3.6). Enabling access to and reuse of government data has significant potential – not only to improve transparency and efficiency in public administration, but also to deliver people-driven governmental actions. Encouraging both public and private sectors to develop MRDH-wide applications based on this data portal could help "make the MRDH a virtual reality", in a sense.

Box 3.6. Using open government data to improve public service delivery and quality of life at a regional scale: The example of Helsinki Region Infoshare

In 2010, the four cities of Helsinki, Espoo, Vantaa and Kauniainen started to plan the Helsinki Region Infoshare (HRI), a web service that aims to make regional information quickly and easily accessible to all. The first version of the web service was brought online in March 2011 and further evolved through user-based testing and learning. It has opened over 1 000 datasets on the Helsinki region. By 2014, it had become a part of normal municipal operations.

The data published on the service are mainly statistical and often GIS-based, giving a comprehensive and diverse outlook on different urban phenomena, such as living conditions, economics and well-being, employment and transport. The data on offer are ready to be accessed and used at no cost by anyone, from citizens to businesses, universities, academies, research facilities and municipal administrations. The data have been used in a wide range of fields, including research and development activities, decision making, visualisation, data journalism and in the development of numerous apps on metropolitan-wide public services to make citizens' daily life easier. Examples of fields include mobility, land reserve, housing stock and public expenditure (e.g. the Tax Tree, a software visualisation showing how a city's revenues – represented by the roots of a tree – are spent – represented by branches, whose thickness is proportional to the size of the cash flow), among many others.

The HRI service is funded by the cities of Helsinki, Espoo, Vantaa and Kauniainen, as well as the Finnish Innovation Fund Sitra (an independent public fund under the supervision of the Finnish parliament). The Finnish Ministry of Finance has also supported the project planning phase through an inter-municipal co-operation grant of EUR 205 000. The operative execution of the service is managed by a composition of the funding and executive parties of the service, as well as City of Helsinki Urban Facts and Forum Virium Helsinki. Forum Virium Helsinki was particularly responsible for the project planning phase during 2010-13, as well as implementing sub-projects and co-ordination. In 2014, operational co-ordination was the responsibility of the City of Helsinki Urban Facts in close co-operation with Forum Virium Helsinki. The HRI service also draws on a number of data material experts and IT experts from the four cities, as well as a lawyer handling all of the legal aspects of the service. Furthermore, the service co-operates widely with other owners and distributors of data materials. Such operators include Statistics Finland, Helsinki Region Environmental Services Authority, the Uusimaa Region, and various agencies of the region's cities and communities.

Sources: Helsinki Region Infoshare (n.d.), "Helsinki Metropolitan Area", www.hri.fi/en (accessed on 27 May 2015).

The MRDH could also collaborate with regional actors toward larger and more long-term federating projects. As mentioned in Chapter 2, a first important step could be to establish the MRDH as the main spokesperson for the area in international and external relations to speak with a unified and stronger voice at national, European and international levels. Second, the MRDH could establish an internationalisation agenda for the area by developing a marketing strategy that promotes the entire region and highlights its particular strengths. Finally, the MRDH could pursue larger scale projects, such as flagship events like the World Expo 2025, which, if managed well, could help build regional identity and generate economic benefits to the region.

Working with the province towards a stronger region

The Province of Zuid-Holland and the two large municipalities have long been competing for unofficial leadership of the MRDH area. This is a common issue in countries where metropolitan areas are emerging as young and dynamic organisations while provinces (or their equivalents) correspond to the country's traditional administrative structures.

As the intermediate level of government between the central government and municipalities, the province sees itself in charge of developing and co-ordinating policies for the region. It makes two points to support this argument. First, it argues that only an organisation at the geographical scale of the province can effectively work to move the region as a whole forward, especially when the goal is to compete on an international level. Second, the province emphasises its role as an elected level of government that has the function to supervise municipalities and to provide them with strategic guidelines. The province enjoys the historical and democratic legitimacy that the MRDH and other metropolitan collaboration platforms lack. Provinces are among the Netherlands' oldest institutions, dating back to when the Netherlands was a federation (Republic of the Seven United Provinces, 1581-1795). After the country became a unitary state in 1795, provinces became part of the central government and were reintroduced with the constitutional changes of 1848 but with a much less prominent role (CPB, 2010). In contrast to the MRDH, the province is governed by an elected provincial council, which approves the provincial executives. The head of the provincial executive is the King's Commissioner, who is appointed by the King upon recommendation of the provincial parliament. Among other tasks, he/she plays an important role in the national government's appointment of the mayors upon recommendation of the local parliament.

At the same time, the ambitions of the Province of Zuid-Holland are not aligned with its resources. The size of the province's staff, approximately 1 500 employees, is roughly equal to that of a mid-sized municipal administration in the region. Its budget of EUR 693 million in 2015 is approximately one-fifth of that of Rotterdam, the largest city in the region, and less than one-third of that of The Hague. As noted by OECD (2014b), provinces have, *de facto*, different roles in different parts of the Netherlands. Provinces with small municipalities play a prominent role in the co-ordination of municipal activities and the promotion of economic development. By contrast, those located in large urban regions such as the Randstad tend to be overshadowed by the major cities, which are powerful nodes of governance with larger financial and human resources, have direct access to the central government and are internationally better-known brand names. Even within the Randstad, the north and the south display quite different power structures. In the north, the driving force of the city of Amsterdam is virtually undisputed while the Province of Noord-Holland plays a less assertive role than the Province of Zuid-Holland. In the south, neither Rotterdam nor The Hague has emerged as a clear leader of the region in the past. As discussed in Chapter 2, the tension between the Province of Zuid-Holland and municipalities (primarily Rotterdam and The Hague) has seemed to manifest itself most strongly in the field of spatial planning in the past, and in particular with respect to planning decisions related to commercial developments.

Possible ways for closer collaboration between the MRDH and the Province of Zuid-Holland have not been fully explored so far, although recent developments since the provincial elections in March 2015 are promising. Institutional tools for active collaboration between the MRDH and the province exist in the current setting. For example, upon request of the Province of Zuid-Holland, the general management of the MRDH can appoint a representative from the province as a sixth member of the Executive Board. In that case, a representative from the province can also sit on advisory committees. At the time of writing, the province had not requested a seat on the Executive Board. In 2012, the MRDH had also invited the province to join the transport side of the MRDH, but the province declined. The rationale was that the province, as a different layer of government, did not consider it a logical step to join an inter-municipal organisation. However, the new provincial executive team that came into operation in

May 2015 following the provincial elections in March 2015 has shown encouraging signs of constructive dialogue. For example, on 8 September 2015, the MRDH and the province signed an agreement to work together on eight projects: establishing a four-track rail connection between Rotterdam and The Hague (an improvement from the current dominance of two-track connections); further reinforcing the region's international accessibility (e.g. rail connections to Belgium and Germany; the Rotterdam-The Hague Airport); introducing a single public transport card for the region; fostering mobility innovation; developing a heating network for the region; bidding for the World Expo Rotterdam in 2025; creating attractive metropolitan landscapes; and developing field labs to create a favourable environment for collaboration between firms, education and knowledge institutions, and the government). Each project will be co-ordinated by a managerial duo, composed of a leader from the MRDH and a leader from the province.

In addition to these concrete common objectives for the region, the MRDH and the Province of Zuid-Holland will need to co-ordinate transport and spatial planning policies. As shown in the experience of other OECD metropolitan governance bodies, separate bodies can exert transport and spatial planning competencies as long as effective co-ordination mechanisms are in place between municipalities, metropolitan authorities and regional/state agencies (Box 3.7). For example, in Canada, the regional planning authority Metro Vancouver aligns the spatial plans of its member municipalities and influences the strategic plan of the separate regional transport authority TransLink. In the United States, the goals and priorities put forward by the directly elected metropolitan planning organisation Portland Metro also shape the public transport policy managed by the separate transport authority TriMet, without Metro using the existing legal possibility to take over the control of TriMet. Those two examples of metropolitan governance bodies differ from the MRDH in the sense that they have the spatial planning competency and not the transport one, but they illustrate the importance of better integrating transport and spatial planning decisions when the two policy areas are managed by separate entities.

Over the long run, governance arrangements in the MRDH area may need to further evolve, as illustrated in some other OECD countries. Like Dutch provinces, intermediate levels of government in OECD countries are often the product of history and the subject of a debate about their role in today's fast-changing environment (Box 3.8). In some countries, the search for a streamlined, modernised system of subnational government led to enacting substantial institutional reforms, ranging from taking a metropolitan area out of the jurisdiction of its upper tier to merging them altogether (Table 3.4). For example, in France, as part of the recent country-wide territorial reform, most of the *département* of the Rhône was merged with the inter-municipal organisation (*communauté urbaine*) Grand Lyon into a new metropolitan authority, Métropole de Lyon, which has a unique status in France (Box 3.9). In Italy and Turkey, "metropolitan cities/municipalities" have been created on the perimeter of their corresponding provinces (Boxes 3.10 and 3.11). A more drastic option, chosen in New Zealand, was to merge seven local governments with the corresponding regional government into a single Auckland Council (Box 3.12). While most such reforms have triggered intense political debates, as they hinge on the specific history and socio-institutional framework of each country, this spectrum of experiences illustrates that many OECD countries no longer settle on maintaining a *status quo* and actively seek more efficient public policy delivery to raise quality of life and the international competitiveness of their main cities. This is particularly common when the metropolitan area makes up the bulk of the province/region in which it is located. For example, in terms of population, Grand Lyon accounted for about three-quarters of the

département of the Rhône, which is quite similar to the MRDH area that accounts for 78% of the Province of Zuid-Holland.

Box 3.7. Co-ordinating transport and spatial planning decisions at the metropolitan level: Examples from Vancouver and Portland

In **Vancouver** (British Columbia, Canada), the Greater Vancouver Regional District (GVRD), renamed Metro Vancouver in 2007, is a supra-municipal authority created in 1967 which brings together 24 local authorities (22 municipalities, 1 "electoral area" and 1 aboriginal community called "Treaty First Nation"). Metro Vancouver provides regional services, including three core utilities (water, liquid waste, solid waste), and co-ordinates regional planning by producing the Regional Growth Strategy (RGS). There is a separate metropolitan public transport authority called TransLink, which was created in 1998 and is responsible for setting and administrating fares for regional public transport services. TransLink is governed by the Mayors' Council on Regional Transportation (where all 24 member local governments of Metro Vancouver are represented) and the TransLink Board of Directors. Metro Vancouver is responsible for formulating the RGS and regional air quality objectives that TransLink must consider when developing long-term transport strategies. Metro Vancouver also provides input to TransLink on its long-term transport strategies and ten-year transport investment plans. Finally, it provides input to the Mayors' Council on proposed borrowing limit increases in ten-year transport investment plans.

