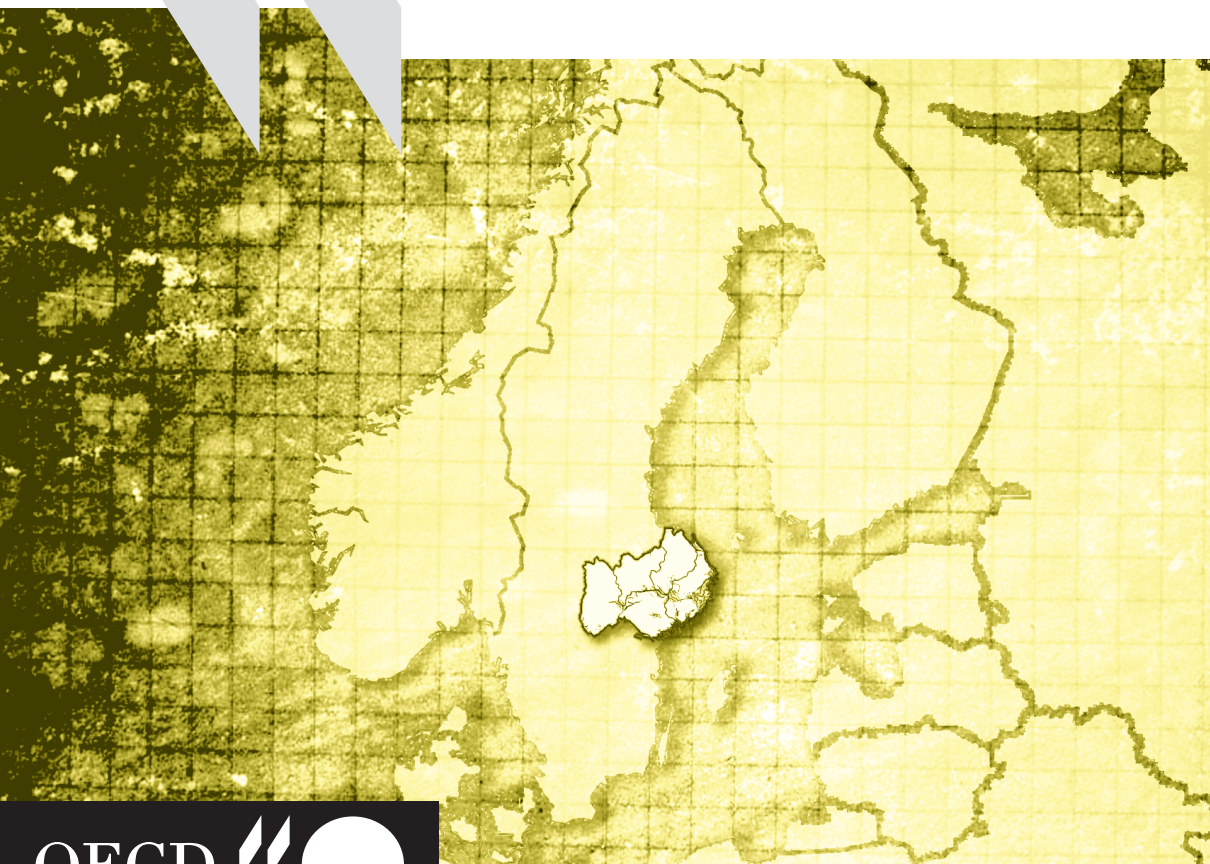




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Foreword

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

The objective of pursuing regional competitiveness and governance is particularly relevant in metropolitan regions. Despite producing the bulk of national wealth, metropolitan areas are often characterised by unexploited opportunities for growth as well as unemployment and distressed areas. Effective policies to enhance their competitiveness need to address their functional region as a whole and thus call for metropolitan governance.

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

Acknowledgements

This Review was produced by the OECD Regional Competitiveness and Governance Division in co-operation with the Government of Sweden (Ministry of Industry, Employment and Communication and NUTEK), the Stockholm County Council and the City of Stockholm. Special thanks are given to Mr. Roland Engkvist and Mrs. Suzanne Dufresne.

A team of international experts and peer reviewers participated to the process: Mr. Vincent Fouchier (*Délégation à l'aménagement du territoire*—DATAR, France), Professor Christian Ketels (Harvard Business School and Stockholm School of Economics), Mr. Daniel Popescu (Council of Europe), Mr. Jose-Manuel Rodriguez Alvarez (Ministry of Public Administration, Spain), Mrs. Judy Rogers (City of Vancouver), and Mr. Antti Valle (Ministry of Interior, Finland). Professor Andrew DeWit (Rikkyo University, Japan) also provided some external contribution.

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Assessment and Recommendations

One of the OECD most successful but not unchallenged metropolitan regions.

Stockholm is one of the most successful metropolitan regions in the OECD. Throughout the 1990s, the region experienced consistent and impressive growth, drawing on its role as the national capital, its research and development strengths, concentration of advanced business, logistical and financial services, and specialisation in high growth, high-tech sectors, notably ICT. Stockholm also stands out for its high quality of life, as is evident in its strong public health performance, high educational attainment and low poverty levels. In terms of these and other socio-economic indicators, Stockholm ranks among the best in the world. Yet, this position should not be taken for granted. While there is no crisis on the horizon, there are a number of weaknesses that could undermine the region's competitiveness in the long run. These weaknesses include the apparent lack of new high-growth firms to stimulate the regional innovation system, challenges in the labour market, especially with regard to the integration of immigrants, housing shortages and a transport network that has failed to keep pace with growth in the region. These are issues that need to be addressed if the region is to retain its prominent position as a major international metropolitan region in the context of increasing competition among cities to attract and generate investment, jobs and skills.

From the economic core of Sweden...

The Stockholm metropolitan region as defined by the *Labour Market Area* is the leading region in Sweden. Until recently, the Labour Market Area more or less coincided with Stockholm County. A recent reassessment of functional regions in Sweden shows that the labour market area has further expanded, and it now encompasses almost the entire Uppsala County. With a total population of 1.94 million inhabitants, the Stockholm metropolitan region represented 21.5% of the Swedish total population in 2003, up from 19.6% in 1990. Stockholm features a more positive demographic profile than Sweden thanks to net-inflow migration. Its share in national GDP has been even higher than for population. In 2003, it stood

at 29.1%, an increase from 26.9% in 1990. It is also the major location of multinationals nationwide (Sweden ranks 9th among OECD countries in terms of inward cumulative FDI flows over 1990-2003) and most of Sweden's R&D, skills, universities and research centres are located in the region. With higher levels of labour productivity, employment rate and activity rate than in the rest of Sweden, Stockholm's GDP per capita surpassed the national average by 35% in 2002 suggesting the existence of significant economies of agglomeration.

...towards a larger and stronger metropolitan region within the Baltic Sea Area.

Exploiting economies of agglomeration at a wider regional level, the *Stockholm Mälars region*, is a new concept that has emerged within the local political and economic spheres. The Stockholm Mälars region includes five counties (Stockholm, Uppsala, Södermanland, Örebro and Västmanland). It is not yet a functionally integrated economic area but current trends in commuting flows might well accelerate the process of integration. In addition, although most of clusters remain concentrated in the Stockholm Labour Market, concentration of similar activities, particularly in ICT, biotech and R&D related sectors, are expanding to other parts of the Stockholm Mälars region, suggesting increasing inter-linkages between firms as well as between firms and universities/research institutions. The idea of the "aspirational" Stockholm Mälars region is that to effectively compete at the international scale, Sweden needs to be endowed with a larger scale metropolitan city. Stockholm is commonly perceived as an intermediate urban centre in European or international comparison. With 2.97 million inhabitants, one third of the total Swedish population and near to 40% of Sweden's GDP, the larger Stockholm Mälars region would hold promise for higher productivity gains and a stronger position within the Baltic Sea Area. Strategic political decisions, especially through public goods with investment in such fields as transport infrastructure, will be determinant in accelerating the integration process and shaping a functional polycentric region.

A high international profile...

Internationally, Stockholm remains a strongly competitive region. Among a selection of 66 metropolitan region with 2 million and more inhabitants, Stockholm County ranks 25th. Its position is particularly strong within the European Union area as it ranks 6th out of 28. This good

performance is explained by a high employment rate and a large labour force. More significantly, output growth has been fuelled by a remarkable surge in productivity levels since the mid-1990s. Over the period 1994-2005, labour productivity in Sweden has averaged 2.5%, *i.e.* the second highest in the OECD. Yet, Stockholm ranks only 34th among the 66 OECD metropolitan regions (11th among the 28 European regions) for labour productivity. Actually, the position of Stockholm reflects the comparatively low number of hours worked per worker in Sweden. The country experienced a significant decrease in hours worked over the period 1997-2003, and now ranks among the lowest of OECD countries for this indicator. It is likely that Stockholm's ranking would be higher if the comparison would be based on GDP per hour worked (the more common measure of labour productivity) rather than GDP per worker (the only data available at sub-national levels).

...thanks to a strong innovation potential...

A main driver of Stockholm's economic growth has been its capacity to generate innovation, especially in high-tech sectors. Using current patent intensity as a means to measure innovation, Stockholm County ranks 11th among the 204 EU-15 NUTS 2 regions. It also ranks as one of the top regions on high-tech patents applications. Innovation in high-value added sectors has been fuelled by strong skills in science and technology. In Stockholm, about one third of all employees with tertiary education have qualifications in science and technology disciplines. This puts the metropolitan region again in the top 10% of the 204 EU-15 NUTS 2 regions. Stockholm's strong position in the field is supported by a well developed science system of universities and research institutions which concentrates 48% of all university-based spending in Sweden and attracts a strong net-inflow of undergraduates and PhD students both domestically and from abroad. Stockholm's science system also benefits from significant R&D spending, reaping the bulk of Sweden's spending in this field. Among OECD countries, Sweden ranks the highest in the ratio of R&D expenditures to GDP, investment in knowledge and second for the number of researchers.

...and well developed clusters.

Innovation and productivity have taken place in a number of competitive clusters. Although the Stockholm Mälar region's economy does show the economic diversity of a metropolitan region, its main competitive clusters are dominated by a limited number of large firms such as Ericsson, ABB

and AstraZeneca. They include ICT, biopharmaceuticals, financial and business services, transport and logistics, and analytical instruments clusters. Among these clusters, the ICT cluster stands out as a leader in the global marketplace. Strongly driven by the anchor company Ericsson, this cluster has been able to overcome the end of the 1990s' high-tech bubble and diversify with a wide range of products and services. A key aspect of the cluster is *Kista Science Park* which concentrates some 30 000 employees and around 700 companies. In the biotech cluster, in which Stockholm has globally competitive strengths, better integration of activities is required to face other international competitors, especially from the US. The financial cluster is modest when compared to other European financial centres but holds promise with further integration of the Baltic Sea Area. The Stockholm model of cluster based on a dominant firm (or a few firms) induces limited domestic competition inside individual clusters. Cluster policy should therefore better respond to this local context, for instance by providing incentives for more internal cluster competition as well as for attracting outside talent and firms. Cluster initiatives need also to be further co-ordinated among the five counties to prevent from wasting resources and better organise activities at the wider Stockholm Mälars region level.

Updating the innovation system to meet increasing international competition requires...

Stockholm requires new sources of growth from its innovation system. The Swedish innovation system is considered as one of the most sophisticated within the OECD. Yet, notwithstanding considerable investment, the system might not be as effective as it could be: this is the so-called “the Swedish paradox”, of high R&D expenditures coupled with comparatively low long term economic growth (Sweden's GDP per capita dropped from fourth to fifteenth place among OECD countries between 1970 and 2003). The university-dominated Swedish research system has been successful in supporting innovation in large R&D intensive companies but has been less efficient in supporting innovation through start-ups, in SMEs, as well as in the advanced service sectors, and in the public sector. A main challenge for Stockholm is that many of multinationals have been increasingly outsourcing some R&D and operational functions in Asian and Eastern European countries. Stockholm lacks new fast growing firms that are necessary for providing knowledge intensive business services to existing large firms, but also for producing breakthrough and radical innovation. Flexible rules and a more favourable regulatory and tax environment for entrepreneurship and new firm creation are critical for technology innovation and commercialisation. A particular emphasis should

be put on further integrating small and medium-sized firms in collaboration mechanisms between research institutions, private sector and government.

...strengthening of the regional innovation system.

The regional focus of the Swedish innovation policy needs to be further strengthened and adapted to a large metropolitan region like Stockholm. At present, Sweden's Regional Growth Programmes (RTP) and Regional Development Programmes (RUP) appear to be the main policy vehicles for stimulation of the regional innovation system. Yet whether the RTP and the RUP are decisive influences on national policy remains unclear. Other national policy tools specifically aimed at encouraging regional innovation systems are *Vinnväxt* and *Visanu*, each with a total budget of respectively EUR 65 and EUR 7 million. *Vinnväxt* has many positive features but struggled to deal with the issues of a metropolitan region. The programme required regions to identify a single priority cluster. This approach appears inappropriate in a diverse economy characterised by a number of clusters. Also, it is often in the interaction between clusters where interesting innovation can emerge. The *Visanu* programme sought to address the issues of metropolitan regions. Yet, designed to encourage greater collaboration between national agencies, this programme does not provide a platform for integrating actions into a consistent regional competitiveness strategy.

Stockholm's labour market is facing a number of constraints, including exclusion of immigrants...

A number of obstacles to a well functioning labour market might challenge Stockholm's competitive position. The Stockholm region has a comparatively large labour force and high employment. In 2003, the Stockholm County ranked respectively 10th and 13th out of the 66 OECD metropolitan regions for activity rate and employment rate. This good performance reflects, to a large extent, favourable macroeconomic conditions after a deep recession in the early 1990s. The outlook remains however uncertain as Sweden is confronted with the challenge to maintain its welfare system under the pressure of an ageing population. In particular, it has to address the late entry of young people into the labour market, the impact of sickness benefits on the number of hours worked and the difficulties for immigrants to access to employment. The latter issue is a particular challenge for the Stockholm region which has a higher share of foreign born population than the national average (18% in 2003 against 12%

for Sweden). In-migration in Stockholm has been the main driver of recent positive demographic trends and is likely to increase in the future. Insufficient skills is just one of the key factors explaining the difficulties certain immigrant groups have in integrating into the labour market as even skilled immigrants find it difficult to integrate economic networks (only 40% of foreign-born university graduates from non EU countries have a qualified job compared to 90% for native Swedes).

...that are underexploited assets in the knowledge-based economy.

Further efforts should be made to promote diversity as a major asset in the knowledge-based economy. Sweden has invested heavily in programmes aimed at integrating immigrants and is one of the only countries in the world where immigrants are entitled to social assistance immediately upon arrival. Yet, it has one of the highest rates of unemployed foreigners relative to their share in the labour force, in the OECD. Sweden has increased protection against discrimination in employment and established a foreign diploma equivalency and validation board. It also launched the *Metropolitan Initiative* in 1998, a policy aimed at addressing the immigration integration issue from a holistic approach, using contractual tools, the Local Development Agreements (LDAs), to involve different actors in cross-sector, intergovernmental co-operation alongside local residents. The preliminary assessment of LDAs has been judged positive but as of 2006, there will not be any new funding which might well result in a halt of current actions. Efforts should also be put to address labour market integration from the demand side by further involving the business sector. The *Kista matching programme* is an interesting initiative as it offers improved placement services and career enhancement to ethnic minority residents within the *Kista Science City* business sector. In general, improvement appears to require a shift from a model of assistance and entitlement to one that recognises the social, cultural and economic value that comes from diversity. Negative attitudes towards foreigners among native Swedish is often quoted as one of the major obstacles to the integration of immigrants. The central government has the ability to send a strong signal to this direction but local and regional governments in the Stockholm Mälars region can also play an exemplary role in supporting diversity, by recruiting more foreign born residents within their administration and developing public-private partnerships that could serve as an example to other businesses on how to leverage diversity as a source of competitive advantage.

Regulations and skewed financing incentives are causing housing shortages...

Housing shortages are a serious challenge for Stockholm as an attractive location for skills and business. Between 1990 and 2004, the population of Stockholm County increased by 231 000 whilst only 90 000 housing units were built during this period. Housing shortages have also been reported in other parts of the Stockholm Mälars region even though several municipalities have surplus housing. Shortages in housing construction combined with inappropriate regulations have had a major impact on rental housing as well. In the Stockholm City centre, there is almost no vacancy and about 100 000 people are on waiting lists. The consequences include a high level of household spending on housing. Sweden ranks near the top of OECD countries on housing consumption as a percent of income. Municipalities are responsible for housing provision, but have been unable to promote the housing investments necessary to meet Stockholm's in-migration. The central government has an important role to play in providing stronger incentives for new housing construction both to private and local public entities. Reforms to address housing shortages should include a review of the operation and results of the rent-setting scheme. In addition, integrating municipalities in housing planning strategies at wider regional level would support efforts to create a polycentric region through a bottom-up approach.

...and transport infrastructure is not keeping pace with population and economic growth.

Developing an efficient transport network will be crucial to sustain Stockholm's economic competitiveness and pursue the integration of the Stockholm Mälars region. Transportation network capacity has not kept pace with either local population growth or changes in the economy. Insufficient transport infrastructure investments have instead caused accessibility problems and congestion. In fact, investments in transportation remain low in Sweden overall and below the OECD average. One consequence of this under-investment is that the more peripheral cities and labour markets in the Stockholm Mälars region often have a commuting time of one hour or more to the Stockholm City centre. Several projects are under way to improve the capacity of links and a congestion charge trial has been introduced in the City of Stockholm. A further hindrance to a coherent region wide transportation policy is fragmentation of responsibility for public

transportation between national and local governments, and between the counties as well. Other obstacles, such as those limiting collaboration with the private sector for infrastructure investment, need to be addressed. Except the Arlanda Express Train (that connects the Airport to Central Stockholm), there are no or few public private partnerships for infrastructure development.

A more integrated and coherent regional approach is required...

Sustaining and increasing Stockholm's competitive position requires a better co-ordination of actions and a long term and comprehensive regional development strategy. Currently, there are a large number of actors working on economic development strategies and policies, resulting in the delivery of piecemeal, cluttered programmes. Responsibilities for regional development strategy are under the County Administrative Boards which are branches of the central government at the regional level. In the Stockholm County, this responsibility has been transferred to the elected county council. Its regional development plan (RUFs) is probably the most advanced tool to foster a comprehensive development strategy as it attempts to integrate physical planning with economic development. However, it remains weak in terms of implementation due to municipalities' strong autonomy. The City of Stockholm has developed a long term vision, *Vision Stockholm 2030*, but that vision has not been adopted at the political level. Although it includes recommendations of RUFs, it is not clear as well how the strategy is integrated into a broader regional strategy. Finally, while strategic plans developed at the county level have in common the will to increase mobility in the labour market, develop transportation networks and other infrastructures at the Stockholm Mälars regional level, there is not yet a clear strategy and action plan agenda developed at this wider regional level.

...but governance is too fragmented and undermined by small and weak regional level.

Elaboration of a comprehensive regional development strategy warrants governance adaptation. As in many other OECD countries, the current governance structure in the Stockholm region is not well adapted to the tasks and challenges it faces. Created centuries ago, the counties' borders neither reflect the Stockholm Labour Market Area (which includes two counties) nor the expanded Stockholm Mälars region (five counties). The County Councils are elected bodies that can be thought of as another form of local

government. Their responsibilities are mainly limited to health care (around 80% of County Council's budget), and in some cases regional transportation and planning (as for the Stockholm County). This contrasts with strong municipalities which are responsible for a large number of items including primary and secondary education, child care and elderly care, roads and water management. Along with strong fiscal autonomy, this allows for innovation in service delivery that efficiently responds to local needs. However, municipalities also have extensive planning authority, often referred to as "planning monopoly", whilst regional-wide issues such as transport infrastructure, housing and labour market, clusters and private sector interests, require a broader focus than that of the current 36 municipalities that form the Stockholm Labour Market (or the 65 municipalities within the Stockholm Mälars region). These issues cannot be performed efficiently at the current county level as well as they have neither the resources nor the capacity.

More formal co-operation is needed at a wider regional level...

Current initiatives for strategic development planning at the regional level lack formal structures and mandates for arenas of co-operation. Inter-municipal co-operation leads the way for delivery of joint public services through different forms of local government federations and joint ownerships. Municipalities can also form a Regional Co-operation Council, an indirect elected association created at the county level that would be given responsibility in regional development. So far, two Regional Co-operation Councils have been created within the Stockholm Mälars region (Uppsala and Södermanland). At the Stockholm Mälars regional level, there is also the *Council for the Stockholm Mälars Region*, an interesting bottom up initiative that has emerged from local and regional leaders. Funded by membership fees, it is composed of 5 county councils and 50 municipalities. In 2003, the Council proposed a regional vision addressing such issues as co-ordination of infrastructure and transport, economic development and integration within the Baltic Sea area. Yet, the Council has no formal role for regional planning and economic development. With a secretariat of five people and a budget of SEK 10.7 million, it does little more than establishing a network between the various public authorities in the region.

...for instance by creating a two-level metropolitan governance...

A hybrid solution could be envisaged to reflect current development pattern of the Stockholm Mälars region. The search for an appropriate solution has to take into account the current context of regionalisation process in Sweden and the ongoing discussion of the Parliamentary Committee on Public Sector Responsibilities. On the one hand, experimental regionalisation in two regions, Skåne (two counties) and Västra Götaland (three counties) could be envisaged in the Stockholm region. There, the new regions became self-government bodies with a directly elected council and a president and were given the charge of traditional county council tasks such as health care but also regional and economic development. Such experiments could be adapted in the Stockholm County taking into account the specifics of the metropolitan region. For instance, merging the two counties of Stockholm and Uppsala would better reflect the new functional labour market area. This option actually discussed at the Committee on Public Sector Responsibilities would be in line with a recent decision from the private sector to merge the two Chambers of Commerce of Stockholm and Uppsala. On the other hand, to pursue the integration process and better exploit existing linkages and potential for agglomeration economies, a lighter form of metropolitan governance could be established at the Stockholm Mälars region level, with the mandate to co-ordinate efforts for a common and shared vision for economic development and infrastructure planning. The current association of the *Council for the Stockholm Mälars Region* could be reinforced for that purpose, and eventually, evolving in a future step towards a consortium or a Metropolitan Agency in charge of co-ordinating public infrastructures for the whole region.

...with stronger links with the private sector.

Further co-operation with the private sector is essential for developing a comprehensive regional strategy. For example, Stockholm could consider the creation of “*Competitiveness Council*” to support the development of a regional strategy through political leadership and public/private dialogue. Such a Council would be formally led by the region, county or municipal leader (depending on the responses that will be provided to changes in the metropolitan governance) and a leading business executive. This Council would include key representatives of public, private and research sectors at the regional level and would give recommendations on an overarching

economic strategy for the region. Inputs would come from a number of working groups focusing on specific clusters and cross-cutting issues.

The impact of national policies on the Stockholm region needs to be assessed...

The central government has a key role to play in strengthening the competitiveness of its major metropolitan region. The current “Metropolitan initiative” is just a neighbourhood action plan and it is as yet too early to assess whether the new regional development policy, prioritising regional growth over redistribution, will effectively sustain the Stockholm region’s competitiveness. The main implementation tools for this new regional development policy, the Regional Development Programme (RUP) and the Regional Growth Programme (RTP), provide a useful means by which to create synergies among actors but critically lack adequate financial incentives. As they are prepared individually by the counties, the plan areas reflect neither the local labour market nor the aspirational Stockholm Mälars region. Particular attention should also be paid to the national fiscal equalisation scheme to which the municipalities within the Stockholm County and the Stockholm County Council itself are the main contributors. Along with one of the most developed welfare systems in the OECD, the equalisation mechanism has helped to provide more or less the same level of public goods and services across the country, certainly contributing to Sweden’s place as the OECD country with the lowest regional disparities. Nonetheless, the fact remains that this system represents a financial burden for the Stockholm region. Looking farther ahead, ageing of the population will begin to exert pressure on both welfare and equalisation systems, thereby increasing further the significance of wealth creation by the Stockholm region in the national economy.

...and intergovernmental relations need to be streamlined.

Greater co-ordination and rationalisation of programmes across central government administrations need also to be considered. Programme clutter has been reported as a particular issue with different agencies delivering overlapping government programmes with different criteria. This has detracted from the ability or willingness of business to engage in these programmes, thereby reducing their effectiveness. Weak cross sectoral co-ordination on regional development issues at the national level impedes the establishment of a coherent strategic plan at the regional level as well.

To bolster state co-ordination at regional level the Governors and their County Administrative Boards have been made responsible for co-ordinating the activities of sectoral state agencies at the local level. Further institutional reinforcement of their position is recommended as presently the Governor's effectiveness is reliant on the Governor's personal authority. Ongoing discussion within the Parliamentary Committee on Public Sector Responsibilities may clarify specific roles and responsibilities, reduce any redundancies or gaps and be a window of opportunity for improving intergovernmental affairs. Attention should be given to distinctive challenges of a large metropolitan region like Stockholm.

Summing up.

Stockholm is unquestionably one of the most competitive regions in the OECD, leading the transition to a knowledge-driven economy, and successfully competing through high performance in innovation and creativity. Stockholm is also confronted to challenges that are common to a number of OECD metropolitan regions in the increasing globalised economy. It faces competition from new emerging metropolitan regions, which requires it to constantly renew its innovation system. It has to increase participation in the workforce of underrepresented groups of the population in a context of an ageing society. It has to attract and better integrate immigrants in the labour market to promote diversity as a major asset in the knowledge-based economy. And it has to manage growth and address increasing demand for transport, housing and other public infrastructure. Whilst a number of those issues are related to the national policy framework, local and regional actors have a key role in improving their enabling environment. In other words, Stockholm's capacity to sustain its international strong position will be largely determined by how well it can mobilise public, private and community resources around common objectives. The need for reforms is clear. However, any reform would be effective only with a strong political leadership and active involvement from the business sector. Such reforms are clearly a choice that Stockholm cannot take alone but, that Sweden also needs to take it as part of a national strategy.

Chapter 1

Stockholm in the Global Economy

Introduction

Stockholm has earned its international reputation as a metropolitan region leading the transition to a knowledge-driven economy, successfully competing through high performance in innovation and creativity. The region is well-known for high-tech industries, cutting-edge design, progressive environmental behaviour and high standards of living, which are shared widely among its citizens. Throughout the 1990s, the region experienced consistent and impressive growth, particularly in the information and communication technology sector (ICT) sector, but also in other manufacturing industries. The burst of the high tech-bubble in 2000 did not undermine this reputation, and the economy continues to grow steadily. Stockholm's reputation is supported by the evidence. The region is, by all measures, economically very successful and highly competitive. Stockholm ranks highly in quality of life measures. The region's strong public health performance, high educational attainment and low poverty levels are amongst the best in the world. GDP per capita is higher than the OECD average, buttressed by a very high employment rate, a strong activity rate and comparatively good labour productivity.

Although these factors have contributed to Stockholm's success as a prosperous region, they do not guarantee success in the future. As the capital region with an overall business environment somewhat better than in the national average Stockholm could increasingly specialise in a number of clusters related to science-driven areas such as research and development and advanced business, as well as logistical and financial services. Policy changes in the mid 1990s gave more room for market forces to shape the location of economic activity across Sweden. However, the increasing opening of the Swedish economy to the European and international markets might pose a threat to this dominating position, as Stockholm in this global context is not an unchallenged leader but just one out of many metropolitan

regions. Stockholm's performance in science and technology has been largely driven by R&D intensive manufacturing large multinational firms with a strong R&D and production base in Sweden. Those firms have over a number of years internationalised their production base in some countries in Asia and Eastern Europe. Many of them are increasingly internationalising research and development as well, and consolidating other specialist functions in global or regional centres. At the same time innovation in knowledge intensive services and innovation by small to medium enterprises has been relatively weak. In this new global competitive environment, Stockholm will have to adapt and improve its local business environment, including incentives for start-up and entrepreneurship, bottlenecks in the labour market, especially for foreign labour force, as well as housing and transport infrastructure.

There is a sense that the region requires new sources of growth from an innovation system, which notwithstanding considerable investment, might not be as effective as it could be, and from new entrepreneurial firms, which are not appearing in the numbers wished for. Overcoming difficulties integrating migrants into the labour market, the late entry of youth into the labour market, and the impact of sickness absences on the labour market is a challenge. Although Stockholm's high performance reflects key advantages in the business environment, the region must deal with the impact of growth on the region's infrastructure, and in particular that transport investment is not keeping pace with growth, and that the regulated housing market is impeding growth. Finally, governance arrangements, no longer reflect the shape and economic structure of the region, and are characterised by a plethora of poorly co-ordinated responsibilities.

In the medium-term, however, the opening to globalisation has also created new opportunities, as Stockholm could compete more effectively with other metropolitan areas in the Nordic and Baltic Sea Area. This is an area in which Stockholm is well placed and has been able to compete very effectively. Better exploiting economies of agglomeration at a wider regional level, *i.e.* at least to the functional labour market or at a larger geographical area of the Stockholm Mälars region, will help to promote Stockholm's international competitiveness.

Based on these units of analysis that better reflect socio-economic trends, this chapter starts by assessing Stockholm's position within the national economy, *i.e.* as the leading region where over one third of the population and economic activities are concentrated. A particular focus is put on potential regional disparities within Sweden. A picture of Stockholm's positioning on the international marketplace is then provided confirming the success of the metropolitan region. The chapter then discusses the main comparative advantages and the key challenges before concluding on the

necessity to adopt a more coherent approach towards a polycentric (*i.e.* multiple hubs) and more integrated metropolitan region.

1.1. The national economic context

1.1.1. A sound macroeconomic background...

Sweden's economic performance over the past decade or so has been impressive in many respects thanks to a package of structural and macroeconomic policy reforms. After a deep recession in the early 1990s, growth of the Swedish economy picked up in the second half of the 1990s and continued to grow since then (with a real GDP growth of 1.6% and 3.3% in 2003 and 2004). The economy has delivered a remarkable surge in productivity since the mid-1990s that resulted in per capita incomes slowly making up the ground lost in earlier decades. Accordingly for the period 1995-2004, the growth rates of per capita income and of output per hour worked have averaged around 2.3% and 2.4% respectively which are among the higher rates in the OECD. Consequently, after several decades of current account deficits, Sweden has been running sizeable surpluses (averaging 4.8% of GDP) ever since joining the EU. The fiscal accounts have moved into surplus, and the government has moved into a net asset position. Inflation expectations are well anchored by the central bank's credible inflation targeting framework. Structural reforms have included a fairly widespread deregulation process (although the housing market is a clear exception), competition rules have been strengthened, and there is relatively little "red tape" holding back the business sector (OECD, 2005a). Exporters in particular have benefited from a more favourable business environment due to a deregulation process, as well as opportunities raised by entry to the EU in 1995 and the depreciation of the currency shortly before it.

1.1.2. ... but challenged by labour market constraints

A key challenge for Sweden is to maintain its welfare system under the pressures of ageing and globalisation. Public finances will remain under pressure given the demographic transition to an older population. On the expenditure side, the greying of the population will lift demand for public services such as healthcare and elderly care. As well as these purely demographic spending pressures, there will no doubt be demands to raise public service standards over time, especially in healthcare, both because people will be getting wealthier and because new technologies will expand the range of services that can be offered. On the revenue side, tighter integration within the EU and globalisation more broadly are making it

harder to maintain the high tax rates on mobile bases that are needed to finance the country's ambitious public expenditure programmes. The high tax wedges needed to finance this welfare system are putting downward pressure on labour supply.

Although productivity growth has been impressive and has been acting as an engine of growth, addressing labour market weaknesses is crucial as the outlook remains uncertain. In particular, it remains to be seen to what extent productivity growth was driven by a cyclical element (in particular the cyclical bounce-back from the slump of the early 1990s) which will probably unwind. A major part of the productivity gains in the past years was due to the ICT sector, in particular to the telecommunications company Ericsson. Government policy has contributed to this development, as Sweden was one of the first European countries to deregulate its telecommunications market. At the same time, productivity has increased in other manufacturing industries as well and first evidence suggests that the sustainable, cyclically adjusted productivity trend is positive and will arguably continue in the future. While this development is certainly welcome, labor supply has decreased significantly. Total hours worked in 2004 were still 6% below the peak recorded in 1990, resulting partly from sickness and disability absences. Experience from other countries suggests that a reduction in hours worked might have led to an upward bias in productivity growth which could be reversed in the future.

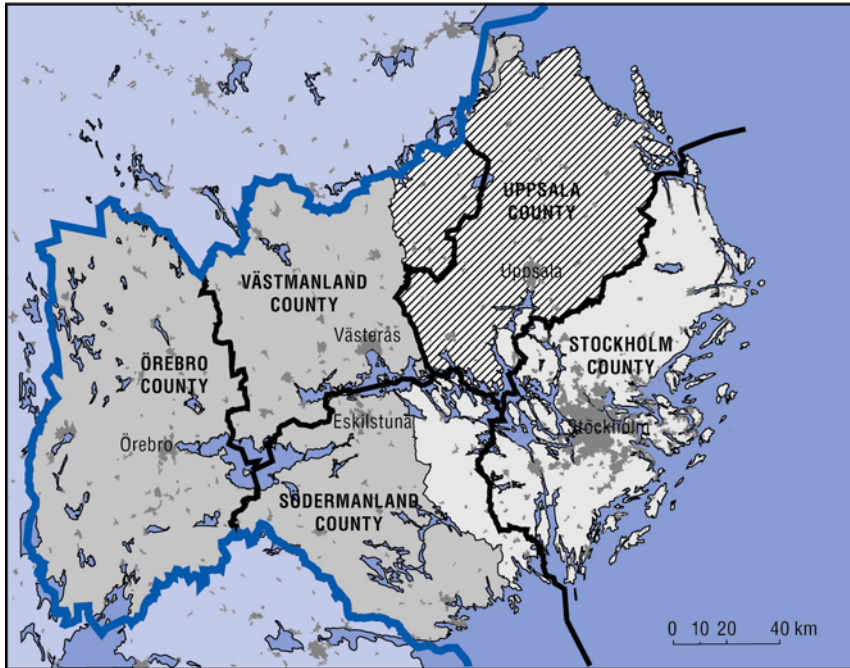
1.2. Socioeconomic trends in the Stockholm Region

1.2.1. What is the metropolitan region of Stockholm?

There are different ways to define the geographic borders of the Stockholm region based on its labour market, the governance structure or simply the available data. A good definition of the region should meet the following three criteria: it should be *relevant* to businesses in terms of encompassing the area that has a consistent and distinguishable impact on their environment, it should be *actionable* for government in terms of having governance structures that can be used to set policies for such a region and it should be *tractable* in terms of data being available to describe and analyze it. For Stockholm, there is an array of possible definitions that meet these conditions to different degrees. Economically, the most relevant definition is probably the Stockholm Labour Market Area because it is based on actual commuting flows of employees, one important dimension that defines a company's business environment. Actionable areas exist at different political levels, from the City of Stockholm to Stockholm County to the Stockholm Mälars region (Figure 1.1). Data that is tractable for both

national and international comparisons and consistently available is the NUTS 2/3 region (Stockholm County).

Figure 1.1. **Map of the Stockholm Mälars region**



Note: The map represents the five counties in the Stockholm Mälars region as well as the Stockholm Local Labour Market according to the 1998 NUTEK definition (grey part) and the 2005 NUTEK definition (grey part plus striped part).

Source: Office of Regional Planning and Urban Transportation, Stockholm County Council.