Portland (Oregon, United States) has the only metropolitan planning organisation (MPO) directly elected in the United States, called Portland Metro. Operational in its current form since 1979, Portland Metro is primarily in charge of metropolitan strategic planning, while a state corporation (TriMet, officially Tri County Metropolitan Transportation District of Oregon, governed by a Board appointed by the Governor of Oregon) organises and operates public transport. There is, however, an indirect form of co-ordination between the two. Metro adopted the 2040 Growth Concept, a long-term regional plan that lays out a vision for the region in 2040 that includes both land use and transport. The 2040 Growth Concept was first adopted in 1995 and is updated every five years. The 2040 Growth Concept emphasises co-ordination of land use and transport in order to preserve the region's locational advantage as a relatively uncongested hub for trade. It also states that the preferred form of regional growth is to contain growth within a carefully managed urban growth boundary (UGB), a land-use planning line to protect farms and forests from urban sprawl and orient growth in the form of infill and redevelopment with higher density where it is appropriate. The UGB has been expanded more than 30 times since it was first drawn up, in accordance with forecasts of land supply needs. In its quality as an MPO, Metro is also tasked with preparing a regional transportation plan (RTP), which evaluates federal, state and local funding for transport improvements, estimates project costs and proposes funding strategies. The RTP was last updated in July 2014. TriMet must develop a five-year transit investment plan (TIP), updated annually, which is grounded in the objectives of both the 2040 Growth Concept and the RTP. State law gives Metro the right to take over TriMet and the issue was debated several times, without gaining sufficient political traction from Metro councillors to get through.

Sources: OECD (2015a), *Governing the City*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264226500-en. (accessed on June 2015);drawing on various sources including Metro Vancouver (2014), www.metrovancouver.org (accessed 27 May 2015); TransLink (2014), "Regional transportation authority of Metro Vancouver", www.translink.ca (accessed May 2015); Portland Metro (n.d.), Portland Metro website, www.oregonmetro.gov (accessed 9 June 2015); TriMet (2014), "Public transport provider for Portland, Oregon", http://trimet.org (accessed June 2015).

Box 3.8. **Local administrative boundaries are often based on a reality different from that of today**

In many OECD countries, political and administrative boundaries are often based on historical settlement patterns that do not necessarily match today's socio-economic reality.

Unitary countries

Two-tiered subnational governments

- **Norway:** Counties (*fylker*) are the oldest among the current administrative units in Norway. They were established during the 1660s as 12 *amts* (replacing the earlier *len* and *sysler*). A further subdivision in the period 1671-1866 increased the number of *amts* to 20. In 1919, the name was changed from *amt* to county (*fylke*). In 1972, the number of counties was reduced from 20 to 19, when the city-county of Bergen was merged with the county of Hordaland. Throughout this period, boundaries only underwent minor changes and a few municipalities have changed *amt*/county.
- **Sweden:** The number of counties is almost the same as it was in 1634, when they were established by the Constitution, superseding the historical provinces of Sweden. In 1997, the counties of Kristianstads and Malmöhus merged into the new county of Skåne (which is the historical name of the same territory in the Middle Ages). In 1998, three counties also merged into a new county called Västra Götaland.

Three-tiered subnational governments

- **France:** The French *départements* were created with the French Revolution in 1789. While many have been added over time to the list of the first 83 *départements* (101 today) and several changes were introduced, the general principle for defining boundaries was that an individual should be able to reach the central administrative city (*chef-lieu*) by horseback and return within the same day from every corner of the territory. The *cantons* were also created during this period as an electoral subdivision of the *département*. A *canton* is a territory of around 16-20 km², whose boundaries were determined along the same lines as those of the *département*, i.e. within a single day's journey from the central city, but on foot. The names of the *départements* were derived from rivers and mountains situated on the territory, in a radical departure from the names of the provinces of the *Ancien Régime*.
- **Italy:** Provinces were established by Napoleon Bonaparte on the model of French *départements*. When Italy was unified into a single kingdom in 1861, the status of 59 provinces was formalised under the Rattazzi Law in 1865. Since then, most provinces have remained the same, although their number grew regularly after further annexations (e.g. Friuli, Mantova, Rome, Veneto, etc.). In 1927, a Royal Charter created 19 new provinces. Since 2000, 7 new provinces were established (including 4 in Sardinia); there are currently 110 provinces.

Federal and quasi-federal countries

- **Belgium:** Provinces have long existed in their current boundaries, with two exceptions: the Province of Brabant was split into two provinces (Flemish Brabant and Walloon Brabant); and the Brussels-Capital Region in 1995.
- **Switzerland:** The majority of Switzerland's 26 cantons trace their roots back hundreds of years to the Middle Ages. The Swiss Confederation was built up in piecemeal fashion, with additional cantons joining the original three cantons of Uri, Schwyz and Unterwalden. With a few exceptions, cantonal boundaries have remained unchanged over decades. The most recent canton is Jura, which was created in 1979 as a result of its secession from the canton of Bern.

Box 3.8. **Local administrative boundaries are often based on a reality different from that of today** (*continued*)

- **Spain:** The system of provinces was put in place through a royal decree of 20 November 1833, mainly based on a previous subdivision from 1822. The division was made on a set of "rational" criteria, including the area (based on the model for French *départements*, i.e. making it possible to reach the provincial capital city by horse and return from any place in the province in a single day), population (a province should include between 100 000 and 400 000 inhabitants) and geographical coherence. Since 1833, the provinces have undergone only minor changes. These include adjustments of boundaries (most notably the division of the Canary Islands into two provinces in 1927) and name changes (taking into consideration language and regional identity). When the Spanish Constitution was approved in 1978, the provinces remained basic decentralised units of territorial organisation, as an intermediary level between the municipalities and "historic regions", now known as "autonomous communities". Spain currently has 52 provinces, including the autonomous cities of Ceuta and Melilla.

Source: Adapted from OECD (2014c), *OECD Regional Outlook 2014: Regions and Cities: Where Policies and People Meet*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201415-en.

Table 3.4. **Addressing metropolitan and intermediate levels of government in selected OECD countries**

Options	Examples	Tiers of government affected by the reform	Change of existing administrative boundaries of the intermediate level of government
Splitting the metropolitan area from the rest of the province/region	Lyon (France): 2015	– Municipalities (inter-municipal authority) – *Département*	Yes – three-quarters of the *département* of Rhône were merged with the Métropole de Lyon
Matching metropolitan and provincial/regional boundaries	Italy: 2014	– Municipalities – Province	No – the ten *città metropolitane* correspond to the existing provinces
	Turkey: 2014	– Municipalities – Provinces	No – 30 "provincial metropolitan municipalities"
Merging local and regional governments into a single government	Auckland (New Zealand): 2010	– Municipalities and districts – Region	No – seven local councils were merged into the existing regional council

Source: Author's own elaboration.

Engaging municipal administrations

The MRDH's primary stakeholders are municipal administrations. The MRDH needs their support to be able to work effectively on a daily basis. Efforts by the MRDH to support municipal administrations can be beneficial for two reasons. First, they can improve the quality of the public administration in the region, thus providing a direct benefit to the region. Second, they can create goodwill for the MRDH within administrations. This can increase the support of municipal administrations for projects of the MRDH and can thereby increase the effectiveness of other MRDH projects.

Because several other formal and informal networks and working groups of municipalities exist that aim at co-ordinating specific policies at varying scales, the MRDH can provide support on more practical aspects, for example by providing support to these networks. For instance, the MRDH could support individual municipalities, or groups of municipalities, by assisting in capacity-building efforts. This could be

especially beneficial for smaller municipalities that have smaller administrations and less specialised staff. Offering services targeted at smaller municipalities could also help to reduce the perception that the MRDH is primarily a co-operation between Rotterdam and The Hague – the two biggest cities in the region. Examples of such efforts are knowledge-sharing programmes for municipal employees, such as the existing network of purchasing managers from member municipalities. The network existed for the city-region of Rotterdam prior to the creation of the MRDH. With the creation of the MRDH, it has been extended to all other municipalities of the region. Similar networks of experts dealing with specific issues could help to build additional capacity in municipal administrations.

Box 3.9. **Merging an inter-municipal level and its upper level into a new metropolitan authority: The case of Lyon (France)**

Since 1 January 2015, the urban community (*communauté urbaine*) of Grand Lyon became the Métropole de Lyon after 45 years of existence. This new metropolitan authority, which has a unique status in France, combines the competences of Grand Lyon and those of the *département* of the Rhône (Conseil Général du Rhône) on its perimeter. It covers the geographic area of the urban community, home to about 1.3 million people across 59 municipalities. It is administered by a Metropolitan Council of 165 councillors, whose chairman is the Mayor of Lyon. During the transitional period 2015-20, the community councillors serve as metropolitan councillors. From 2020, metropolitan councillors will be directly elected.

Métropole de Lyon combines three sets of competencies transferred from different levels of government:

- Competencies from the previous Grand Lyon: urban planning, housing, sustainable development and energy, territorial planning, mobility and transport, economic development, waste management, water and sanitation, roads, tourism, agriculture.
- Competencies from the *département* of the Rhône: insertion, elderly, disabled, housing, urban development, mobility, family, education (junior high schools), childhood, culture and sport, spatial planning, roads, tourism, agriculture.
- Competencies that can be transferred from the region and the central government through a "delegation of competencies": creation and management of cultural facilities, construction and maintenance of hot and cold networks and broadband networks, concession of electricity and gas distribution, management of aquatic areas and flood prevention, prevention of delinquency, access to rights, participation in the governance of train stations, co-leading competitiveness poles (*pôles de compétitivité*), housing, creation and maintenance of services for electric vehicles, external defence against fires, hygiene and health.

The budget of the Métropole de Lyon comes from three main sources of revenues: 65% from tax revenues, 25% from central government transfers and 10% from other sources.

Métropole de Lyon includes several participatory and consultative bodies: the Development Council (Conseil de développement, established in 2000); the Consultative Commission for Local Public Services (Commission consultative des services publics locaux, established in 2003); and the Inter-municipal Commission for Accessibility (Commission intercommunale d'accessibilité, established in 2009) for the disabled. Following the reform, the *département* of the Rhône only governs the areas that are not part of the Métropole de Lyon. This represents around 471 000 people, i.e. about one-quarter of the *département*'s population before the reform.

Source: Drawing from various sources including the websites of the French government, www.gouvernement.fr/action/lesmetropoles and of the Métropole de Lyon, www.grandlyon.com (accessed 6 July 2015).

Box 3.10. **Creating metropolitan cities on the perimeter of their corresponding provinces: The case of Italy**

Italy went through more than two decades of deadlock in the metropolisation process before the recent turn in 2014.

The initial legal framework (introduced in 1990 with Law n. 142/1990) offered the possibility for ten major cities of Italy (Rome, Turin, Milan, Venice, Genoa, Bologna, Florence, Bari, Naples and Reggio Calabria) to establish "metropolitan cities" (*città metropolitana*), endowed with a range of key competencies (e.g. in terms of spatial planning, economic development, etc.). These new institutions would require a regional law to create them, in the absence of which the central government would intervene itself. However, neither the regions nor the central government took any strong institutional or financial action. A few instances of local attempts to establish *città metropolitane* remained unsuccessful (e.g. Bologna in the 1990s, Rome and Turin in the 2000s). As a special case, Rome was given different competences from all other Italian municipalities in Law n. 42/2009, Art. 24 (Roma capitale).

In 2012, the Italian government decided to address the institutionalisation of Italian metropolitan areas more directly. In 2013, it committed itself to presenting a new law draft creating *città metropolitane*, which would leave no possibility for the regions to oppose it. The government also proposed to put aside some financial incentives in the EU Structural Funds 2014-20 programming period in order to support investments at the metropolitan scale for the ten cities previously targeted and four additional cities from the special status regions (Palermo, Messina, Catania in Sicily, as well as Cagliari in Sardinia). After a long and difficult legislative process, in April 2014, the Italian parliament passed Law n. 56/2014, which identified a roadmap up to 31 December 2014 to establish *città metropolitane*.

In an effort to avoid the vexed question of how to identify the boundaries of those metropolitan areas – which had proven a major obstacle to the emergence of metropolitan structures in the past – the government decided to take the territories of the corresponding provinces as the territories for which to assign by law the status of *città metropolitana*. The main functions devolved to the *città metropolitane* are: local planning and zoning; provision of local police services; transport and city services regulation. However, the government left each territory the freedom – and responsibility – to decide the depth and breadth of inter-municipal co-ordination. The law also provides the possibility of changing the provincial boundaries and of striking specific agreements between the metropolitan cities and individual contiguous municipalities or clusters of municipalities. Nonetheless, the complex political-administrative procedure required to expand the boundaries of metropolitan cities may be regarded as an obstacle discouraging this option.

The new metropolitan cities have been operational since 1 January 2015. The *città metropolitana* is composed of the municipalities (*comuni*) that had been part of the same province. Each *città metropolitana* is headed by a metropolitan mayor (*sindaco metropolitano*), who is the mayor of the chief town (*capoluogo*). The metropolitan mayor is assisted by two bodies: a legislative body, the metropolitan council (*consiglio metropolitano*), whose members are indirectly elected by the city councils of each municipality in the *città metropolitana*; and a non-legislative assembly, the metropolitan conference (*conferenza metropolitana*), which is composed of the mayors of the municipalities closest to the main town.

The law that transforms the provinces is preliminary to their formal abolition, as the Italian Constitution needs to be revised in order to change the current bicameral parliamentary system.

Source: Updated from OECD (2015a), *Governing the City*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264226500-en

Box 3.11. **Metropolitan municipalities and provinces in Turkey**

In Turkey, metropolitan municipalities were first created in 1984 in the three largest cities (Istanbul, Ankara and Izmir). Two main waves of legislative reform extended the number of metropolitan municipalities: Act N.5216 in 2004 and Act N.6360 in 2012. The 2012 law determines a minimum size of 750 000 people and expands the boundaries of metropolitan municipalities to their corresponding provincial boundaries in order to cover both urban and rural areas. As a result, as of 2014, there were 51 provinces and 30 "provincial metropolitan municipalities" (the latter account for approximately 75% of the national population). The reform dissolved 30 provincial administrations, 1 591 smaller municipalities and 16 082 villages (Akilli and Akilli, 2014). The objective of the reform is to reap economies of scale and improve the planning, co-ordination and cost-effectiveness of public service delivery.

Source: Updated from OECD (2015a), *Governing the City*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264226500-en

Box 3.12. **Merging city councils and a regional council into a single council: The case of Auckland (New Zealand)**

New Zealand is divided into 16 regions, which were established in 1989 by largely following the boundaries of drainage basins. Among the 16 regions, 11 are administered by regional authorities (top tier of local government), while 5 are unitary authorities that combine the functions of regional authorities and those of territorial authorities (second tier of local government). Regional and territorial authorities have complementary roles. Regional authorities are primarily responsible for environmental management; regional land management; regional transport (including public transport) and harbours; biosecurity or pest management. Territorial authorities are responsible for local-level land-use management (urban and rural planning); network utility services such as water, sewerage, stormwater and solid waste management; local roads; libraries; parks and reserves; and community development. Property rates (land taxes) are used to fund both regional and territorial government activities.

Until 2010, the Auckland Region had a regional authority (Auckland Regional Council), four city councils (Auckland, Manukau, North Shore, Waitakere) and three district councils (Papakura, Rodney and Franklin). The Auckland Regional Council was elected and collected its own rates, half of which funded public transport through the Auckland Regional Transport Authority (ARTA, established in 2004).

In 2007, the government of New Zealand set up a Royal Commission on Auckland Governance to report on how to overcome administrative fragmentation in the region and restructure its governance. The report was released on 27 March 2009. Following some of the recommendations of the report, the government decided to combine the functions of the previous regional council and the region's seven city and district councils into a new unitary "super council". The council was established by three laws: the Local Government (Tamaki Makaurau Reorganisation) Act 2009, the Local Government (Auckland Council) Act 2009 and the Local Government (Auckland Transitional Provisions) Act 2010.

The Auckland Council came into operation on 1 November 2010. At the same time, the ARTA was replaced by Auckland Transport, responsible for local authority transport delivery functions inherited from the former local authorities and ARTA (including local roads and public transport). The Auckland Council commands a large budget of NZD 3 billion per year and employs approximately 8 000 staff. Its administrative structure includes the following bodies:

Box 3.12. **Merging city councils and a regional council into a single council: The case of Auckland (New Zealand)** (*continued*)

- **Mayor:** The mayor of Auckland is directly elected every three years and leads Auckland Council's governing body. He/she has extensive executive responsibilities, including: promoting a vision for Auckland; providing leadership to achieve the vision; leading the development of council plans, policies and budgets; ensuring effective engagement between Auckland Council and Aucklanders. The Mayor is also responsible for appointing the Deputy Mayor, establishing the committees of the governing body and appointing the committee chairs.
- **Governing body:** The governing body of the Auckland Council consists of the Mayor, the Deputy Mayor and 19 councillors elected from 13 wards across the region. The governing body focuses on region-wide strategic decisions, such as: preparing the long-term council community plan, annual plan and annual report; making rates and bylaws; setting regional strategies, policies and plans, including the spatial plan and the district plan; and the governance of council-controlled organisations.
- **Local boards:** There are 21 local boards (149 members altogether), which provide important local input into region-wide strategies and plans including those of the council-controlled organisations.

Source: author's elaboration, drawing from the website of Auckland Council (n.d.), www.aucklandcouncil.govt.nz (accessed 5 July 2015).

A way to involve municipalities even more closely in the work of the MRDH is the secondment of municipal employees to the organisation. Having a core staff of employees that are fully employed by the MRDH has advantages, such as greater continuity among the staff. At the same time, transferring staff to the MRDH on a part-time basis offers greater flexibility and the possibility to work on a project basis with municipalities (as is done in the Amsterdam Metropolitan Area, see Box 3.15). The MRDH could combine both approaches and work with seconded municipal employees in addition to its own core staff of permanent employees. Possible arrangements vary from short temporary assignments to long-term assignments on a part-time basis. For example, bigger municipalities could second staff from their business development agencies to the MRDH. This would improve the capacity of the MRDH and also help to ensure that local business development strategies are aligned with the regional strategy.

The MRDH could also offer its facilities for meetings and events of other networks and inter-municipal working groups whenever possible. Making the MRDH a centre of activity related to regional co-operation has several advantages. First, as the physical location for meetings and exchanges about regional policies, the MRDH signals that it is the default institution for policy dialogue and co-operation in the region. Second, hosting meetings of municipalities provides the opportunity for MRDH staff to meet with civil servants and local politicians from across the region. This helps them to stay informed and connected to developments in municipalities and make connections between strands of activities that municipalities co-ordinate with each other. Depending on the interests of the involved municipalities, this would also allow the MRDH to become more involved over time and play a co-ordinating role in such meetings.

Finally, the MRDH could promote networking among the municipalities within (and perhaps outside) the MRDH area. This could include, *inter alia*, the organisation of meetings, seminars, trainings, Internet forums and study visits. This is one role of the Diputació de Barcelona, the provincial government in Barcelona, for instance.

Involving the business community in the decision-making process

Engaging the business community in metropolitan governance is a challenge shared across the OECD – only 9% of metropolitan governance bodies include representatives of the private sector or other interest groups (OECD, 2015a). However, the MRDH will need to foster close dialogue with the private sector if it is to achieve its stated goal of accompanying the economic transition of the region and supporting the creation of new, innovative and sustainable types of economic activity (MRDH, 2014). First, the MRDH needs the input of businesses to understand how it can support them most effectively and how the policy goals of the MRDH can be aligned with the existing activities of businesses. Second, the MRDH needs to inform businesses about its activities to allow them to react in a timely manner to new opportunities. Third, the MRDH needs to involve private businesses as partners for projects, which it either cannot fund on its own or in which private sector involvement is desirable in its own right. Several examples of private sector involvement in metropolitan reforms in OECD countries could offer interesting insights in this respect. In many cases, metropolitan authorities have worked effectively with the private sector without necessarily giving firms a voting seat (Box 3.13). Such efforts can help the MRDH become part of the "mental framework" of private stakeholders, broadening the entity's legitimacy.

Strengthening metropolitan finance

As discussed in OECD (2014b), the Netherlands has one of the lowest levels of fiscal autonomy at subnational level when compared to OECD and EU countries, especially at the municipal level. More than 70% of Dutch subnational government revenue comes from transfers (grants and subsidies), 15% from tariffs and fees, 3% from assets (financial and non-financial) and only 9% from taxes (shared and own-source taxes). This gives Dutch subnational governments the same financing profile as Greece, Ireland, Mexico, Turkey and the United Kingdom, where subnational governments remain dependent upon central government transfers.

Exploring new sources of funding

In this context, the MRDH might need to consider a different funding model if the scope of its responsibilities changes in the coming years. Metropolitan governance bodies in OECD regions usually draw from three main sources: own-source revenues, transfers from other levels of government and capital finance – each with its own set of advantages and drawbacks (Table 3.5). Currently, the MRDH operates with transfers from other levels of government: the transport pillar relies mostly on transfers from the central government and the economic development pillar is entirely funded by transfers from municipal governments. An extension of the MRDH's membership or competencies would require rethinking its financial resources.

Box 3.13. The role of the private sector in supporting metropolitan governance approaches

Chicago

In 2005, the state government of Illinois merged the operations of the former transport planning commission (Chicago Area Transportation Study, CATS) and the land-use planning commission (Northeastern Illinois Planning Commission, NIPC) to create a single organisation responsible for comprehensive regional planning, the Chicago Metropolitan Agency for Planning (CMAP), which also acts as the region's metropolitan planning organisation that co-ordinates federal investment in infrastructure. This institutional reform was the result of a two-year lobbying campaign instigated by a regional non-profit organisation representing the business community, Chicago Metropolis 2020, which orchestrated a media campaign, developed a bipartisan coalition in Illinois' legislature, found legislative sponsors and drafted the legislation that was unanimously adopted by the Illinois General Assembly. The establishment of Metropolis 2020, which changed its name to Metropolis Strategies in 2011, was motivated by the understanding that having two different agencies engaging in planning (one for land use and one for transport) was no longer a coherent strategy. The initiative was also in sync with the long-standing involvement of the business community in the city's civic affairs that dates back to Daniel Burnham's Plan for Chicago, sponsored by the Commercial Club.