The assessment of the Stockholm metropolitan region refers to two main units of analysis. We first focus on the functional metropolitan area as defined by commuting flows which in our case is represented by *the Stockholm Local Labour Market Area*. However, the definition of a local labour market region often changes with the development of employment, settlement patterns, infrastructure and communications, and the increasing flexibility due to the changes in the organisation of work (e.g., telecommuting). For instance, the 2005 definition of the local labour areas in Sweden identifies one single Local Labour Market area for formerly separate Stockholm and Uppsala.¹ However, due to the non availability of data as yet using the 2005 definition of the local labour market, we refer to the 1998 definition in our analysis. Whilst the local labour market area will

be used to position Stockholm in the national economy, to ensure consistency for international comparisons, we adopt Stockholm County as the unit of analysis (for both NUTS 2 and NUTS 3). Data referring to the Stockholm County are the closest to the true labour market, although they exclude 16% of the population in the local labour market as defined in 2005, and 10.5% of GDP (Table 1.1).

Table 1.1. **Population and GDP by region**

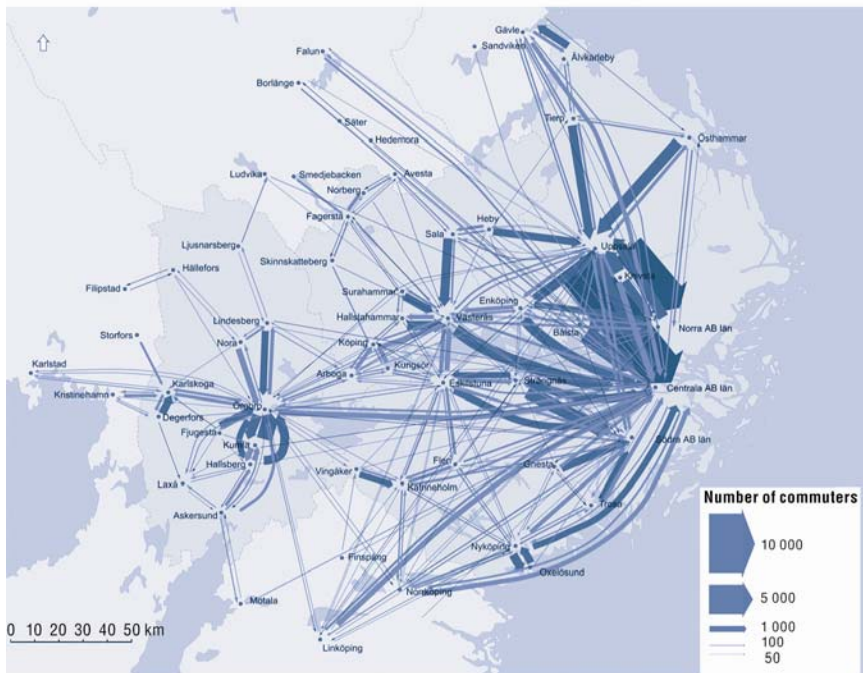
	Population 2004 (thousands) (% of national share)		GDP 2002 (million SEK) (% of national share)	
Stockholm City	765	(8.5%)	374 828	(15.9%)
Stockholm County	1 873	(20.8%)	673 841	(28.6%)
Stockholm LM (NUTEK definition 1998)	1 942	(21.6%)	685 654	(29.1%)
Stockholm LM (NUTEK definition 2005, <i>i.e.</i> including Uppsala LM)	2 231	(24.8%)	752 819	(32.0%)
Stockholm Mälars region	2 971	(33.0%)	917 983	(39.0%)
Counties				
Uppsala County	303	(3.4%)	69 606	(3.0%)
Södermanland County	261	(2.9%)	52 685	(2.2%)
Örebro County	274	(3.0%)	62 330	(2.6%)
Västmanland County	261	(2.9%)	59 521	(2.5%)
Labour markets (NUTEK definition 2005)				
Nyköping LM	61	(0.7%)	14 049	(0.6%)
Eskilstuna LM	149	(1.7%)	29 115	(1.2%)
Örebro	220	(2.4%)	50 490	(2.1%)
Hällefors LM	8	(0.1%)	1 385	(0.1%)
Karlskoga LM	45	(0.5%)	10 056	(0.4%)
Västerås LM	224	(2.5%)	52 138	(2.2%)
Fagersta LM	23	(0.3%)	5 587	(0.2%)

Source: NUTEK (rAps)/Statistics Sweden.

The second unit of analysis is the largest Stockholm Mälars region which holds promise for greater agglomeration economies. This area is not yet an integrated metropolitan region but features increasing commuting flows and inter-firm linkages (Figure 1.2). Despite the concentration of commuting in Stockholm County (or the Local Labour Market Area of Stockholm), commuting has become increasingly dispersed in the Stockholm Mälars region, with more people from Stockholm moving to other counties around Lake Malaren (Stockholm County Council, 2002). In addition, with the spillover of economic activities from the city and the county of Stockholm

out to the surrounding areas, this “city region” is increasingly recognised as holding promise for greater agglomeration economies, a valuable asset for cities competing within the international marketplace. Cluster development and inter-firm relations may well accelerate the integration process towards one single functional area but strategic political decisions, especially in the fields of transport infrastructure and localisation of economic activities, will be determinant in this respect. They will also impact the metropolitan structure which has so far evolved in a mono-centric pattern, with the City of Stockholm attracting most of the commuters in the region (Figures 1.3 and 1.4).

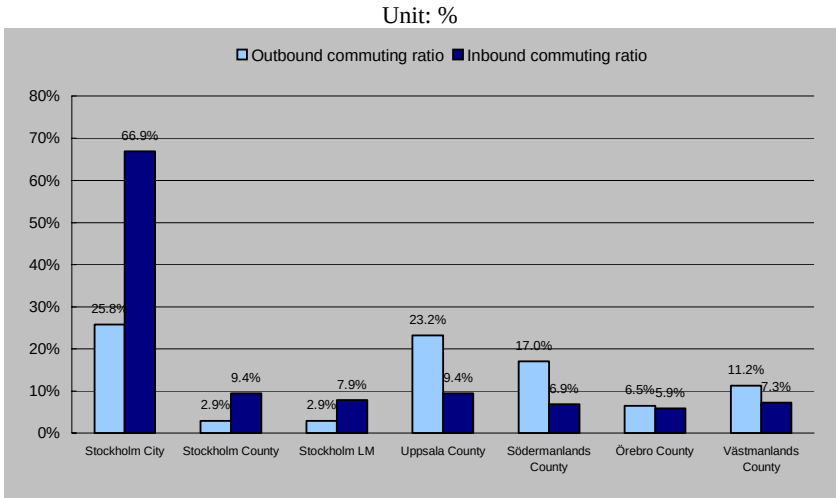
Figure 1.2. **Commuting flows within the Stockholm Mälars region**



Source: statistics Sweden

Source: The County Administrative Boards in the Stockholm Mälars region, 2004.

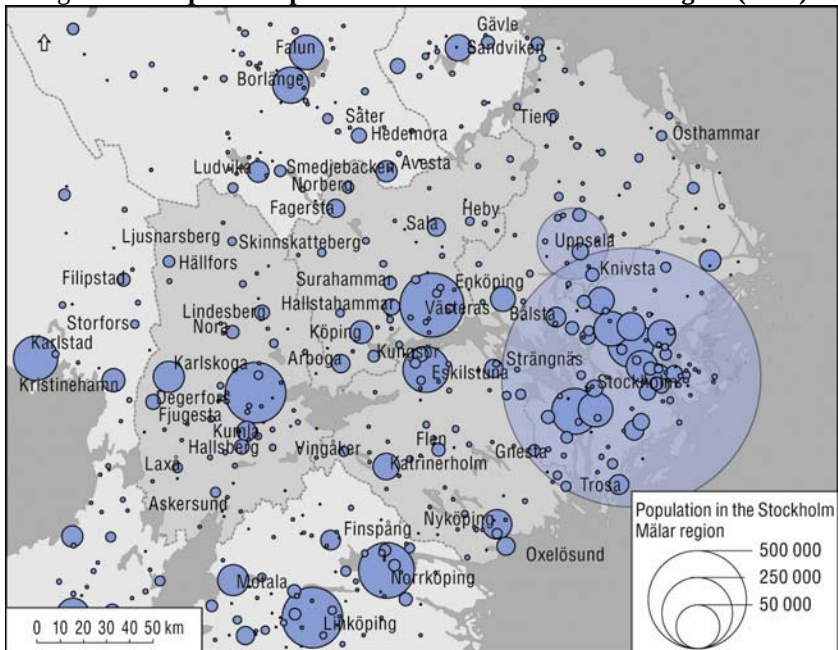
Figure 1.3. **Commuting pattern in the Stockholm Mälars region in 2002**



Note: The commuting ratio compares to the percentage of people commuting from (or to) a region to the total employed people within the region. Numbers of commuting people are collected from NUTEK.

Source: NUTEK (rAps)/Statistics Sweden.

Figure 1.4. **Population pattern in the Stockholm Mälars region (2005)**



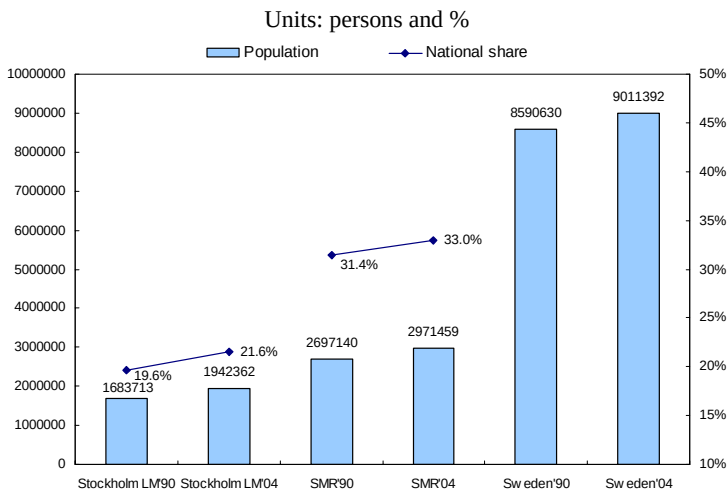
Source: AF infraplan 2005

1.2.2. The leading region in Sweden

A growing population magnet...

The Stockholm Labour Market Area contains an increasing share of the national population, recently boosted by foreign migration. Its share increased from 19.6% to 21.5% during 1990-2003 (Figure 1.5). Similar patterns were found over this period in the Stockholm Mälars region overall, where the total population increased by 9.6% compared to 4.5% at the national level. Much of this growth occurred before 2000 and has been fuelled by the domestic net-migration attracted by the opportunities in the booming high-tech sector. With the slowdown of the economy after 2000, more people left the region than moved to the region to generate negative domestic net-migration. Foreign net-migration and natural population growth have, however, continued to be positive. Immigrants contributed the most over the 2000-02 period with a peak in 2001 (53.7% of 16 134 person increase). In fact, the share of foreign born population in Stockholm has been consistently higher than then national rates by approximately 6 percentage points since 1990. In 2003, the share of the foreign born population in the Stockholm Labour Market reached 18%, compared to 12% at the national level, with the highest concentration in the city itself.

Figure 1.5. **Population Change in the Stockholm region 1990-2003**



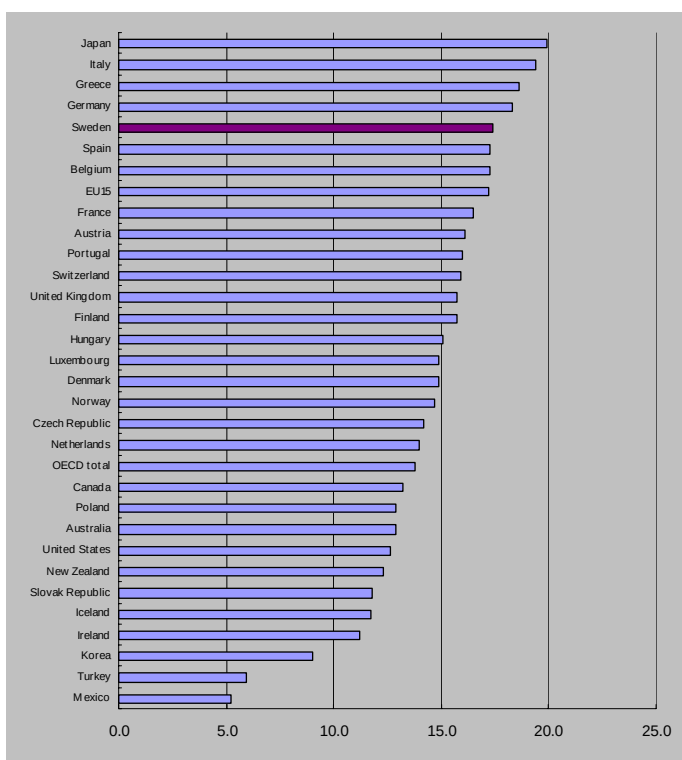
Note: LM – Labour Market; SMR – Stockholm Mälars region.

Source: NUTEK (rAps)/Statistics Sweden.

Although Sweden as a country has a relatively ageing population, Stockholm Labour Market has maintained a relatively younger age structure compared to national levels thanks to the migration pattern. In 2004, Sweden ranked fifth among the 30 OECD member countries for its share of population aged 65 and over, behind Japan, Italy, Greece and Germany (Figure 1.6). Fortunately Stockholm Labour Market, with a relatively higher share of young families, has registered higher fertility rates than many other regions in Sweden. In 2003, the share of the population aged 20-59 in the Stockholm Labour Market was 57%, compared to 53% at the national level. The larger Stockholm Mälars region also enjoys a younger population structure than the nation with 55% of population aged 20-59. In addition to fertility differences, this trend reflects Stockholm's ability to retain a much higher share of graduates leaving the region's institutions for higher education than elsewhere in Sweden. It is also the major destination in Sweden for young graduates to start their careers.

Figure 1.6. **Population ageing in Sweden**

Units: % (population aged 65 and over in the total population in 2005)

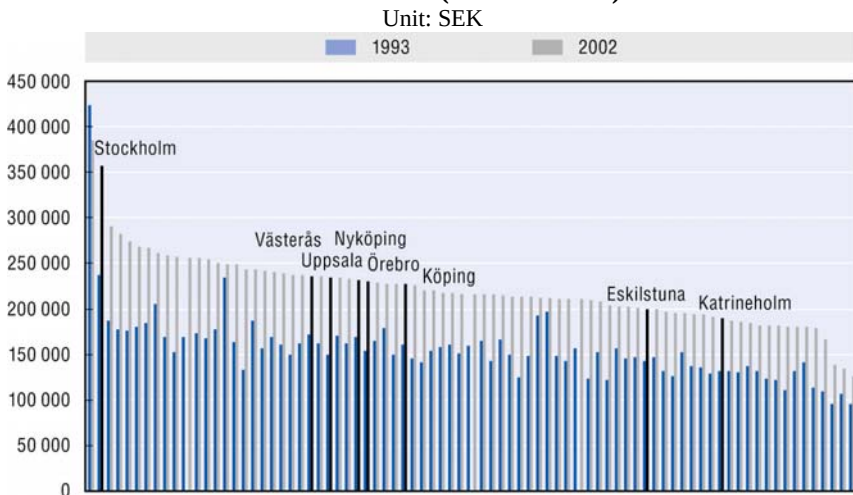


Source: OECD (2005h).

... with a high concentration of GDP...

The Stockholm metropolitan region is the leading economy in Sweden in terms of overall GDP, GDP per capita and growth rates for those indicators. In 2002, the Stockholm Labour Market generated 29.1% of national GDP, up from 26.9% in 1993, while the Stockholm Mälars region generated 39%. Over the period 1993–2002, both the Stockholm Labour Market and the Stockholm Mälars region GDP growth rates have been significantly higher than that for the nation (64.9% and 60% vs. 52.4%). Similar results exist for GDP per capita. In 2002, the Stockholm Labour Market GDP per capita reached SEK 357 358, i.e. 35.8% higher than the national level (SEK 263 124). Stockholm Mälars region GDP per capita also surpassed the national average, but only by 18.6% because its performance was weighed down by other labour markets beyond the Stockholm Labour Market that registered GDP per capita lower than the national average. These 2002 results indicate a modest growth in the differential between the Stockholm Labour Market and the Stockholm Mälars region and national levels by 1.3 percentage points as compared with 1993. The Stockholm Labour Market outperforms all but one other Swedish region by a considerable margin² (Figure 1.7). The average growth rate for all other Swedish labour market areas (except Stockholm and Jokkmokk labour market areas) was 4.4%. Between 1993 and 2002, Stockholm registered cumulative average growth rates of GDP per capita higher than the country average (4.6% for the Stockholm Labour Market, 4.7% for the Stockholm Mälars region and 4.5% for the country average).

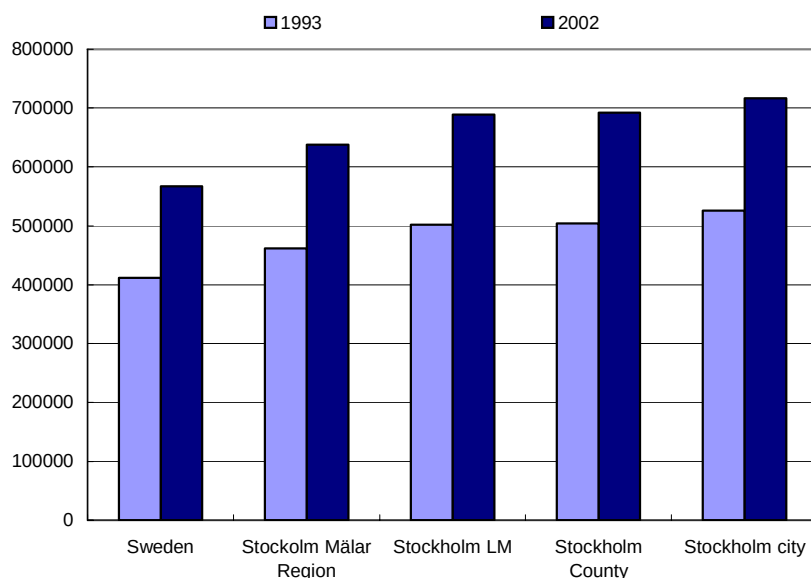
Figure 1.7. **Regional comparison of GDP per capita for Swedish Local Labour Markets (1993 and 2002)**



Source: NUTEK (rAps)/Statistics Sweden

Figure 1.8. **Labour productivity in Stockholm Mälars region 1993 and 2002**

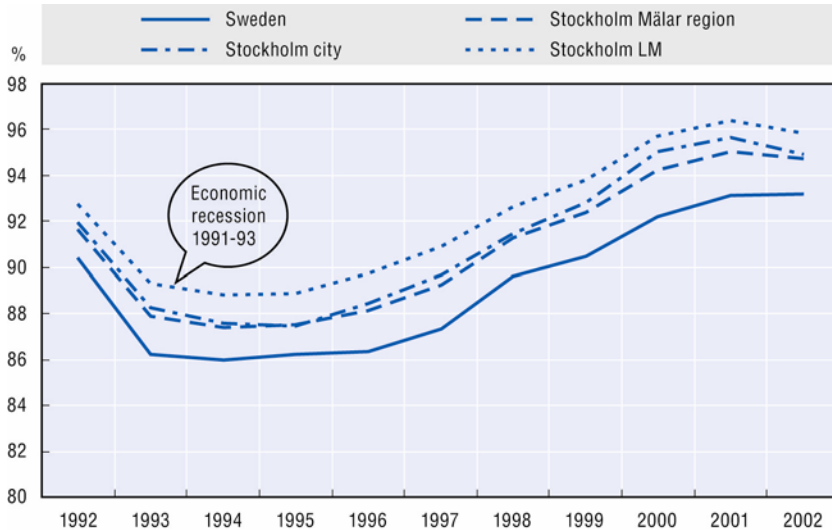
Unit: SEK



Source: NUTEK (rAps)/Statistics Sweden.

Similarly, the region leads the rest of Sweden in terms of labour productivity and employment rates (Figure 1.8). Both in the Stockholm Labour Market and the Stockholm Mälars region, labour productivity stands at a higher level compared to the national average (respectively 21.4% and 12.4% higher in 2002). Between 1995 and 2002, Stockholm had also registered higher rates of labour productivity growth, reaching a CAGR (cumulative average growth rate) of 3.8% and 3.5% respectively for the Stockholm Labour Market and the Stockholm Mälars region, compared to the lower national average of 3.1%. The employment rate is also significantly higher in the Stockholm Labour Market (95.8% in 2002) against 93.2% at the national average (Figure 1.9). The Stockholm Mälars region shows a lower employment rate (94.7%) than the Stockholm Labour Market but still higher than the national averages over 1990-2002, revealing the notable socioeconomic differences between Stockholm Labour Market and other labour markets in the Stockholm Mälars region.

Figure 1.9. Employment rate 1990-2002
(employed people as a percentage of the total population)



Notes:

1. The drastic drop in employment rates during 1991-1993 was associated with an economic recession during this period.
2. The employment rate is the number of the employed (resident population) divided by the labour force.

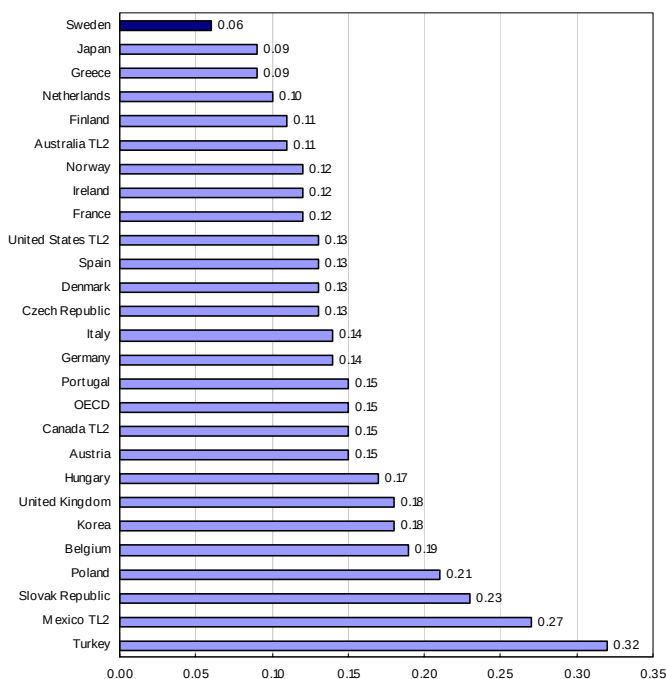
Source: NUTEK (rAps)/Statistics Sweden

... but low disparities with other regions

Although differences in GDP per capita slightly widened between Stockholm and other Swedish regions between 1993 and 2002, Sweden still appears as the OECD country with the lowest regional disparities. In 2001, regional disparities in GDP per capita – as measured by the Gini index – were equal to 0.15 for the OECD average and to 0.06 in Sweden, a score significantly lower than in the neighbouring countries (0.11 in Finland, 0.12 in Norway and 0.13 in Denmark) (OECD, 2005j). Although differences in regional GDP per capita remain relatively small, they seem to affect a large proportion of people. In 2001, 79% of the Swedish population were living in regions with a level of GDP per capita below the national average, a proportion well above the 59% observed for the OECD average (Figure 1.10). Similar patterns of low levels of regional disparity also exist in areas such as labour productivity (the lowest) and participation rates (the second lowest together with Belgium, Ireland, Netherlands, New Zealand

and Norway, only after Iceland) (Figure 1.11). Regional disparities in unemployment rates are a little bit more pronounced but still below the OECD average (Sweden ranks the 9th lowest together with Australia, France and Greece). Still, despite some widening over two decades, Sweden ranks the second-most equal income distribution among the OECD countries, only after Denmark (OECD 2005a).

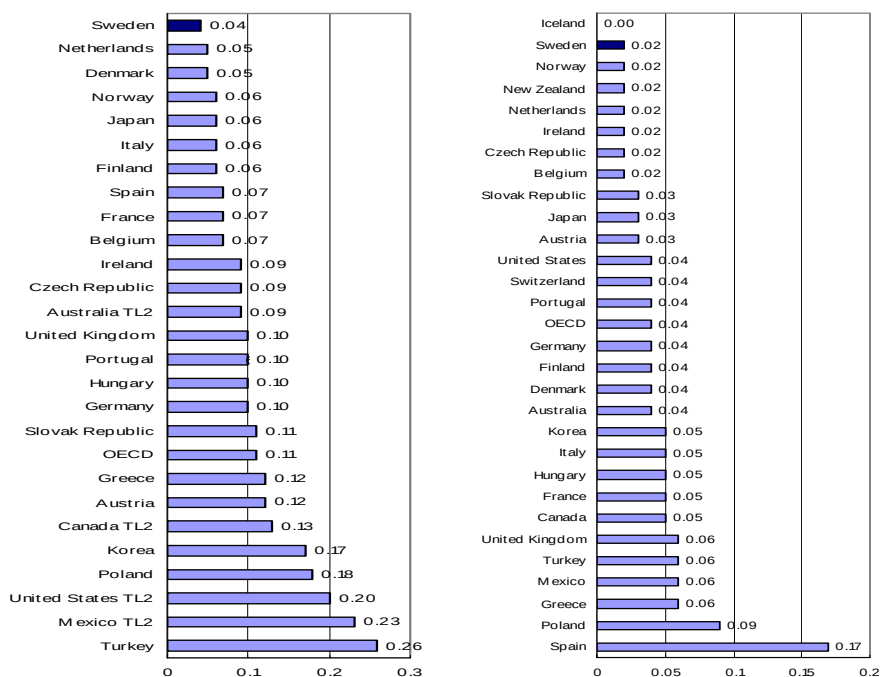
Figure 1.10. **Regional distribution of GDP per capita**
(Gini index for GDP per capita)



Note: The Gini index looks not only at the regions with the highest and the lowest values but also at the differences among all regions. It ranges between 0 and 1: the higher its value, the larger regional disparities. The Gini index for GDP per capita is obtained from the OECD Regions at a glance 2005. And the regional population figures are collected from Statistics Sweden.

Source: OECD (2005g).

Figure 1.11. **Comparison of regional disparities in OECD countries**
(Gini indexes for labour productivity and participation rate)*



Note: *The participation rate is defined here as the ratio of the labour force to the population aged 15-64 years old. The labour force is defined as the sum of employed and unemployed.

Source: OECD (2005g).

GDP per capita serves as a common measure of regional disparity, but its interpretation for wealth redistribution policies must account for difference in price levels, *i.e.* cost of living. The OECD and EU calculate an adjustment factor for the price level differences of member countries, but there is no comparable adjustment between regions within a country. This data problem can present a misleading picture of the real level of prosperity Stockholm enjoys relative to other regions in the country. Real estate and retail prices for many goods are more expensive in Stockholm, driven in part by higher wages and rents for commercial real estate. It is hard to exactly quantify the negative effects of these higher prices on relative prosperity in Stockholm, or the advantages of living in the region that are not visible in the economic data (museum, restaurants, concerts, theatres and other leisure amenities). But the fact that people in Stockholm pay a much higher share of their income for housing than in any other part of Sweden argues for caution when using the higher GDP per capita in the capital region as a rationale to redistribute funds to other “less prosperous” regions of the country.³

1.2.3. High international profile

Among the top metropolitan regions

Internationally, Stockholm stands as a relatively strong competitive region. Regional competitiveness is a broad concept and can be measured in many different ways (Box 1.1). A good aggregate indicator of economic

Box 1.1. Defining regional/city competitiveness

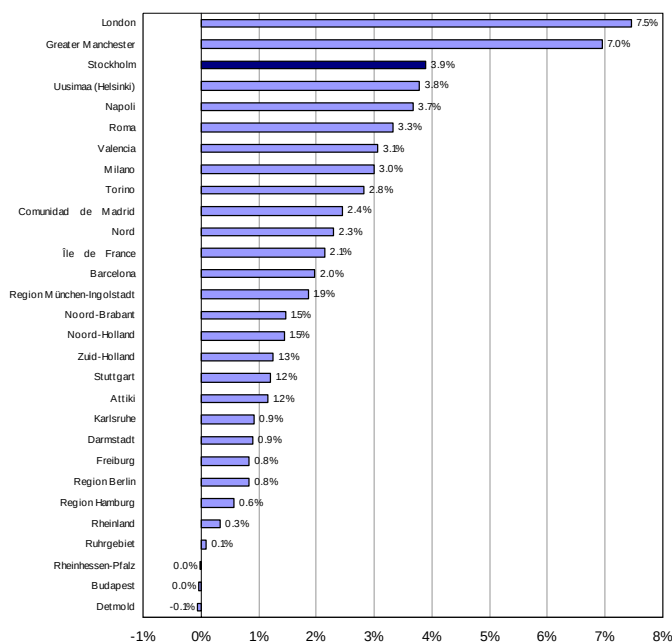
Competition among regions (sub-national areas) has received growing attention with globalisation and the transition to a knowledge-based economy. Regional competitiveness is a broad concept and can be measured in many different ways. A widely cited case for measuring competitiveness is the measurement by the International Institute for Management Development (IMD), which measures competitiveness in four major categories: economic performance, government efficiency, business efficiency and infrastructure. These four major categories can be further sub-divided into more specific measures covering a comprehensive set of perspectives in national growth. Although employed at the national level, these measures apply to regional economies as well. A recent study in the UK identified factors in urban competitiveness, including economic diversity, quality of life, skilled labour force, internal and external connectivity, innovation in firms and organisations, and strategic decision taking capacity etc. (Parkinson *et al.*, ODPM, 2004).

Despite the extensive literature on factors of competitiveness, this assessment will however focus on the purely economic performance for international benchmarking. More specifically, like in the earlier section, the international comparison of Stockholm's competitiveness will be conducted using an aggregate indicator – GDP per capita. Factors such as infrastructure and accessibility, industry and economic scale and structure, and human capital and labour force may act both as major determinants of GDP per capita. GDP per capita can be further decomposed into three parts to better understand the contributions of different factors – productivity, employment rate and activity rate (OECD Territorial Database).

Major drivers that function as intermediaries between the indicators and final regional performance or competitiveness may include entrepreneurship, innovation, investment and competition (Parkinson *et al.*, 2004). These factors are especially important in facilitating new business growth and product development and playing an even more important role in fostering the growth of a new economy that centres on knowledge creation and innovation. Facilitating these drivers entails creating competitive dynamics or efficient interrelationships among the major competitiveness indicators and other aspects of local business environments (government and business associations etc.).

prosperity is GDP per capita adjusted for purchasing power, given differences in price levels. In this respect, the Stockholm metropolitan region (County) ranks 25th according to an OECD ranking of 66 metropolitan regions with more than 2 millions inhabitants (12 in Asia, 26 in the US and Canada and 28 in Europe)⁴ (Table A.1).⁵ With a GDP per capita of USD 37 066 in 2002, its position is particularly outstanding within the Europe Union area as it ranks 6th following Munich-Ingolstadt, London, Paris-Île-de-France, Milan and Darmstadt. In terms of prosperity growth, between 1995 and 2002, Stockholm outperformed the European average but ranked only 63rd among 212 regions of the EU-15 (90th among 254 regions of the EU-25). This middle tier growth rate may be normal for regions with existing higher levels of GDP per capita. Compared with a selection of metropolitan regions, the Stockholm County registered one of the highest GDP per capita growths between 1995-2002 (Figure 1.12).⁶

Figure 1.12. GDP per capita growth in selected European metropolitan regions 1995-2002

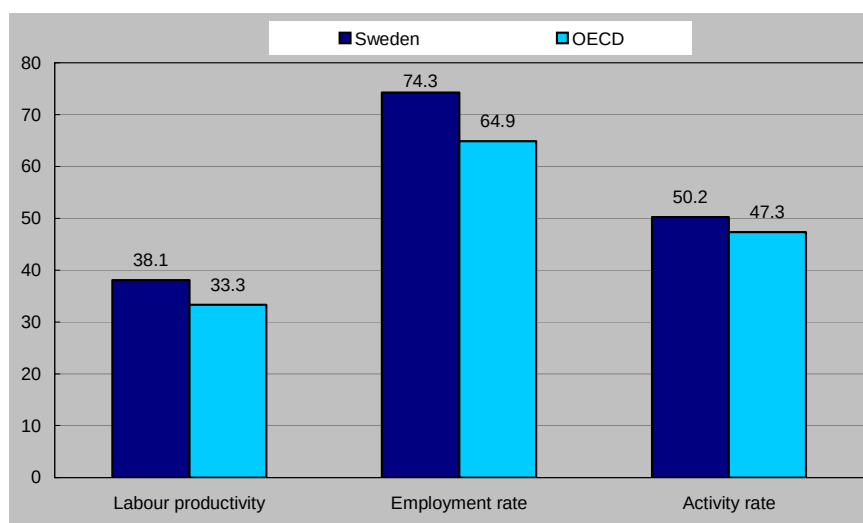


Source: EUROSTAT. Population data for Uusimaa are collected from the Finland Statistical Office.

High employment and activity rates combined with relatively good performance in labour productivity explain Stockholm's relatively strong competitiveness position internationally. Three factors contribute to the observed difference in GDP per capita between the Stockholm County and other metropolitan regions: productivity, efficiency of the local labour market and relative size of the labour force. Greater productivity is reflected in a higher level of GDP per worker. A more efficient labour market results in an increase in employment and production. And higher labour force participation implies a higher GDP per capita. In 2001, these three factors contributed to the 9.8% difference in GDP per capita between Stockholm County and the average of the 66 metropolitan regions by the following proportions: higher employment rate (8.2%), higher activity rate (2.6%) and lower productivity (−1.0%) (Table A.2). The slight negative difference of Stockholm County in labour productivity has been largely caused due to the selection of about one third of U.S. metropolitan regions in the sample (23 out of 66) which are associated with higher labour productivity than European metropolitan regions. In fact, out of the selected 28 European regions, Stockholm County ranks the 11th. Also, the measure by GDP per worker may have also lowered the relative position of Stockholm in labour productivity due to its declining total hours of work (see below). The relative position of the Stockholm region reflects the national trends. Sweden's GDP per capita stands above the OECD average. More specifically, Sweden ranks extraordinarily high in employment rate (74.3%) (4th) and relatively high in labour productivity (13th) and activity rate (15th). All three indexes for Sweden are above the OECD average (Figure 1.13).

Figure 1.13. **Decomposition of GDP per capita of Sweden 2003**

Units: %



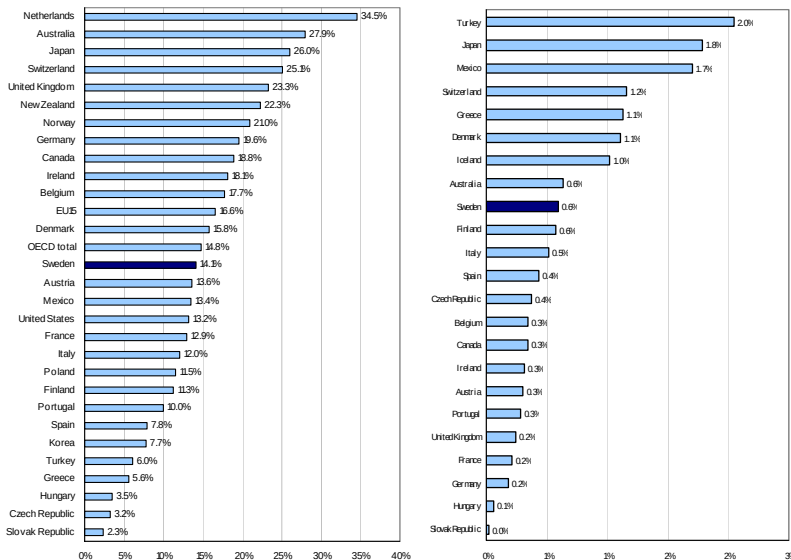
Source: OECD (2005f) and OECD (2004b).

...thanks to strong employment...

The high *employment rate* is a main driver of Stockholm's strong economic performance. Stockholm County ranks 10th out of 66 OECD metropolitan regions and 6th among European regions within the OECD metropolitan ranking (Table A.3) In fact, from 1992 to 2002, Stockholm County's already low unemployment declined slightly more than the national average. Over that period, the unemployment rates for the Stockholm Mälars region and the Stockholm Labour Market dropped from 7.3% and 7.2% respectively to 4.2%, compared to the drop from 9.6% to 6.8% at the national level. The low unemployment rates in Sweden have been accompanied by relatively low part time employment and high temporary work incidence (Figure 1.14). A low level of part time employment is not necessarily a benefit as it may suggest inflexibility in the labour market. Also, strong employment protection legislation (EPL) for permanent employees in Sweden may have led to a relative high incidence of temporary work (OECD 2005b). The impact of these issues on the Stockholm region's labour efficiency and productivity needs further assessment.

Figure 1.14. Part time employment and short time workers in OECD countries

(Percentages of part time employment in 2003 and short time workers in the total employment in 2002)



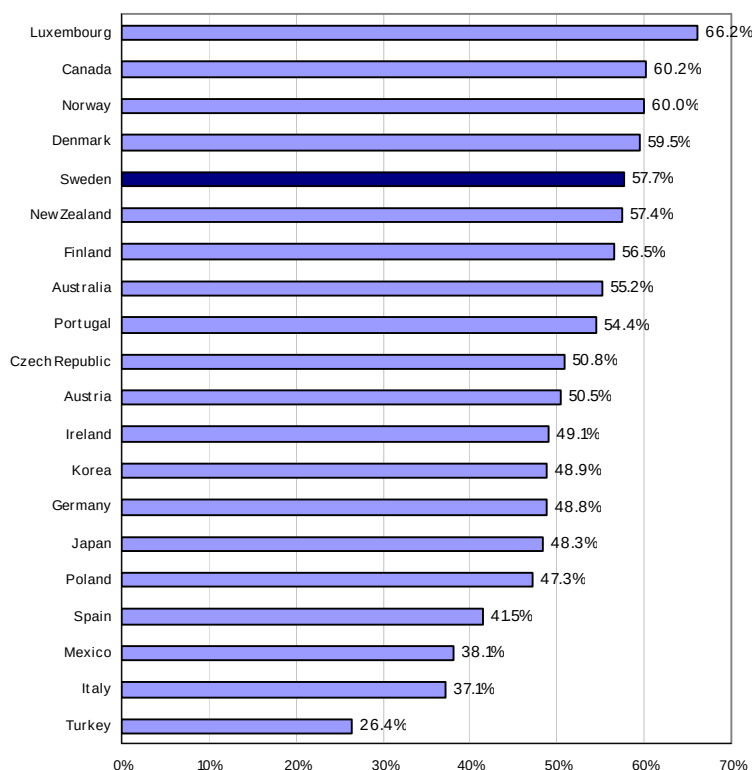
Note: Part time employment refers to persons who usually work less than 30 hours a week in their main job. Data include only persons declaring usual hours. Short-time workers includes workers who are working less than usual due to business slack, plant stoppage, or technical reasons.

Source: OECD (2004b).

... and a large labour force

The Stockholm region also has a large labour force. The participation rate of 88.3% puts it at 13th among the 66 OECD metropolitan regions and 1st among the European regions (Table A.4). This good performance is partially explained by high female labour market participation (Figure 1.15). Stockholm County

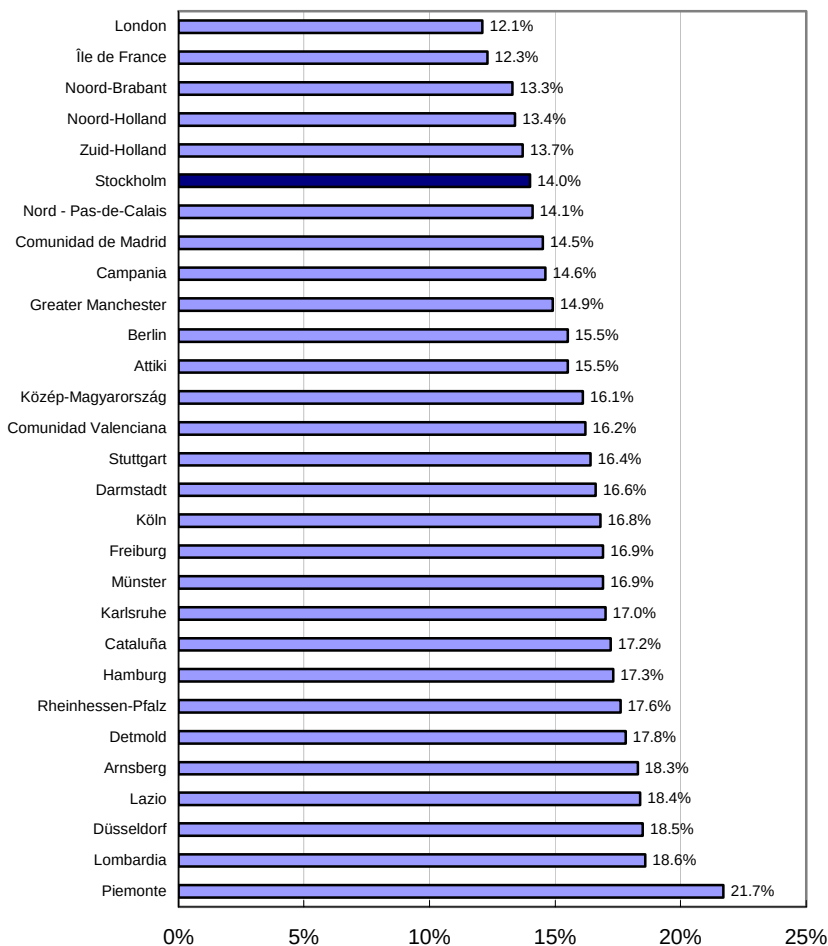
Figure 1.15. Female labour force participation rates in OECD countries 2003



Source: OECD (2004b).

is also the only region in Sweden with a more advantageous age profile than the European average. It ranks 60th out of 237 European NUTS 2 regions with available data for the share of population aged 20 to 65. It also stands in a relatively good position when compared with a selection of NUTS 2 metropolitan regions (Figure 1.16). However, the share of people in the age group 20-64 still in education is higher in Stockholm County than at the national level. Stockholm concentrates more students and universities than elsewhere. In general, younger adults in Sweden tend to enter the workforce later than in most countries, because of a late start and completion in university (OECD 2005a).⁷

Figure 1.16. **Percentage of population 65 years old and over in selected NUTS 2 regions, 2003**



Source: EUROSTAT.

In the future, the Stockholm region will need to increasingly rely on foreign migration to meet population and labour force needs given its relatively low fertility rate and the ageing population. Population growth projections are more positive for Stockholm than nationally (Table 1.2) although for Sweden overall they are not as high as in the OECD area given middle range performance (11th for average annual growth rate for 2000-2050) (Antolin *et al.*, 2005). Projections for 2020 for the Stockholm Mälars region show an increase in the elderly population (County Administrative Boards of the Mälars Region, 2004). As

mentioned previously, the contribution of foreign migration to population growth in Stockholm has increased in recent years (Figure 1.17).⁸ Researchers predict that individuals born outside of Sweden will constitute nearly 30% of the working age population in the next ten to fifteen years versus 22% today (Ministry of Finance, 2004c). Therefore, better attracting and integrating foreign migrants will be crucial to maintain a young population structure and avoid any labour shortage.

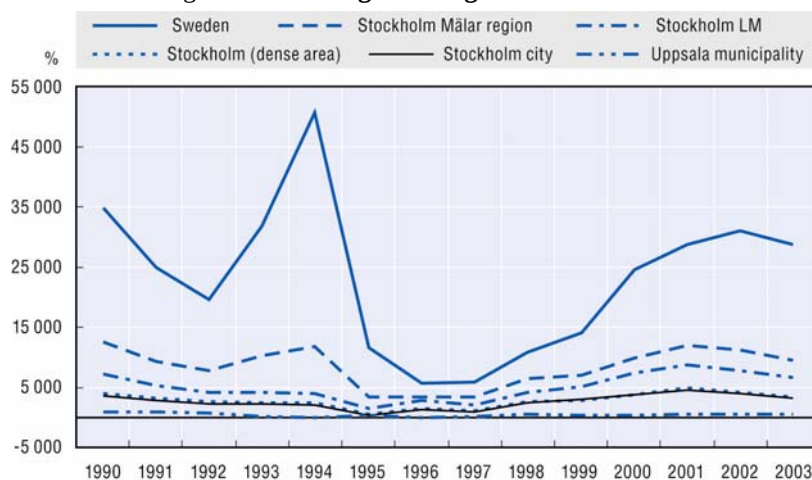
Table 1.2. **Population growth projection for 2020**

(% per year)

Population growth projection	2003-2020 (%)
Sweden	0.46
Stockholm city (municipality)	0.84
Stockholm LM	0.79
Uppsala LM	0.76
Nyköping LM	0.42
Katrineholm LM	0.32
Eskilstuna LM	0.53
Örebro LM	0.34
Västerås LM	0.72
Köping LM	-0.07
Sum of LMs in the Stockholm Mälars Region	0.67

Source: Nutek (rAps) and Stockholm stad, 2004.

Figure 1.17. **Foreign net migration 1990-2003**



Source: NUTEK (rAps) Statistics Sweden.

Moderate or strong labour productivity?

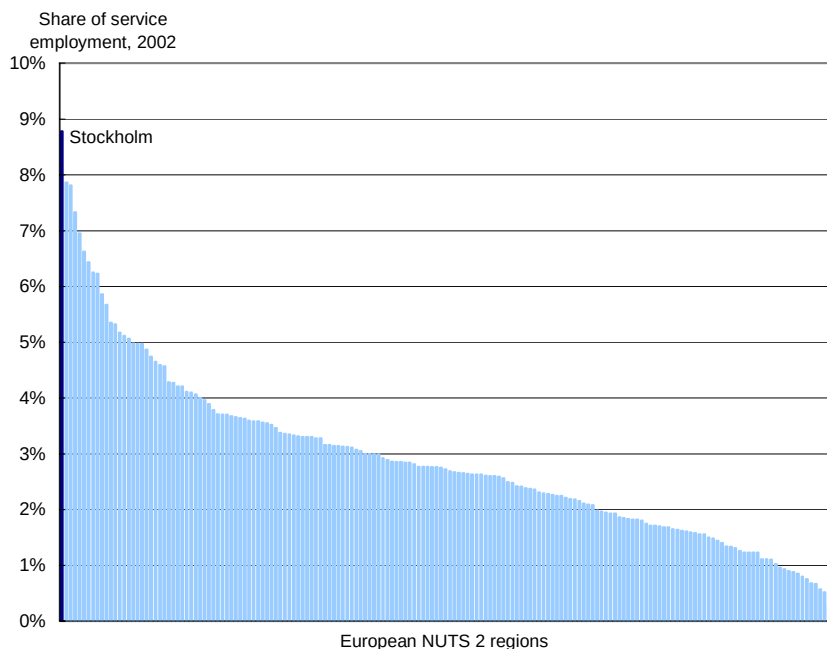
Stockholm's *labour productivity* is comparatively good internationally thanks to specialisation in high value-added activities. Stockholm County ranks 34th among the 66 OECD metropolitan regions and 11th out of 28 among the European regions within this same ranking (Table A.5). Labour productivity depends on regional specialisation in high value-added sector and/or complementary factors of production (skills, physical capital, etc.). Stockholm's industrial mix has experienced a strong shift towards services and knowledge-based activities and away from the public sector (Table 1.3). The significant growth of the services sector has been largely propelled by the rapid development of the high tech services sector. In 2002, Stockholm County ranked first with 8.8% of service sector employment in high tech, a commanding lead over all other Swedish and European NUTS 2 regions on this indicator (Figure 1.18). The ICT industry particularly has achieved momentous growth since 1990 (70.28% growth in the number of establishments to reach 16 384 and 36.44% in employment to reach 156 600) (Paulsson and Mellander, 2002).

Table 1.3. Changes in industrial composition

Sectors		1993 (%)	2001 (%)
Sweden	Manufacturing	30.6	30.3
	Services	46.5	48.9
	Public Sector	22.9	20.8
Stockholm LM	Manufacturing	18.2	16.3
	Services	59.9	66.7
	Public Sector	21.9	17.1

Source: NUTEK (rAps)/Statistics Sweden.

Labour productivity has also been fuelled by a highly educated labour force, with Stockholm far exceeding national and even international regions in education levels. One of the most impressive features of the Stockholm region is its strong skill base. Stockholm County ranks 3rd among 53 selected metropolitan regions on the share of the labour force with at least a tertiary education, only surpassed by Washington, DC and San Francisco (Figure 1.19). This is consistent with Sweden's position in the OECD area which ranks 5th among the 30 member countries. In 2003, 41% of the population aged 25-64 in Stockholm County have a university degree or higher, compared with only 32.8% at the national level.

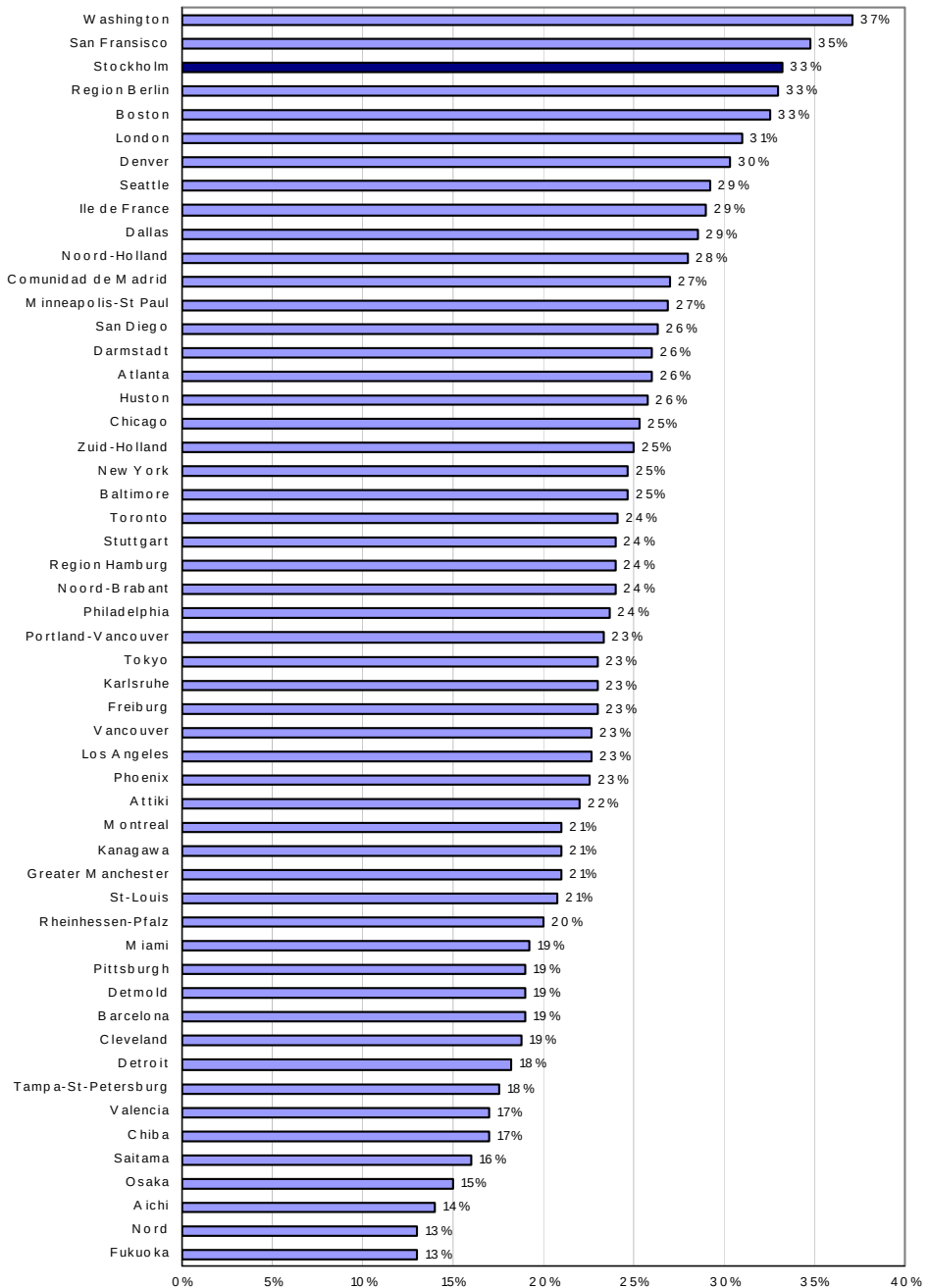
Figure 1.18. **Share of service employment in “high-tech” services**

Note: 174 regions are covered in the graph.

Source: EUROSTAT (2005).

Labour productivity in the Stockholm region is likely to be higher than what is suggested by the indicator GDP per worker. Over 1997–2003, the number of hours worked per worker has significantly decreased in Sweden (from 1 638 in 1998 to 1 564 in 2003). As a result, in 2003, Sweden ranked among the OECD countries with the lowest level of average working hours per worker (Figure 1.20). Although no data are available at the local/regional level, it seems safe to suggest that a similar trend towards a reduction of working hours has taken place in the Stockholm region as well. Therefore, the commonly observed low level of working hours in Sweden suggests that when more precisely measured by GDP per hour, labour productivity in the Stockholm region may possibly be even higher. In this context, Stockholm County will quite likely score even better in labour productivity (*i.e.* GDP per hour of work) among the 66 metropolitan regions. And it also suggests that labour productivity (GDP per hour of work) has been increasing faster than that when measured by GDP per worker.

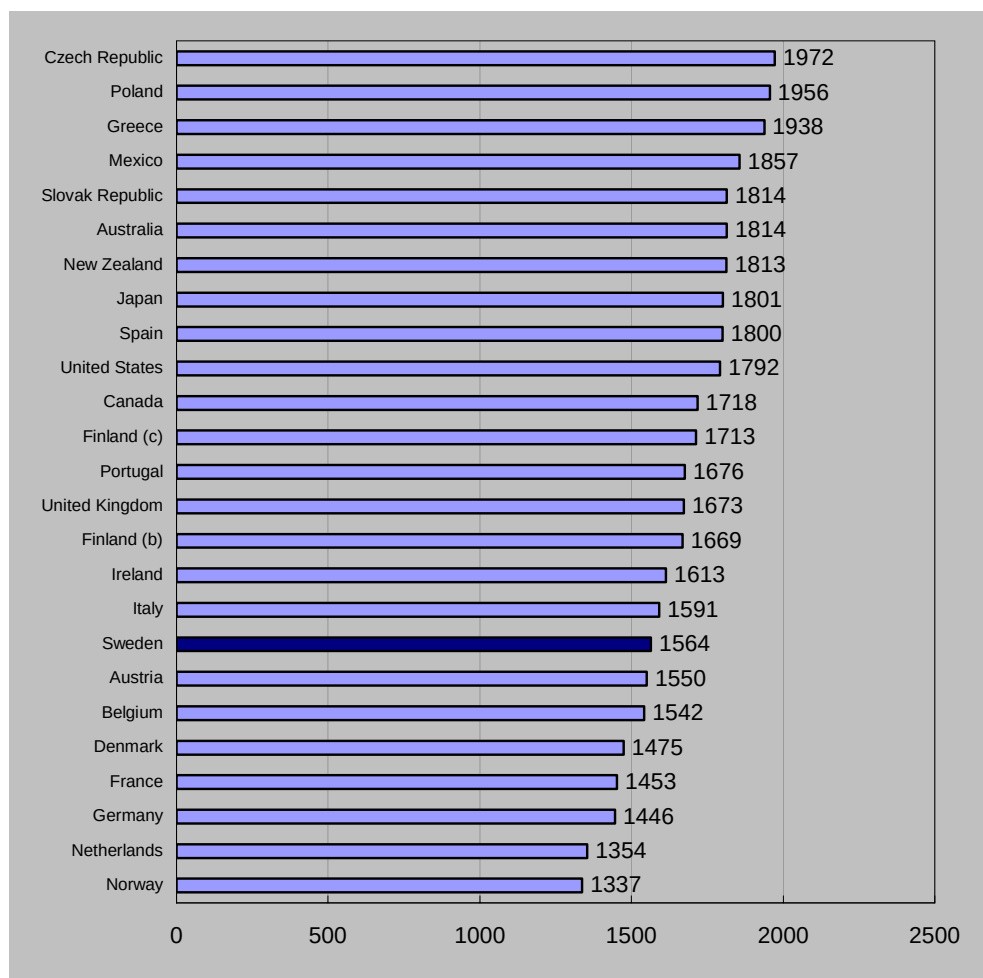
Figure 1.19. Percentage of labour force with a tertiary education (2001)



Source: OECD Territorial Database.

Figure 1.20. **Average annual hours actually worked per person in 2003**

Unit: hours

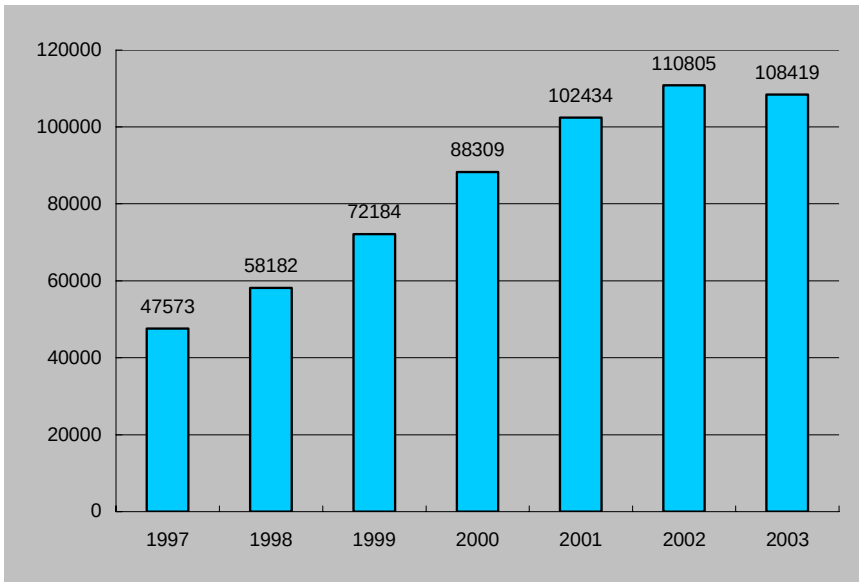


Notes: The concept used is the total number of hours worked over the year divided by the average number of people in employment. The data are intended for comparisons of trends over time; they are unsuitable for comparison of the level of average annual hours of work for a given year, because of differences in their sources. Part-time workers are covered as well as full-time. *b)* Data estimated from the Labour Force Survey. *c)* Data estimated from national accounts.

Source: OECD (2005b).

Raising hours of work is critical for the region's labour supply and economic activities. The decrease of working hours comes mainly as a result of a spectacular increase in the number of sick leaves (from 47 574 days in 1997 to 108 419 in 2003) (Figure 1.21). Compared with other OECD countries, sickness insurance in Sweden has been generous and readily accessible. The legitimate social goal of the country is to protect sick people from undue hardship (OECD 2005a). However, there have not been enough responsibilities placed on the sick person, the employer and the social insurance office. The recent upsurge, particularly among long-term leaves, reflects the cyclical pick-up, more generous benefit levels and substitution between disability and long-term sickness benefits (access to disability benefits in the late 1990s) and population ageing only explain a small fraction of the increase (the recent slight drop from the peak is due to the fact that some people have moved onto disability benefits instead) (OECD 2005a). Besides sickness and disability absences, other forms of time off from work along with negotiated reductions in working hours also contribute to the problem.⁹

Figure 1.21. **Number of sick days in Sweden 1997-2003**



Source: Statistics Sweden.

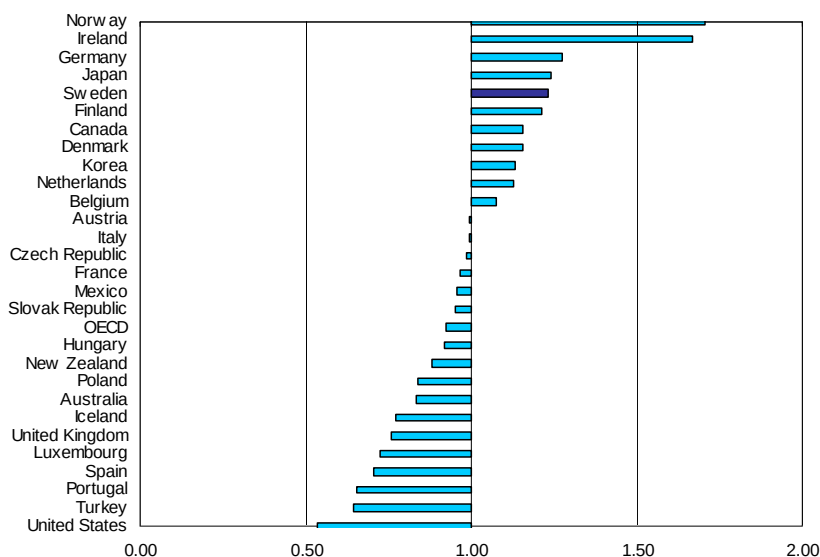
1.3. Globalisation, strengths and challenges

1.3.1 A winning region

A highly internationalised economy

Companies located in the Stockholm region have successfully competed in international markets, as Stockholm is the leading regional economy of a country with strong exports. In 2004, total Swedish exports reached USD 10.22 billion, ranking 13th of the 29 OECD member countries.¹⁰ This represents growth of 49.6% over the three years since 2002 as compared with 37.9% for OECD countries overall. Its position among OECD member countries has been relatively stable over this period with Sweden ranked 7th among OECD countries in trade surplus (USD 1.93 billion) given its high ratio of exports to imports (Figure 1.22).

Figure 1.22. Ratio of exports to imports 2004



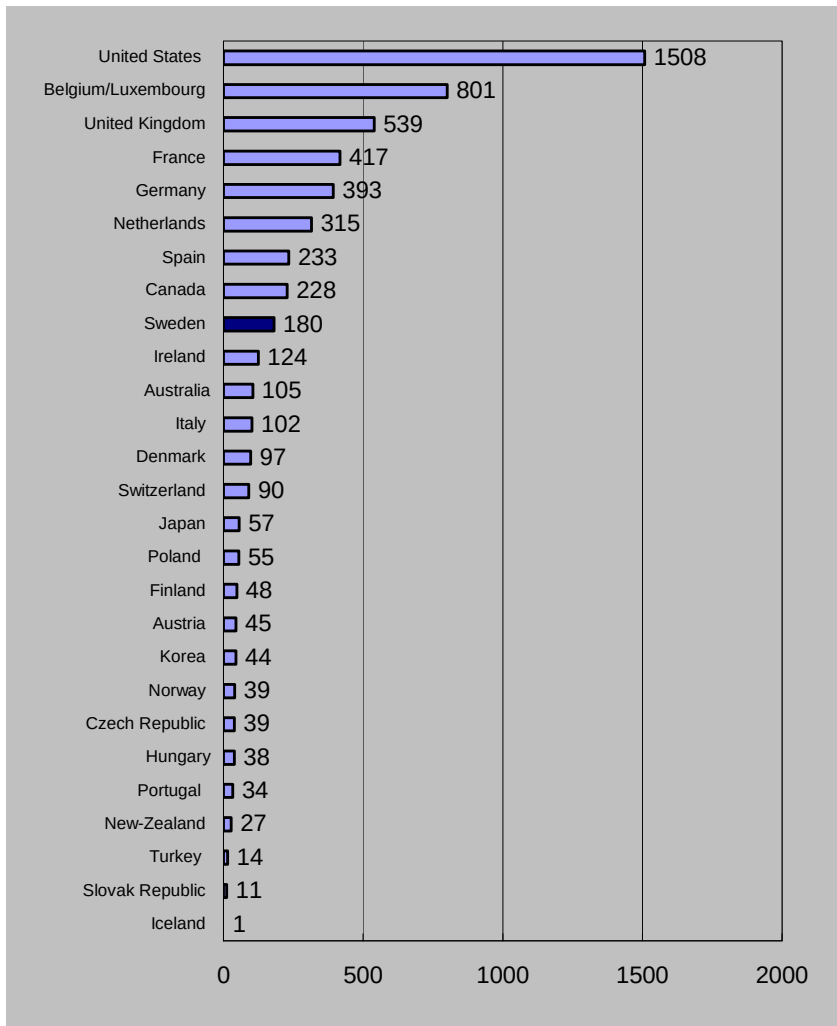
Source: OECD (2005d).

The Stockholm region, and Sweden overall, also attract high levels of foreign direct investment (Figure 1.23). Sweden ranked 9th among OECD countries in terms of inward cumulative FDI inflows over 1990-2003. The major driving force behind this development is takeovers and acquisitions by foreign firms and groups and to a lesser extent by start-ups. The largest

foreign-owned companies are from the US followed by Finland, United Kingdom and Denmark. Given that the region contains the majority of the multinationals in Sweden, there is a rationale to assume that most of these inflows went to the Stockholm region. About 30% of all Swedish jobs in foreign-owned companies are located in the Stockholm Labour Market (40% for the Stockholm Mälars region), compared to the overall share of 23% of Swedish employment.

Figure 1.23. **Cumulative FDI inflows 1990-2003**

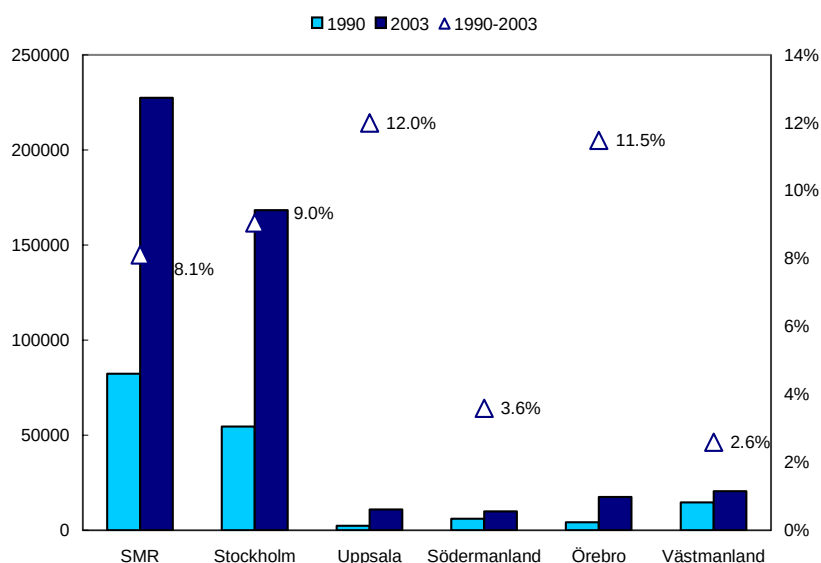
Unit: billion US dollars



Source: OECD (2005f).

Within the Stockholm Mälars region, employment in foreign firms is increasingly concentrated in Stockholm County. For example, 74% of total foreign employment in the Stockholm Mälars region was in Stockholm County in 2003, compared with 66.2% in 1990. The number of jobs in foreign-owned companies reached 564 200 with an annual growth rate of 8.7% during the period 1990-2003. Employment growth in foreign-owned companies in Stockholm County has been roughly equal to the national average (9% annually over the 1990-2003 period compared with 8.7% for the national average). However, the growth rate for the Stockholm Mälars region overall of 8.1% has been slightly slower than the national average due to low growth rates in Södermanland and Västmanland (Figure 1.24).

Figure 1.24. **Employment growth rates in foreign-owned firms in the counties of the Stockholm Mälars region**



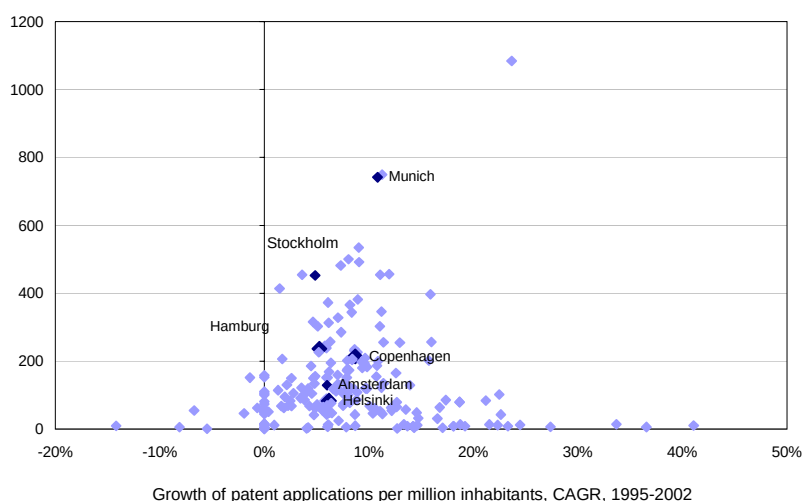
Source: ITPS – Swedish Institute for Growth Policy Studies.

... based on good innovative potential...

Despite a recent economic slowdown largely as a result of trends in global high tech markets, the Stockholm region's innovative capacity remains one of the highest in Europe, especially in the high-tech sector. Using current patent intensity as a means to measure innovation,¹¹ Stockholm ranked 11th among the 204 EU-15 NUTS 2 regions. Regions ahead of Stockholm included seven Southern German regions, one Dutch,

and one Austrian region. Stockholm has middle range performance on the growth of the number of patents between 1995 and 2002, ranking 142nd among the 222 regions for which such data is available (Figure 1.25). Surprisingly, the Stockholm region's patenting intensity has grown at a slower annual rate than that for Sweden overall over this period, 4.9% versus 7.3%. This has been associated with the rapid technology development in other high tech centres of Sweden such as Goteborg region and Malmö/Lund region benefiting from national innovation policies. However, Stockholm does register a high absolute number of patents in sectors classified as “high-tech” (Figure 1.26), and these patents account for a large share of all patents filed from inventors in the Stockholm region. The large number of high-tech patents per population places Stockholm in a top group of a few other European regions including two Finnish regions, one German region, one Dutch region, and Southern Sweden.

Figure 1.25. **Patent Applications across NUTS 2 European Regions**



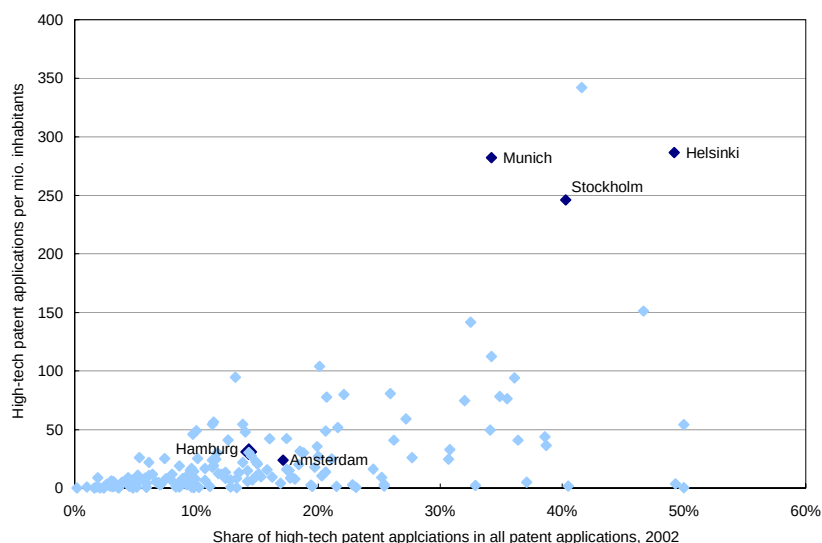
Note: The regions highlighted in this figure are NUTS 2 regions: Oberbayern (Munich), Hamburg (Hamburg), Denmark (Copenhagen) and Noord Holland (Amsterdam).

Source: Eurostat.

Innovation in high value-added sectors has been fuelled by strong skills in science and technology. In Stockholm County, about a third of all employees with tertiary education are trained in a science and technology field. This positions Stockholm ahead of other Swedish regions in the top 10% of European regions with a rank of 23 out of 241 (Figure 1.27). More remarkably, Stockholm County (and the Swedish regions in general) is

among the leading European regions, along with London, Paris, Madrid and Helsinki, in terms of employing people with a science and technology background in a field that draws on their competences.