Toronto

Strong momentum from the business sector was a driver of the reform process. Following a 2002 summit of business and community leaders, a senior partner of the Boston Consulting Group (David Pecaut) created and led a 40-member steering committee that produced the 2003 report "Enough talk: An action plan for the Toronto Region", which raised the government's awareness on the economic and social decline of Toronto and provided a roadmap for issues where there was a clear consensus that action was needed and quick progress could be made. Large firms played a key role in the subsequent creation of the Toronto City Summit Alliance (TCSA), a non-profit organisation that brought together civic leaders and firms from sectors such as banking, professional services and high technology. Renamed CivicAction in 2010, the organisation is led by a board of directors and a 75-leader steering committee. It has been leading and implementing a large number of collaborative projects and initiatives to drive progress on regional challenges, ranging from smart office energy to tourism recovery and income security. In 2007, together with the Boston Consulting Group, the Centre for Social Innovation and independent charity MaRS Discovery District, the organisation co-hosted Canada's first Social Entrepreneurship Summit.

Marseille

In Aix-Marseille, the "Top 20" initiative was led by entrepreneurs as an attempt to bring Aix-Marseille-Provence into the top 20 metropolitan areas in Europe. This initiative followed a study carried out in 2003 by the Inter-ministerial Delegation for Spatial Planning and Regional Attractiveness (Délégation interministérielle à l'aménagement du territoire et à l'attractivité régionale, DATAR), which ranked Marseille 23rd out of 180 European cities. In reaction to this disappointing ranking, several economic actors (including the Chamber of Commerce and Industry of Marseille Provence and the Union for the Companies of Bouches-du-Rhône) created the Club Top 20, which brought together about 70 chief executive officers. In July 2010, the club approved a strategic document entitled "Metropolitan archipelago project: The future of Marseille Provence", which put forward the concept of an archipelago as a way to highlight the specific identity of each territory composing the metropolis rather than a "monolithic vision of a centralising metropolis". The document included 28 projects related to key themes such as transport, business tourism, event tourism and international promotion. The Club Top 20 also called upon local elected officials for their support to a "manifesto for the future of Marseille Provence". The Chamber of Commerce and Industry has so far published about ten editions of the "Cahier du Top 20" that raise awareness among business leaders about metropolitan themes, such as transport and single ticketing, housing, business tourism, etc.

Box 3.13. **The role of the private sector in supporting metropolitan governance approaches** (*continued*)

London

Since the mid-1900s, the private sector in London, and more particularly large firms, were at the core of the dynamics to adopt a metropolitan approach to economic development. After the UK government abolished the Greater London Council (GLC) in 1986, economic stakeholders stimulated the debate on the strategic future of Greater London between 1986 and 2000. Following transport-related challenges and the real estate crisis at the beginning of the 1990s, large firms jointly created the London Development Partnership, which published a first strategic document in 1999. The private sector in London has long been represented through several bodies: the City Corporation (financial firms); the London Chamber of Commerce and Industry (LCCI), a voluntary association of about 4 000 members; and the London branch of the Confederation of Business Industry (CBI), which traditionally represents large firms. At the beginning of the 1990s, a business association called London First was established, composed of about 200 globally oriented firms. The former mayor of London, Ken Livingstone, built a close relationship with the LCCI, the CBI-London and London First. He urged them to co-ordinate among themselves in order to convey a single, stronger voice. The London Business Board (LBB) was therefore created in 2000 as an umbrella organisation for the three business associations at the metropolitan level and to serve as the collective interlocutor with the mayor. The LBB and the mayor met very regularly, on an almost weekly basis. Through the LBB, the business associations solved their internal conflicts of interest and agreed on common requests to submit to the Greater London Authority. Following the election of the new Mayor, Boris Johnson, in 2008, and at his request, the LBB welcomed a new member, the Federation of Small Business (FSB), as a representative of the interests of smaller firms.

Source: OECD (2015a), *Governing the City*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264226500-en.

However, options appear somewhat limited as the MRDH is not allowed to levy taxes or impose other fees or charges. Concerning own sources of revenues, several options exist in principle for metropolitan authorities. They may, for instance, have complete freedom in setting tax rates. Alternately, they may collect the tax revenues but have no influence in setting rates. Finally, they may be able to set rates within certain brackets that are determined by a higher level of government. The more freedom local governments have in setting tax rates, the more likely it is that the tax will be used as an instrument for competition between different local governments. Such competition can have positive elements, such as creating incentives for local governments to achieve more with fewer resources and thereby lowering the tax burden, but they could also have harmful consequences, such as creating a race to the bottom. In the case of the MRDH, tax competition between municipalities could harm the spirit of co-operation that the institute aims to create between municipalities.

User fees are widely seen as the most appropriate source of revenues for metropolitan areas to finance the operation and maintenance expenses of infrastructure. As part of a broader effort to achieve greener growth and sustainable development, large metropolitan areas can also exploit the potential of user fees to signal the scarcity and encourage the conservation of resources such as water and energy. The MRDH can set user fees for public transport, but as the revenues from those fees belong to the companies that are commissioned with the public transport provision, changing them will only affect the long-term financial situation of the MRDH indirectly through the amount of subsidies it needs to provide to the transport companies.

Table 3.5. **Main sources of revenues of metropolitan areas in OECD countries**

Main types of revenues		Examples	Characteristics
OWN SOURCES	Taxes	Property tax	Most common local tax. Relatively stable source of revenue. Immobile tax base and lower risk of tax evasion. Relatively costly and difficult to administer. Possibility of split-rate.
		Income tax	Often not only a local tax. Can offer substantial revenues in periods of economic buoyancy but is highly volatile. Generally argued to be more revenue-elastic than the property tax and more progressive in its distributional impact on taxpayers.
		Sales tax	Allows more direct benefits from local economic growth and addresses externalities from services by making commuters and visitors pay. May be prone to tax competition and distortions if rates are set locally.
		Business tax	Can generate substantial revenue and is more responsive to economic growth, but rarely equitable, often costly to administer, and likely to encourage tax exporting and to lead to destructive tax competition.
		Congestion charge	Sometimes called "smart taxes", fees for road use can vary throughout the day to reach its peak during rush hour, as in Stockholm (2006), but also vary across vehicles in order to charge higher rates to higher polluting vehicles, as in Milan (2008) and Singapore (1975-98).
	User fees	Public transport fares	If charged at appropriate levels, can function as market prices for market commodities (allowing users to know how much they are paying for the services they receive from local governments, and giving governments an indicator of consumer willingness to pay for services). Help ensure efficiency in production and accountability in service delivery. Low price elasticity. Uneven levels of cost recovery across OECD metropolitan areas, full recovery not frequent.
		Fees on other public services (e.g. waste, water, energy)	Full cost recovery frequent. Can help encourage resource preservation.
		Parking fees	High price elasticity. Generally effective in reducing car trips and decreasing the car share in the modal split.
TRANSFERS	Intergovernmental transfers	Equalisation grants (represent about 50% of intergovernmental transfers across the OECD)	Redistributive effect (on average in OECD countries, reduces pre-equalisation inequalities by more than two-thirds). Formula can be based on revenue equalisation and/or cost equalisation. Widespread preference for revenue equalisation, which "taxes" the fiscal resources of a jurisdiction (net effect: marginal equalisation rate) and equalises tax-raising capacity. Cost equalisation is prone to subnational manipulation and can lead to inflated allocations.
		Unconditional grants	General purpose grants with no strings attached.
		Conditional grants (either matching or non-matching)	Earmarked for specific purposes. Oriented towards inputs rather than outputs. Creates an administrative burden and may have high compliance costs. Disappointing equalising effect in the case of matching grants.
CAPITAL FINANCE	Land- and asset-based sources	Development charges	One-time levy on developers to finance growth-related capital costs (urban infrastructure and services for the developed area). In principle, should be calculated in a way that measures the incremental costs of new construction, including infrastructure costs but also congestion costs.
		Land-value capture (e.g. betterment levies)	Taxes on estimated land-value increments and windfall gains for the private sector arising from public investment.
	Public-private partnerships (PPPs) Private participation in infrastructure (PPI)	Concessions Private finance initiatives (PFIs)	Wide variety of contractual arrangements where private operators bid for a contract to design, finance and manage the risks involved in delivering public services or assets and receive fees from the public body and/or user tolls. In certain cases, can offer an attractive way to relieve municipalities from upfront capital costs and avoid highly visible debt while tapping into the expertise of the private sector, but require strong local capacity for concluding adequate contractual agreements.
	Borrowing	Bond issue or loans	Either direct access to capital markets via bond issue (but unlikely to become a main source of long-term capital investments) or loans from specialised financial institutions (often via the creation of a financial intermediary that spreads the risks across many municipalities and lowers the average cost of borrowing). Access often restricted by national legislation, due to moral hazard and macroeconomic stabilisation problems.

Source: Author's own research drawing from various sources including: Bird, R. and E. Slack (2013), "Metropolitan public finance: An overview", Chapter 6 in: Bahl, R.W., J.F. Linn and D.L. Wetzel (2013), *Financing Metropolitan Governments in Developing Countries*; OECD (2013a), *Fiscal Federalism 2014: Making Fiscal Decentralisation Work*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204577-en; OECD (2006), *Competitive Cities in the Global Economy*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264027091-en.

Capital finance is currently underutilised and might offer an avenue for the future. Capital finance includes revenues from asset sales and land-value capture tools, but also public-private partnerships and borrowing.[5] Capital finance can be used to distribute costs of current investments more evenly over time, or to make use of expected revenue gains in the future to pay for investments today. It can be highly important to finance large investments, but it is rarely the only funding mechanism for local governments or metropolitan authorities. Capital finance tools work well in conjunction with other sources of revenues that can capture the gains from public investment.

Increasing land-value capture to fund infrastructure could be a useful tool in the Netherlands to create new sources of funding for local infrastructure investments (Van der Krabben and Needham, 2008). Land-value capture refers to tools used by governments to recoup some of the costs of public infrastructure investment and other public improvements to private land from the land owners who benefit from it. Tools can include land taxes, fees, pre-emptive purchase rights for local governments at discounted prices and co-development of the improved land (OECD, 2015b). According to Munoz Gielen and Tasan-Kok (2010), land-value capture is little developed in the Netherlands and costs for site development are largely borne by the public. Whereas for example in England, private land owners pay a large share of the costs of on-site infrastructure development, such investments in the Netherlands are heavily subsidised by the central government. Dutch municipalities have the possibility to undertake joint developments of land together with private developers, but this has become difficult in the aftermath of the bursting of the housing bubble in 2008. Furthermore, no systematic tools to capture betterment (i.e. the gains in value of privately held land in response to public investments) exist.

For local governments, land-value capture is a way to internalise the positive externalities of infrastructure developments. If successful, it can increase infrastructure investments by local governments and avoid an inefficient under-provision of infrastructure that might occur if the beneficiaries of the infrastructure do not pay for its costs. Furthermore, when it is applied consistently, land-value capture prevents public investments from leading to large windfall gains for private land owners. In other words, it avoids that a few individuals benefit at the taxpayers' expense from investments. Thus, it is not only justified for efficiency reasons; it also improves equity of public spending. Lastly, land-value capture increases local autonomy with respect to infrastructure investment decisions, because it reduces the need for funding from other levels of government.