Figure 1.26. **High-Tech Patent Application across European Regions**



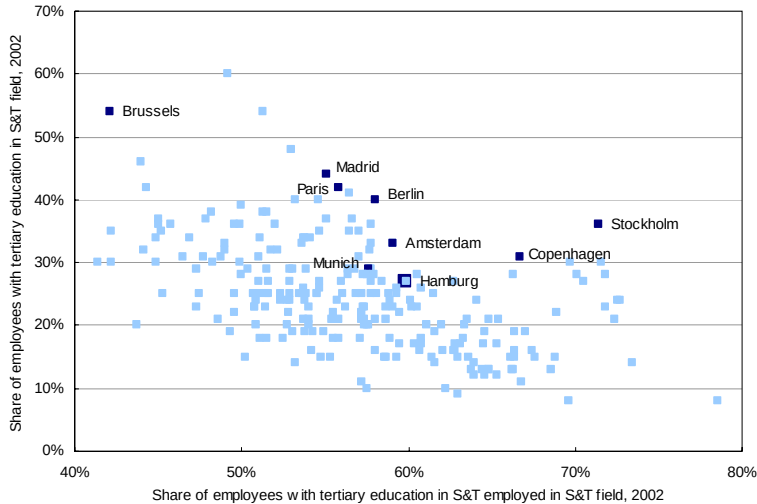
Note: The regions highlighted in this figure are Oberbayern (Munich), Hamburg (Hamburg), Noord Holland (Amsterdam) and Uusimaa (suuralue) (Helsinki).

Source: Eurostat.

The Stockholm region's strong position in terms of employee skills is supported by a well developed science system of universities and research institutions of international stature. The Stockholm Mälars region is especially strong in research, accounting for 48% of all university-based spending in Sweden. There are altogether 26 centres for higher education in the region, including the internationally outstanding Arts Colleges, the Royal Institute of Technology (KTH), Stockholm School of Economics, Stockholm University, Karolinska Institute and Uppsala University. One indicator of Stockholm's international standing in science and technology is the net-inflow of undergraduate and PhD students from abroad. The number of incoming students (undergraduate and Ph.D. levels) is more than 50% greater than the number of Swedish students going abroad. International Ph.D. students do not just come from the EU (41%), but also other European countries (12%), the United States (6%), other OECD countries outside of

the US and Europe (25%) and the rest of the world (19%).¹² Over 88% of all entering Ph.D. students (both domestic and international) concentrate in medicine, natural science and technical fields.

Figure 1.27. **Mobilisation of science and technology skills in European regions**



Notes: The regions highlighted in this figure are NUTS 2 regions: Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest (Brussels), Comunidad de Madrid (Madrid), Île de France (Paris), Berlin (Berlin), Oberbayern (Munich), Hamburg (Hamburg), Denmark (Copenhagen) and Noord Holland (Amsterdam).

Source: Eurostat

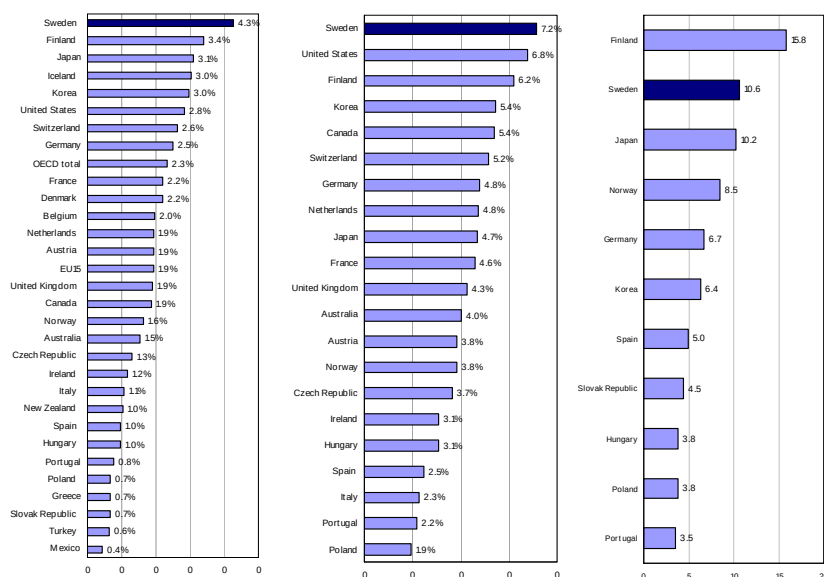
The Stockholm region's science system is more focused on research than on teaching. The region's share of students is at 33%, in line with the Stockholm Mälars region's share of national population but lagging in the region's share of employees with post-secondary education. Recent growth has, however, been strongest at Södertörn University and Mälardalen University, two institutions with a stronger focus on teaching. In both research and teaching, the science system has a considerable strength in science and technology-related fields. Advanced management training is however lacking. Despite the local presence of the Stockholm School of Economics, the first full-time MBA program was offered only in 2004, although a number of executive MBA programs have been available for a number of years.

The Swedish science system benefits from significant R&D spending. On the national level, Sweden ranks the highest among OECD countries in

the ratio of R&D expenditure to GDP, investment in knowledge and second for the number of researchers after Finland (Figure 1.28). Sweden and Finland, Japan and Iceland are the only countries whose GDP expenditure on R&D reached at least 3% in 2001. Although there is no comprehensive data available across Swedish regions, data on university-based R&D spending suggests that the Stockholm Labour Market receives a more than proportional share of public R&D expenditures. The Stockholm Mälars region represents 42% of combined private and university-based R&D in Sweden. Additionally, the Stockholm Mälars region has the largest concentration of R&D personnel in Sweden. Out of 65 000 employees in Swedish universities, 40% are employed by the ten largest institutes located in the Stockholm Mälars region. More than 15 000 of these are working in R&D and education. The absolute number varies much between the Stockholm School of Economics with 390 employed to Uppsala University with more than 6 000 people. The dominance of national R&D activities in Stockholm County would put it most likely in the top ten European regions on this measure.

Figure 1.28. R&D in OECD countries

(from left to right, R&D ratio in GDP, investment in knowledge, number of R&D researchers per thousand employed)



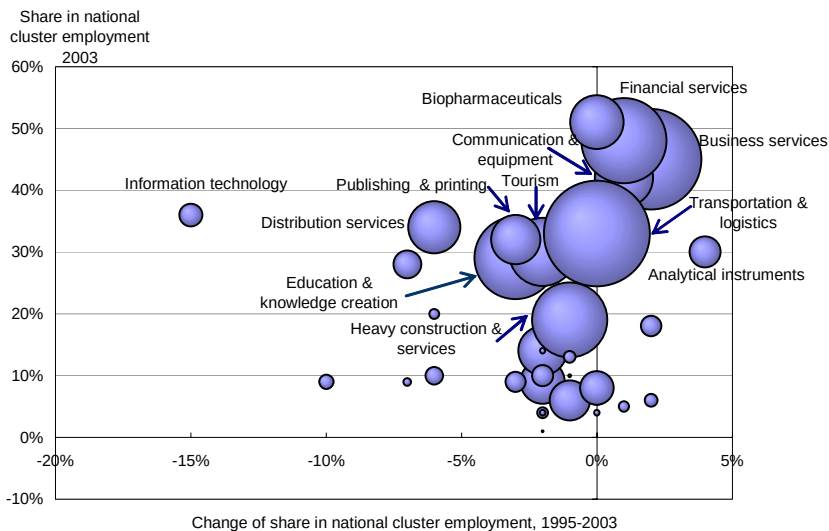
Note: Investment in knowledge is defined as the sum of expenditure on R&D, on total higher education (public and private) and on software. This sum is then divided by each country's GDP to produce a comparable indicator across countries. The data have been adjusted to exclude the overlaps between components.

Source: OECD (2005f).

... and well-developed clusters

In its shift towards a services and knowledge-based economy, the Stockholm region has developed competitive and innovative industry clusters.¹³ A cluster mapping of the Swedish economy shows that the Stockholm region (NUTS 2) is very specialised in a few clusters that account for the majority of jobs. These are clusters where Stockholm has a regional competitive advantage in Sweden (Fördel Stockholm Mälardregionen 2004). They include biopharmaceuticals, financial and business services, transport and logistics, ICT and analytical instruments (Figure 1.29). With few exceptions, these clusters fit very well with the notion of the Stockholm region as a business centre for the nation with strong elements of science-driven economic activity. While there is a lack of directly comparable data from other European metropolitan regions, it is likely that the specialisation of the Stockholm region's economy in science-driven clusters is also high in comparison to relevant peers.

Figure 1.29. **Cluster composition in the Stockholm Region (NUTS 2)**



Notes: 1) Bubble size is proportional to employment levels; 2) Stockholm share of national cluster employment in 2003 is 22.9%; and 3) Change in Stockholm's overall share of national cluster employment over 1995-2003 is -0.5%.

Source: "Institute for Strategy and Competitiveness, HBS" with data from Statistics Sweden (2005).

There is an increasing recognition that better integration at the Stockholm Mälär region level will allow for a more efficient allocation of resources, strengthen the linkages within industries, and thus further improve cluster performance. In their prioritisation exercise, public authorities in charge of the new regional growth programmes (see Chapter 2) have identified a number of industry clusters which are quite similar to the ones identified at the County level (Table 1.4). These clusters will support the Stockholm Mälär region economy and facilitate regional industrial and economic dynamics. The Stockholm Mälär region will benefit additionally from the resulted trickling down effects of the dynamics in its further integration. Compared with Stockholm County, the Stockholm Mälär region shows more economic diversity with more manufacturing sectors concentrated in the western part of the region. This creates a bigger platform for the region to organise its industrial and economic activities and creates even greater economies of scale.

Table 1.4. Clusters in the Stockholm Mälär Region, 2003

Clusters	Examples	Employee nt	Wages (million SEK)	Wage/per worker (1 000 SEK)	Employ- ees with higher education %	Wage differential all employees 1997-2003
Creative industries	Architecture, design, fashion and music etc.	52 052	14 075	270	28.0	12.0
Professional services	Legal, economic consulting, recruitment etc.	98 943	29 825	301	32.0	13.2
ICT	IT and telecommunications	77 627	31 552	406	35.6	28.1
Logistics	Transports, travel agents	55 363	14 858	268	7.9	14.5
Advanced manufacturing, engineering	Robotics, steel processing, machinery	50 837	15 197	299	13.3	19.6
Finance	Banking and financial service	49 681	20 575	414	30.5	23.5
Vehicles	Cars, trains and trucks	13 623	3 900	286	14.4	16.4
Biotech / pharmaceuticals	Pharmaceuticals	26 424	9 603	363	35.7	21.2
Rest of privately owned companies and public sector		989 872	244 115	247	21.3	17.8
Regional total		1 414 422	383 701	271	22.8	18.6

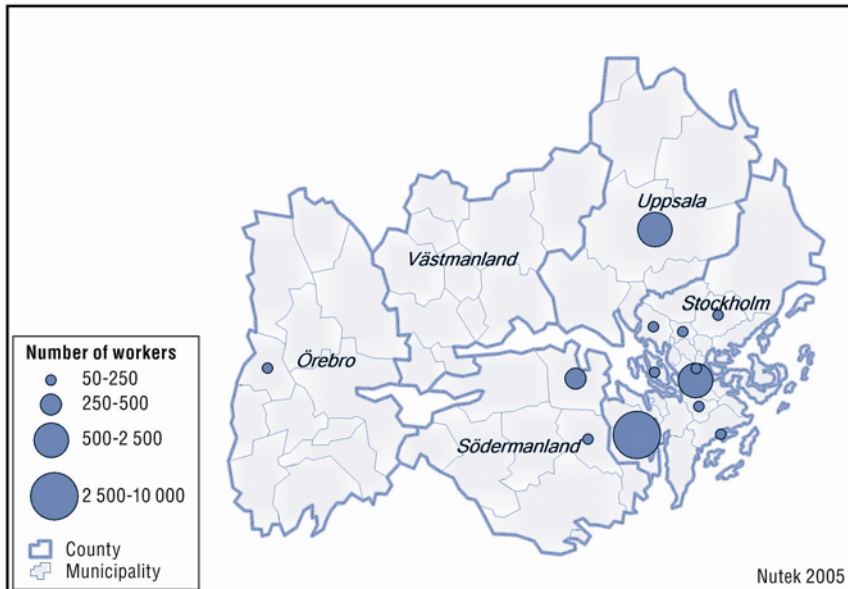
Source: The County Administrative Boards in the Stockholm Mälär Region.

The clusters in the Stockholm Mälär region have achieved dramatic growth over the period 1990-2001. Total wages in the clusters have grown by 70% during this period, compared with a 35% for the whole economy in

this region. Most of the clusters show a higher wage rate than the rest of the economy due to their technology-intensive character. The number of employees has grown faster for industries in the clusters than for the rest of the economy, a 16% increase versus a 2% decrease for the total workforce. The creative industry is the largest cluster, both by employees and total wages earned. Biotech is the smallest cluster but it is growing quite rapidly. The ICT cluster is one that has grown most rapidly both in terms of employees and wages during the period 1990-2001. The manufacturing cluster is actually shrinking, the workforce being down 24% since 1990 and wages rising a mere 5% compared with a regional total of 35%.

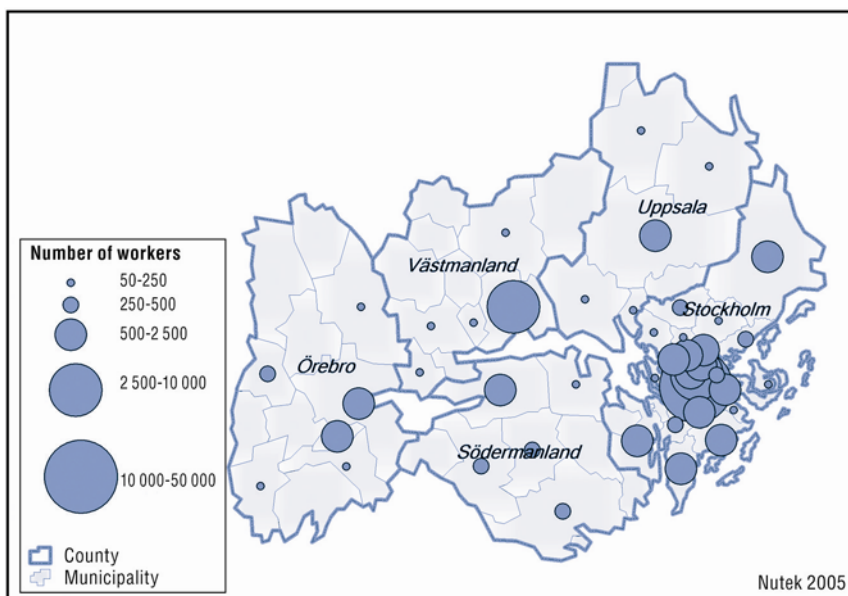
Three competitive clusters are highlighted in the following analysis: the ICT cluster, the biotechnology (life science) and the financial sector. These clusters produce the greatest added value as measured by the wage per worker. The three clusters and related R&D activities are concentrated in the more expansive east side of the Stockholm Mälars region (Figures 1.30, 1.31, 1.32 and 1.33).

Figure 1.30. **Employment agglomerations in the biotechnology cluster**



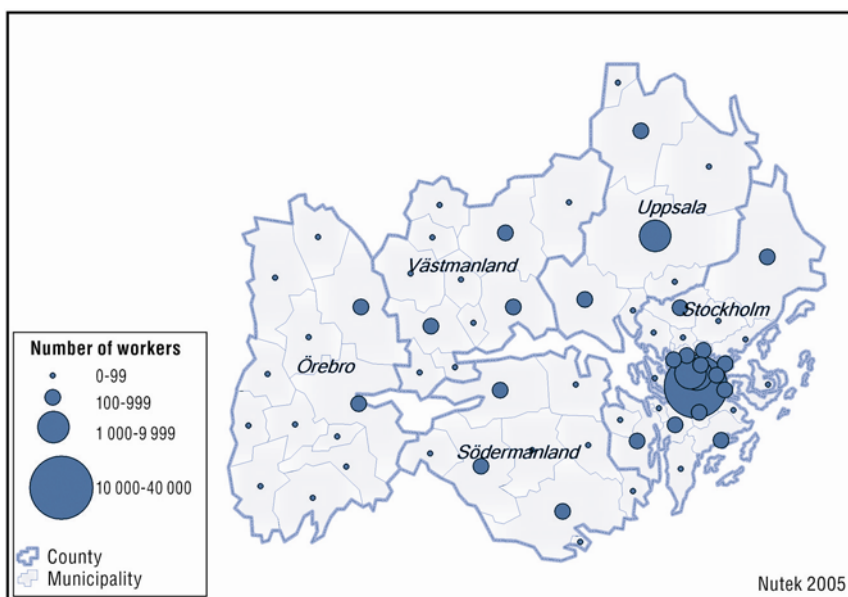
Source: NUTEK/rAps.

Figure 1.31. Employment agglomerations in the ICT cluster

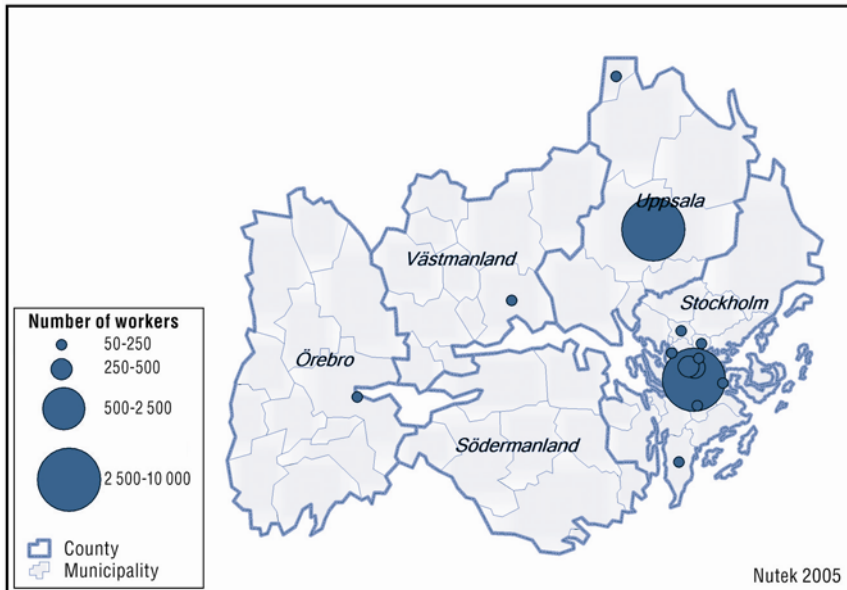


Source: NUTEK/rAps.

Figure 1.32. Employment agglomeration in the financial cluster



Source: NUTEK/rAps.

Figure 1.33. **Employment agglomerations in Research and Development**

Source: NUTEK/rAps

The ICT cluster

Among the industry clusters, the ICT cluster in the Stockholm region stands out as a leader in the global marketplace. When measuring its ability to access and use ICT, the International Telecommunication Union ranks Sweden the top global ICT nation, followed by Denmark, Iceland, South Korea, Norway, Netherlands, Hong Kong, Finland, Taiwan and Canada (ITU Digital Access Index 2003). Driven primarily by the ICT cluster, the Stockholm region is ranked the most dynamic European region in technology (Table 1.5). The cluster holds the advantages of a strong skill base and innovative capacity as well as close linkages between universities and industries. Within Sweden, the region's share of national employment in the sector has grown since 1995. Strongly driven by the anchor company Ericsson, the cluster was hit by the downturn of the global industry in the aftermath of 2000. The Stockholm regional cluster was, however, able to deal with the crisis better than other Swedish regions. While the sector lost 20% of its employment nationwide between 1995 and 2003, the same figure for Stockholm was only 14%. This is an indication of the fact that many of the former Ericsson employees that lost their jobs successfully transitioned into other companies in the cluster. Given its diversification to a wide range of products and services the cluster should be better able to survive

downturns than certain other industries (Figure 1.34). However, the cluster may face competition from its neighbour Finland, a country that also stands out in many aspects of ICT development (Box 1.2).

Table 1.5. Top 10 most innovative European regions (2002)

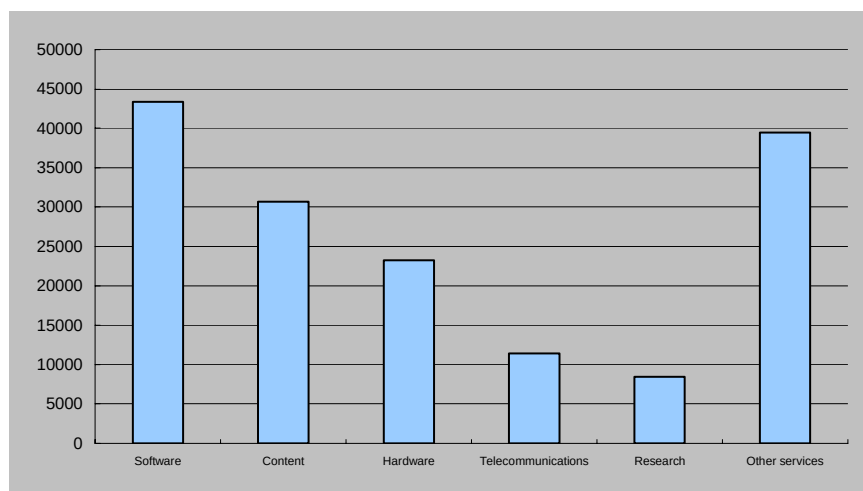
<i>Ranking</i>	<i>Regions</i>	<i>Country</i>
1	Stockholm	Sweden
2	Munich/Oberbayern	Germany
3	Stuttgart	Germany
4	Braunschweig	Germany
5	Helsinki/Uusimaa	Finland
6	Göteborg/Western Sweden	Sweden
7	Ulm/Tübingen	Germany
8	Eastern U.K.	United Kingdom
9	Oula/Pohjois	Finland
10	Uppsala/Eastern Central Sweden	Sweden

Note: The study covered 214 European regions and measured the number of patents, expenditure on R&D and number of people employed in R&D.

Source: Empirica Delasasse/Wirtschafts Woche (2002).

Figure 1.34. Composition of the ICT cluster in Stockholm 2000

Number of employees



Note: The Stockholm region measured here refers to the functional region of Stockholm used in the MUTEIS study (Paulsson and Melander, 2002), which encompasses 35 municipalities and covers an area of 15,814 square kilometres.

Source: Paulsson and Mellander (2002).

Box 1.2. Comparing ICT clusters in Helsinki and Stockholm

Information and communication technology (ICT) is a powerful agent in socioeconomic changes. Both city regions of Helsinki and Stockholm have developed their strong ICT clusters around the world's leading mobile telecommunication companies (Nokia and Ericsson respectively). Compared to other Swedish regions such as Gothenburg (vehicular telematics, i.e. links between telecommunications and computing) and Öresund (cognitive research, bioinformatics, man-machine interface and user-friendly design), the ICT cluster development in Stockholm (Kista Science City) has focused on wireless technology, mobile applications and services. In contrast, since the end of the 1990s the ICT cluster in Helsinki reflects more the characteristics of ICT development in Finland, which has sought to move to the downstream side of the value chain (software), due to the commodification of handsets and increasing price erosion at the upstream end of the market. Compared to other places in Finland, Helsinki shows more emphasis on support and headquarters functions as well as R&D.

Despite many similarities, the two ICT clusters in Stockholm and Helsinki exhibit distinct differences. Both clusters are the major players in their respective national ICT development, with Stockholm playing a larger overall role (about 43% in 2000 compared with approximately 36% in Helsinki). This difference could be partially due to the fact that compared to Helsinki, Stockholm houses relatively large firms. In terms of the composition of the ICT sub-sectors (hardware, software, telecom and content), both Stockholm and Helsinki show larger shares of software and content, but Stockholm pays more attention to software development (40% in 2000) whereas Helsinki focuses more on content (32% in 2000). Overall, the growth of both clusters has benefited from their location in a capital, proximity to a skilled labour force and concentrated R&D activities in the two regions.

A key aspect of this cluster is Kista Science Park which in employing some 30 000 people and hosting around 700 companies has been responsible for much of the growth in the Stockholm Region. Kista Science City was ranked as second only to Silicon Valley as one of the world's most influential high-tech hub by U.S. magazine *Wired* (Business Arena Stockholm, 2005). Located in the northwest of Stockholm, Kista is home of Ericsson's headquarter as well as many other companies such as Nokia, HP, Microsoft, Sun Microsystems, Intel, Apple, IBM and Oracle and the relevant programs of the Royal Institute of Technology (KTH).¹⁴ There seem to be two factors which have helped Kista to develop significant cluster effects. First, the social network of former Ericsson employees are able to easily identify where the product or service they are now working on fits into Ericsson's overall activity. Second, the services provided by Kista Science

Park to attract and support entrepreneurs specifically in the field of IT and telecom. Given that a number of the cluster activities, including the expansion of KTH's presence in Kista, are still relatively recent, there is still significant potential for further benefits to arise. Over time this could reduce the dominant role that Ericsson plays in the cluster not only in economic terms but also a source of the cluster interactions. The expected increasing diversity could lead to greater creativity and dynamism in the cluster.

The biotechnology cluster

The Stockholm region is a leading region internationally in biotechnology. There is no direct data to measure the performance of the cluster at the regional level, but more than 50% of Swedish employment in biotechnology is concentrated in Stockholm County. The cluster's competitiveness can therefore be inferred from the country's international rankings. Sweden leads in Europe and even in the world in many industry measures. Overall, among European countries, Sweden ranks 1st in pharmaceutical research climate, with a number of citations in clinical medicine, 3rd in biotechnology innovation (after Switzerland and Denmark, but followed by the US) and 4th in the number of biotech companies and products in the pipeline (following Germany, UK and France) (Business Arena Stockholm, 2005). Specifically, major areas of excellence in the Stockholm region include neuroscience, immunology and allergy, metabolic diseases, regenerative medicine, biotech tools and supplies, and bio-production.

Strong fundamentals in research and linkages have facilitated the rapid growth of the biotechnology cluster and will continue to function as the motor in its expansion. Similar to the ICT cluster, these sources of growth for the biotechnology cluster include the high overall investment in R&D, the strong skill base in terms of employees with tertiary education in science and the presence of strong research institutions, especially Karolinska Institute with its international standing. Particularly, the strong university-industry linkages and co-operation between hospitals, universities and private industries present in the Stockholm Mälars region (especially in Stockholm and Uppsala counties) will be greatly beneficial for the continued growth of the cluster. One important reason for Stockholm's leading position is the legacy of strong pharmaceutical companies that were previously Swedish owned such as Astra and Pharmacia. These companies had at least their lead production facilities close to headquarters in the Stockholm region, and some of this activity remains in place today. Other companies, such as Pfizer, located to the Stockholm region at a time for its strong factor conditions, especially the available skill base, which has made the region an attractive location to place European production facilities. The

presence of these firms is important. New investments, such as the one just announced by Pfizer in Strängnäs, would be unlikely in Sweden in their absence. Furthermore, the presence of the globally leading ICT cluster should enhance the competitiveness of the biotechnology cluster given the unique possibilities for convergence between IT and biotechnology.

The biotechnology cluster will need to increase its economic scale to compete with the US. The study by the European Association for bio-industries shows the US superiority over European countries (Table 1.6). The report covers the reference year 2003, including both public and private company data along with an in-depth study of nine European countries – Denmark, Finland, France, Germany, Ireland, Norway, Sweden, Switzerland and the UK and the US. Compared to the US, the European biotechnology industry is much smaller in many areas such as total employment, employment in R&D, R&D spending and venture capital attraction. The findings of this study reveal that the key divers of the biotechnology industry in Sweden and other European countries require greater scale. Regional integration of the Stockholm Mälars region may be able to help integrate more resources to facilitate the growth of the cluster.

Table 1.6. **Biotechnology industry development in Europe and US in 2003**

Units: various

Countries	Number of companies	Number of employees	Number of R&D employees	R&D spending (million Euros)	Venture capital (million Euros)
U.S.	1 830	172 391	73 520	16 386	2 100
Europe	1 975	94 211	35 316	6 043	756
Germany	525	17 277	8 625	1 283	179
U.K.	455	22 404	9 644	1 757	247
France	225	8 922	4 193	608	90
Sweden	108	3 716	2 359	313	45
Denmark	100	17 329	3 866	942	44
Switzerland	97	8 819	4 143	639	43
Finland	64	2 016	1 146	186	5
Ireland	41	2 940	1 053	277	1
Norway	32	970	283	34	2

Note: The definition of the biotechnology industry in this report includes only companies “whose primary commercial activity depends on the application of biological organisms, systems or processes, or on the provision of specialist services to facilitate the understanding thereof”. Pharmaceutical and other companies for whom biotechnology is an important but minor part of their businesses are not included in the study. This may explain the discrepancies between the data in this table and in other parts of the assessment.

Source: European Association for Bio-industries (2005)

The financial cluster

The financial cluster stands at a modest level compared to other European financial centres but holds promises for the integration of the Baltic Sea region (Table 1.7). Although Stockholm lags behind top financial centres such as London, the region is superior to other Nordic cities in terms of financial services. The equity trading volume of Stockholm is almost as much as that in Helsinki, Oslo and Copenhagen combined. Functioning as the base for financial services for Nordic countries, Stockholm hosts foreign banks and financial services companies such as Aon, Citigroup and Cr dit Agricole Indosuez.

Table 1.7. European Stock exchanges

Equity trading Stock related products, contracts traded as of October 2002, year-to-date

Exchange	Turnover (Euro billion)	Exchange	Number of contracts
London Stock Exchange (U.K.)	3 666	Euronext (The Netherlands)	334 242 017
Euronext (The Netherlands)	1 815	Eurex (Germany/Switzerland)	295 374 981
Deutsche B�rse (Germany)	1 122	Stockholmsb�rsen (Sweden)	45 538 749
Spanish Exchanges (BME)	579	Liffe (U.K.)	38 552 104
Italian Exchange	553	Spanish Exchanges (BME)	29 457 414
Virt-X (U.K.)	543	Idem (Italy)	14 367 646
Stockholmsb�rsen (Sweden)	253	Adex (Greece)	3 012 809
Helsinki Exchange (Finland)	156	WSE (Poland)	2 678 686
Oslo B�rs (Norway)	50	Oslo B�rs (Norway)	2 517 349
Copenhagen Stock Exchange (Denmark)	46	Helsinki Exchange (Finland)	2 311 418

Source: The Federation of European Securities Exchange, FESE.

1.3.2. Weaknesses and challenges

Low entrepreneurial activity

Although Stockholm's economy does show the economic diversity expected of a metropolitan region, its main competitive clusters remain dominated by a limited number of firms. For example, a common feature of both ICT and biotech/life sciences is cluster domination by one or a couple of firms. Ericsson overwhelmingly dominates the ICT cluster. In biotech/life sciences AstraZeneca and Pfizer are the most important firms. The evidence suggests that research and development undertaken by old large firms in mature industries tends to be weighted towards incremental and process innovation, rather than transformational innovation, which is more likely to come from new firms and new industries. Thirty one of the largest fifty

firms in Sweden in 2000 were established prior to 1914 (Högfeldt, 2004a). No firm founded after 1970 is in the top fifty. The large firms also dominate Swedish research and development. The large firms account for about 70% of all Swedish patents in the USA, they also account for the great majority of R&D investment. These large firms are important assets for the region and the country, although over the long term Swedish policy makers will need to focus on ensuring a better mix of large older firms and new fast growing firms.

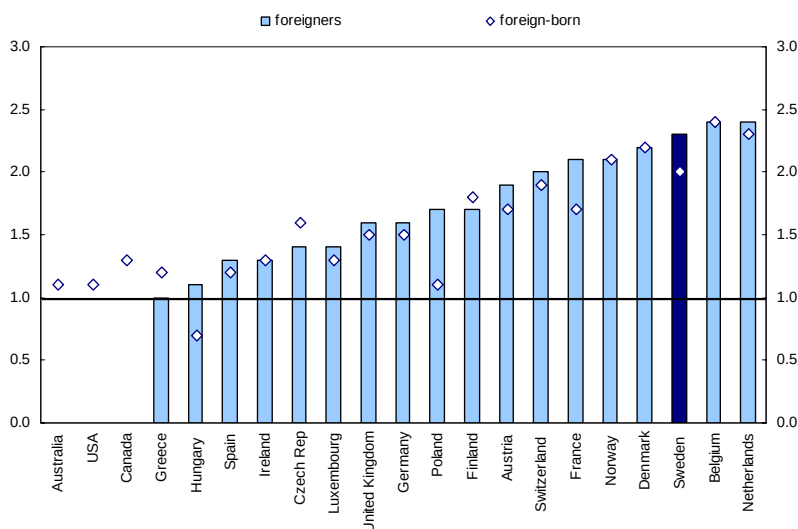
The absence of new fast growing firms and low levels of entrepreneurship are a challenge for the Stockholm region given the clear economic transition towards a knowledge-driven model. In this new model, advanced services of high-skilled individuals, and a vibrant and entrepreneurial mix of flexible SMEs and large companies become increasingly dominant. Entrepreneurial activity is a key contributor to productivity growth and a potentially important source of employment growth. Outsourcing, the development of new services, and demand for more differentiated products all point to a greater role for small and new firms as engines of entrepreneurial activity (Henrekson, 2002). Overall, Sweden has low numbers of start-ups and shut-downs. It ranks low among European countries, with only about two thirds the number of entrepreneurs that would be expected given the EU average (NUTEK, 2005). And between 1995 and 2003, the share of entrepreneurs dropped significantly faster in Sweden (–15.1%) than in the EU average (EU-15: –5.3%). Gallup Europe (2002) conducted a survey about the idea of starting a business in European countries and the US.¹⁵ Sweden ranked the lowest in this survey. Relatively few Swedish people have ever thought about starting a business. The proportion of people starting a business in Sweden is also smaller than in many other surveyed countries (OECD 2004a). While overall there are low levels of start-ups and shut-downs in Sweden, there is considerable variation in entrepreneurial activity rates within the country. In 2003 the average number of start ups per 1 000 inhabitants in Sweden was 6.4. Within the region, Stockholm (10 start-ups per 1 000 inhabitants) and Uppsala (6.6 start-ups per 1 000 inhabitants) were the only two parts of the region which exceeded the national average.

Segregation of immigrants on the labour market

Looking forward, an ageing population will put pressure on the Swedish economic model, and, finding ways to better integrate the foreign-born population into the labour market will be increasingly important as that population represents a growing proportion of the working age population. The high unemployment rates associated with the foreign born population (7.4% in 2003 for people born outside Sweden and Nordic countries against

3.6% for people born in Sweden¹⁶), in combination with labour shortages resulting from the ageing population, could seriously hamper the country's future economic development. Currently, Sweden is among the OECD countries with the highest rate of unemployed foreigners relative to their share in the labour force (Figure 1.35.) Employment among immigrants has increased slightly since 1997 but unemployment remains comparatively high. Foreigners have an unemployment rate that is at least double that of nationals and they are also more likely to be doing temporary jobs or working part time than their native counterparts (OECD 2005j).

Figure 1.35. **Proportion of foreign or foreign-born in total unemployment relative to their share in their labour force**
2002-2003 average



Note: Foreign-born labour force represents first-generation migrants. It may consist of both foreign and national citizens. The data is the relative share of the proportion of foreign or foreign-born unemployment relative to their share in the labour force.

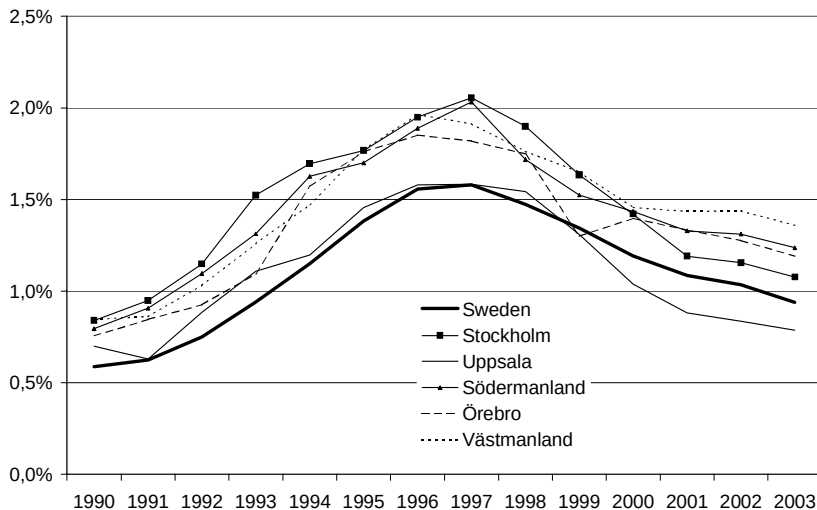
Source: OECD (2005j).

High rates of unemployment within the foreign-born population have led to increases in both the poverty level and welfare expenditures. With the highest concentration of immigrants in the country, the Stockholm region has registered a higher level of poverty than the national level (Figure 1.36). The high poverty figures around the mid-1990s may have been related to recent surges of immigration. For example, Sweden provided sanctuary to more than 170 000 refugees from the former Yugoslavia during 1992-94 and

most of them are concentrated in metropolitan areas such as Stockholm, Göteborg (Gothenburg) and Malmö (Jederlund, 1998). Immigrants have less disposable income compared to the Swedish born inhabitants. During 1993-2000, 14.9% of immigrants had a disposable income under the “welfare norm,”¹⁷ twice the rate of the Swedish born at only 7.3% (Vogel, Hjerm and Johansson 2002). Consequently, the share of those receiving social benefit is higher for immigrants than native Swedes (Figure 1.37). Immigrants tend also to be over represented in early retirement and long term illness leave statistics. At the national level, 42% of Swedish born had some sort of long term illness, post-accident complications, handicap or taking medicine – compared to 46% for immigrants during 1993-2000 (Vogel, Hjerm and Johansson 2002). In Stockholm County, 21.5% of people aged 16-64 on long term illness leaves were reported as foreign born this year, whereas foreign born constituted only 18.3% of the County’s total population in 2003. Foreign born workers also tend to take longer illness leaves than the Swedish born population: 32.7% of long term illness leave days were taken by the foreign born workers and their average length of illness leaves was 52 days, compared to 30 days by a Swedish born in the county.

Figure 1.36. **Changes in poverty levels, 1990-2003**

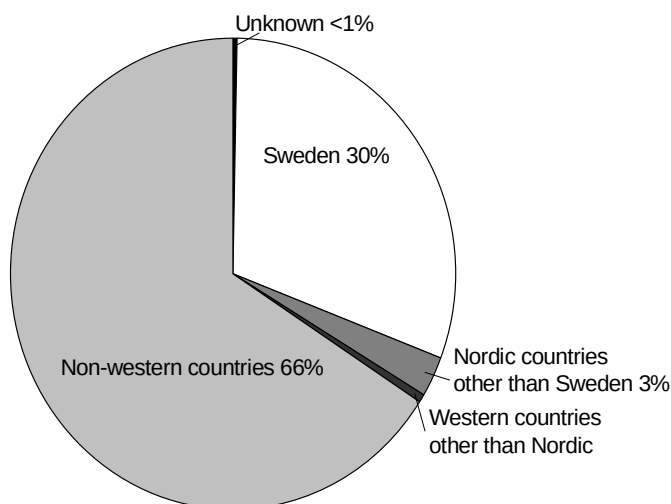
People over 18 years old receiving social benefit for 10 months or more as a percentage of total population



Source: Statistics Sweden and the National Board of Health and Welfare.

Figure 1.37. **Place of birth among people receiving social benefits for 10 months or more**

Units: %



Source: National Board of Health and Welfare.

Factors such as age, gender and low educational attainment play a role in high unemployment rates among foreign born workers. Young foreign males between the ages of 25 and 29 years have a participation rate that is 8 percentage points below that of nationals (OECD 2005a). Employment rates among foreign-born women remain well below that of female nationals, a problem that is further compounded by low rates of educational attainment among immigrant women. Although the proportion of metropolitan residents with at least three years of upper secondary schooling increased between 1997 and 2001, foreign-born women were the group least likely to have benefited from this trend even when they had lived in Sweden for over twenty years (Ministry of Justice, 2003). The acquisition of country-specific human capital does not seem to be sufficient to overcome labour-market obstacles specific to this group either. The transition to a service economy, with a corresponding decline in manufacturing activities, has left low-skilled workers in a weak position in the labour market. These trends were accentuated in the 1990s which were marked by both a severe recession and important increases in immigration levels. The higher qualifications necessary to compete in the new labour market have meant that

immigrants with low levels of education or weak language skills have found it increasingly difficult to obtain employment.

Even immigrants with higher education are unable to successfully compete for skilled jobs. Income surveys show that the Stockholm region functions as a stairway for highly educated Swedes but not for highly educated immigrants. The education level of the immigrants arriving during the 1990-95 period was about the same as the Swedish born. However, only 39% of the immigrants have a job corresponding to their education level, compared to 85% for the Swedish born (Vogel, Hjerm and Johansson, 2002).¹⁸ Only 40% of foreign born university graduates (from outside EU/EES, born 1955-1974, who immigrated here 1991-1997) had a qualified job, compared to 90% of Swedish-born university graduates of same age group.¹⁹ One explanatory factor is that in many cases immigrants have obtained their degrees abroad but they have difficulty assessing how their training compares with that of workers educated in Sweden, thus few have attempted to translate their degrees into the Swedish context. This has led many foreigners to work in jobs below their qualifications.²⁰

The employment gap between educated immigrants and native Swedes has also led to differences in disposable income between the two groups. During the period 1993-2000, 11.1% of immigrants with higher education had disposable income under the “welfare norm”, compared to 4.3% for the Swedes with higher education (Vogel, Hjerm and Johansson, 2002). The gap is even wider in terms of the proportion of population who received social welfare during this period (12.1% for immigrants with higher education, compared to 1.4% for the Swedish born population with higher education) (Vogel, Hjerm and Johansson, 2002).

Negative attitudes towards foreigners among native Swedes are often cited as one of the major obstacles to the integration of immigrants. Although discrimination can be studied through trends in employment and the distribution of income, it is difficult to quantify in surveys, in part because those who practice it know that it is not an accepted behaviour and therefore do not reveal their intentions. A series of surveys focusing on discrimination experienced in Sweden carried out by the Swedish office of the Ombudsman found that a majority of the immigrant respondents had little trust in employment agencies, social welfare agencies or the National Board of Immigration. Approximately 75% of respondents felt that racism and xenophobia had increased in Sweden over the past few years. In one survey, 67% of male respondents of African origin indicated that they had experienced discrimination in conjunction with seeking work (Lange 1997 in Westin 2000). In

addition, two thirds of jobs are filled through informal methods, namely personal contacts, leaving immigrants at a disadvantage in comparison to most native born Swedes (OECD 2005a).

Humanitarian migration, which tends to be associated with slower labour market integration than other forms of migration, has been increasing over the past fifteen years.²¹ Sweden has developed increasingly strict rules for non-humanitarian labour migration. Political instability in the Middle East and North-East Africa towards the end of the 1980s provoked a considerable increase in the number of asylum seekers from Iran, Iraq, Turkey, Eritrea, Ethiopia and Somalia. In recent years, increasing numbers of asylum seekers have also come from the Balkan countries (Westin, 2000). Approximately 66% of those living in poverty²² in the Stockholm area were born in non-Western countries.

High levels of unemployment among immigrant groups, along with prevailing social attitudes, have also contributed to housing segregation in a number of areas in Stockholm County. Segregation tends to occur at the neighbourhood level rather than the municipal level (Nesslein, 2003) and while the proportion of immigrants in relation to the county average has remained relatively unchanged since the mid eighties, in certain areas the share of immigrants from outside the EU has increased. This proportion increased during the period 2000-2003 with a 5% rise in the number of neighbourhoods with 20% or more immigrants born outside of the EU (Table 1.8). These immigrants are concentrated in areas that have

Table 1.8. Non-EU immigrant concentration by neighbourhood, 2000 and 2003

% of areas (220 total number of areas)

Concentration (non EU population/total population)	2000	2003	Examples of areas (municipality within brackets)
(0-4%)	11	7	Hallstavik (Norrtälje), Värmdö archipelago (Värmdö), Torö socken (Nynäshamn)
(5-9%)	33	31	Rönninge (Salem), Nykvarn, Trollbäcken (Tyresö)
(10-19%)	39	40	Djursholm (Danderyd), Edsberg (Sollentuna), Bromma (Stockholm)
(20-39%)	11	14	Hagalund (Solna), Vantör (Stockholm), Mariekälla (Södertälje), Smedby (Upplands Väsby)
(over 40%)	6	8	Fittja (Botkyrka), Rinkeby (Stockholm), Hovsjö-Tveta (Södertälje), Fisksätra (Nacka), Jordbro (Haninge)

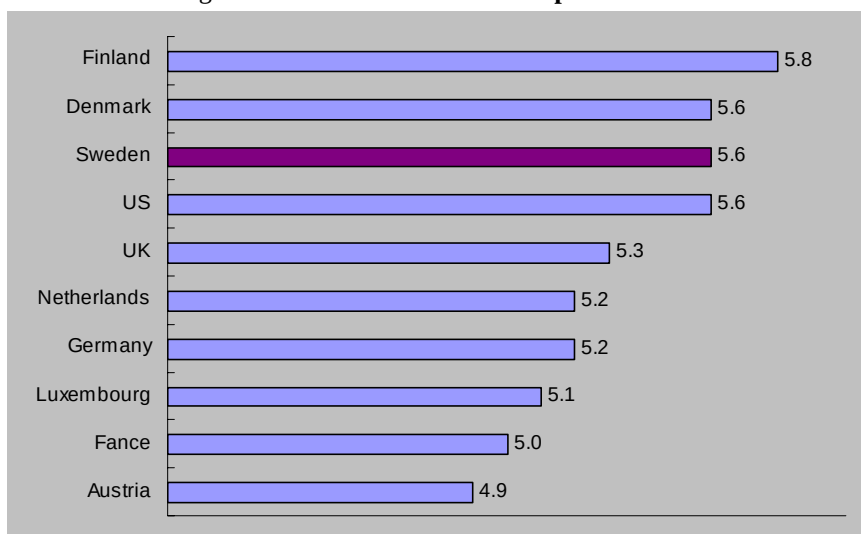
Source: Office for Regional Planning and Urban Transportation (RTK).

the lowest rates of labour force participation such as Tensta, Rinkeby, Sollentuna Center, Fittja and Alby, where they constitute over 40% of total residents, with the largest groups coming from Turkey and Iran (Stockholm County Council, 2005).

Segregation in the Stockholm region is based on being an immigrant or a native born, and is less a question of ethnic enclaves (with the exception of a few neighbourhoods that contain very high concentrations of Turkish-born residents). There is a tendency for foreign-born individuals with a variety of racial and ethnic backgrounds to live in low-income neighbourhoods containing few Swedish-born inhabitants (Westin, 2000). The proportion of foreign-born Swedes in certain neighbourhoods is significantly higher than their percentage representation in the city's overall population. This, in turn, has led to a certain degree of isolation from the native-born. Many foreign-born individuals have little "residential contact" with native Swedes and in particular with middle or upper class Swedes. It should be noted, however, that the levels of segregation being discussed here are nowhere near those found in the United States, where it is not uncommon for over 90% of residents in a neighbourhood to belong to a single racial or ethnic group. The level of segregation²³ in Stockholm is closer to levels found in Australian and Canadian metropolitan areas (Murdie and Borgegard, 1998).

Attracting more businesses and talent

On several international rankings for business climate, Stockholm and Sweden score well. This relatively good business environment has enabled the Stockholm region to serve as an attractive location for foreign companies, as reflected in its FDI volume and growth previously discussed. The World Economic Forum considers Sweden's business climate to be the third most favourable in the European Union. It receives high marks on such dimensions as skill-intensity, efficiency and quickness in adapting to changing market conditions (Figure 1.38).²⁴ The IMD World Competitiveness Report 2004 also ranks Sweden at a relatively high level among OECD countries in business efficiency (11th among the OECD countries, more specifically with rankings of 8th in management practices, 10th in attitudes and values and 11th in finance). Quite similar results emerged from the *European Cities Monitoring* where Stockholm was ranked 15th best city to locate a business out of 500 cities (Cushman & Wakefield Healey & Baker, 2004) (Table 1.9). According to the survey, the City of Stockholm is performing particularly well for such variables as quality of life (2nd), freedom from pollution (1st), quality of telecommunications (4th), languages spoken (8th), qualified staff (9th), and availability of office space (11th).²⁵

Figure 1.38. **Business climate comparison 2004**

Source: Invest in Sweden Agency (2004).

There are however a number of challenges for the Stockholm region to address in order to secure and improve its current locational attractiveness. The Stockholm region's ranking in the *European Cities Monitoring* has risen since 1990 but it has room for improvement in areas such as easy access to markets (18th), the climate governments create (19th), external transport links (20th) and value for money of office space (24th). Five main issues should be addressed: *i)* the national regulatory environment, including competition regulations and tax policies that discourage business development *ii)* the housing shortage which hinders companies from attracting expertise and skilled labour workforce²⁶ and acts as an obstacle to labour mobility within the Stockholm Mälar region; *iii)* the insufficient transport infrastructure (both internal and external accessibility) that also hinders labour mobility and limits the integration of the area to the international marketplace *iv)* a fragmented and conflicting institutional context (administrative infrastructure, co-operation with the private sector) which impedes good co-ordination with the business sector as well as between different public authorities and *v)* an insufficient international marketing strategy and visibility regarding existing capacity.

i) Regulatory environment

The regulatory environment in the Stockholm region is disadvantaged by high tax burden and overall weak incentive structures. According to the

Table 1.9. **Best cities to locate a business**

Cities	Rank		Weighted Score	
	1990	2003	2004	2004
London	1	1	1	0.85
Paris	2	2	2	0.63
Frankfurt	3	3	3	0.34
Brussels	4	4	4	0.28
Amsterdam	5	5	5	0.27
Barcelona	11	6	6	0.26
Madrid	17	7	7	0.22
Munich	12	10	8	0.19
Berlin	15	8	9	0.18
Zurich	7	11	10	0.16
Milan	9	9	11	0.15
Dublin	–	12	12	0.14
Prague	23	17	13	0.12
Manchester	13	13	14	0.12
Stockholm	19	18	15	0.11
Lisbon	16	15	16	0.11
Geneva	8	14	17	0.10
Düsseldorf	6	16	18	0.10
Hamburg	14	20	19	0.09
Warsaw	25	22	20	0.09
Lyon	18	19	21	0.07
Vienna	20	24	22	0.07
Budapest	21	23	23	0.07
Glasgow	10	21	24	0.07
Rome	-	26	25	0.07
Copenhagen	-	25	26	0.07
Moscow	24	28	27	0.04
Helsinki	-	29	28	0.04
Athens	22	30	29	0.03
Oslo	-	27	30	0.03

Note: 1) Base: 500; 2) in 1990, only 25 cities were included in the survey.

Source: Cushman, Wakefield Healey and Baker (2004).

European Cities Monitoring, Stockholm ranks 19th out of 30 cities in terms of the business climate government create through tax policies and availability of financial incentives). Although Sweden has reasonably competitive corporate tax rates, the tax system does discourage business development. The tax system is unfavourable for business development, including variations in the marginal effective tax rate (METR) of different types of investments, distortions from the tax treatment of different forms of financing, and high taxation on income and wealth. Particularly, the tax system distorts capital allocation and investment decisions due to its tax treatment of debt financing which receive preferential tax treatment relative to retained earnings and new equity. Compared to small and medium enterprises, this preferential tax policy puts big firms at an advantageous position with their easier access to cheaper debt capital (OECD 2004a).

Besides, the largest firms are usually the owners of “tax-exempt institutions” (institutional investment funds such as pension and family-endowed decision), which further enhances their advantageous tax position. Also, debt finance is favoured by the double taxation of income from equity. For example, returns on equity are taxed whereas interest expenditures are tax deductible. The openness of Swedish capital market by attracting foreign investors is crucial to overcome the asymmetry on the corporate tax (OECD 2004a).

Business development in the Stockholm region’s competitive sectors such as pharmaceutical and telecommunication might also be constrained by insufficient pressure to compete. Although Sweden has been a leader in reforming and deregulating a range of sectors that had previously been shielded from competition, progress has recently lost its momentum (OECD 2004a). Areas where adjustments to policy settings could facilitate greater competition include strengthening the enforcement of the competition legislation, further action in several sectors such as telecommunications, pharmaceuticals and construction to ensure effective competition, and addressing issues which generate negative effect of the public sector on competition (OECD 2004a). For example, in the telecommunications sector, although Sweden has taken a strong regulatory approach, the experience seems to suggest that negotiating contracts by interested parties, encouraged by the Electronic Communications Act implemented in 2003, is not sufficient to provoke effective competition. This regulatory environment thereby hinders business development in this sector. Also, despite Swedish extensive deregulation effort, investors are still banned from retail sale of pharmaceuticals and alcoholic beverages. They also face a fairly extensive system of permits and authorisations before engaging in many business activities.

ii) Housing and Office Spaces

The Stockholm region’s housing construction has not met the rapid population growth and the need for economic expansion. Between 1990 and 2004, the population of Stockholm County increased by 231 000, while around 90 000 new residences were built during the same period. There is currently a housing shortage in most of the municipalities of the Stockholm County as well as in some municipalities in the rest of the Stockholm Mälars region (Uppsala, Örebro and Västerås). The Office of the Regional Planning and Urban Transportation of the Stockholm County Council estimates that 9 000 to 12 000 dwellings per year will be needed until 2015, then 7 000 to 10 000 per year until 2030 (Stockholm County Council, 2003).²⁷ Although the City of Stockholm has set up a construction plan for 20 000 new dwellings (half of them for rent) during the current term of office

(2002-2006), the city will have to keep up this pace over decades. Each year around 1 000 summer cottages are converted into all-year residences, 40% of these converted summer cottages are found in Norrtälje and Värmdö. In contrast with the growth areas in Sweden, several municipalities with declining populations have lots of empty housing.²⁸

Shortage in housing construction combined with inappropriate regulations have had a major impact on rental housing. The Swedish rental housing market is characterised by comprehensive rent regulation and extensive tenure rights (OECD 2002a). But this approach pre-empts the role of the price mechanism in helping the market to allocate efficiently the housing that is available, as well as to provide signals to expand the housing stock. The result is a very segregated market and limited turnover as tenants hold on apartments with low rent, even if they no longer suit their needs or preferences (OECD 2004a). The issue is particularly strong in the Stockholm region. In Stockholm's centre, there is almost no vacancy and about 100 000 people are waiting for rental housing. It is estimated to take 15 years for people on waiting lists to obtain apartments. In the Stockholm region, for example, older people often retain long-held central city apartments, while younger generations are left with high-priced apartments in new buildings and rental housing in the suburbs (OECD 2004a).

Furthermore, the current rental housing system has produced perverse effects. Tenants have strong and protected rights of possession without capital risk, which, what is worse, may encourage sublets and black market deals. The rationing system that has emerged for allocating apartments that do become available, along with widespread black-market activities, tends to particularly disadvantage low-income households.²⁹ These outcomes raise the question as to whether the lottery-like characteristics of the rental housing market are compatible with the stated equity objectives of the current rent-setting system (OECD 2004a). Additionally, quite a lot of rental apartments (about double of new construction in the City of Stockholm in 2003) have been sold to residents at below market value (capital gain is split by owners and tenants), which has contributed to housing inequity. Since municipal housing accounts for approximately 50% of housing stock, the impact of selling municipal housing at below market prices in the past years has been notable.

iii) Transport infrastructure

Public transport infrastructure investments have failed to keep pace with the demands of a growing metropolitan region. By 2000, road traffic had increased by 80% since 1970, while road surface area had only increased by 10-20% (Stockholm County Council, 2003). The lack of track capacity, particularly in central Stockholm results in delays and lowers rail traffic

capacity. The cost by the queues and delays in road and public transportation costs SEK 8 billion annually in terms of the direct loss of time and separation of the regional labour market (Stockholm County Council 2003).

There are important constraints to developing an optimal transportation network, mainly due to the Baltic Sea and lake Mälaren as well as bottlenecks in the City of Stockholm. The lake, approximately 120 kilometres wide from east to west, divides the territory into northern and southern parts with only three connections. Therefore, infrastructure such as roads and railroads in the region has a radial structure with the City of Stockholm in the centre. There are transport corridors with both roads and railroads in a north-south and east-west direction which have improved during the last decades. However, some of the connections have not been developed to the desired level. Despite a recent major improvement in the motorway links in the southern part of the city, there are still significant gaps in the planned ring road system. Due to the limited capacity on the rail way lines in central parts of the City of Stockholm, these bottlenecks have limited the ability of the local and regional transit system to meet peak commuter demand, thereby hindering labour market development. A high-speed train connecting Stockholm to main centres in other parts of Sweden and Copenhagen was introduced in the 1990s, in an effort to significantly reduce travel time between Stockholm and the two other major cities, Göteborg and Malmö. By 2030 the “European corridor”, Stockholm – Göteborg (Götaland Line) and Stockholm – Malmö / Copenhagen (Europe Line), will be strengthened by introducing high-speed passenger trains.³⁰ Considering long-term demands, the “Nordic Triangle” (Stockholm, Copenhagen and Oslo) should be enhanced, where the Stockholm Mälars region will become globally more competitive by utilising synergy of diverse and dynamic metropolitan areas.

The under-developed international transportation connectivity is a barrier since, although located in a central point in the Baltic Sea Area, the Stockholm region is at the edge of Europe, thus far away from European and global markets. The closest business links with the Stockholm region are with immediate neighbouring countries – Finland, Norway, Denmark and the United Kingdom. The number of total passenger (15.3 million) in Stockholm-Arlanda Airport ranks 17th in EU 25 in 2003.³¹ The region has access to five major airports, with Arlanda airport between Stockholm and Uppsala serving as the main hub. While there are connections to many European and international destinations, most long-distance travel requires travellers to connect in Copenhagen, the main international hub for SAS, or another European airport. International business travels by Stockholm company employees principally take place from Stockholm to Helsinki,

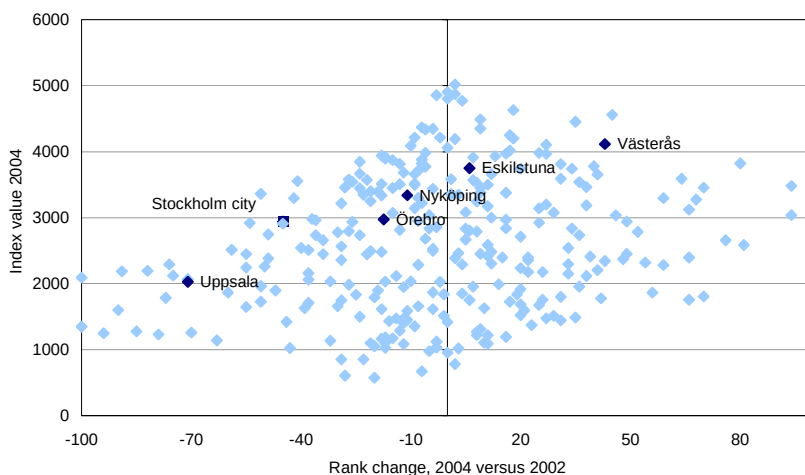
Oslo, Copenhagen, London and Brussels (Stockholm County Council, 2003). Although the air connection does not rank well, the region is well connected to the national and European motorway system.

iv) Institutional context

There is a wide-spread belief within the Stockholm region that the co-ordination across institutions and networks is not working well, despite a rich set of institutions on all levels and informal network, both in the private and in the public sector. The public sector is characterised by the presence of many different levels of government, from the municipality to the region to national agencies in the region. Even for a given geographic level, there is too little co-ordination among agencies that have related goals or share an impact on similar areas. A second set of issues is linked to the co-operation of the public sector with the private sector. Actors perceive communication problems between the business community and the public sector in parts of the region, especially in the City of Stockholm. According to a recent local study on business location choices, the City of Stockholm would have ranked number one based on the fundamental quality of the location alone, but drops to rank 114 among all 290 Swedish municipalities based on the business community's concerns about the local administration's attitude towards business. The study is based on economic data and a survey of Swedish businesses on the perception of the quality of the local and regional public administrations relevant to businesses (Svenskt Näringsliv, 2004). The scores of municipalities in the Stockholm Labour Market score varied greatly (Figure 1.37). While the City of Stockholm gets a negative (and worsening) grade from its business executives, other municipalities in the Stockholm County received positive assessments: seven out of the ten municipalities ranked highest in Sweden come from the Stockholm County.

v) International marketing and visibility

The Stockholm Mälars region as a whole should seek to become globally competitive by taking advantage of regional developments in nearby northern and eastern Europe. Internationally, the Stockholm region has an advantage of being located in the proximity to former Eastern Europe countries, particularly the Baltic States and Russia. The EU enlargement to and development of those same countries provides a good opportunity for the Stockholm region to expand its global reach. Currently the central Baltic Sea Area has formulated the "Baltic Palette Vision" which includes metropolitan regions such as Helsinki (Finland), Saint-Petersburg (Russia), Stockholm, Riga (Latvia) and Tallinn (Estonia). In addition, the Oresund Bridge strengthened a cross-border linkage between Malmö and Copenhagen, Denmark.

Figure 1.39. **Business-friendliness of Swedish municipalities**

Source: Svenskt Näringsliv (2004)

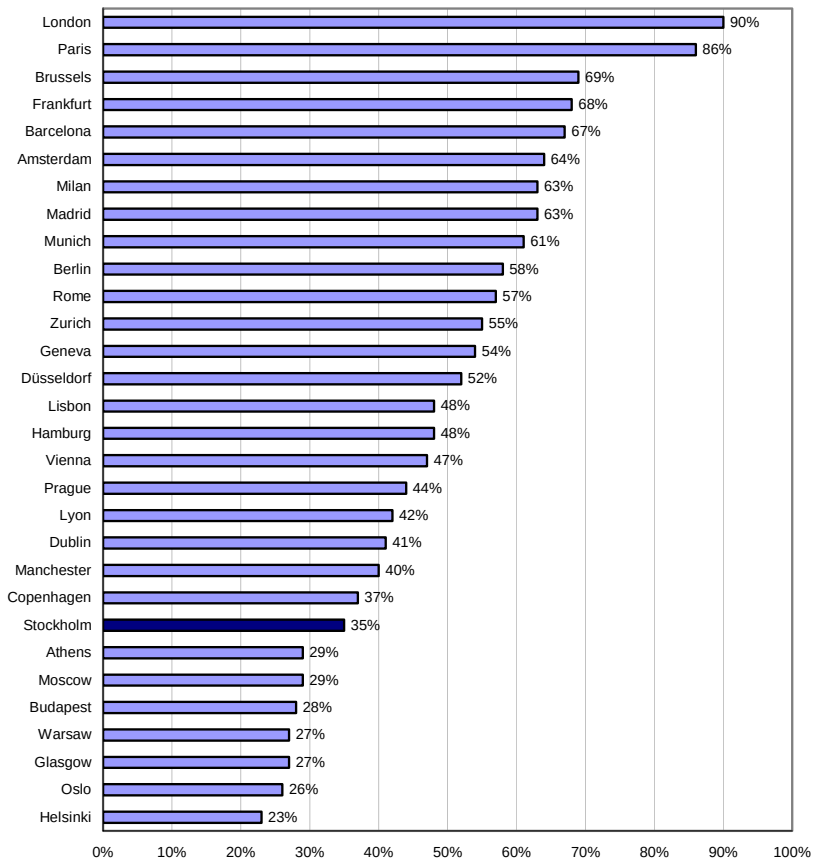
To play an even bigger role in Europe and globally, the Stockholm region will need branding to increase its international visibility. Compared to many other European cities, Stockholm is far less known (Figure 1.40). Stockholm may have to rely on regional branding to attract foreign resources (businesses and workers). Regional branding could serve to overcome the disadvantages of being located at the edge of European and global markets as well as increase its currently low international visibility. This is particularly important if Stockholm seeks to function as the economic magnet in the Baltic Sea Area. Stockholm has already been well known for its high tech industries (particularly its ICT cluster), which serves as a base for its regional branding. However, Stockholm should go beyond promoting singular industry groups to cultivate an image of a diversified and well-structured industrial and economic system with superiority in several knowledge-intensive clusters (ICT, biotechnology and financial services, etc.).

1.3.3. Conclusion: a stronger (and bigger?) region in the international market place

Undeniably, Stockholm has developed to become one of the best performing metropolitan regions within the OECD countries, especially within European regions. Although Sweden's economy must grow more open and Stockholm could benefit from this, the region's strong position could be threatened if certain internal weaknesses are not addressed.

Challenges that may limit its ability to sustain or increase its competitiveness include a need for greater economic diversification, a better integration of its foreign-born labour force and adequate infrastructure and housing to face growing demands for its growth. Stockholm in a global context is not an unchallenged leader in all areas but just one out of many metropolitan regions. In the medium-term, however, this opening will create new opportunities, as Stockholm could compete more effectively with other metropolitan areas in the Nordic and Baltic Sea Area. Stockholm is well placed in this area and will be able to compete very effectively.

Figure 1.40. Familiarity with cities as a business location

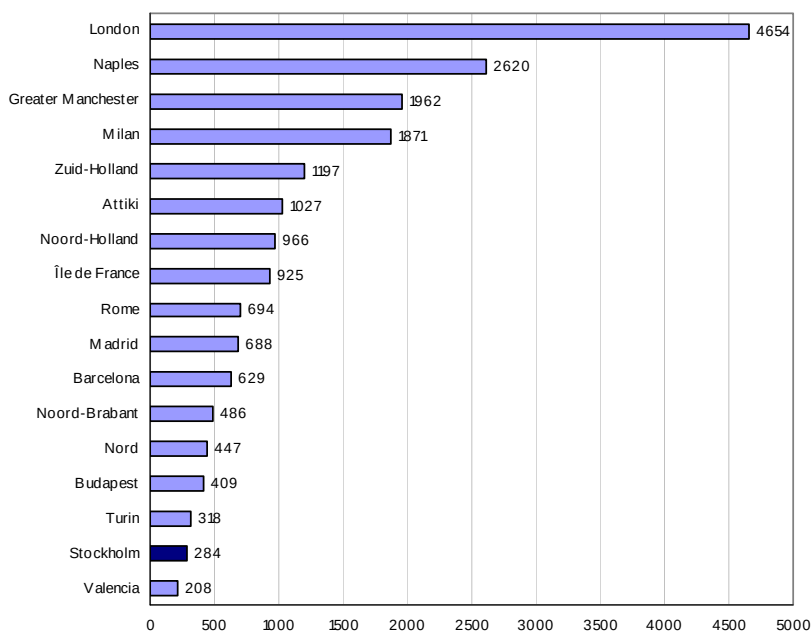


Source: Cushman, Wakefield Healey and Baker (2004).

Capitalising on economies of agglomeration is an important means for the Stockholm region to meet pressures for increased international competitiveness. Agglomeration economies in an urban setting arise from increasing economic scale that facilitates greater industrial specialisation and division of labour, thereby lowering the cost of production and developing a greater market. Compared to many other metropolitan regions in the world, Stockholm is fairly small in terms of population and economic size. Among the selected 66 metropolitan regions in the previous section, Stockholm (County) ranks only the 54th by total GDP and 65th by population (only bigger than San Francisco). Its population density has also ranked relatively lower compared to other metropolitan region (Figure 1.41). Therefore, despite the current debate over the diseconomies of agglomeration (congestion cost etc.) shown in many big mega city regions such as New York and London, Stockholm's fairly small economic scale suggests there is much room for the region to expand, most importantly if the Stockholm Mälar region can overcome important transportation barriers.

Figure 1.41. **Population density in selected metropolitan regions in 2002**

Units: people/km²

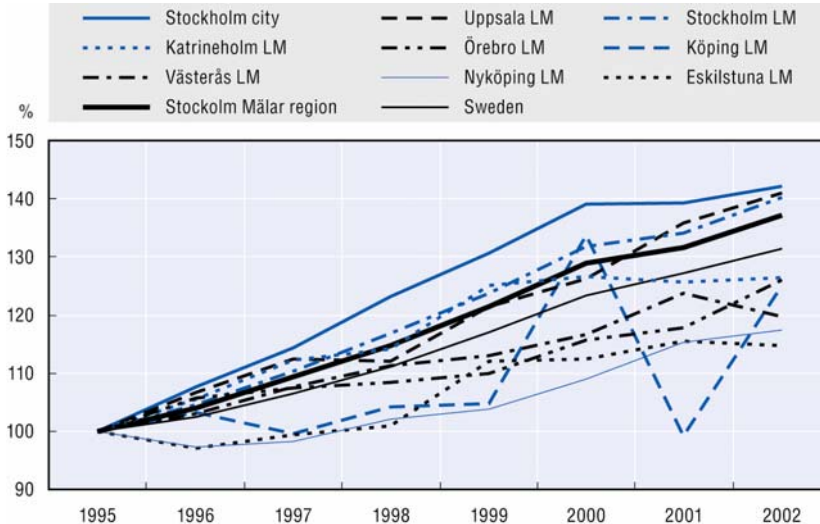


Source: EUROSTAT

Further integration within the Stockholm Mälars region could help to increase the desired economies of agglomeration. Presently, about 3 million people live in the Stockholm Mälars region, constituting about 32.9% of the national population and contributing 39% of the national GDP. However, the Stockholm Mälars region remains split into two distinct parts. The economic activities and the population in the Stockholm Mälars region are mainly concentrated in the Stockholm and Uppsala labour markets – now, one single labour market. This united labour market is increasing in geographic size and improving economically over time (Figures 1.42). The rest of this large region is developing much less dynamically and is on some indicators falling behind the Swedish average. The Stockholm Labour Market accounts for 76.3% of the entire Stockholm Mälars regional GDP (2002), stable since 2000 and about 3% higher than in 1995. The Uppsala Labour Market accounts for about 7.5% of the Stockholm Mälars regional GDP, after a slight drop around 2000 back to the 1995 level. The Stockholm and Uppsala labour market regions have since 1995 recorded higher GDP per capita growth than the overall Stockholm Mälars region and national levels. The rest of the Stockholm Mälars region increasingly lags behind, accounting in 2002 for only 16.2% of GDP, down from 18% in 1995.

Figure 1.42. **GDP per capita within the Stockholm Mälars region**

GDP per capita 1995 = 100%



Source: Nutek (2004).

Regional specialisation is key in building economic integration as it allows different regional components to better use available capital, labour

and other resources. The local labour markets have already exhibited division of labour as evidenced by major firm locations (Table 1.10). The City of Stockholm and its surrounding areas have been focused on the development of the services sector, particularly the ICT sector. Whilst medical institutions and universities represent a key asset of the Uppsala Labour Market's economy, manufacturing remains a predominant sector in its northern part, which can largely be explained by the concentration of such activities as biotech, nuclear power plants, steel, tools and marine technology.³² It should be noted however that the economic scale of the largest private employers in the City of Stockholm is much larger than those in the City of Uppsala.