The sources of revenues discussed above are not mutually exclusive. In fact, many metropolitan authorities with budgets above that of the MRDH rely on a mix of them. Most are flexible and allow for an incremental increase in the available budget that could correspond to an evolving set of responsibilities of the MRDH.

Addressing fiscal inequalities within the MRDH area

Promoting further integration within the MRDH area might also require addressing fiscal inequalities among municipalities. Across the Netherlands, the national municipal fund compensates the municipalities that have higher costs, for example due to a higher share of low-income inhabitants. In a few OECD metropolitan areas, intra-metropolitan equalisation schemes have been implemented to specifically tackle the negative externalities of urban sprawl and compensate for inequalities in tax bases. Such schemes may include redistributive grants and tax-base sharing. These are typically only

implemented in megalopolises governed by a single metropolitan government (e.g. Seoul, Tokyo) or in rare exceptions – the best-known example is the Twin Cities Fiscal Disparities programme in place in Minneapolis-St. Paul (Box 3.14). Tax-base sharing mechanisms help share the costs of public services and promote regional planning. At the same time, they may also generate disincentives for economic development, since the wealthier municipalities get, the less they receive in terms of grants. In general, they are politically and financially difficult to implement.

Box 3.14. **The Twin Cities Fiscal Disparities programme: Tax-base sharing in Minneapolis-St. Paul (United States)**

In 1975, Minnesota law stipulated that a portion of the commercial/industrial tax base in each community within the Minneapolis-St. Paul metropolitan area be shared. Using 1971 as the base year, the Twin Cities Fiscal Disparities programme places 40% of the growth in commercial/industrial (C/I) tax base in each municipality in each year into a seven-county, metro-wide pool and distributes the tax base back to participating municipalities and school districts, based on tax base and population. The redistributed tax base is then taxed by each location at its own tax rate. C/I property includes all businesses, offices, stores, warehouses, factories, gas stations, parking ramps, as well as public utility property and vacant land that are zoned for commercial or industrial use. Not included are properties in tax increment financing districts and the Minneapolis-St. Paul International Airport.

The programme benefits most of the region's residents. In 2011, 64% of households in the region lived in areas that received more from the pool than they contributed. Minneapolis has had periods where it contributes and others when it benefits. In St. Paul, one of the largest beneficiaries, the average homestead tax is roughly 9% lower than it would be without Fiscal Disparities.

The programme has been a very effective way to:

- Reduce incentives for inefficient competition for tax base and improve equity in the distribution of fiscal resources. Tax-base sharing reduces the imbalance between some communities' public service needs and financial resources. The uneven distribution of commercial and industrial properties is thought to be a major cause of imbalance. Communities with low tax bases must impose higher tax rates to deliver the same services as communities with larger tax bases. Consequently, the higher tax rates render the communities less attractive for businesses. Communities then compete by offering special concessions to attract businesses, presuming that these businesses will contribute more in taxes than they require in services. The programme reduces overall property tax base inequality in the region by about 20% (as measured by the Gini coefficient). It reduces the ratio of the highest to lowest tax base per household from 25 to 8 and it reduces the ratio of the second highest to second lowest tax base per household from 10 to 4.

- Promote regional planning and encourage joint economic development efforts. Communities may be willing to accept low tax yield regional facilities (e.g. parks) if they are to share the benefits of other communities' commercial development. By reducing competition for development, urban sprawl is discouraged, reducing the costs of providing regional services such as sewage and transportation. Distribution from a common tax pool is determined by multiplying each community's share of the metropolitan population by a relative fiscal capacity index, the ratio of average fiscal capacity in the region and the community's fiscal capacity. This means that communities with below average fiscal capacity have an index greater than 1, while communities with above-average fiscal capacity have an index less than 1. A community with average fiscal capacity will receive a distributive share of the pool equal to its proportion of the entire area's population. Low capacity communities receive shares greater than their share of area population (net recipients) whereas high capacity communities receive shares smaller than their share of area population (net contributors).

Source: Various sources including OECD (2006), *Competitive Cities in the Global Economy*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264027091-en.

The MRDH initiative in the broader context of Dutch national urban policy

Allowing for the creation of the MRDH (and the Amsterdam Metropolitan Area [Metropoolregio Amsterdam, MRA]) illustrates the Dutch government's recent willingness to tailor its urban policy to the specific needs of different urban areas, as opposed to imposing a uniform setting across the entire country. The following section first reviews the new role of the central government in enabling more effective governance arrangements in Dutch urban areas, and secondly examines the main components of the National Urban Agenda currently under development. This new approach from the central government to experiment with asymmetrical governance solutions has ultimately enabled the creation of the MRDH.

Two different metropolitan authorities and a variety of informal partnerships across the Netherlands

Since city-regions were abolished, differentiated forms of metropolitan governance exist in the Netherlands. As mentioned earlier, the two largest metropolitan regions, Amsterdam and Rotterdam-The Hague, have a specific arrangement, with notable differences between the two (see also Box 3.15 and Table 3.6):

- Balance of powers in a monocentric vs. a polycentric region. While in the MRDH area, two cities of a similar size (Rotterdam and The Hague accounting for 28% and 23% of the MRDH population, respectively) joined forces to bring their smaller neighbours on board, the MRA revolves around the city of Amsterdam (36% of the MRA population, far ahead of the 8.5% living in the second-largest city, Almere). An "Amsterdam-Almere twin-city vision" was briefly put forward in 2002-03 in response to the strategic needs of greater Amsterdam's development in terms of housing policy,[6] but the sheer size difference between the two cities made it clear that Amsterdam is the leader of the region. The balance of powers among municipalities also shapes the relationship with the province in each region (see following point).
- Collaboration with the province *ex ante* vs. competition with the province *ex post*. Not only was the Province of Zuid-Holland not involved in the creation of the MRDH, the MRDH was deliberately established as an alternative to the province recuperating the transport and traffic grant from the central government. In contrast, the Province of Noord-Holland was part of a deliberative process that ultimately led to the creation of the MRA and has been one of its members from the outset. As discussed in Chapter 2, both provinces are responsible for spatial planning. But while the Province of Zuid-Holland has in many cases overridden local planning decisions, the Province of Noord-Holland has largely acknowledged the need for effective regional co-operation on spatial planning issues.
- More flexible geometry in the MRA. While the MRDH covers the same geographical area with both pillars, the MRA organises each of its three pillars in a slightly different manner. Concerning transport, a core group composed of 16 municipalities of the former Stadsregio Amsterdam, who now form the transport authority region Amsterdam, agreed with two other municipalities (Almere and Lelystad) and the two provinces (Noord-Holland and Flevoland) to co-operate on transport and traffic issues in 2015 and 2016. The overall ambition is to expand this co-operation to the whole MRA area over time. Regarding

economic development and spatial planning, the MRA operates with flexible project-based networks.

- Contrasted use of triple helix co-operation. While both the MRDH and the MRA work alongside separate triple-helix co-operation platforms (Southwing Economic Board/EPZ, and Amsterdam Economic Board/AEB, respectively), they have established different relationships with them. The EPZ operates under the auspices of the Province of Zuid-Holland. The AEB was founded and chaired by the mayor of Amsterdam, with the participation of the Province of Noord-Holland, the private sector and knowledge institutions. The AEB also plays a strong advisory role to the MRA.

Box 3.15. **Metropolitan governance in Amsterdam**

The metropolitan area of Amsterdam is organised in two governance arrangements: a smaller scale partnership (16 municipalities) and a larger structure called Metropoolregio Amsterdam, or MRA (36 municipalities and 2 provinces).

Transport Authority Amsterdam region

The Transport Authority Amsterdam covers around 1.3 million people spread across 16 municipalities (including Amsterdam, by far the largest). It takes over the transport and traffic functions of the city-region (Stadsregio Amsterdam), which was abolished as of January 2015. The city-region used to set out its programme of work in the Regional Agenda 2010-2030, which included tasks such as developing a regional economic development strategy and a regional housing policy, improving regional accessibility, preserving the quality of the landscape and organising youth care.

Amsterdam Metropolitan Area

The Amsterdam Metropolitan Area (Metropoolregio Amsterdam, MRA) is an informal voluntary association of 36 municipalities (including the 16 municipalities covered by the above-mentioned transport authority) and 2 provinces (Noord-Holland and Flevoland). The MRA fosters co-operation in three main policy fields: transport, economic development and spatial planning. Each policy field has its own platform:

- Platform for the Accessibility of the Amsterdam Metropolitan Area (PBM): it meets on average six times a year and co-ordinates all activities related to traffic and transport projects.
- Platform for the Regional Economic Structure (PRES).
- Platform for Planning (PRO): it meets approximately four times a year. Special attention is paid to the issues of sustainability, metropolitan landscape and urbanisation.

Source: Metropoolregio Amsterdam website (n.d.), www.metropoolregioamsterdam.nl (accessed 5 June 2015); Stadsregio Amsterdam website (n.d.), www.stadsregioamsterdam.nl (accessed 5 June 2015).

In other parts of the Netherlands, there is no structure comparable to the MRDH and the MRA, but the existing legal framework has allowed provinces and municipalities to establish a rich variety of co-operation mechanisms, even before city-regions were created. This variable geometry of lightly institutionalised mechanisms includes, among many others, the Groningen-Assen Regional Alliance (a voluntary association of 2 provinces and 12 municipalities), BrabantStad (a partnership of 5 cities and 1 province) and Metropoolregio Eindhoven (Box 3.16).