Table 1.10. Largest employers in Stockholm and Uppsala municipalities (April 2004)

Stockholm	Number of employees	Uppsala	Number of employees
Ericsson AB	8 575	Pfizer Health AB	1 025
Skandinaviska Enskilda Banken AB (PUBL)	4 225	Amersham Biosciences Aktiebolag	825
Föreningssparbanken AB	3 625	Fresenius Kabi AB	625
Nordea Bank AB	2 825	Coop Sverige Aktiebolag	425
Svenska Handelsbanken AB	2 775	Swebus Aktiebolag	425
IBM Svenska Aktiebolag	2 625	Swedish Meats EK. För.	425
Securitas Bevakning AB	2 375	Nordea Bank AB	325
Connex Tunnelbanan Aktiebolag	2 275	Lindorff Customer Services Sverige AB	275
Iss Sverige AB	2 025	Trossamfundet Svenska Kyrkan	275
Praktikertjänst Aktiebolag	1 825	Q-Med Aktiebolag	275
Coop Sverige Aktiebolag	1 725	Stiftelsen Livets Ord, Bibelcenter O Förlag	275
Sodexo AB	1 575	Uppsala Kyrkliga Samfällighet	275
Falck Security Aktiebolag	1 525	Upsala Nya Tidning Distribution AB	225
S:T Görans Sjukhus Aktiebolag	1 525	Föreningssparbanken AB	225
H & M Hennes & Mauritz AB	1 475	Aktiebolaget Upsala Nya Tidning	225
Folksam Ömsesidig Sakförsäkring	1 325	JM AB	225
Manpower Aktiebolag	1 325	Sallén Elektriska Aktiebolag	225
Adecco Sweden Aktiebolag	1 225	Peab Sverige AB	225
Brukarkooperativet Jag	1 175	Proffice Sverige Aktiebolag	225
Teliasonera Aktiebolag	1 175	Quintiles AB	225

Source: Invest in Sweden Agency.

Development and integration strategies need to facilitate a polycentric (i.e. multiple hubs) urban structure and regional specialisation between the “post-industrial” eastern part and industry-based western part. This approach will help the Stockholm Mälars region fully capitalise the many resources in this vast region and achieve agglomeration economies. In addition to Stockholm and

Uppsala, other economic or business centres include Södertälje, Västerås, Enköping, Eskilstuna, Sala, Köping and Oxelösund with their own industry characters. For example, Södertälje's major businesses include AstraZeneca, AB, Scania AB and SAAB. Well-developed transportation structure to connect cities or towns in the east and west around the lake in this vast region is a key to the success of the integration.

A fully integrated Stockholm Mälars region holds great promises in light of the development of the Baltic Sea Area. The Baltic Sea Area has recently outperformed regions such as the United Kingdom, the Iberian Peninsula and Central Europe on measures including prosperity growth, labour productivity growth and scientific innovation (Ketels and Sölvell, 2004). The Baltic region has a leading position both in Europe and globally. In 148 selected European regions, Stockholm and Helsinki were ranked the top two local innovation leaders (European Commission, 2002). The further integration of the Baltic Sea Area provides an opportunity for the Stockholm Mälars region to build on the resources in this multi-country area when competing globally. Compared with other Nordic metropolitan regions, Stockholm enjoys a number of advantages, but those advantages are narrow. Geographically, Stockholm is located on the nexus of the area. Stockholm also has a marginal lead in knowledge-based economic growth (Table 1.11). Stockholm also leads Uusimaa (Helsinki) and Copenhagen in the percentage of employees in high-tech services and the percentage of employees in knowledge-intensive services (Parkinson *et al*, 2004). With the trend to integrate regional resources across the Baltic region, so as to achieve comparative advantages, Stockholm's location and leading position in technology innovation and competitiveness mean that it is well positioned to take advantage of this process. Further Stockholm Mälars region integration will support this process.

Table 1.11. **Stockholm vs. Helsinki in 2001**

Units: various

Variables	Stockholm	Helsinki
Tertiary education (% of population aged 25-64)	34.76 a	40.49 a
Lifelong learning (% of population aged 25-64)	17.96 a	22.32 a
High tech employment in services (% of total workforce)	8.78 a	7.86 a
Public R&D (% of GDP)	X	1.34 b
Business R&D (% of GDP)	4.33 b	2.87 b
High tech patent applications (per million population)	246.0 b	286.3 b
Quality of life (2004)	103.5	102.0

Notes: Year of reference: a: 2002, and b: 2001. Helsinki here refers to Uusimaa.

Source: European Commission (2002). Data on quality of life come from Mercier Human Resources Consulting with New York as the base city (=100).

Notes

1. In addition to the Uppsala Labour Market Area, the 2005 NUTEK definition for the Stockholm Labour Market Area also includes three municipalities of the Södermanland.
2. The Jokkmokk labour market area in the northern mountain area of Sweden achieved the highest GDP per capita among all the Swedish labour market areas due to its dominant energy production (hydro-electric power stations) with few inhabitants. The situation is similar for some other local labour markets areas in northern Sweden, but not at the same level as for Jokkmokk.
3. See FöreningsSparbanken, Boindex, several editions. <http://www.fsb.se/sst/inf/out/infOutWww/0.83226.00.html>
4. The selection of OECD metropolitan regions has been defined according to two criteria: 1) their classification as “predominantly urban” (PU) according to the OECD Territorial Typology; and 2) their resident population being greater than 2 000 000 inhabitants. The OECD Territorial Typology classifies regions into three categories: predominantly rural (more than 50% of the population living in rural communities), intermediate (between 15-50%) or predominantly urban (PU) (less than 15%). For European regions, PU regions have generally been selected at Territorial Level 3, except for Paris and London which are at Territorial Level 2.
5. There is a vast array of literature on global urban rankings that aims to classify and rank metropolitan regions internationally using a wide variety of competitiveness indicators. These rankings serve to highlight major strengths and weaknesses to determine the regions’ present positioning, underdeveloped aspects and future objectives. The OECD ranking of metropolitan regions does not focus on historical trends but rather on a region’s current relative position internationally. Although this ranking does not highlight Stockholm’s recent positive trends in socio-economic performance, it does provide a useful international comparison of the region’s level of competitiveness. Moreover, despite the existence of numerous competitiveness rankings, a uniform way to measure metropolitan competitiveness does not exist, but this is not to say that such rankings are irrelevant or inconsistent.
6. Using NUTS 2 level for European GDP.
7. The OECD Economic Survey of Sweden 2005 identifies younger adults as another under-used source of labour supply partly as a result of factors

that delay both start and completion of higher education such as an admissions system based on grades, generous grants and an absence of tuition fees. It suggests encouraging their earlier college entrance by giving preference to people who qualify directly from school and not granting bonus points for irrelevant work experience. Various measures are also recommended to encourage college students to graduate earlier including the introduction of modest tuition fees backed by income-contingent loans.

8. Over the period, the net migration for Sweden in general varies heavily over time but are relative stable for the compared regions. For Sweden in general, the net migration escalated in 1992 and peaked in 1994. The reason for this mainly has to do with the war in the Balkan region and during this period a lot of people moved to Sweden and later back to Balkan. The patterns in the compared regions do not differ significantly from each other.
9. It is worth noting that sick leave is widely taken by people among all working age groups with women and immigrants over-represented. For the Stockholm county, although older population tend to take longer long term illness leaves in 2004 (89 and 68 days per worker respectively for age groups 55-59 and 60-64, compared to 48 and 17 days per worker respectively for age groups 45-54 and 16-44), the two younger groups together take more days than the older two groups. This is consistent with the national trend that sickness absences are high among all groups (OECD, 2005a). Women, particularly those Swedish born, tend to take more sick leaves than men. Also, the figure suggests that immigrants are over-represented in the scheme and tend to take longer sick leave days than Swedish born (63 and 35 days per worker for immigrants compared to 30 days for Swedish born in 2004).
10. No data for Switzerland.
11. Innovation is inherently difficult to measure, increasingly so as the objective is to measure economic invention rather than scientific knowledge creation. We use patent data because it is available across European regions (at least for the EU-15) and other research suggests a significant correlation between patenting and other innovative activity.
12. 2000 data.
13. It should be noted however that data figures related to clusters in this section may not describe the geographical situations of the clusters in a narrow sense as they do not measure the inter-linkages among the business establishments that define those clusters.

14. The roots for the cluster in Kista go back some decades to the time when Ericsson was looking to buy real estate for future expansion and the only land that the City of Stockholm was willing to sell was in Kista, the periphery of the city. The first investors, including IBM, were drawn to Kista by the relatively low prices and the attractive location en route to Arlanda airport, not the notion of an emerging cluster.
15. These countries include the United States, Iceland, Denmark, Greece, Ireland, the United Kingdom, Norway, Germany, Austria, Finland, the European Union, France, Spain, Portugal, Luxembourg, Italy, Netherlands, Belgium and Sweden.
16. Data from the Swedish Integration Board and Sweden Statistics. Similar trends are visible in Stockholm County: in 2003, unemployment rate for people born outside Sweden and Nordic countries was 6.1% against 2.5% for people born in Sweden.
17. Welfare norms or the minimum needs standards (*socialbidragsnormen* in Swedish) refer to the poverty threshold which is designed to cover basic expenditures on food, clothing, electricity, insurance, and health. Their calculations consider all types of household income, household size and structure, etc.
18. Statistics Sweden and Vogel, Hjerm, and Johansson (2002).
19. Berggren and Omarsson quoted in Vogel, Hjerm and Johansson (2002).
20. Foreign-born workers have increasingly worked in the tertiary sector, which accounted for three-quarters of foreign jobs in 2002-2003. The education and health sectors have employed increasing numbers of foreign-born workers in recent years, as a result of strong demand for labour in these fields (OECD, 2005a). Sometimes, higher education may constitute an obstacle for those immigrants when competing for low-skilled jobs.
21. In their study of immigrant earnings, Le Grand and Szulkin (2000) concluded that while immigrants from Western countries experienced few difficulties in the labour market, those originating from Africa, Asia and Latin America faced substantial obstacles to earnings progress. Their findings indicate that a substantial earnings disadvantage remains for male non-European immigrants even when they have lived in Sweden for over 20 years and have accrued country-specific capital.
22. Defined by the National Board of Health and Welfare as individuals receiving social benefits for 10 months or more.

23. The Swedish government has produced a definition of an "ideal" integrated area as one containing equal numbers of "people with low, middle and high income".
24. The rankings include EU countries and the United States by comparing following eight dimensions: information society, innovation and R&D, liberalisation, network industries, financial services, enterprise, social inclusion and sustainable development.
25. Notes: 1) Following Porter's diamond framework, the **Global Competitiveness Report** by the World Economic Forum assesses national business environment in four categories: factor (input) conditions, demand conditions, related and support industries and context for firm strategy and rivalry. The assessment shows that all the four categories are important components. The strongest associations with GDP per capita come from telecommunication access (cell phone and internet use), the quality of public schools, overall infrastructure quality, the quality of public schools, the quality of electricity supply, university-industry research collaboration, financial market sophistication, and the efficiency of the legal framework. Factors related to policies and institutions exert most important influences (World Economic Forum, 2004); 2) The **IMD World Competitiveness Yearbook** (WCY) measures business efficiency in four major categories, including productivity and efficiency, labour market, finance, management practices and attitudes and values. It intends to find out the extent to which enterprises are performing in an innovative, profitable and responsible manner (International Institute for Management Development – IMD, 2004). The surveyed 500 companies (industrial, trading and services) in **European Cities Monitor** (2004) are from nine European countries and systematically selected from "Europe's 15 000 largest companies". Scores for each city are based on the responses and weighted by Taylor Nelson Sofres according to the nominations for the best, second best and third best. For each score, there is a comparison among selected cities and over time for the same city (Cushman, Healey and Baker, 2004).
26. International experts and researchers may also be difficult to attract, as their housing demands often exceed what institutions and companies can afford or are able to find.
27. The National Board of Housing, Building and Planning (Boverket) has estimated housing needs in its publication "Bo lokalt – planera regionalt (Live locally – plan regionally)", which states that 450 000 to 540 000 new dwellings will be needed in the entire Stockholm Mälars region up to 2030.

28. The National Board for Municipal Housing Support, established in 2002, provides support for municipal housing companies in places where there is a large amount of vacant housing. In practice, the Board supports financially municipal housing companies so that they can remove surplus by recycling it for other uses or demolishing it (Ministry of Finance, 2004a).
29. Andersson and Söderberg, (2002a), quoted in OECD (2004a).
30. With maximum speeds of 250 km/h, the travel time of Stockholm – Göteborg is estimated around 2.5 hours and Stockholm – Malmö 3 hours and 15 minutes. See the website of the Swedish Rail Administration: <http://www.banverket.se/>.
31. The world's biggest airport in terms of the number of passenger is London Heathrow Airport (63.2 million passengers in 2003), followed by Frankfurt Main Airport (48.0 million) and Paris Charles de Gaulle (48.0 million). In Nordic counties Copenhagen Kastrup ranked 14th (17.7 million) and Helsinki Vantaa 24th (9.7 million) in the EU-25 (Eurostat).
32. There are medical and medical-technical companies such as Fresenius Kabi and GE Health Care, Sandvik Cormorant, Erasteel and Stora Söderfors on steel and cutting processes, Atlas Copco Tools, Bahco Tools and Habai Cable Manufactory on tools, marine technology at Östhammar and the Ventilation Centre at Enköping.

Chapter 2

Reinforcing Stockholm's International Competitiveness

Introduction

Stockholm is one of the most successful and competitive metropolitan regions in the OECD. It enjoys a well earned reputation as a region for high-tech, cutting-edge design and progressive environmental behaviour. The region's high standard of living is shared widely among its citizens. As demonstrated in Chapter 1, Stockholm is one of the top-ranked regions in the world for competitiveness drivers, such as innovation capacity and competitive clusters, as well as for overall socioeconomic performance on employment levels, labour productivity, public health, educational attainment and poverty. The business or “enabling” environment supports the region's competitive position with strong universities and a skilled labour force. Given this context, there is significant international interest in the structures and policies pursued in the region.

Stockholm will have to streamline its competitiveness strategy to sustain or increase its current competitiveness position. Public and private sector leaders have a mixed opinion about the future. They are confident that the metropolitan area will remain the leading location in Sweden and in the Nordic region. However, these same actors are worried about a number of obstacles to improving competitiveness and there is no overall strategy or action plan to achieve this. Such a strategy and plan are needed to address:

- *Innovation system updating:* The region requires new sources of growth from its innovation system. Without a reorientation to better include smaller firms, and thus to promote entrepreneurship, Stockholm's innovation system will not be as effective as it could be. Furthermore, the entrepreneurial firms needed for the greater “breakthrough” innovation are not appearing in the desired numbers.

- *Labour market improvements:* Stockholm will need to overcome difficulties integrating migrants into the labour market, address the late entry of youth into the labour market, and minimise the impact of sickness absences on economic output.
- *Infrastructure investment:* Although Stockholm's high performance reflects key advantages in the business environment, the region must deal with the impact of growth on the region's infrastructure. Transportation investment is not keeping pace with growth and the regulated housing market is impeding growth.
- *Governance adaptation and co-ordination:* Finally, governance arrangements in the field of economic development policies, no longer reflect the shape and economic structure of the current functional economic region, or the broader Stockholm Mälars region (the area where further integration is likely to deliver additional benefit), and are characterised by a plethora of poorly co-ordinated responsibilities.

This chapter starts by addressing the regional context. In particular, it examines the main difficulties in providing a coherent and comprehensive strategic vision for economic development at the regional level. Some of the reasons that explain why such objective is difficult to be reached in the current context are explored. Some specific competitiveness policies are then discussed including innovation, cluster and entrepreneurship policies. The integration of immigrants in the labour market, one of several labour market challenges, and infrastructure policies - housing and transport - are then reviewed. The chapter concludes with proposals for the better integration of policies.

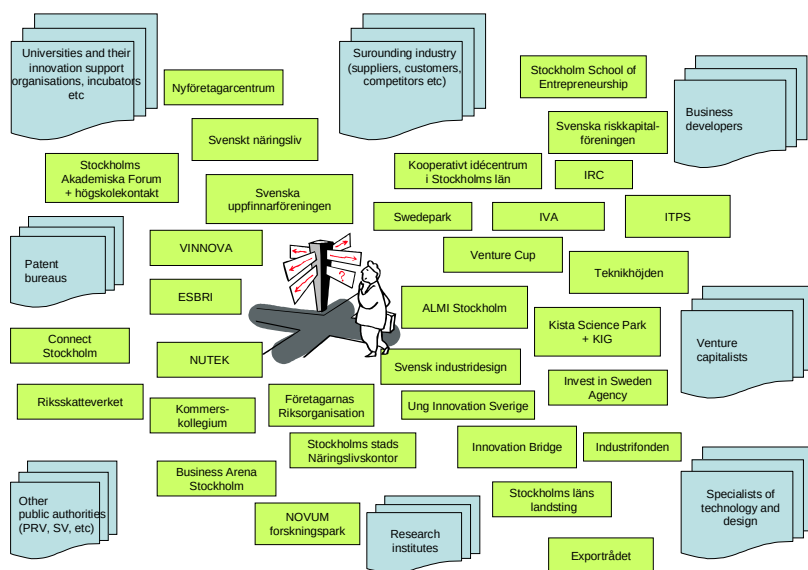
2.1. Vision of economic development strategy in the region

2.1.1. A picture of fragmentation...

The issues for the Stockholm Mälars region are the fragmentation of the actors working on economic development vision and strategies, the lack of co-ordination across geographic levels and functional agencies, and a mismatch between responsibilities, resources and decision rights. Economic development strategy should be developed at the level of the region, but the region has no formal economic development role. The Stockholm Mälars region is comprised of five counties and sixty five municipalities. It is the

counties which have responsibility for developing the strategies. The counties, however, have limited resources or ability to implement the strategies. The resources and ability to deliver the strategies rest with municipalities. There have been attempts since the 1960s at the local level – county and region – to co-ordinate policies and medium term strategies better in order to sustain the economic development of the region. These forms of co-operation have, however, been very limited to date, mainly due to the high autonomy granted to municipalities in Sweden. The result is a complex web of institutions, with a multitude of organisations responsible for delivering a number of piecemeal programmes, which makes it difficult to develop and implement a coherent and comprehensive economic development strategy for the region (Figure 2.1). It makes the clear signals that are needed to influence decisions by businesses almost impossible to obtain, and creates a multitude of easily overlapping, if not contrary, programmes that are unlikely to have a sustained impact on competitiveness. It is critical that a strategic plan with clear actions is developed that addresses the effects of growth. It is around the Stockholm Mälars region vision that actors should co-ordinate their efforts to prepare such a document.

Figure 2.1. **Confusion in economic development policies and programmes**

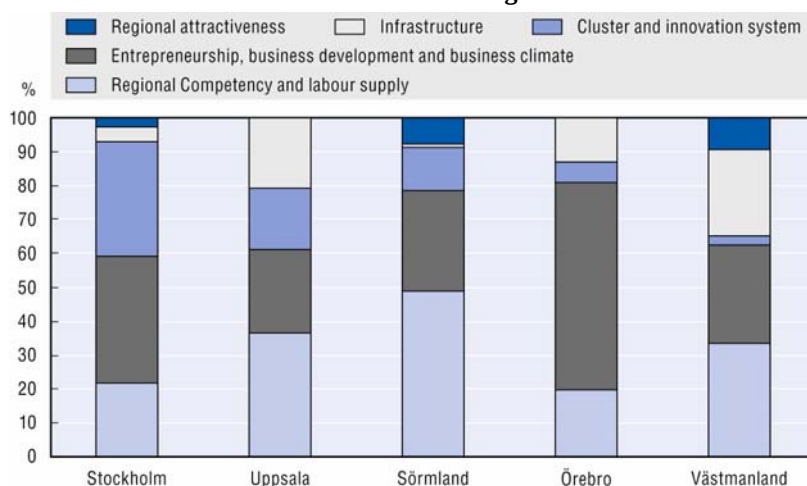


Source: SISTER (Swedish Institute for Studies in Education and Research).

The regional development programmes and the regional growth programmes developed by the counties do not amount to real economic development strategies for the Stockholm Mälars region. In 2001, the Swedish government presented a suggestion for a new policy for regional development, based on the Regional Growth Agreements, RTA (later Regional Growth Programs, RTP) and Regional Development Programmes (RUP) developed by partnerships in each county (See Chapter 3). These plans and programmes set out ambitions for performance outcomes, such as high levels of prosperity, sustainability, integration, and gender equality that are shared by many other regions around the world. These programmes are prepared by each county, therefore the geographic areas reflect neither the local labour markets nor the aspirational Stockholm Mälars region, even through consultation with neighbouring counties. The Regional Development Plan (RUF) produced by the Stockholm County Council, and which stands as the RUP, is notable in formulating and co-ordinating common vision at regional level, however, it is weak in implementation (see Chapter 3). Some municipalities have revised their strategic plans referring to RUF, however, it is just on a voluntary basis. The RUF also includes recommendations for the whole Stockholm Mälars region. However, as a strategic planning instrument, the endorsement of recommendations depends on the consensus of the municipalities. Therefore, municipalities in the Stockholm Mälars region that do not belong to the Stockholm County could not be part of this consensus because they are not taking part in the elaboration process of the document. In addition, substantive power lies in municipalities so that programmes developed by a body with limited legitimacy may inevitably result in ones which cannot be as focused or bold as those which a body which is responsible for development and accountable for delivery might be expected to develop. Funds are allocated to the five individual counties that set up their own priorities in each RTP (Figure 2.2). Thus, RTPs could not be described as comprehensive economic development strategies, and are weak in amounting to coherent regional plans because implementation depends at lower levels.

At the municipal level, the City of Stockholm has no comprehensive strategy that brings together physical planning, economic development, and the city's high level vision. The City of Stockholm has a high level long term vision, *Vision Stockholm 2030*, but that vision has not been adopted at the political level. Vision 2030 focuses on Stockholm as a growing city within a greater network – the Stockholm Mälars region – and on providing a good environment for growing sectors such as IT and life sciences. The City has also developed visions for specific parts of the city with a “Vision for Kista Science City”, and a “Vision for Southern Stockholm”. At the political level, the City has adopted plans for the physical development of the city,

Figure 2.2. **Breakdown of allocated funds in Regional Growth Programmes in the Stockholm Mälars region**



Note: Data correspond to plan funds not to funds that are actually allocated.

Source: Nutek (2005b).

with “City Plan 99” being a comprehensive plan for the city’s physical development. The physical development plans are, however, very much operationally focused rather than strategy focused. The City also participates in the development of the regional development plan (RUFs) and the regional growth programme (RTP) of the County, and it has adopted the plan and programme. The City is currently developing a comprehensive strategy. It is important that this strategy is integrated into a broader regional strategy, and specifies the position of the city in the broader regional economy. Political support for the proposed strategy is also required at the highest level, and that support should be consistent over time.

2.1.2. ... along with a lack of support from central government...

The central government has been hesitant to support regional development for Stockholm given concerns about regional equity and political power. Until recently, Swedish regional development policy has focused primarily on balanced development to meet the needs of the lagging centre and north regions. It has encouraged growth in these less developed regions but also redistributed funds in an equalisation system from the richest areas, such as the Stockholm Mälars region, to the poorest ones. In addition, the Stockholm Mälars region has had access to relatively smaller share of structural funds and government funds for development projects

compared to less fortunate and populated regions in northern parts of Sweden. Until the early 1990s, the central government's position was that growth in the Stockholm Mälars region should be constrained, due to inflationary risks driven by bottlenecks for housing, infrastructure as well as competition for land and skilled labour. Sectoral policies of different ministries were very much influenced by the notion of "Stockholm versus other regions". These were very similar to ideas which France experimented with in the 1950s with "Paris and the French desert". In addition to equity concerns, there was also fear of very strong local political power that would counter national political power, given that the region represents more than one third of the total population. This fear continues as a subtext in the debate on regional development policy and regional governance. Experience in OECD countries suggests that containment policies for metropolitan regions (such as the one conducted in Paris in the 1960s or in Tokyo from 1959-2002 or currently implemented in Seoul since the 1970s) have a mixed impact. There is little reliable data showing whether constraints on the growth of the capital region actually displaced economic activities to other domestic regions, thus compensating for the loss in capital regions with higher growth elsewhere in the country. Moreover, in the context of a global economy, capital regions have increasingly a role as a driver of growth for the country. This is particularly relevant in Stockholm's case.

The new regional development policy, introduced in 2001, now focuses on the entire country but how profound the change represents remains unclear. The policy is "[a] policy for growth and viability throughout the country". The objective is to promote "well-functioning and sustainable local labour market regions with good levels of service throughout the country". While the Swedish emphasis on equality remains a strong theme in the description of the policy, the emphasis on growth not redistribution reflects a potentially significant change. If so, the new policy would be consistent with policies adopted in many OECD countries which are increasingly prioritising regional growth over redistribution as a means of delivering balanced national development. While the policy is still in its early days, there is evidence that in the implementation of the policy there is pressure to limit the growth of gaps between the economic well-being of the Stockholm region relative to other less advantaged regions.

Swedish urban policy is also very limited – both in terms of geographic area and scope. Urban development in Sweden is in general a purely municipal question. National urban policy in Sweden ("*Metropolitan initiative*") is for the time being confined to the three metropolitan areas – Stockholm, Göteborg and Malmö – and its focus is on distressed areas. The main objectives for this policy (through "Local Development Agreements") have been to counteract social segregation and to work for equal and

comparable living conditions for people living in the cities. It should be noted that in many OECD countries, this “remedial” approach confined to actions aimed at combating urban sprawl, declining neighbourhoods, and concentrations of social and environmental problems, are being supplemented by “proactive” urban policies in support of competitiveness. In other words, the urban question is becoming a priority (or at least attract renewed interest) in the political agenda of many central governments, including those in federal countries where their prerogatives in this domain are limited.

2.1.3. ... requires a change to foster a wider and more comprehensive regional strategy

Developing a long-term economic development strategy will boost and sustain current competitiveness. The Stockholm Mälars region is in an enviable position as its assets, especially its strong and healthy portfolio of competitive clusters, should enable it to remain in the group of prosperous regions worldwide. While there are no signs of any fundamental crisis on the horizon, the Stockholm region could play a more leading role in defining the shape of dynamic knowledge-driven regions. To achieve that goal, Stockholm needs a long term strategy with clear actions for economic development at the regional level. Previous efforts are too generic and do not amount to a strategic positioning of the region's value as a place to do business. They also do not provide sufficient guidance as to how the economic basis to sustain the required outcomes will be created. Elaboration of this strategy requires governance changes and collaboration with the private sector. This is clearly a choice that the Stockholm Mälars region cannot take alone but that Sweden will need to take as a country.

There is also a view widely held within the region that to effectively compete with other European and international metropolitan regions the metropolitan region of the Stockholm Mälars region must do so as a single region.¹ The first long-term development plans for Stockholm in the 1950s-1960s focused on a much larger scale than the Stockholm County. There is thus a precedent to re-launch metropolitan co-operation (Stockholm County Council, 2002). Strategic plans developed at the county level have in common the will to increase mobility of the labour market, and to develop transportation networks and other infrastructure. They refer to the Stockholm Mälars region as the relevant level at which these infrastructure issues need to be addressed. In itself, the creation of the Stockholm Mälars region is a strategic project.

The region needs to develop a strategy that spells out what specific value the Stockholm region intends to provide companies as a place to do

business. Based on this positioning, the strategy would define an action agenda that targets those areas that are most critical for delivering the value promised, and would allocate resources accordingly. There is a need for strategic investments instead of short-term projects. A focus on, and funding of, short-term initiatives, such as those to address the IT and telecommunications crisis in the early 2000s, while difficult to resist, do take resources away from long-term investments. They should be resisted unless they are clearly consistent with the long term strategy. One key pillar of the action agenda needs to be the integration of individual cluster efforts into an overarching strategy. Another pillar should be the further focus on innovation. A third pillar could be the more active mobilisation of the neighbourhood. This includes both the close neighbourhood of the Stockholm Mälar region, and the wider neighbourhood of the Baltic Sea Area. Importantly, the strategy would also prioritise activities and it could be expected that some activities presently undertaken would no longer be priorities.

Political leadership is also required to strengthen dialogue with the private sector. While career officials might have excellent technical knowledge, it takes leadership from key elected officials to signal a commitment that company executives can trust when making their decisions. Large companies in Stockholm have reached out directly to national politicians because they view this as a more effective way to convey their concerns. The lack of an organised dialogue between the private and public sector has serious costs: politicians lack sufficient information about the barriers all companies, not just large ones, face when setting policy. Furthermore, the effectiveness of particular initiatives will be diluted if the private sector is not fully engaged and does not trust the underlying broader economic policy goals.

The municipalities and their subsidiary organisations could be more effective if they co-ordinated efforts with all levels of government. The municipalities should ensure that opportunities for confusion or misalignment between councils, the counties and the region on economic development issues are minimised. The need to address this concern appears to have been recognised in the recent restructuring of Business Arena Stockholm. Business Arena Stockholm is a company owned by the City of Stockholm and a number of neighbouring municipalities. In 2005 a decision was made to integrate Business Arena Stockholm back into the City of Stockholm's Economic Development Agency (EDA). The EDA serves the city in a wide range of economic development areas such as fostering enterprise development, attracting investment, and facilitating co-operation between businesses, research institutions, public sectors and other local actors. The rationale for this was, first, to better integrate inward investment

and economic development activities. Second, it was to provide an arena for city political leaders to engage better with business leaders. It is recognised that for effective operation the EDA needs to (and in specific fields does) operate on a regional basis notwithstanding its narrower ownership, funding and formal geographical areas of responsibility. In specific fields it also cooperates with other organisations in the larger Stockholm Mälars region as evidenced by the building of the Stockholm BioRegion.² It is proposed that regional co-operation and co-ordination will be achieved through partnerships. The recent branding initiative – “Stockholm – the Capital of Scandinavia” – has defined key dimensions in which the region is perceived (or perceives itself) as unique and attractive. This could form the basis of a more elaborate strategic positioning of the Stockholm region as a place to do business. It is certainly a worthy initiative, but would be even more effective as part of a regional strategy.

2.2. Specific policies to enhance and promote regional competitiveness

The Stockholm region's competitiveness depends on both national and regional business environment factors. On the national side, the Swedish macroeconomic environment and structural reforms conducted over the last fifteen years have led to a generally favourable business environment in Sweden (See Chapter 1). Further structural reforms are yet needed to improve the functioning of the labour market including measures to encourage young people to enter the workforce earlier, to address incentives for early retirement and to increase labour mobility in response to changes arising from product market competition. Measures should also be taken to address high taxes on labour income and the sickness and disability absence benefit system which have contributed to a reduction of hours worked (OECD 2005b). Finally, although Sweden has reasonably competitive corporate tax rates, it will be important to reform the tax system that discourages business development, including the more favourable tax treatment of debt that is disadvantageous for small companies and start-ups for which equity financing is often more appropriate.

Whilst a sound macroeconomic environment, efficient products and factors markets as well as a performing regulatory and taxing environment are crucial elements to ensure productivity and growth, competitiveness of the business sector increasingly depend on factors related to the regional business environment (OECD 2005a). National sectoral policies such as, education and labour markets, and to a certain extent infrastructure, innovation and research and development, generally do not take into account where the business is located when determining eligibility of support. Spatial targeting appears rather in specific national regional development

programmes, and, of course, policies and programmes that are developed at the local/regional level. which have a spatial dimension. In Sweden, at the county and municipal levels, there is a strong focus on physical infrastructure (*e.g* transport and housing), culture and assimilating migrants into networks. There are also a large number of relatively small initiatives providing support to firms which are mainly geared to small to medium enterprises. They include business information services, business advisory services such as mentoring, incubators, seed funding and venture capital support, and export promotion. This next section will discuss a selection of *those* national and regional/local policies that affect the local enabling environment of the Stockholm Mälars region: *i)* regional innovation and knowledge diffusion; *ii)* integration of immigrants in the local labour market and *iii)* housing and transport infrastructure.

2.2.1. Generating innovation and knowledge

A sophisticated innovation policy with an embryonic regional focus...

A sophisticated innovation system has put Sweden (and the Stockholm region) at the top of most international rankings related to innovation, albeit an explicit innovation policy is new. Sweden has for many years had active research policies and industrial policies. It is only recently that these previously separate policy streams have been joined into a united “innovation policy”. The need for an innovation policy was first explicitly recognised in 2002 (Government Bill no. 2001/02:2, R&D and collaboration in the innovation system). The launch of “Innovative Sweden A strategy for growth through renewal” released in 2004 signals that the government appears to be adopting a broad approach to innovation policy – incorporating research & development, regional development, entrepreneurship and the triple helix model linking public, private and research sectors (Box 2.1).

Box 2.1. The Swedish strategy of innovation

The Swedish strategy identifies four priority areas for action and initiatives: (i) Knowledge base for innovation; (ii) Innovative trade and industry; (iii) Innovative public investment; and (iv) Innovative people.

Continuation of large-scale, comprehensive investment in education at all levels is a priority. The government has set a target of having 50% of those born in any given year enrolled in tertiary-level study later in life. Life-long learning is also promoted and the government will continue to invest in developing world-class research at universities and research organisations. Initiatives to market international high-tech areas and new industries and clusters in which Sweden has special skills will continue to attract foreign investment. The corporate tax rate is subject to ongoing revision to ensure that it remains internationally competitive.

Box 2.1. The Swedish strategy of innovation (cont.)

The strategy calls for new forms of collaboration between large and small enterprises, and between small enterprises themselves in order to enhance skills and development capacity. The strategy also talks about the need for support structures for smaller enterprises to assist with product development, product renewal and the use of design. A review is planned to study the different means of encouraging research and development investment by small and medium sized enterprises. To increase the commercialisation of research results and ideas, the strategy calls for structures that nurture business ideas, spin-offs and inventions originating from small and medium sized enterprises as well as individual innovators. The strategy also emphasises the need to make the most of people's skills and initiative. Specific goals include: entrepreneurship education, the use of simple regulations to facilitate enterprise development, opportunities for students to remain and work in Sweden and the need to encourage mobility between job types.

Since early 2005, a new series of dialogues or 'Branschsamtal' were launched with stakeholders from Swedish industry. Six sectors have been identified as of key importance in the discussions. These are the automotive sector, the biotech sector, the ITC sector, the metal sector, the pharmaceutical sector and the wood and paper sector. Political leadership of the process is provided by the Minister of Industry and the Minister of Infrastructure who head the opening meetings for each of the sectors.

The regional dimension of the Swedish innovation policy could be further developed. The focus on a regional systems approach at the national level is good; however, this approach could be taken further. From the perspective of the firm and the cluster, a rationalisation of the various initiatives, or the strengthening of incentives on the agencies to ensure greater co-ordination of the initiatives would be valuable. Science and technology policymakers are taking increasing account of the importance of region-specific factors – in particular the role of proximity – in the innovation process. This regional approach emphasises the importance of agglomeration effects for knowledge creation and diffusion and takes the view that the regional level is the most appropriate to assure knowledge a favourable “diffusive” environment (OECD 2005a). In Sweden, the Regional Growth Programmes (RTP) and Regional Development Programmes (RUP) appear to be the main policy vehicles for stimulation of the regional innovation system. It is, however, not clear yet how central the RTP and the RUP are to national policy. The Swedish position contrasts with that of Finland, which initiated explicit regional innovation policies in the mid-1990s (Box 2.2).

Box 2.2. Innovation-oriented programmes as policy answers in Finland

The most successful example of programme-based development in Finland is the Centre of Expertise Programme. This programme was launched in 1994 in eight different city-regions. In response to its success, the government later extended the programme. Currently, there are altogether 22 centres of expertise, one in the Helsinki Region.

The centres of expertise seek success through exploiting local excellence and growth potential. The programme aims to pool local, regional and national resources to utilise high-level expertise. It concentrates on using expertise in selected, internationally competitive fields and on the development of business activities. The particular aim of the centres of expertise is to take regional strengths and knowledge specialisation into account.

Through the programme, a quite modest investment by the government has mobilised a great amount of resources from enterprises, research institutions and other partners. The science parks and technology centres are managing the programme at the local level. The centres of expertise create partnerships which provide added value to all the partners, consisting of enterprises, research and educational institutions and public sector actors. This development concept follows the triple-helix model.

The Centre of Expertise Programme promotes local partnership, but it has also a significant role as a strategic steering instrument at the national level. Through the programme, specific local fields of expertise are recognised and nominated. This is how the national division of work and regional specialisation between different regions and their various fields of expertise is clarified.

Innovation strategies for the major city-regions.

In Finland, the vision on future policies promoting cities in the knowledge economy includes designing innovation strategies for the major cities. The Helsinki Region and eight other major urban regions in Finland are now creating innovation strategies for themselves. These strategies can assist urban regions in directing and allocating their own development resources, but also in drawing up the guidelines for national policy.

Finnish opportunity-creating urban policy is one way to ensure the success of cities in the global knowledge economy. This policy aims at establishing mutual co-operation between research and development institutions, the business life and public actors. Recognising the strengths and opportunities of cities in the global framework is the very foundation of the development work. Through this, it is possible to diversify development policies according to local needs.

The main policy tools for this explicit regional focus are the *Vinnväxt* and *Visanu* programmes. A third programme, the “Regional Cluster

Programme”, was announced in late 2005 by Nutek that will focus on international competitiveness and international market development initiatives by clusters. The *Vinnväxt* programme, initiated in 2002, aims to promote sustainable growth and international competitiveness within the functional growth areas through problem-oriented research and development of innovation systems to internationally competitive levels (Dahmen Institute, 2004). Approximately 10 functional regions, regions being defined as labour markets, will be selected through a competitive process for support of up to EUR 1.1 million per year. The selected regions will receive a range of support activities (seminars, training/education, experience sharing, research/increased know-how) to plan their projects. The total budget of the programme is EUR 65 million from VINNOVA with an estimated regional co-funding of at least as much. The programme incorporates many best practices, as it is long term, it involves significant government investment that is at least matched by the investment of other participants, it is not universal in application, and success is determined through a competitive process. However, the program design lacks flexibility for metropolitan regions. There have been two rounds of *Vinnväxt* funding. In the first round three projects were approved. In the second round a further six were approved. In the summer of 2005 a third round was announced. The third round will focus on projects for the development of embryonic clusters.

As designed, the *Vinnväxt* programme could not readily accommodate the challenges of a large and diverse metropolitan economy with co-ordination difficulties. For example, the local biotech cluster proved too complex for the *Vinnväxt* programme design. As discussed in Chapter 1, there are a number of active biotech clusters in the region. There is a cluster initiative in the northern Uppsala County sponsored by NUTEK (Swedish Agency for Economic and Regional Growth) and the EU, seeking to increase knowledge and to link local manufacturing more closely with the biotech industry. There is the Uppsala Bioregion cluster with a strong life science research base, and a number of biotech and medical technology start-ups. There is the Stockholm Bioscience in the City of Stockholm which also has a strong research core. Finally, there is Biotechvalley in the south of the region which is a process and production oriented biotech cluster. A Stockholm Bioregion has been formed to integrate these various islands of competence and the region's cluster initiatives. The aim is to have a fully functional biotech region covering more than 50% of the country's biotech firms that integrates large and small firms as well as research, production and capital. While the cluster stretches from Uppsala – Solna – Stockholm – Huddinge – Södertälje to Strängnäs, the *Vinnväxt* programme support was only provided to the Uppsala Bioregion. The programme, by design, therefore had the effect of fragmenting the various biotech initiatives in the Stockholm Mälars region rather than encouraging combination/collaboration.

An opportunity was lost to encourage the development of a strategic position for the biotech sector in the region, ostensibly one of the aims of the programme.

The more limited *Visanu* programme has been specifically designed to allow more complex efforts as typically present in larger regions like Stockholm but not to provide the main platform to integrate clusters efforts into a consistent regional competitiveness strategy. Initiated in 2003, the three-year program is a joint effort between three national agencies (NUTEK, VINNOVA and ISA) with a systems perspective and a strong emphasis on learning. This programme has a total budget of approximately EUR 7 million. Specifically, it focuses on process support (funding of cluster managers, and business network development) to regional cluster and innovation systems (EUR 3 million with 50% co-financing required), knowledge development for cluster and innovation systems at a regional and national level (about EUR 1.5 million), and international marketing (stimulating inward investment) (about EUR 1 million). Under this programme two significant initiatives in Stockholm County - Kista Science City (EUR 210 000) and Stockholm BioRegion (EUR 200 000) have been funded. There is a strong link between *Vinnväxt* and *Visanu* in terms of personnel, exchange of experience and financing of initiatives: about 50% of *Visanu* initiatives are former *Vinnväxt* applicants. While *Visanu* attempted to address weakness in the *Vinnväxt*, an alternative approach would have been to address the design of the *Vinnväxt* programme to deal with more complex regions.

A main challenge for the Stockholm region will be to improve co-ordination between national and local/regional initiatives. In addition to the national regional innovation policy, at the regional and municipal level, there are also a large number of innovation system and cluster initiatives. The extent of co-ordination between these initiatives varies considerably between regions. The absence of a Stockholm Mälardalen regional economic development strategy means that the linkages between the national initiatives and the regional initiatives are weaker than in other Swedish regions. Small regions often have narrow economies, with one cluster which clearly stands out as the priority. It is also often relatively easy for actors in small regions to co-ordinate their activities and priorities because of the dominance of that single cluster. In Stockholm, like other metropolitan regions, there are a number of internationally competitive innovation intensive clusters. The multitude of clusters makes it difficult to agree on priorities. Co-ordination is also more difficult because of the multiplicity of actors. For example there will often be a number of universities with some expertise in all of the clusters of the region. In metropolitan regions, specifying a single regional specialisation is not possible nor is it desirable.

It is nevertheless important that Stockholm does prioritise if Stockholm is to be competitive in the context of globalisation.

... that mainly targets large R&D multinational firms

While the high level of competitiveness of Sweden (and Stockholm) stems largely from its innovation capacity, there are nevertheless questions over the efficiency of the system to achieve economic growth. On the positive side, Swedish policies for business development have shifted over the last decades, from a focus on economic support to individual firms, via infrastructure investments, to support of business co-operation. However, the “Swedish paradox” of very high R&D expenditure coupled with what is perceived to be relatively low long term economic growth remains troubling and warrants further study. Sweden has been a significant investor in research and technology for many years. The research and development intensity of 4.3% of GDP in 2001 was the highest in the OECD and the second highest in the world. Over the period 1970 to 1990, however, Sweden’s growth was slower than in other EU and OECD countries. Growth since the early 1990s has been faster than in most other EU countries, but it still remained below that of the most dynamic global economies (OECD 2005d).

The weakness of SMEs within the Swedish innovation system entails risks, given the globalisation of multinationals and the crowding out of other sources of innovation. Changes in the innovation process as well as in company structures have increased the reliance of large companies on small companies as providers of specialised or simply more efficient services and inputs. The Swedish system appears to have been relatively efficient in supporting innovation in large R&D intensive companies but “relatively inefficient in supporting start-up innovation, innovation in SMEs and public sector innovation” (European Commission, 2002). Multinationals, with strong links to Sweden, which are more integrated in the national innovation system than any other type of firm, have a significantly higher likelihood of receiving public R&D funding subsidies than other groups of firms. On the positive side, these multinationals are significantly associated with the propensity to launch radical innovations (Ebersberger and Loof, 2005). Ericsson, AstraZeneca (pharmaceutical) and ABB (robotics) have very high rates of patenting. The large multinationals account for about 70% of all Swedish patents in the USA and for the great majority of R&D investment while SMEs represent a very small proportion of overall Swedish patenting.³ Large multinational firms continue to undertake substantial research and development activities in Sweden. However, their value generation in Sweden has gradually been decreasing. The historic strong links to the Swedish home base may also be weakening as production and research and development undertaken by the large multinationals is increasingly globalised (OECD 2005d). For those firms, Sweden is just one of a

number of production centres and potential sources of innovation. This is both a threat and an opportunity for Sweden over time.

As the Stockholm region leads the transition to a knowledge-based economy, it will increasingly need a national policy framework going beyond large industrial firms to support SMEs. There are many indications that while the country's economy is in clear transition towards a knowledge-driven model, economic policy remains tied to the traditional industrial model that characterised Sweden in the past. In the old model, capital-intensive production of high-value goods in large multinational companies was the hallmark of Sweden's economic success. Competitive corporate tax rates, strong infrastructure, a well educated workforce, and good labour relations were critical in this phase. In the new model, breakthrough innovation is likely to come increasingly out of small to medium sized firms. New technology based firms are important agents of radical renewal, variety and dynamics in innovation systems. Flexible rules for small and medium-sized companies become critical, while infrastructure and skills remain important. Networks that are open to large and small firms, and are regional and international will be important. The attraction and retention of high-skilled individuals globally will be key.

Entrepreneurship and new firm creation should be facilitated for technology innovation and commercialisation. The lead of the high tech clusters in the Stockholm region may be hampered by the low levels of entrepreneurship. As demonstrated in Chapter 1, Sweden generally ranks low in entrepreneurship. Reasons for explaining the lack of entrepreneurship may include the lack of vibrant production market competition, lack of suitable capital, the tax rules governing closely-held companies, and employment-related factors such as employment protection legislation and high earnings-related component of the unemployment insurance system (OECD 2004a). It is important to reduce barriers and offer incentives to encourage the growth of small firms.

Efforts to enhance innovation entrepreneurship have been taken, although not as extensively as many other OECD countries. A national programme was launched in 2002 to improve attitudes towards entrepreneurship and to stimulate a more entrepreneurial society. The three-year programme is run by the Swedish Agency for economic and Regional Growth (NUTEK) and focuses on three major areas: co-operation with the so-called regional partnerships; exchange between school and industry (working life); and developing and complementing existing programmes (OECD 2005i). There are also a number of local and regional initiatives; however they are less developed than in peer regions. The Greater London Enterprise provides a good example of an active and coherent policy held at the metropolitan level that seeks to promote firms creation in strategic industries (Box 2.3).

Box 2.3. Active local entrepreneurship policies: the case of the Greater London Enterprise

London has a challenging environment for SME development due to high demand for staff and land from global firms. Given the high cost of land (in part an urban planning problem), SMEs have difficulty to finding and paying for office space. They also lack access to capital for smaller investments and loans. It is against this backdrop that the Greater London Enterprise Ltd. (GLE) emerged. The company is a publicly owned economic development entity in London which operates on a commercial basis. The company particularly aims to tackle general weaknesses in the business environment, notably the supply of capital and business space to all SMEs. It does not target services only to small firms experiencing difficulties, and works with growing companies in all sectors. It utilises its financial resources and commercial skills to facilitate SME growth and entrepreneurship generally as a tool for economic development. Although owned by the 33 municipal local governments in Greater London, the company receives no subsidies and generates its own returns (based on the initial endowment of assets from its public shareholders). The 33 shareholders do not control the policies of the company (including lending and investment decisions) nor seek to control how the company develops. The challenge for GLE is to deliver good commercial returns and build shareholder value, whilst focussing its business on the commercial opportunities to deliver services to growth oriented smaller firms in the Greater London region, that are not well supplied by the existing market.

The result is that GLE often finds 'the commercial solution' to the problems smaller growth companies have, rather than the 'subsidised solution' that involves the direct use of public funds to try to 'buy out' the weaknesses in the market supply to such firms. This combination of commercial freedom combined with a clear focus on priority clients (the smaller firms) gives GLE the operational freedom and discipline to make a unique contribution to SMEs in London.

The core activities are the management of real estate and supply of growth capital to help SMEs grow and stay in London. GLE is a specialist business which only operates in niche markets, where SMEs need services and no mature market has yet evolved. Although commercially driven, the goal of GLE is not profit-maximisation. This allows the GLE to operate in market niches which are often unattractive for wholly commercial players that require higher shorter-term returns. For example, it can take considerable time to negotiate the purchase of under-utilised public real estate, a problem for entirely profit-driven firms. The business approach also serves to attract commercial capital (e.g. bank lending, pension fund investments) through its regional investment vehicles, including venture capital funds, property investment funds, and regional loan funds. This commercial approach meets the need of small businesses for commercially sustainable solutions to their growth challenges and will leverage more benefits for SMEs than more 'policy driven and public funded' initiatives. The value of GLE's assets has dramatically increased since inception, to over GBP 30 million in 2005, compared to GBP 8 million in 1993, with no public subsidy.

Box 2.3. Active local entrepreneurship policies: the case of the Greater London Enterprise (cont.)

The company takes a regional approach right from the start. Its inherited real estate, which came from the Greater London Council, was spread across London. The accident of history enables GLE to be a regional business and requires it to engage in portfolio management rather than single site management, or only a localised landholding. GLE must make the portfolio work as a whole, by spreading risks and returns across the portfolio to build up the value of the balance sheet. In 2002, GLE already owned 20 sites/centres with about 1000 SME tenants from across a wide range of sectors and locations. It is likely to expand greatly in the future. By managing a large portfolio rather than individual sites, GLE is also able to bring in a much wider range of financial and other services to its tenants. Also, being owned by all the local municipal governments in Greater London, the GLE was able to develop a critical mass necessary to achieve its commercial sustainability from a regional platform. In other words, GLE is able to build and manage a large portfolio, difficult for a commercial player to match, and therefore exploit various economies of scale (e.g. low unit overhead cost). GLE is not just a development entity for employment and urban regeneration; it constitutes a significant dimension of London's competitiveness policy.

Source: OECD (2005i) and GLE website <http://www.gle.co.uk>.

Programmes to promote the commercialisation of new ideas are needed to complement existing support for the pre-commercialisation phase. Universities have mainly supported innovation in the pre-commercial phase *i.e.*, before the company has started its production and established itself on the market. Students and researchers who have developed a clear business concept may receive rent-free space for a limited period in a *start house* affiliated with the respective campus. For young companies at a more advanced stage, there are three incubators in the Stockholm region (*Teknikhögden AB*, *Kista Innovation and Growth* and *Novum Research Park*). The businesses in these incubators have access to a variety of other services such as coaching, networking, business advice and training.

Innovation in services has considerably lagged behind other sectors. The services sector has not shown the added value or productivity gains that have been shown in parts of the telecommunications and manufacturing sectors. Low levels of innovation in the business services sector is an important element of this poor performance (OECD 2005d). Although there is no separate data for the Stockholm region, the business services sector's presence is most significant in the Stockholm region. Swedish innovation policy tends to favour technology and prototype development processes and this is an issue which policymakers should consider.

The public sector could play a much greater role in innovation as a source of innovation itself and through its influence on the private sector. This opportunity has to a large degree been neglected nationally and in the Stockholm region. The sheer size of the public sector in the Stockholm economy makes it an important potential source of innovation, especially as a sophisticated consumer. Demand that is pushing companies to innovate in directions that they will later be able to exploit in other markets is a powerful tool.⁴ Given the large size of the public sector in Sweden, Sweden there is a clear opportunity to think about the strategic potential of being a lead user of new products and services. There are, however, currently few signs of this happening.⁵

Building relational assets: cluster policies...

Although Sweden has actively promoted cluster development at the municipal level, national initiatives are quite recent. Within the Stockholm Mälars region there are a significant number of cluster initiatives and cluster-specific science parks, especially in research-driven areas. Well known and documented⁶ examples include, Stockholm Bioregion, Biotechvalley.Nu, TIME.STOCKHOLM,⁷ IDEA Plant, Kista Science Park, and Robotdalen. Municipalities provide support to industrial parks such as Kista Science City, and cluster initiatives such as biotech valley Strangnas. A focus on clusters at the national level is relatively recent. The national cluster programmes are relatively small in comparison to municipal initiatives. In 2001, the Swedish government required counties to consider the question of cluster development within the framework of the new tools of regional policy (RUP and RTP).⁸

In general, the innovative cluster policies in the Stockholm region are inspired by international examples but could be better adapted to the local context of firm concentration. There is tendency to follow a generic model of what clusters look like that is strongly shaped by the US experience. In this model, clusters are “magnets”⁹ for companies and skills in a particular field and that way create more and more value. The “magnet” is fuelled by strong factor conditions and high-powered incentives. Many US clusters are characterised by strong domestic competition between the firms comprising the cluster. By contrast a number of Swedish clusters are characterised by the overwhelming domination of a single firm (or a few firms), such as Ericsson, with limited domestic competition, but with the firms in the cluster having a strong export orientation and competing aggressively internationally. In many cases the entrepreneurs and staff in the smaller firms in the Swedish cluster come out of the dominant firm. The dominant firm therefore plays a key role in the provision of existing skills for the cluster. In addition, the clusters appear to be characterised by strong

informal relationships (generally based on personal connections) between the smaller firms and the dominant firm in a homogenous cultural environment, rather than strong formal relationships (buyer and seller relationships excepted). A good example of this dynamic is Kista Science City and the tremendous role played by the networks of former and current Ericsson employees in that cluster. Strong factor conditions are also present but the incentives are much weaker. The lower incentives and the nature of the networks create higher barriers to the attraction of outside “talent”.¹⁰ Even though there is at least a strong hypothesis that Swedish clusters have a different (not necessarily better or worse) profile, current cluster policies show little sign to try and develop and leverage these differences. Instead, they pursue – often more professionally than others – the same policies which are also currently getting launched in many other parts of the world.

Cluster initiatives need to be placed into an overall vision or strategy for the whole metropolitan region. This region-wide approach would better allocate resources and exploit economies of agglomeration whilst reducing the negative effects due to over concentration of population in certain areas (housing, transportation etc.). Industry clusters have to be understood as a system of interrelated players and operations. Activities should therefore seek to exploit the different relative strengths of the sub-regions, and include efforts on infrastructure and housing that grow the capacity of the region in line with its economy and population. They would also include specific activities that ensure the availability of employees with low- and medium-skills in the region, for example through vocational training programs and specific projects for low-cost housing. Different parts of the region would be able to play different roles, as places to live or as places for specific economic activity. These roles would define the type of infrastructure investments required in the different parts of the region. The broader perspective in designing and implementing cluster policies will overcome the diseconomies of agglomeration already existing in some parts of the Stockholm Mälar region, and fully capitalise on the resources in the bigger region through intraregional division of labour and socioeconomic functions. Specifically, it is necessary to co-ordinate cluster initiatives among the five counties to prevent from wasting limited resources (funding etc.) and better organise cluster development at the bigger metropolitan level. Montreal would be a good illustration of developing and implementing its cluster strategies with a vision for an overall metropolitan integration (Box 2.4).

Box 2.4. Cluster Development strategy in the Montreal metropolitan region

The economic development of the Montreal metropolitan region, particularly its rebound in the 90s, has been based on its strong specialisation in a number of clusters. As the first step in developing its cluster strategies, the Montreal Metropolitan Community 2005 (CMM) – the regional planning body serving 63 municipalities which covers the functional geographical area of the metropolitan region and which is responsible for the planning and the financing of economic development, transport and housing – examined the metropolitan economy and identified 15 clusters essentially based on their degree of development and interlinkages (Montreal Metropolitan Community, 2005). These clusters are classified into four categories: (1) competitive clusters (aerospace, life sciences, information technologies, and textiles and clothing); (2) visibility clusters (culture, tourism, and services); (3) emerging technology clusters (nanotechnologies, advanced materials, and environmental technologies); and (4) manufacturing clusters (energy, bio-food, petrochemicals and plastics, and paper and wood products). These clusters accounted for 1 280 000 jobs (79% of the total jobs in this area) in 2001 (Montreal Metropolitan Community, 2005). The rest of the jobs in this region mainly concentrate in local services industries such as personal services, public administration and most health care and social assistance services. These regional clusters have stemmed from their ability to produce high-value added products and services and together created a hub of innovation in the rather diversified metropolitan economy. The first step was launched in the fall of 2003 and finished in late 2004.

The second and third steps involve developing an action plan for each cluster and preparing a regional innovation strategy and are carried out simultaneously. The point of departure in the case of Montreal is that the strategy should take a metropolitan-wide perspective to avoid the risks of heightening the tensions that exist between smaller municipalities in the region and the new mega-city of Montreal (OECD 2004c). A second principle of the cluster strategy is that it should address problems of duplication among institutions, streamlining interventions according to an agreed set of priorities. The CMM cluster plan intends to ensure that the entire community is committed to the course of action. The CMM selected a bottom-up approach with the cluster development initiative coming from the firms involved and their institutional partners in development. In addition to building the competitive capital of the clusters, the CMM proposes giving an organisation the mandate to support the dynamics of innovation for all the firms, whether they belong to a cluster or not, and to improve the region's overall innovation performance.

Box 2.4. Cluster Development strategy in the Montreal metropolitan region (*cont.*)

In co-ordinating the cluster development plan, the CMM suggests assigning for each cluster a secretariat “to activate the cluster, safeguard the common vision, make good use of the competitive capital, see that the strategic plan is carried out and in the process, help improve the economic growth of the metropolitan area” (Metropolitan Community of Montreal, 2005). The secretariat will provide expertise in research and networking, cluster expansion, innovation and technology, education and training, commercial co-operation and policy action. Further, the CMM has decided to: (1) build an Integrated Transactional Information System (ITIS) to facilitate fast circulation of information among involved cluster partners; and (2) create a Metropolitan Competitiveness Fund through financing from the municipal, provincial and federal governments and the private sector primarily for value-added projects to stimulate and foster cluster development. The CMM, the Government of Quebec, the Government of Canada and the private sector are investing a total of CAD 6 million per year to finance the creation of industrial cluster initiatives as well as value-added projects to make these clusters more competitive and thereby make the metropolitan region internationally competitive. The cluster strategy has been developed with wide spread support and consultation from the CMM’s Economic Development Commission (mayors and city councillors), the Technical Committee (Executive directors of the region’s economic development corporations), elected officials on the CMM Board of directors and Executive Committee and the representatives of all the municipalities of the CMM, and the public.

Source: OECD (2004c) and Metropolitan Community of Montreal (2005)

... and co-operation between public, private and academic sectors

The Stockholm region’s well developed business environment has benefited from formal and informal interactions between the private sector, research institutions (i.e. universities and research centres) and the public sector. Since 1997, higher education institutions have greatly expanded their mission. They collaborate with and contribute to: business and industry, public sector activities, culture and adult education. The number of joint research projects and the extent of diffusion of innovation and applied research in the Stockholm Mälars region have increased significantly. Each institute chooses its own way of organising its co-operation with businesses and industry. For instance, many institutes have formed holding companies with the mission to identify business ideas within the institutes and to support the process of commercialisation.¹¹ It is also possible for the company to participate in joint-ventures. The holding companies are

often close connected to a science park within campus. Joint strategic projects are another form of co-operation.¹² There are also a number of formal public initiatives held by central government agencies (NUTEK, Vinnova and ISA) as well as by local authorities (Kista Science City).

Small and medium-sized enterprises have not, however, been actively involved in this co-operation since policies have catered to the large firms. The implementation of innovation policies continues to be led by the public sector. Interactions between public and private sectors mainly exist between larger firms with local and the national governments, particularly in the case of the ICT cluster (Meer, Winden and Woets, 2003). The triple helix model, that brings together the public sector, companies and universities, could be strengthened. Helsinki offers an interesting example of a well functioning regional innovation policy through a collaborative effort between public authorities, universities, polytechnics, science parks and the business community (Box 2.5).

Box 2.5. A well-functioning Triple Helix model: the example of the Helsinki Culminatum Ltd.

For fifteen years, the City of Helsinki and the University of Helsinki have persistently built up their co-operation, the most important ingredients of which are: promoting science-driven business enterprises with the aid of a common business incubator and science park, cooperating in urban planning and traffic planning to develop campuses and transport and logistics between campuses, creating a common Student City concept to increase international attractiveness, promoting urban research by creating initially six (today nine) professorships in urban research, and collaborating with the city's own think-tank Helsinki City Urban Facts.

Besides their international co-operation, the University of Helsinki and the City of Helsinki have been initiators in establishing the Helsinki Region Centre of Expertise Culminatum Ltd. This public-private organisation is based on the Triple Helix model, which means that one-third of its shares are owned by the local universities and research institutes, one-third by the City of Helsinki, its neighbouring municipalities and the Uusimaa Regional Council, and one-third by the business community, financiers and science park companies.

Helsinki Culminatum forms a co-operation forum and a basis for the development of common projects. It focuses on two main missions, namely:

- Managing regional cluster building activities in six selected sectors of the knowledge-based economy. Development programmes and actions are funded mainly by the cities and by national innovation organisations. In sharing their knowledge, universities and polytechnics play a crucial catalysing role in development projects. One of the focus areas of Culminatum is to help university spin-off companies grow. Cluster building activities by Culminatum combined with the funding from the National Technology Agency (Tekes) have contributed to increased interaction between SMEs and higher educational institutions.

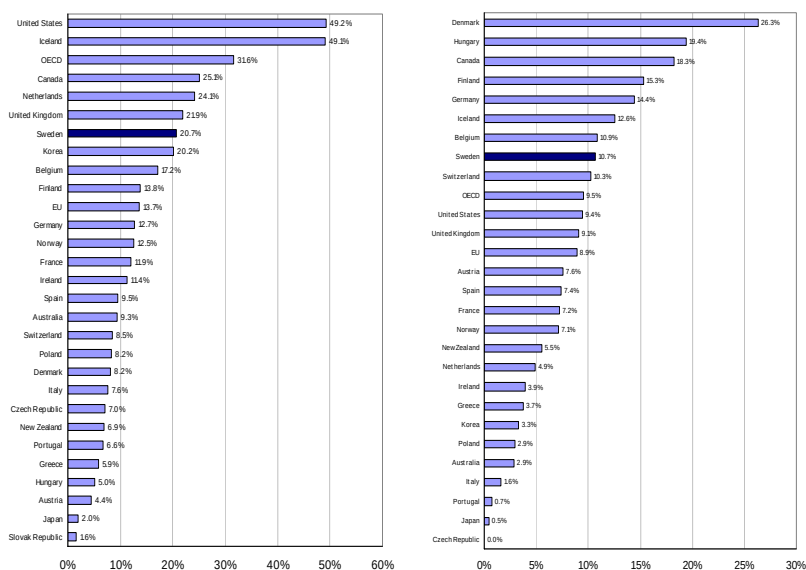
Box 2.5. A well-functioning Triple Helix model: the example of the Helsinki Culminatum Ltd. (cont.)

- Developing the Helsinki Region as a world class innovation eco system – as an Ideopolis. Early 2005 saw birth of Yhdessä Huipulle (Together to the Summit), a common innovation strategy by Culminatum's owners presenting 26 common development projects of the universities, cities and the business community on four key issues: (1) to increase the international appeal of local research and education, (2) to develop strong clusters and create test beds and living labs for product service development, (3) to apply innovations to renew the welfare services provided by the cities and to consolidate the role of the cities in the R&D, and (4) to support university-driven business growth by, for example, developing a second generation science park concept.

In the Stockholm region, the biotechnology sector is a useful example of a well-functioning “triple helix” between the public sector, the private sector and universities. The Stockholm region has a strong life sciences cluster, which faces great international competitive challenges. Although the market for life science products continues to grow, the high costs of development and marketing have resulted in ongoing consolidation of the major pharmaceutical companies. While the sector is significant in the region, it is still only a middle ranking region in international terms. Within Europe alone larger locations are: Belgium, Germany, the UK, France, Switzerland, Italy, Ireland, and the Netherlands. In the medium term it is expected that regions will increasingly differentiate themselves on the basis of particular specialisation; there will be a consolidation of international locations; and, globalisation of research and development, product development and marketing will increase. The Stockholm region has some important positive factors as a location. Research shows that the development of the biotechnology industry relies on two major sources – pre-commercial medical research and continuing private sector investment in product development (Cortright and Mayer 2002). Both sources are available in Stockholm. There are three world renowned universities, Karolinska Institutet, KTH- the Royal Institute of Technology contribute most to the research in life science. Within the region there is also significant private sector investment in research and development and linkages between universities and the private sector are well developed. Government also plays key roles: as funder of the universities and some research and development; as both a funder and a purchaser in the health system; and as a regulator. Venture capital can play a key role in facilitating the linkages. Compared to other OECD countries, Sweden enjoys a larger share of venture capital in GDP and a larger share of venture capital in biotechnology compared to the total (Figure 2.3). This is a good sign for Stockholm (and Sweden) to facilitate the linkages between the private sector and research institutions.

Figure 2.3. **Venture capital in Sweden**

(From left to right: share of venture capital in GDP and share of health/biotechnology in total venture capital)



Source: OECD (2004d).

2.2.2. *Preparing the labour market of the future: integration of immigrants*

Given the projected increasing reliance on foreign-born workers, especially in the context of a knowledge economy, human capital development for immigrants needs to be more effective. As discussed in Chapter 1, unemployment rates among immigrants are higher than for the national population, and immigrants are over-represented in both early retirement and long-term illness leave statistics. Sweden has invested heavily in programmes aimed at integrating immigrants and is one of the only countries in the world where immigrants are entitled to social assistance immediately upon arrival. However, better immigrant labour market integration requires a paradigm shift from a model of assistance and entitlement to a model that recognises the social, cultural and economic value that comes from diversity. Tackling discrimination, forging partnerships with the private sector for programmes aimed at immigrants and creating incentives for early labour market participation need to be part of this paradigm shift.

From traditional integration measures...

The Swedish government has taken several useful steps to promote better labour market integration of foreign-born workers. Sweden has increased protection against discrimination in employment such as the Act of 1 July 2003. In 2004, Sweden established a foreign diploma equivalency and validation board.¹³ This measure should assist immigrants upon arrival to find employment that matches their qualifications. Vocational training in fields where there are labour shortages has also been offered to skilled foreign-born workers who hold jobs for which they are overqualified. A number of other OECD countries have experimented with similar programmes to facilitate immigrant integration. Some of the most innovative policies and programmes can be found in Canada (Box 2.6).

Box 2.6. Policies and programmes targeting the labour market integration of immigrants: Canada

Public awareness campaigns: Employers are often reluctant to hire internationally trained immigrants because they are unable properly to assess their qualifications. A number of campaigns have been launched in an attempt to build support from the general public and the private sector. This is a necessary step if changes are to be made in the current systems.

Employer Promising Practices Working Group: A toolkit of best practices for immigrant labour market integration is being developed as the basis of an employer awareness campaign.

The Information, Public Awareness and Recognition Working Group: The group is in charge of a public awareness campaign about the contribution immigrants make to the Toronto Region labour market and the obstacles they face in seeking employment. The accomplishments of employers who have developed innovative techniques for integrating immigrants into the labour market are also being recognised publicly.

Occupation and Licensing Gaps: The Government of Ontario Bridge Training Project seeks to help immigrants obtain licensing, certification or accreditation for employment and build on their existing skills. The project has sought to include key stakeholders, such as occupational regulatory bodies, employers, educational institutions, and community agencies. Eleven projects have been launched in strategic skill sectors including: biotechnology; construction and manufacturing trades; health care technologies; information technology; midwifery; nursing; pharmacy; teaching. Through these projects immigrants, who qualify for mid- and senior-level positions; can obtain paid internships as well as an assessment of language proficiency and of international academic credentials. Workplace communications training is also provided along with an email resource designed to support interns during their placements (CAETO, 2004).

Box 2.6. Policies and programmes targeting the labour market integration of immigrants: Canada (*cont.*)

Mentoring Programmes: Mentoring programs have been set up to connect established working professionals in Canada with immigrants looking for work in their fields. Through these programmes, immigrants receive advice and are introduced to professional networks that can facilitate their adaptation to Canadian workplace culture. The Mentoring Partnership, an alliance of community agencies that offers occupation specific mentoring, will enable agencies to increase the number of mentoring opportunities available.

Source: Toronto Region Immigrant Employment Council <http://www.triec.ca/initiatives/promising.htm> and CAETO (2004).

Given the greater returns for Sweden-specific job experience, policies should promote the early entry of foreign-born workers into the local labour market. Immigrants who do integrate successfully often have had early contact with the labour market, which would seem to be more beneficial in the long run than vocational or language education (OECD 2005e). Indeed, studies indicate that only programmes that place individuals in real jobs, such as recruitment subsidies, can be associated with positive employment probability after five years. These types of programmes are, however, also amongst the most expensive (Sianesi, 2002 in OECD 2005e). This would suggest that employers recognise and reward Swedish work experience and that developing measures and incentives to encourage early entry into the labour market should be an important feature of future immigration programmes. The language training/introduction period, which can last up to two or three years, should be made more efficient so as not to delay labour market entry. One successful programming facilitating labour market entry is the Job Centre Southwest in the Skärholmen district. This Skärholmen model has generated national and international interest because the number of households receiving social welfare benefits has dropped by half since the program started six years ago, the best results of any Local District Council in Stockholm. However, it has been reported that this experience has provided short-term solutions, with some people coming back to unemployment in some cases after six month. The Kista matching is another example of an area that offers an opportunity to move forward on the issues of integration and inclusion. The area's robust business sector and concentration of immigrant and ethnic minority residents makes possible a unique synergy between business development and an under-utilised labour force. However, housing in the area is segregated and local residents have relatively high rates of unemployment. Services, for example those provided by the Kista Science City Information Centre (*Motesplats*), have focussed

on labour market, such as improved placement services and career enhancement.

... towards a more holistic approach

Sweden's "Metropolitan Policy" provides a holistic approach to improving immigrant integration in the most distressed housing districts (Box 2.7). In contrast to other European countries, where non-governmental organisations play an important role in promoting integration, Swedish integration policies depend primarily on the general welfare policies administered by the public sector. Although the national government sets the broad policy direction for immigration, it is the municipal level that deals directly with immigration and integration issues on the ground through their actions in welfare and social service delivery, housing, local economic development, labour market participation and economic and social exclusion. To improve coherence and co-ordination of actions among central government and the municipalities, county councils and regions, Sweden launched in 1998 a Metropolitan Policy aiming to 'end the social, ethnic and discriminatory segregation in the metropolitan areas and to work for equal and comparable living conditions for people living in the cities'.¹⁴ The initiative focuses on 24 housing districts in the three major urban areas reaching 250 000 individuals. The main policy tools for achieving these objectives are the local development agreements (LDAs) elaborated by the state, the municipalities and the districts but implemented primarily by municipalities. First evaluations of the program suggest success increasing employment rates and reducing benefit dependency. Tangible results in reducing segregation, a phenomena based on a complex set of issues, have not yet been observed despite improved neighbourhood conditions. Furthermore, there are still several distressed districts within the Stockholm Mälar region that have not benefited from LDAs, including those located in Västerås and Uppsala.

Box 2.7. Sweden's Metropolitan Policy

Launched in 1998, the Swedish Metropolitan Policy is based on a holistic approach to integration: 1) support development in urban areas in order to foster long-term sustainable economic growth, and 2) end social, ethnic and discriminatory segregation in specific areas to ensure equal opportunities for all. The government perceives the following long-term goals as essential to achieving the second objective: raise employment rates, reduce dependence on social assistance, improve Swedish-language skills, increase democratic participation, improve public health, ensure that all students reach an adequate level in several subjects (Swedish, English and mathematics), offer upper secondary schooling to those who need it, improve living environments by ensuring that all neighbourhoods are safe and attractive, and reduce crime.

Box 2.7. Sweden's Metropolitan Policy (*cont.*)

The main policy tools for achieving these objectives are the local development agreements (LDAs), elaborated by the state, the municipalities and the districts. Local development initiatives take place over the long-term and are based on a bottom-up approach focusing on collaboration and management by objectives. Although within each neighbourhood a large number of actors must work together, the municipality is ultimately responsible for the neighbourhood's development. The LDAs cover over 1 000 different projects in 24 housing districts, comprising 250 000 residents. The districts have used different methods, ranging from the creation of new structures, working groups and sub-structures (ex: resident councils) to the organisation of large meetings open to all residents, so as to involve local inhabitants in the development of their neighbourhoods (Lukkarinen, 2004). Funding is distributed through the Commission on Metropolitan Areas. The State and the municipalities concerned decide which initiatives will be funded out of the remaining resources in disadvantaged housing areas (Commission on Metropolitan Areas, 2005). Between 1999 and 2003 the government allocated approximately EUR 230 million to the agreements, and metropolitan authorities and the municipalities committed themselves to the same amount.