Table 3.6. **Comparing the greater Amsterdam Metropolitan Area and the Metropolitan Region of Rotterdam-The Hague**

	Metropolitan Region of Rotterdam The Hague (Metropoolregio Rotterdam-Den Haag, MRDH)	Amsterdam Metropolitan Area (Metropoolregio Amsterdam, MRA)
Members	– 23 municipalities	– 36 municipalities (including the 16 municipalities that together form the Transport Authority below) – 2 provinces (Noord-Holland and Flevoland) – Transport Authority Amsterdam region (a partnership of 16 municipalities)
Population	2.2 million	2.4 million
Share of major cities in the total population	– Municipality of Rotterdam: 616 295 inhabitants (27.9% of the MRDH population) – Municipality of The Hague: 505 855 (22.9%)	– Municipality of Amsterdam: 825 080 inhabitants (36% of the MRA population) – Municipality of Almere: 196 290 inhabitants (8.5%)
History of governance (including previous/ co-existing structures)	Previously two distinct city-regions: Rotterdam (Stadsregio Rotterdam) and The Hague (Haaglanden). Merged into a new metropolitan entity (Metropoolregio Rotterdam-Den Haag, MRDH), which came into operation in January 2015.	Regional Orgaan Amsterdam (ROA), created in 1986: initially formed of 23 municipalities (eventually reduced to 16), an inter-municipal body endowed with a council of 56 municipal representatives (including 21 for the municipality of Amsterdam) and its own statutory competencies. Prepared a *structuurvisie* report (*De grenzen verlegd*) in 1990, calling for a binding regional co-operation body in charge of housing, economic development, transport and environment. Was renamed "Stadsregio Amsterdam" (city-region) in 2006. As of January 2015, the city-region was abolished and replaced by the Transport Authority Amsterdam Region covering the 16 municipalities. The functions of housing and economic development will be transferred to another body, to be decided in 2016.
	Southwing Administrative Platform South Wing (Bestuurlijk Platform Zuidvleugel, BPZ) created in 1997 as a temporary network of administrators from different government tiers: the Province of Zuid-Holland (chairing the platform); five regional co-operation bodies including the city-regions of Rotterdam and The Hague; Holland Rijnland (the northern part of the province with Leiden as the largest city); the Drechtsteden (Dordrecht and surrounding municipalities); and Midden-Holland (Gouda and its environs); as well as the municipalities of Rotterdam and The Hague. Converted into permanent structure in 2000 and renamed South Wing Co-operation (Samenwerkingsverband Zuidvleugel) in 2011. Provides the organisational setting for the annual negotiations with the central government as part of the Multi-year Plan for Infrastructure, Spatial Planning and Transport (Meerjarenplan Infrastructuur, Ruimte en Transport, MIRT).	Regionale Samenwerking Amsterdam (RSA), created in 1998: a voluntary association covering a larger area than ROA, chaired by the mayor of Amsterdam and the then Queen's Commissioner, for informal project-based co-operation. Organised "Northwing conferences" (*Noorvleugelconferenties*), which provided regional deliberation arenas between municipalities, the Province of Noord-Holland and relevant ministries on key strategic investment issues. After the 7th Northwing conference (in 2007), there was a unanimous decision to rename the RSA the Metropoolregio Amsterdam (MRA).
	South Wing Economic Programme Board (Economische Programmaraad Zuidvleugel, EPZ): triple helix form of co-operation created in 2014.	Amsterdam Economic Board (AEB): triple-helix co-operation network founded and chaired by the Mayor of Amsterdam, with the participation of the Noord-Holland Province, the private sector, knowledge institutions. The AEB plays a strong advisory role to the MRA.
Competencies	The MRDH has two pillars: – Transport – Economic development	The MRA has three pillars, which are organised differently from each other: – Transport: in 2014, the municipalities of Stadsregio Amsterdam signed an agreement with two other municipalities (Almere and Lelystad) and the two provinces (Noord-Holland and Flevoland) to co-operate on transport and traffic issues in 2015 and 2016. – Economic development: this pillar works alongside the AEB. – Spatial planning: project-based network with different levels (aldermen, directors, technical secretariat). Deals with a variety of issues including sustainability, housing, metropolitan landscape, etc.

Source: Author's own elaboration.

Box 3.16. Different examples of collaboration between provinces and municipalities in the Netherlands

Groningen-Assen Regional Alliance

The Groningen-Assen Regional Alliance is a voluntary platform of co-operation at the scale of the functional urban area. The alliance brings together the 2 provinces of Groningen and Drenthe, as well as 12 municipalities (Assen, Bedum, Groningen, Haren, Hoogezand-Sappemeer, Leek, Noordenveld, Slochteren, Ten Boer, Tynaarlo, Winsum and Zuidhorn). It produced a joint spatial development strategy ("Regiovisie 2030") in 1996, which was updated in 2005, and set up a joint fund (Regiofonds) composed of financial contributions of the different partners and supplemented by central government and European grants (for a total of about EUR 1.5 billion for the 2004-20 period). The current agreement was signed in 2004 and will remain in effect up to 1 January 2030.

BrabantStad

BrabantStad is a network that brings together five non-contiguous cities (Breda, Eindhoven, Helmond, 's-Hertogenbosch and Tilburg) and the Province of North Brabant. It covers about 1.5 million people. The partnership was created in 2001 at the initiative of the then Queen's Commissioner of Brabant. The partnership focuses on promoting the economic development of the area as a hub and raising its national and international visibility. Initially a loose strategic partnership, it has moved beyond its original focus on lobbying and has begun to develop a focus on integrated spatial planning. A strategic agenda was prepared for the period 2012-20, with four core principles: strengthening economic resilience through knowledge, innovation and valorisation; increasing the international appeal of the territory; increasing international accessibility; and strengthening the spatial structure of the urban network.

BrabantStad has a complex system of discussion, joint working and decision making, with decisions reached through consensus. Its various organs include: "ambassadors" (the King's Commissioner and the mayors of the five cities, who focus on lobbying the Dutch government and the European Commission about commonly agreed positions); a steering committee made up of senior representatives from the six partners; a small support team (employed by the province, but delegated to the partnership); and a range of working groups on agreed themes. The partnership worked on proposing Eindhoven as the Dutch nominee for the 2018 EU Capital of Culture.

BrabantStad partly overlaps with Metropoolregio Eindhoven, a voluntary co-operation structure that encompasses 21 municipalities and succeeded to the city-region of Eindhoven (Samenwerkingsverband Regio Eindhoven) in March 2014. The tasks related to transport were, in that case, transferred to the Province of North Brabant. BrabantStad also lies within the Eindhoven-Leuven-Aachen Triangle (ELAT), a highly successful cross-border partnership for innovation.

Sources: Adapted from OECD (2014b), *OECD Territorial Reviews: Netherlands 2014*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264209527-en; website of the Groningen-Assen Regional Alliance (n.d.), www.regiogroningenassen.nl (accessed 10 July 2015); OECD (2011), *Rural-Urban Partnerships: An Integrated Approach to Economic Development*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204812-en.

Should the existing arrangements in the largest urban areas require further adjustment in the long term, the Dutch government could also help facilitate a smooth transition. Recently, the Ministry of Interior has taken up a role as a facilitator of a better working relationship between the MRDH and the Province of Zuid-Holland. In several other OECD metropolitan areas, the central government has played a valuable role to embed change. For example, the French government is currently accompanying the creation of the new metropolitan authority Aix-Marseille-Provence (see Box 3.1 earlier in this chapter) through an inter-ministerial taskforce that will be dissolved when the metropolitan authority comes into operation on 1 January 2016. In another example, during the transition towards the creation of the consolidation of a single Auckland Council (see Box 3.15), the government of New Zealand operated an Auckland Transition Agency over a year and a half (Box 3.17).

Box 3.17. The support of the central government in facilitating metropolitan governance reforms: The examples in Aix-Marseille (France) and Auckland (New Zealand)

Aix-Marseille (France)

Acknowledging that the law is only a first step whose implementation will determine its effectiveness, the French government appointed a "*préfet délégué*" to the metropolitan project, with the task of animating a temporary interministerial taskforce in support to the future métropole (Mission interministérielle pour le projet métropolitain Aix-Marseille-Provence). (A similar taskforce was also established for the metropolitan project of Grand Paris.) The taskforce aims to manage the transition and build ownership of the metropole by different stakeholders (local governments, private sector, civil society).

Under the Minister of State Reform, Decentralisation and Public Administration, the taskforce includes about 15 people from a diversity of backgrounds (regional council, chamber of commerce, prefecture, port, public companies, etc.). The taskforce is supported by two bodies: 1) a "council of elected officials" (*conseil des élus*), which is composed of the chairs of the six inter-municipal authorities that are scheduled to merge, mayors appointed by the latter, the Mayor of Marseille, the chairs of the councils of the next two upper levels of government (the *département*'s Conseil général des Bouches-du-Rhône and the region's Conseil régional Provence-Alpes-Côte d'Azur); and 2) a "council of partners" (*conseil des partenaires*), which includes representatives from labour unions, schools and universities, firms, etc.

Auckland (New Zealand)

The Auckland Transition Agency (ATA) was established by legislation in May 2009 and ceased to exist upon the establishment of the Auckland Council on 1 November 2010. Its task was to manage and oversee the transition process of amalgamating the regional council and seven city/district councils into one Auckland Council and Local Boards. The ATA Board was composed of five members appointed by the central government from various backgrounds, including the Chairman of the Auckland Regional Transport Authority (ARTA), a former mayor and personalities with strong experience from the legal, media and finance sectors.

During the transition period, the ATA was entitled with the power to confirm or decline various decisions taken by councils and certain other local government organisations. These decisions included entering into any contract (other than an employment agreement) that imposed obligations after 30 June 2011 and involved consideration of NZD 20 000 or greater. The ATA was required to consider whether, in each case, the decision could significantly constrain the powers or capacity of the Auckland Council following the reorganisation or have a significant negative financial impact on it. It was also required to consider whether the decision could significantly prejudice the reorganisation process. In making this assessment, the ATA had to take into account factors, such as the likelihood and magnitude of any potential adverse effects, the obligations on councils to continue to perform their roles in the interim and whether the decision was part of an ongoing project or key local government project.

The ATA was organised into 13 project management work streams: workforce and human resources, legal, community services, finance and treasury, property and assets, council-controlled organisations, environment policy and planning, environmental services, environmental regulation, governance, customer services, business processes and systems, communications and public affairs. Each work stream was run by a project leader from the ATA team. Former council organisations nominated employees to be involved in project teams.

Sources: Drawing from various sources including the website of the interministerial taskforce (n.d.), www.mouvement-metropole.fr (accessed 6 July 2015); and the website of the Auckland Transition Agency (n.d.), www.ata.govt.nz (accessed 6 July 2015).

The Dutch National Urban Agenda embraces broad strategic objectives

The national government is elaborating a National Urban Agenda (Agenda Stad, NUA) as part of an overarching ambition to strengthen Dutch cities and urban areas. Institutional reforms, including the creation of the MRDH, are a key part of the strategy. The NUA aims to strengthen economic growth, innovation and liveability in cities, thereby marking an important shift from past urban policy in the Netherlands, with the following key features (further developed in Box 3.18):

- A shift of focus from the regeneration of priority neighbourhoods towards broader objectives of growth, innovation and quality of life across the entire urban network. Past urban policy focused on urban and social regeneration measures that channelled funding to priority areas. For example, the Action Plan for Empowered Neighbourhoods (Actieplan Krachtwijken), launched in 2007 by the then Ministry of Housing, Communities and Integration, targeted 40 deprived neighbourhoods across 18 cities. Such neighbourhoods were selected on the basis of their high unemployment, challenges in terms of liveability and safety, as well as an ageing housing stock. The plan initially included measures for improving housing, employment, education, integration and safety over the course of a decade, but part of the funding (which was agreed to come from housing associations) was scrapped in 2011, bringing the plan to a halt. Departing from this approach, the NUA is currently guided by four strategic principles: 1) strengthening the entire urban network; 2) fostering adaptability and resilience; 3) enabling customisation and experimentation; 4) facilitating multi-level collaboration on shared ambitions.
- An intergovernmental, public-private collaboration process. The Ministry of Interior and Kingdom Relations is co-ordinating the preparation of the NUA, working closely with the Ministry of Economic Affairs and the Ministry of Infrastructure and the Environment, as well as other ministries where relevant. A process of extensive dialogue with cities, businesses, knowledge institutions and civil society organisations has been conducted, with a call for innovative proposals.
- The search for pragmatic tools. A critical component of the NUA is a tool called the City Deals, inspired from the UK City Deals and the Green Deals already in place in the Netherlands.[7] City Deals are not attached to any new funding, but pool together and boost existing initiatives and funding streams. They also allow for a temporary adjustment of regulations in order to move selected projects forward.

Lessons from the MRDH for the National Urban Agenda

Along with the introduction of specific tools for co-operation, such as the City Deals, the national government could also consider how a range of public policies in other, related domains could be adapted to meet the ambitions of the new National Urban Agenda. Some of the policy bottlenecks observed in the MRDH in terms of housing, spatial planning, and transport may also be relevant in other Dutch urban areas. OECD (2014c) recommends that in designing national urban policy frameworks, governments should: 1) identify policies that have a particularly strong effect on urban development, even if they are not explicitly designated as "urban"; 2) analyse the interactions between those policies with a view to avoiding incoherence and, where possible, identify potential

synergies among them. In the Netherlands, several policy domains would appear to be particularly useful to reconsider in light of their potential impacts on cities and urban development.

Box 3.18. **The National Urban Agenda under development in the Netherlands**

The Dutch government, under the leadership of the Ministry of Interior and Kingdom Relations, is developing a National Urban Agenda (Agenda Stad). It launched a call for cities and relevant actors to present their ambitions and position papers on how to boost growth, innovation and quality of life in Dutch cities. A major National Urban Agenda Conference brought together more than 500 stakeholders on 15 April 2015. Drawing from this wide-ranging consultation, the essence of the NUA was communicated to the House of Representatives (Lower House, Tweede Kamer) on 26 June 2015 via a letter co-signed by the Minister of Interior and Kingdom Relations, the Minister of Economic Affairs, the Minister of Infrastructure and the Environment, and the State Secretary of Infrastructure and the Environment.

The Dutch NUA revolves around four guiding principles:

1. Strengthening the urban network. The government not only focuses on the Randstad or the largest cities, but on exploiting complementarities across the entire polycentric urban network of the Netherlands. The Urban Agenda goes beyond a pure economic growth approach and embraces broader objectives such as quality of life and innovation (including the concepts of circular economy, smart mobility, social and managerial innovation, etc.).
2. Fostering adaptability and resilience. The Urban Agenda aims to help cities quickly develop solutions in response to new economic and social challenges and market them internationally.
3. Enabling customisation and experimentation. The government has adopted a no one-size-fits-all approach and will allow some cities to deviate from existing statutory and regulatory schemes during a predetermined timeframe to better address social issues. The government received proposals from 25 municipalities and is selecting those that will be carried out as experiments starting from 1 January 2017.
4. Multi-level, public-private co-operation on shared ambitions. The government acknowledges the importance of co-creating workable solutions with various levels of government, businesses and other social stakeholders, rather than a unilateral supply-demand relationship between cities and the government. Reducing administrative fragmentation can help, but success ultimately comes down to a cultural shift towards willingness to co-operate.

A large number of cities and other institutions and stakeholders have responded to the government's call for ambitions. Respondents include G4 (the four largest cities), G32 (the next 36 largest cities), the Association of Dutch Municipalities (Vereniging van Nederlandse Gemeenten, VNG), the Network of Knowledge Cities, the MRA, the MRDH, BrabantStadsome provinces, the Association of Water Boards, and individual cities such as Utrecht, Zwolle, Nijmegen, Overijssel, Gelrestad, Landstad Noord-Nederland.

Examples of proposed initiatives include solutions for: smart cities (e.g. developing The Hague Security Delta into the main cybersecurity hub in Europe); accessible cities (e.g. proposal from Groningen and Zwolle for more effective management for bicycle and bike parking at stations; in June 2015, a group of 30 parties – including the public sector, businesses and various interest groups – signed a Green Deal to encourage car sharing); inclusive cities (e.g. the cities of Eindhoven, Enschede, Leeuwarden, Utrecht and Zaanstad are experimenting with more efficient management of care, housing, unemployment and social assistance services); healthy cities (e.g. Utrecht is organising research institutions and companies in a Health Campus and is interested in developing a toolbox for Healthy Urbanisation; Amsterdam is planning to promote prevention by providing innovative incentives to healthcare providers).

Box 3.18. **The National Urban Agenda under development in the Netherlands** (*continued*)

Based on the proposals received from the cities, over the coming months, the government will discuss which ones could be developed into "City Deals" – public-private co-operation agreements on concrete, urgent tasks, which are modelled after the City Deals in the United Kingdom and the Green Deals in the Netherlands. City Deals do not provide any new funding, but pool together existing resources and allow for a temporary adjustment of regulations for innovative pilot projects.

Source: Based on the letter "Voortgang Agenda Stad" (kenmerk 2015-0000307564) to Parliament dated 26 June 2015 from the Ministry of Interior and Kingdom Relations, the Ministry of Economic Affairs, the Ministry of Infrastructure and Environment, and the State Secretary of Infrastructure and Environment.

This report has discussed at length the potential barriers to greater agglomeration benefits in the Netherlands, including both the existence of two distinct economies of Rotterdam and The Hague (Chapter 1), as well as explicit public policies that have prevented the development of large urban agglomerations (Chapter 2). Past spatial planning policies have been successful on many fronts (e.g. in facilitating the development of a dense urban network that is well connected by public transport, and maintaining a high quality of life, based on numerous measures of well-being). However, they have explicitly aimed to curb further urban growth in the country's largest cities, thereby limiting potential agglomeration benefits. If productivity growth is indeed a desired objective of the national government, policy makers could further review existing spatial planning policies to ensure that they are consistent with this ambition. It will nonetheless remain important to consider and manage possible trade-offs of larger cities, such as the potential for increased congestion or pollution. Moreover, policy makers should ensure that land-use, transport and economic development are integrated into a co-ordinated strategy for urban areas.

By extension, this report has also mentioned the possible impacts of the country's polycentric spatial structure on productivity levels, although more research is needed to understand the relationship between spatial structure and productivity in the Netherlands. What does appear to be clear is the importance of connectivity among Dutch urban areas, and the productivity gains to be made from short travel times among large Dutch cities. Improved connectivity could increase market access and boost agglomeration benefits. These findings are consistent with the 2007 *OECD Territorial Review of the Randstad*, which highlighted that the Randstad area was not sufficiently exploiting the proximity of its four large cities (OECD, 2007).

The national government could reconsider the highly localised management of the social housing system, given the effects on regional labour markets. As discussed in Chapter 2, the current system may result in a reduction of regional labour markets by discouraging households from accepting a job in another social housing market, rather than lose their social housing unit (or their place on the waiting list). Reforms to the social housing system should aim to increase the flexibility of workers in their ability to select a place of residence (so that they are more likely to find a job that matches their skills) and, potentially, reduce the need for long commutes and increased congestion (when people are encouraged to live closer to where they work). One of the recommendations for the MRDH in Chapter 2 may be relevant for other large Dutch urban areas: that is, to merge the two social housing waiting lists in the MRDH area into a single list, which would also require a realignment of social housing regulations. Changes to national social housing policies should be accompanied by efforts at the regional/MRDH level to enhance labour mobility.

More broadly, the national government could also facilitate the development of a larger unregulated (private) rental market to enable greater labour mobility. Some progress has been made in recent years, yet additional measures are needed to increase the size of this sector. For instance, OECD has recommended: 1) introducing tighter income conditions for eligibility; 2) further differentiating rent increases depending on income; 3) continuing to relax rules for the sale of dwellings by housing associations; 4) fully liberalising rents for new construction and for new contracts in the private rental sector; 5) easing strict land regulation; 6) accelerating the reduction of mortgage interest relief once the housing market starts to recover durably (OECD, 2015c).

Ambitions of the NUA compared to urban policy objectives of governments across the OECD

The shift of focus in national urban policy mentioned earlier places the Netherlands in line with broader OECD trends and opens up a valuable window of opportunity for the MRDH to develop a stronger partnership with the national government. Many OECD countries are increasingly aware of the significant contribution of urban areas to national economic performance and developing national visions or strategies for cities (Box 3.19). Compared with other OECD countries, the Netherlands is focusing on a selective set of overarching priorities that aim to empower cities (Table 3.7). The MRDH could take advantage of the NUA to speak with a unified voice.

Box 3.19. **Getting cities right: The OECD approach to urban policy**

Cities are the economic engines of national economies and, thanks to global urbanisation trends, the places in which most people across the world live. By getting cities right (Table 3.7), governments can serve a greater share of the population and economy. Yet many policies with major implications for cities are never really seen through an "urban lens", and even though a wide range of national policies can have a profound effect on urban development, most national governments have rarely reviewed this impact systematically. This is changing, however, and a growing number of governments are expanding their vision of urban policy and seeking to improve the co-ordination of different strands of policy that have significant urban impacts. Achieving policy coherence for urban development often requires governments not only to enhance communication among those charged with explicitly "urban" dossiers, but also to consider a wider range of sectoral policies than they have tended to see as "urban". This should facilitate better co-ordination across national sectoral policies and contribute to better alignment of national and city-level initiatives, thereby strengthening the impact of both.

Table 3.7. **Getting cities right: The OECD perspective**

Moving from	Towards
An administrative logic, where cities are seen as administrative entities, solving problems within boundaries, even if the impact extends beyond	A functional logic, where cities are seen as functional economic areas, and solutions need to be adapted to the area of impact
Problem-driven, with a focus on issues such as air pollution, congestion, poor economic performance, failing neighbourhoods	Strategic, with a focus on opportunities (e.g. how cities of all sizes can grow and contribute to national policy objectives)
A narrowly defined urban agenda (e.g. national urban policies limited to one or two urban issues, such as infrastructure provision or revitalising distressed neighbourhoods)	A holistic approach (with national government awareness of the full range of policies that can profoundly shape urban development)
A silo approach, with sectoral, fragmented responses to specific challenges (e.g. transport, land use, water, waste, economic development)	Integrated approaches to cross-cutting urban challenges, based on co-ordinating economic, social and environmental policies (e.g. improving the quality of life and citizens' well-being, and green growth strategies)

Sources: OECD (2014c), *OECD Regional Outlook 2014: Regions and Cities: Where Policies and People Meet*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201415-en; excerpt from OECD (2015c), *OECD Urban Policy Reviews: Mexico 2015: Transforming Urban Policy and Housing Finance*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264227293-en.

Table 3.8. **Key issues in national urban policies in the Netherlands and selected OECD countries**

	Key strategy/document	Key themes	Examples of measures
Australia	National Urban Policy "Our Cities, Our Future" (2011) prepared by the Department of Infrastructure and Transport	Three goals, broken down into 14 objectives: 1) Productivity – Improve labour and capital productivity – Integrate land use and infrastructure – Improve the efficiency of urban infrastructure 2) Sustainability – Protect and sustain natural and built environments – Reduce greenhouse gas emissions and improve air quality – Manage resources sustainably – Increase resilience to climate change, emergency events and natural hazards 3) Liveability – Facilitate the supply of appropriate mixed-income housing – Support affordable living choices – Improve accessibility and reduce dependence on private vehicles – Support community well-being Good governance: – Improve the planning and management of cities – Streamline administrative processes – Evaluate progress Ten principles: efficiency, value for money, innovation, adaptability, resilience, equity, affordability, subsidiarity, integration, engagement	"Our Cities, Our Future" (2011) contains a detailed summary action plan with concrete actions and financial allocations to be carried out over three timeframes: short term (2011-14), medium term (2014-17) and long term (2017-20).
Chile	National Urban Development Policy (2013)	Overarching objective: developing sustainable cities and improving urban quality of life. Five thematic areas: social integration, economic development, environmental balance, cultural heritage, governance	The government recently approved the creation of the National Council for Urban Development (Consejo Nacional de Desarrollo Urbano).
China (People's Republic of)	National Plan on New Urbanisation (2014-2020), approved by the State Council in March 2014	Focus on "people-centred urbanisation", i.e. the quality of urban growth, giving greater priority to questions of equity, environmental protection and quality of life in cities, in addition to output growth	Measures to facilitate the access of migrants (moving from rural to urban areas) to education, skills development and social protection.

Table 3.8. **Key issues in national urban policies in the Netherlands and selected OECD countries** (*continued*)

	Key strategy/document	Key themes	Examples of measures
The Netherlands	National Urban Agenda (Agenda Stad), summarised in a letter sent to the House of Representatives in June 2015 by the Ministry of Interior and Kingdom Relations, the Ministry of Economic Affairs, the Ministry of Infrastructure and the Environment and the State Secretary of Infrastructure and the Environment	Four leading principles: 1) Strengthening the urban network 2) Fostering adaptability and resilience 3) Enabling customisation and experimentation 4) Multi-level collaboration on shared ambitions	The government is planning to conclude City Deals with cities on concrete, urgent tasks.
Mexico	National Urban Development Programme (Programa Nacional de Desarrollo Urbano, 2014-18), released in April 2014 by the Ministry of Agrarian, Territorial and Urban Development (SEDATU) created in 2013	Six objectives: – Controlling urban sprawl – Boosting well-being and sustainability – Developing instruments to improve land management – Promoting sustainable mobility – Avoiding irregular settlements and development in risk zones – Boosting local economic development	Heavy reliance on housing subsidies and introduction of urban containment perimeters to curb urban sprawl.
Poland	National Urban Policy (Krajowa Polityka Miejska): draft presented in March 2014 by the Ministry of Infrastructure and Development Timeframe: 2020	Five objectives: (1) competitive, (2) strong, (3) integrated, (4) cohesive and sustainable and (5) efficient cities Ten key challenges: spatial development, social engagement, transport and urban mobility, low-emission economy and energy efficiency, urban revitalisation, investment policy, economic development, environmental protection and adaptation to climate change, demography, management of urban areas	Knowledge centres to support local policy makers.
United Kingdom	White paper "Unlocking the growth in cities" (2011), co-signed by the Deputy Prime Minister and the Minister for Cities	Recognises that cities are the engines of economic growth and proposes to further unlock their potential by giving them real powers, effective leadership and an ability to take strategic decisions across their economic footprint.	City Deals, which give cities new powers in exchange for greater collaboration and responsibility to support economic growth in their area.

Sources: author's own elaboration, drawing from various sources including Australian Department of Infrastructure and Transport (2011), *Our Cities, Our Future: A National Urban Policy for a Productive, Sustainable and Liveable Future*, Commonwealth of Australia, available at: https://infrastructure.gov.au/infrastructure/pab/files/Our_Cities_National_Urban_Policy_Paper_2011.pdf; OECD (2013c), *OECD Urban Policy Reviews: Chile 2013*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264191808-en; OECD (2015c), *OECD Urban Policy Reviews: Mexico 2015: Transforming Urban Policy and Housing Finance*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264227293-en; OECD (2015d), *OECD Urban Policy Reviews: China 2015*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264230040-en; OECD (2014b), *OECD Regional Outlook 2014: Regions and Cities: Where Policies and People Meet*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201415-en.

The Dutch National Urban Agenda is also expected to provide a critical input to the ongoing preparations for a European Union (EU) Urban Agenda (Box 3.20). The Netherlands is scheduled to hold the EU Presidency from January to July 2016, during which it aims to advance the EU Urban Agenda towards reducing regulatory barriers to urban development and sharing innovative solutions to fully exploit Europe's urban potential. Going further, the shift of the Dutch urban policy toward a more tailored and collaborative approach could be of broader interest across the OECD.

Box 3.20. **Towards an EU Urban Agenda**

A growing number of voices – at the EU, national and local level – argue that an EU Urban Agenda is needed so that cities can provide their input and expertise in developing and putting EU policies into practice and, in turn, that these are better adapted to urban realities. As a response, the European Commission adopted a Communication in July 2014, launching a public consultation on an EU Urban Agenda. Its purpose was to widen the debate to all relevant stakeholders, to gather their ideas and to further clarify the rationale for an EU Urban Agenda, what its objectives should be and how it could function.

The consultation has generated strong interest. In total, 225 responses were received from 29 European countries, as well as Canada and the United States. Many respondents were local authorities associations, trade and industry federations, and civil society organisations. In addition, some EU member countries have carried out national consultations with local authorities.

The main message emerging from the consultation is that Europe can help cities to address common challenges and, in turn, cities can contribute to achieve the priorities of the European Union. Respondents believe that an EU Urban Agenda would push the EU towards reaching its overall political objectives. Moreover, an EU Urban Agenda should fully acknowledge the key role cities play in translating national and EU policy objectives into concrete action. It should also support cities in addressing society's challenges, such as demographic change, urban poverty or migration. Many also see an EU Urban Agenda as a vehicle to promote global sustainability issues and the European model of urban development in the context of the post-2015 Sustainable Development Goals and global New Urban Agenda being developed in the context of the 2016 Habitat III conference.

Most respondents believe that no new legislation or new funding is needed, but rather better legislation which reflects urban realities and better co-ordination among existing funding sources. No new competences should be transferred to the European level, but a more structured, regular dialogue in full respect of subsidiarity and respective responsibilities should be put in place to ensure that what Europe already does is good for cities. All respondents agree that the "Cities of tomorrow" report is the reference document at the European level. The real challenge is how to deliver on its main ideas.

The consultation pointed to three main avenues to move forward: 1) concerted action on few priorities; 2) improved policy coherence and co-ordination of instruments; 3) development and better use of the knowledge base.

Source: Adapted from European Commission (2015), "Results of the public consultation on the key features of an EU Urban Agenda", Commission Staff working document SWD(2015) 109 final/2, European Union, Brussels, 27 May, available at: http://ec.europa.eu/regional_policy/sources/consultation/urb_agenda/pdf/swd_2015.pdf.

Key findings and recommendations

- The abolition of the city-regions, which gave way to the creation of the MRDH body, runs counter to OECD trends in metropolitan governance. While many OECD countries have created specific mechanisms for metropolitan governance, in 2014 the Netherlands abolished the eight compulsory metropolitan-level co-ordination mechanisms (city-regions), transferring their responsibilities to provinces and municipalities. Only the two largest urban areas in the Netherlands (Amsterdam and Rotterdam-The Hague) emerged from the latest reform with their own new metropolitan governance arrangements.
- Relative to other metropolitan governance bodies in the OECD, the voluntary, bottom-up collaboration among municipalities is a positive, distinctive feature of the MRDH, particularly when compared to other OECD metropolitan regions built around two large cities. Its two strategic competencies (economic development and transport) are among the most common policy fields managed by metropolitan authorities across the OECD. The MRDH has a smaller staff (around 95 full-time employees) than other OECD metropolitan governance bodies that oversee a similar population size, but this is consistent with its more limited set of responsibilities. It also has a horizon of 12 years to demonstrate that it can be a beneficial actor in the region: in 2024 a decision will be taken on the future of the MRDH.
- The MRDH was born from an unprecedented alignment of interests within the Randstad policy space, whose two "wings" have tested a variety of governance arrangements over the past decades. Its task henceforth will be to consolidate the strong momentum of collaboration between two cities that have not traditionally been partners, between cities and the historically alienated Province of Zuid-Holland, and between them and the central government in the broader context of the Dutch National Urban Agenda.
- The MRDH has a valuable but limited window of opportunity to better exploit potential agglomeration benefits in the region and make a difference in people's jobs, homes and quality of life. In addition to its infrastructure and economic functions, the MRDH will also need to build broader support within the region to become a part of the mental framework of businesses, citizens and other public actors. To do so, it will need to define a clear hierarchy of objectives and federate a wide range of stakeholders around shared, concrete projects. It will also be critical to build on the recent progress in a more productive relationship with the Province of Zuid-Holland, particularly to ensure effective co-ordination of transport and spatial planning. By extension, the MRDH should develop stronger partnerships with the private sector and engage municipalities in its work.
- The Netherlands has one of the lowest levels of fiscal autonomy at subnational level when compared to OECD and EU countries, especially at municipal level. It is thus unsurprising that the MRDH depends almost entirely on transfers from other levels of government to support its budget: from the central government for transport, and from member municipalities for economic development. In this context, the MRDH might need to consider a different funding model if the scope of its responsibilities changes in the coming years.
- The MRDH and the Amsterdam Metropolitan Area (MRA) have a specific governance arrangement within the Netherlands, as the only two Dutch metropolitan authorities with responsibilities in traffic and transport (and the corresponding budget, as a transfer from the central government). However, the two entities also exhibit important differences, in terms of the balance of powers between member municipalities, and between municipalities and the respective provincial authorities; the organisation of the policy fields within the governing bodies; and a contrasted use of triple-helix co-operation, which thus far is more present in the MRA.

Key findings and recommendations (*continued*)

- The emergence and evolution of the MRDH in the Dutch institutional context should also be assessed in the context of a shift in the central government's approach to cities and urban policies. The national government is currently defining a National Urban Agenda, which is guided by the core objectives of growth, innovation and quality of life. This shift of focus in national urban policy places the Netherlands in line with broader OECD trends and opens up a valuable window of opportunity for the MRDH to develop a stronger partnership with the national government.

Notes

1. As mentioned in Chapter 2, it was briefly contemplated that the portfolio of the MRDH could include additional responsibilities, such as spatial planning and natural resources management, but municipalities in the MRDH ultimately agreed to co-operate voluntarily on economic development only.
2. For further discussion of metropolitan governance trends in the OECD, see OECD (2015a; 2015b).
3. The Collective Innovation for Public Transport in European Cities (CIPTEC) project is a research and innovation project of the European Union Horizon 2020 programme for fostering modern, creative and innovative transport sectors. For further information, see: http://ciptec.eu/news/analysis-of-market-and-social-trends-in-public-transport.
4. Leiden and Dordrecht could most easily join the MRDH on the economic development side. Joining the transport function would be more difficult, as it would require changes in the legal framework of the MRDH set out by the national government.
5. Under Dutch law, the MRDH is allowed to get loans up to a total limit of 8.2% of its annual budget, although it has not used this option yet.
6. In 1995, it was estimated that the growth of Amsterdam required the construction of 300 000 new houses, of which 60 000 were planned to be built in Almere together with a new metro line.
7. For more information about the Green Deals in the Netherlands, see: www.government.nl/issues/energy-policy/green-deal.

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