Although it is too soon to determine whether positive changes are the direct result of the LDAs, some important improvements have been observed. Employment rates increased more in the 24 districts that participated in LDAs than in other districts that were not part of the programme. Overall, employment rates increased by 2-11% in all 24 districts between 1998 and 2001. In addition, the number of residents dependent on social benefits decreased in 21 out of the 24 districts by 1-13% (Lukkarinen, 2004). The LDAs have also produced a number of successful initiatives in pre-schools and compulsory schools that have improved student results and, consequently, the reputations of the schools involved. Crime has been reduced in some of the housing districts making them more attractive. Cultural events have been an effective means of bringing residents together, involving them in activities and increasing participation. Increased cross-sector co-operation has resulted in better service delivery (Lukkarinen, 2004).

The impact of the LDAs on the structures that create and maintain segregation has however been limited. The Swedish policy approach has attempted to take into account the fact that segregation is usually the result of a complicated mixture of social and economic dynamics by focusing on both "people prosperity" (ex: providing assistance to individuals in areas such as employment) and "place prosperity" (ex: targeting depressed neighbourhoods through urban renewal). One of the goals of the Metropolitan policy has been to ensure that troubled neighbourhoods are revitalized to a point where their homes are in demand by Swedes with different social class backgrounds. This has involved efforts to reduce crime and generally make neighbourhoods more attractive. However, greater strides will have to be made in other areas such as promoting equal access to employment opportunities and fighting discrimination if the processes leading to increased segregation are to be reversed.

Although the Metropolitan policy has appears to have experienced successes in the short term, integration of immigrants is a long-term process. Furthermore, it is difficult to assess whether the positive results of this program are the result of the policy itself or of other intervening factors. Short-term successes run the risk of providing a disincentive for policy makers to provide the support needed to sustain and expand such programs. A main concern is that when the agreement will be renewed in 2006, the government will not allocate any new funding for the local authority to pursue their work. This may result in a halt of the activities since the local authorities have to finance the program themselves. The experience of the Vancouver Agreement, a five-year urban development agreement bringing together the governments of Canada, British Columbia and Vancouver in an effort to create safer, healthier, more sustainable communities, demonstrated that systemic problems require longer term efforts in order for real change to take place. The Vancouver Agreement was signed in 2000 to promote co-operation between the three levels of government to address local issues of poverty, homelessness, substance abuse, safety, and economic revitalisation. In particular, Vancouver's Downtown Eastside, Canada's poorest neighbourhood and the initial focus of the Vancouver Agreement, required more strategic and co-ordinated interventions. The Agreement initially experienced a number of 'growing pains' as the three levels of government grew accustomed to working more closely together. It took time for a functional culture of co-operation and collaboration to develop between the government partners. However, towards the end of the term of the five-year agreement, significant progress was made and the effects of more co-ordinated government efforts began to be felt in the community. The agreement was renewed in the spring of 2005 for another five years and acknowledges that sufficient time is needed to understand, support, and sustain the positive outcomes.

Opportunities for moving forward by involving businesses and valuing multiculturalism

Businesses could be better integrated in the local development agreements for neighbourhood development. LDAs have already proven successful at involving different actors in cross-sector, intergovernmental co-operation alongside local residents. However, too much effort is spent working to address labour market integration from the labour supply side rather than on the labour demand side. Employers have a key role to play in hiring and there is little private sector intervention in these urban initiatives. Innovative public-private partnerships can play a crucial role in involving the private sector in the integration of immigrants and ethnic minorities. Although some LDA programmes do involve businesses to some extent in initiatives concerning the labour market integration of foreign-born workers

(e.g. Kista Matching which brought together companies, educators and recruitment agencies), more could be done to promote programmes focused on encouraging business investment in the designated communities. The Empowerment Zone/Enterprise Community programme in the United States is a promising example (Box 2.8).

Box 2.8. United States - Empowerment Zone/Enterprise Community Programme

Established in 1994, the Empowerment Zone/Enterprise Community programme combines an innovative bottom-up approach to rebuilding communities with an emphasis on developing employment opportunities and expanding businesses.

The EZ/EC programme is based on three principles:

- 1) Every community is different and no single renewal strategy is appropriate for all communities. Revitalization strategies must be designed to meet the unique set of problems and needs of each neighbourhood.
- 2) Both social and economic development is necessary for long-term neighbourhood renewal.
- 3) Projects must be developed by the communities themselves, rather than imposed from above.

The programme involves multiple government agencies such as the departments of health, education, and housing, and includes activities focused on a range of initiatives such as improving education and assuring access to health care and affordable housing.

It also provides tax incentives, grants and loans to help develop employment opportunities and expand businesses in the designated communities. Organisations are eligible for wage-tax credits of up to USD 3 000 per year for each Empowerment Zone resident they employ. Businesses that invest in facilities located in the Empowerment Zone may also claim tax deductions and tax-exempt facility bonds are available for businesses located in EZ/EC neighbourhoods and seeking capital for expansion projects.

Political leadership, through the creation of a national policy on multiculturalism, is required to set the example for shifting social norms. The central government has the ability to send a strong signal to other levels of government, private business, and civil society through such a ground-breaking and potentially controversial policy direction. This leadership is necessary to help Sweden transition from a model of assistance to a model that values diversity as an asset. A formal, well-publicised, and financially supported program that promotes the contribution of an ethnically diverse population in the economic, social, and cultural

development of Sweden will encourage further work and provide guidance for the business community, government sector, and the citizenry at large. For example, Canada became the first country in the world to adopt an official Multiculturalism Policy in 1971. Multiculturalism has become a key instrument in the government's efforts to foster social cohesion and build an inclusive society that is open to, and respectful of, all Canadians and Canadian residents.¹⁵ Multiculturalism policy in Canada provides a national framework under which other governments, communities, businesses and civic organisations can participate in preserving and promoting a diverse social fabric.

A closer examination of business practices in Sweden would provide useful models where diversity and efficiency are effectively combined to increase the firm's competitive advantage. For example, IKEA's global priorities include recruitment policy that focuses on diversity in gender, disability, age, and ethnicity. In Kungens Kurva, IKEA measures ethnic belonging of staff and managers as well as language skills, defined to be proficiency in a sales conversation. They also include language training programs for employees. Their goals are to reflect the major ethnic groups in their area, increase diversity to a minimum of 23% of total staff, provide a list of interpreters for the languages spoken in their store, and to recruit 1/3 immigrants among their holiday workers. IKEA's recruitment practices offer several key advantages, including: (i) a marketing advantage that enhances sales; (ii) the provision of service for clients in their mother tongue; and (iii) a better working environment facilitated by diversity, as thinking becomes more dynamic and this creates better results.

A public-private partnership across levels of government emulating the IKEA model could emphasise the importance of business *and* government in the process of successful integration. Such partnerships could serve as an example to other businesses on how to leverage diversity as a source of competitive advantage. At the same time, they would support national government initiatives to create meaningful change to attitudes about social and economic integration in Sweden. Again, Vancouver provides an interesting example. The Vancouver Economic Development Commission (VEDC)¹⁶ is an arm's length branch of the City of Vancouver that works with industry and private business to promote international investment and economic expansion in Vancouver. International trade activity is especially sensitive to the contributions of ethnic minorities and immigrants, who often possess specific knowledge of foreign markets, indispensable language skills, and play a key role in urban development and expansion. Although not specifically focused on the integration of immigrant and ethnic minorities, the VEDC model demonstrates the ability of private business and

government to work together to promote the common goal of economic development.

As role models and employers, local and regional government bodies in the Stockholm Mälars region can also play an exemplary role in supporting diversity. Expanded recruitment, training and development programs that focus on developing diversity as an asset could prove instrumental in improving integration in the region. As the municipal governments and county councils are major employers, there is an opportunity for significant greater integration. The experience of the City of Vancouver has been particularly relevant in this respect. The City established the Equal Employment Opportunities (EEO) in 1987 to support departments in meeting the goal to have a workforce that reflects the diverse makeup of the community. Hiring continues to be based on merit, and the City is committed to ensuring that selection and recruitment processes are fair and recognise the value of including individuals from under-represented groups. The EEO also operates the Hastings Institute, a not-for-profit organisation owned by the City that works on issues related to employment and service equity, diversity, cross-cultural relations, literacy and harassment-free workplaces. It provides training and consulting services for other governments, corporations, community agencies and the private sector. This model offers valuable insight into the role that local and regional government can play in a policy area that is largely determined by the national government.

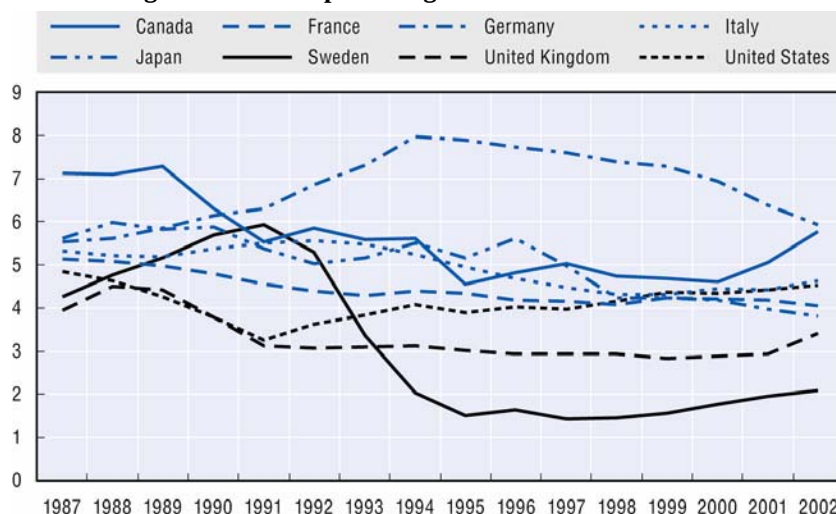
2.2.3. Better infrastructure for a competitive region

Innovation and cluster policies need to be complemented by measures that improve the “enabling environment”. The availability of land and housing along with the quality of transport and communication infrastructure are among the factors that either encourage or inhibit business activity. The commercial real estate market did not emerge in this case as a major obstacle for business activity, although there is clearly high demand in the City centre. For central Stockholm, the transportation system, with congested roads and railroads not able to absorb the daily flux of commuters, and the severe housing shortage are key obstacles to the efficient functioning of the labour market and hence the area’s competitiveness. In both areas, public investment, policy reforms and a wider regional integrated approach are required to meet the growing needs and pursue the integration goal for the larger Stockholm Mälars region. The central government has a key role to play in this respect.

Addressing housing needs

The low level of housing investment, exacerbated by housing market distortions, has contributed to the housing shortages that drive high housing costs. Changes in the housing finance environment worsened dramatically during the economic crisis of the 1990s. The tax reform (1990-91) and the modifications to housing policy over the last decade have led to higher housing prices and discouraged housing investment.¹⁷ Housing investment is at a very low level in comparison with other OECD countries (Figure 2.4). Municipalities, which are responsible for the planning and overall implementation of housing construction, have been unable to promote the housing investments necessary to meet Stockholm's in-migration. The cuts in housing allowances for individuals have also contributed to the large share of household spending on housing (Figure 2.5).

Figure 2.4. **Housing investment in percentage of GDP in a selection of OECD countries**

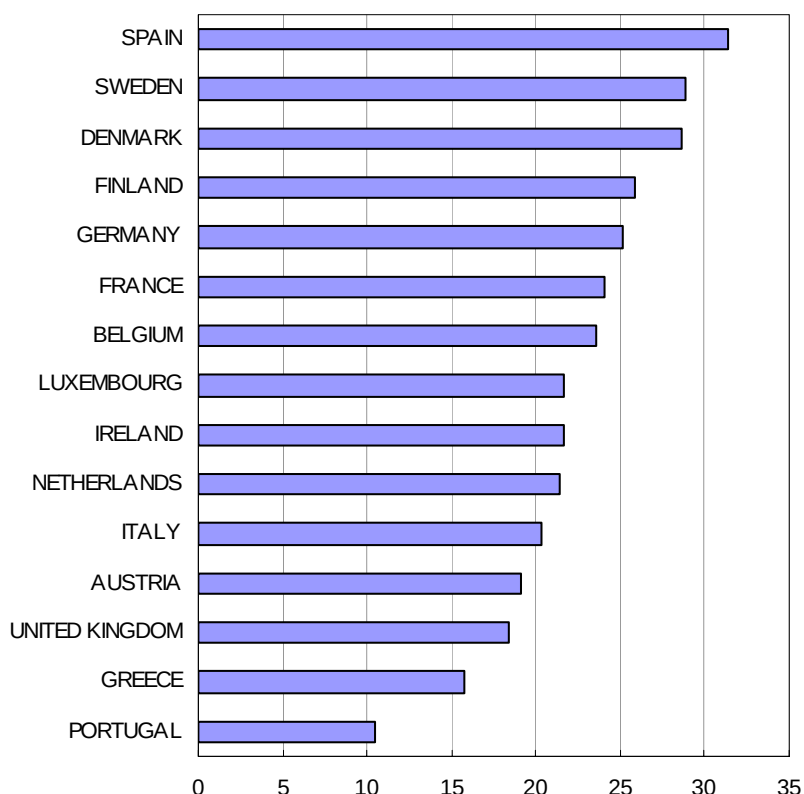


Source: OECD National Accounts

The rent negotiation system restricts in effect the ability of rents to respond to changes in supply and demand, which can lead to lower production of rental units,¹⁸ although the rent negotiation system does not include any normative rules for rent setting. The rent regulation was first introduced to prevent landlords from taking advantage of the sudden housing scarcity during the Second World War and has been modified over time.¹⁹ Present rent setting in the public housing sector is regulated through a legally imposed collective negotiation system. The rent is determined by a bargaining process between local tenants' organisations and local municipal

housing companies (MHCs), and is intended to reflect the “use value” in comparison with other rental units under the principle that public housing companies MHCs should not generate a profit. Rents in the private rental sector are also set through negotiations between the local tenants’ organisations and the local private landlords’ associations. These private sector negotiations take into account rates in the public housing sector which effectively determine the level in the private sector as well (OECD 2002a). In fact, rents of privately-owned housing in the City of Stockholm are at about the same level of those for MHCs (Table 2.1). Surprisingly, average rents of MHCs in Stockholm County do not show significant variations by area despite the significant variations in demand.

Figure 2.5. **Housing consumption as a percent of total household spending, 2003**



Source: OECD National Accounts

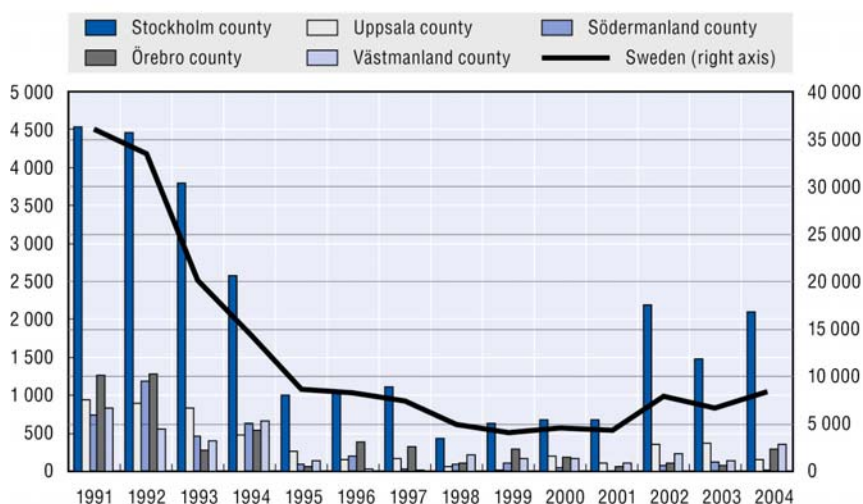
Table 2.1 Average rents for dwelling in Stockholm County in 2004 (SEK/m² and year)

Stockholm county	Municipality owned companies		Stockholm municipality	Municipality owned companies	Private companies
Central municipalities	845	=>	Inner city	967	1 006
North municipalities	837		Western suburbs	863	903
South municipalities	785		Southern suburbs	817	906
STOCKHOLM COUNTY	831		STOCKHOLM MUNICIPALITY	860	956

Note: Rents vary considerably depending on the time of construction/reconstruction. “Central municipalities” include Stockholm, Solna and Sundbyberg. “North municipalities” and “South municipalities” locate either north or south of the “Central municipalities”. “Inner city” include 5 planning units of Kungsholmen, Norrmalm, Östermalm, Maria-Gamla Stan, and Katarina-Sofia. “Western suburbs” and “Southern suburbs” locate either west or south of the “Inner city”.

Source: Statistic office of Stockholm and from the municipality owned companies in Stockholm County

Rent negotiation has not provided private and public entities with the appropriate incentives to build the sorely needed new rental housing. The rent negotiation can distort the functioning of the housing market in several ways, in some cases through a complex interplay with other regulatory shortcomings. The fact that there is little profit and even a risk of loss in the rental market has discouraged private landlords from constructing new rental dwellings and offered favourable conditions for conversion.²⁰ Conversion of apartments to condominiums has removed rental units from the market, further exacerbating supply problems.²¹ This lack of profitability has also discouraged other builders from entering rental market, resulting in less builder competition. Investors face an especially low return on construction of new rental dwellings, notably in the growth regions such as the Stockholm Mälars region where land prices and construction costs are relatively high. The very low level of construction has been a problem for many years (OECD 2004a) (Figure 2.6). MHCs own about half of the rental housing stock, yet since “profitability” is insufficient, they feel a threat to their balance sheet if they engage in high levels of new construction.²² MHCs use a “cost pricing” method at each company level *i.e.* MHCs should not generate a profit across the portfolio of rental units. Since the rent setting system does not restrict redistribution of earnings within MHC, it has led to a situation that rents of centrally located existing units are set lower, while rents of new rental construction could be set as high as people’s willingness to pay.

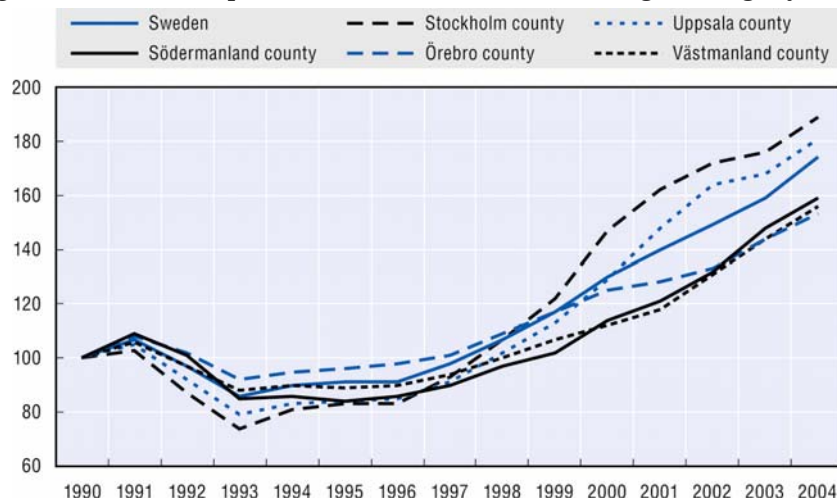
Figure 2.6. **Completed rental units**

Note: The figures do not include “tenant-owned dwellings”, indirectly owned dwellings.

Source: Statistics Sweden.

The high rents in the central parts of the Stockholm Mälars region and housing market distortions contribute to segregation and spatial mismatches within the region. The intent of the rent regulations is to ensure affordable housing, however in general this tool results in considerable efficiency losses (Economic Council of Sweden 2003). Most municipalities own non-profit housing companies that allocate apartments to renters regardless of income, origin or family structure. It is housing allowances that serve to redistribute income to families with children and families with low income. In other words, there is no “social housing” in common usage. The housing shortage was exacerbated by the recession and previous national policy of Sweden, which led to increased net costs for both construction and housing. High housing prices have been particularly prohibitive for low income people, particularly in the County of Stockholm, where the price level of housing increased dramatically after the downturn economy in the early 1990s (Figure 2.7). In order to deal with the price hike, for example, the City Council of Stockholm approved strategies to reduce the cost of new housing construction in 2004. The City’s housing companies have implemented contractor competitions and developed new housing concepts to solve this problem. From the central government side, a temporary investment grant has been introduced for the construction of rented housing in areas with a housing shortage.

Figure 2.7. Real estate price index for one- and two-dwelling buildings by county



Source: Statistics Sweden.

The central government has an important role to play in providing stronger incentives for new housing construction. New legislation since 2001 clarifies the responsibility of housing policy. The central government has been responsible for legislation (in construction, planning, requirements, grant systems) and financial support for housing construction while the municipalities are responsible for planning and overall implementation of housing provision. Policy priorities to address housing shortages should ensure that the rent negotiation allows MHCs and private landlords to recover all costs, which might not always be possible when prices are set with “use value” comparisons. The rent negotiation results should be further analysed to ensure that the redistribution is in line with other social goals. For example, longer-term tenants have greater power to ensure lower rents, regardless of their actual income level and the market value of their rental unit. In addition, it is therefore necessary to ensure collaboration among different actors (across level of governments, politicians and private companies) to increase the number of rental housing units. Since the municipalities are required by law to formulate a housing plan, they could be encouraged through special incentives attached with this housing plan.

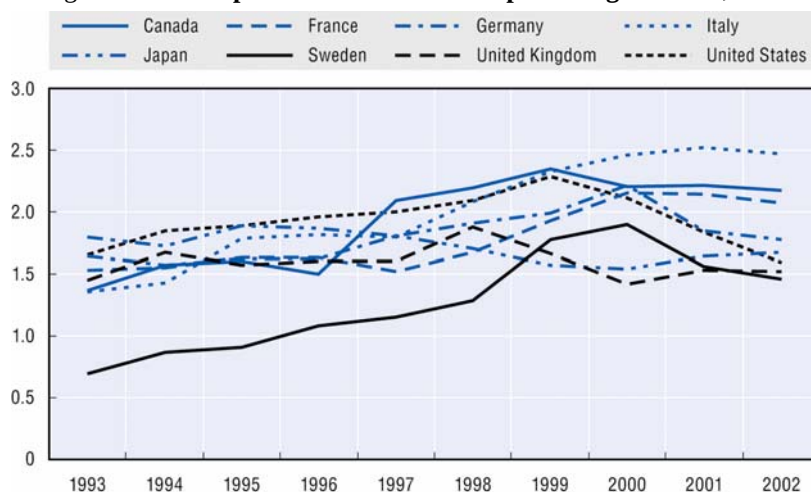
Integrating municipalities in regional housing planning strategies would support efforts to create a polycentric region through a bottom-up approach. Currently, municipalities have a responsibility to make plans for housing provision, while counties have to make development plans and economic plans (RUP and RTP). They are independently produced, which implies little coherence

and effectiveness. At the regional level of Stockholm, RUFS (the Regional Development Plan 2001 for the Stockholm County) gives a general overview of housing development, provision and needs for the next 30 years. That assessment was developed in dialogue with each municipality. This kind of joint planning by municipalities and counties should be further strengthened particularly in infrastructure policy, which would increase effectiveness of policy implementation and provide the backbone for a truly functional region.

Transport policies

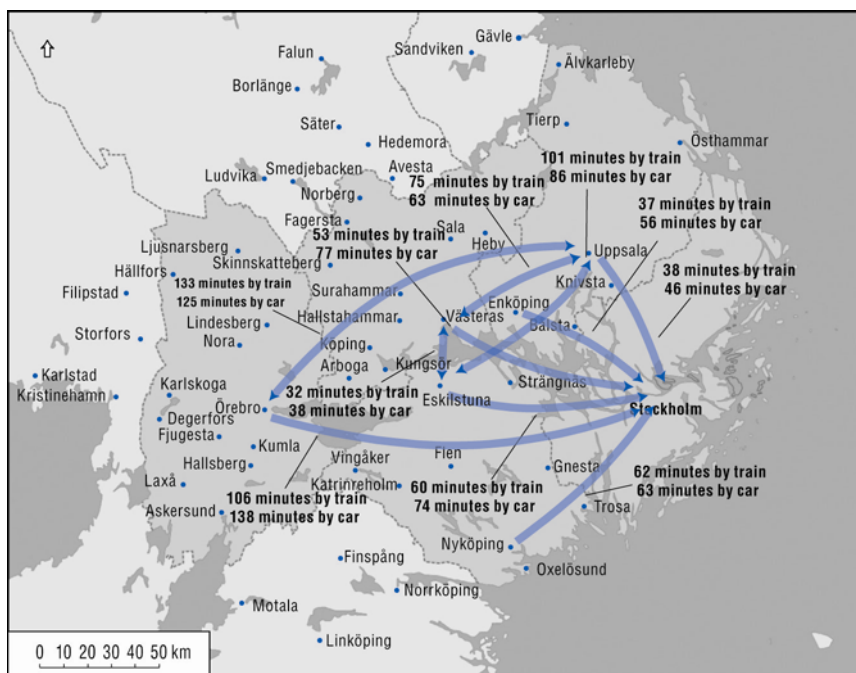
Accessibility problems and congestion in the Stockholm region is mainly due to insufficient public investment. In fact, investments in transportation remain low in Sweden overall and below the OECD average (Figure 2.8). Transportation network capacity has not kept pace with either local population growth or changes in the economy. From the 1960s to the 1990s, no major investments were made in the road network in the Stockholm region. Many of the small and medium-sized local labour market regions around Stockholm experienced in the 1990s an increasing population and an expanding economy. The more peripheral cities and labour markets in the Stockholm Mälars region often have a commuting time of one hour or more to the centre of the City of Stockholm (Figure 2.9).

Figure 2.8. **Transportation investment in percentage of GDP, 2003**



Source: OECD National Accounts.

Figure 2.9. Travelling time by train and car in the Stockholm Mälars region



Source: AF infraplan 2005

Since the early 1990s, plans have been developed to tackle the accessibility and congestion problem within the Stockholm Mälars region. Planned infrastructure investments in Stockholm County²³ are outlined in the County's Regional Development Plan 2001 (RUFs), which is in effect a wish list. The infrastructure investment planning is through an interactive process carried out by the county administration, the Regional Road administration and the regional Rail administration in connection with the national bodies of the separate administrations. The main focus of the plan is to increase regional accessibility by drastically improving bypass and through traffic, and improving accessibility for travel across the region, as well as connections with other regions and countries. The objectives for 2030 are to relieve congestion in the centre and enable greater traffic flow between the north and the south of the region as well as facilitate travel from suburb to suburb – which are the fastest growing relations – by allowing traffic to bypass the centre.

Several projects are also under way to improve the capacity of links, including Citybanan/Mälartunnel and Northern link. In the late 1990s, investments have notably been made to improve the capacity by adding

lanes on the access roads leading in to the central parts of the Stockholm Mälär region.²⁴ A new southern link on the ring-road (Södra Länken) around the inner city opened in October 2004. Upgrades have been made on major bridges, including capacity and safety improvements. Public authorities tend to favour railway, given growing interests in environment.²⁵ Accessibility to the entire Stockholm Mälär region would increase if the infrastructure through the central parts of Stockholm were improved and if the Stockholm Railway Station had a higher capacity. One strategic project, the Citybanan/Mälartunneln, is scheduled to open in 2011. This investment will allow for more intense local train services within Stockholm County and a comprehensive Regional Train system throughout the whole Stockholm Mälär region. It will also provide more long distance trains to and from the Stockholm City Centre during rush hours.

To address traffic congestion, Stockholm authorities are investigating a congestion tax, following the example of other OECD metropolitan regions (Box 2.9). After the Stockholm City Council adopted to conduct congestion charge trials in June 2003, the *Riksdag* (Swedish Parliament) passed the Congestion Charges Act in June 2004. Trials are planned from 3 January 2006 through 31 July 2006.²⁶ The primary objectives of the trials are to reduce congestion, increase accessibility and improve the environment.²⁷ The purpose of the (full-scale) trials is to test whether the efficiency of the traffic system can be enhanced by congestion charges. All costs are paid by the national government and the budget for the trials is SEK 3.8 billion. Although the congestion charge revenues will be a national tax due for legal reasons, it is planned that the revenues will be ploughed back into the Stockholm Region for investment in public transport and infrastructure. New bus lines and more park-ride facilities will be provided. A referendum on the permanent implementation of congestion charges will be held in conjunction with the general election on September 2006. Considering success in other cities, congestion charge will help the region become environmental sustainable for future. The referendum will be voted only by residents of the City of Stockholm, however the people living in surrounding communities who will pay this tax are not allowed to vote. To build wide support for the tax, the public sector needs to be transparent and accountable regarding the use of congestion revenues. To achieve congestion charges efficiently and effectively, the costs and their benefits should be carefully examined.

Box 2.9. Examples of the use of congestion charges in London, Trondheim and Singapore

Road pricing through directly charging users for using a section of a transportation network has a long history. The purpose of the congestion charge is more ambitious than imposing tolls to recoup financing for the road and related facilities, however. By making the fee cheaper during non-peak periods (and often free during the very early AM hours), it is possible to induce commuters to use alternative transportation during peak hours or to use the roads at other times. Revenues generated by the charge are often used to fund expansions of mass transit. But in addition, the charges potentially increase economic efficiency by improving traffic flows and thus reducing wasted fuel and driver time. They also improve conditions in the downtown area by reducing pollution, noise, traffic hazards and other negative externalities associated with congestion. Congestion charges, including those implemented in Singapore, London and Trondheim are imposed, sometimes at staggered rates, in order to reduce rush-hour flows of traffic into urban centres.

London

With traffic movement in central London severely hampered by congestion, the Mayor of London introduced a highly controversial congestion charging scheme (CCS) in February 2003, arguing that it would help to reduce congestion, improve the bus network and make central London generally more pleasant. The CCS provides for a charge of GBP 5 (EUR 7) per day for all vehicles moving within central London between 7am and 6:30pm on weekdays. Taxis, licensed minicabs, emergency services, and alternative energy vehicles are exempt from the charge and certain drivers are entitled to a discount, such as residents and vehicle breakdown services. Cameras, located on roads around the city centre, read car registration plates to make sure everyone has paid. The funds raised through the congestion charge must go back into the capital's transportation system. Although the tax still faces a certain amount of opposition, its general impact has been positive:

Public transportation networks are being used more frequently. As a share of trip making in London, public transportation increased by 0.7% from an estimated 33.2% to 33.9% in the period 2002-2003. In particular bus travel increased by 7%, although underground travel actually fell by 1% (City of London, 2005).

Congestion inside the charging zone was reduced by approximately 30% over the established pre-charging reference value (Transport for London, 2005). However, reductions in inner London were offset by growth in outer areas and as a result; road travel was unchanged at 11 million car/motorcycle trips per day (City of London, 2005).

Box 2.9. Examples of the use of congestion charges in London, Trondheim and Singapore (*cont.*)

The impacts of the charging zone on the boundary area surrounding it were largely neutral (Transport for London, 2005).

Although the charging scheme was introduced during a period of economic slowdown, research suggests that the impact on the majority of businesses and sectors in the area concerned has been marginal (Transport for London, 2005).

Trondheim

The Norwegian city of Trondheim has had a congestion charge for the past 10 years. Initially created to finance ring roads for the city that would relocate traffic away from the city centre, the congestion charge has also provided funds for improvements in public transport and a number of environmental projects. Despite initial opposition to the project, after several years of existence, most people came to accept it. At NOK 15 (EUR 2) the charge is significantly lower than that of London, GBP 5 (EUR 7). The toll is due to be removed in 2005 now that the city's ring roads have been paid for. Trondheim has introduced the world's first electric road pricing system for entering a city. 80% drivers have a transponder, a small plastic device on the windshield of each car communicating with toll booths and allowing money to be automatically deducted from the user's account (Vägverket, 2002).

Singapore

Manual road pricing was introduced in Singapore in 1975. At this point officers were making visual checks at each entry point. Electronic road pricing (ERP) was introduced in 1998. The charging areas are divided into central business districts, where the scheme applies from 7.30am to 7.00pm, and expressways/outer ring roads, where the scheme applies from 7.30am to 9.30am. The charging areas are much smaller than those in London. The congestion charges are paid by a CashCard that has to be fixed to the vehicle windshield. The charges are paid automatically as the vehicle passes under gantries. This CashCard can be bought and topped up at retail outlets, banks, petrol stations and automatic machines. The congestion charges resulted in a reduction of traffic in the charging zone during charging period by 13%. It reduced the number of solo drivers and vehicle trips shifted from peak to non-peak. The ERP system cut down a previously paper-heavy system.²⁸

The fragmentation in the responsibilities for public transportations between national and local governments, and between counties is a serious obstacle to the implementation of a coherent infrastructure development policy. Responsibilities for infrastructure development are complex and independently organised. For example, for railroad transportation, the

Swedish Rail Administration “Banverket” (central government) is responsible for the maintenance and development of the railway infrastructure and the distribution of available capacity in the railway system. The Rail Administration divides the country into five geographical units based on functional transport flows rather than the current 21 counties. Meanwhile, in many cases, counties are responsible for commuter trains within their respective jurisdictions. This allocation of responsibilities sometimes has caused inefficient outcomes for cross-county trips.

There are some positive examples of collaboration for transportation. One example is the ABC-co-operation – an informal partnership for horizontal co-operation between Stockholm and Uppsala counties, aiming at easier access between the two counties.²⁹ Public transportation companies of Stockholm (SL) and Uppsala (UL) decided to implement a joint project in 2004, for which the central government gave its authorisation in 2005. Another joint effort among the regional public transportation public limited companies in the five counties of the Stockholm Mälars region and the national railroad, SJ, will support the region’s commuters. In January 2006, they will launch a commuter pass that will be valid on all InterCity and regional trains in Mälardalen as well as express trains from Stockholm to distant cities in the region. This initiative expands efforts started with “Traffic in the Stockholm Mälars region” (TIM; Trafik i Mälardalen) by allowing the new commuter pass to be adapted to a personal travel profile so as to make planning and payment for journeys more convenient for the commuter. Yet another example is the *Hagaforum*, a supra-regional co-operation consisting of representatives from the county administrations and politicians of the Stockholm Mälars region, which promoted the Citybanan (railway tunnel) in the last national plan. *Hagaforum* also initiated the process of elaborating a common regional vision for transportation and traffic in 2030. The ongoing process involves 47 elected politicians representing different political parties from municipalities and county councils in the region.

Obstacles limiting collaboration with the private sector for infrastructure investment need to be addressed. The Arlanda Express train³⁰ is the first attempt of a public-private partnership (PPP) in Sweden, requiring a special law to remove different levels of restrictions. Arlanda Express is owned and operated by A-Train AB, which also planned and constructed the Arlanda rail link. When the link was completed in 1999, the railway facilities were transferred to the Swedish government. In return, A-Train AB leased back the link based on an exclusive concession, which gives them the right to operate trains on the link until 2040. In 2004 A-train AB was sold to an Australian multinational infrastructure investor (Macquarie Bank Limited). Stockholm and Sweden more generally, could take advantage of more

public-private partnerships for infrastructure development. The private sector could be involved earlier in the development planning process. In addition, the government could provide a better environment for the private sector to enter regional development by removing obstacles *e.g.* relaxing regulations, provide fiscal incentives *e.g.* low-rate lending, and make clear allocations of responsibilities (risks).

Box 2.10. Public-private partnerships (PPPs) in OECD countries

Public-private partnerships (PPPs) refer to the private sector financing, designing, building, maintaining, and operating infrastructure assets traditionally provided by the public sector. PPPs can also involve the private sector purchasing already existing infrastructure assets and redeveloping them. Public-private partnerships bring a single private sector entity to undertake to provide public infrastructure assets for their “whole-of-life”, generally 20-30 years. (The asset generally reverts to the government at the end of this period.) The private sector partner then charges an annual fee for the use of the infrastructure assets. This can either be paid by the government or through user charges, or a combination of the two. PPPs are also known as private finance initiatives (PFI), projects for public services, and private projects. PPPs have been most extensively used in the provision of transportation infrastructure, but other examples include schools, hospitals, office buildings, and water and sewage treatment facilities.

The objective of PPPs is to achieve efficiency gains through competition by private sector providers, transferring risks from the government, and taking advantage of private sector expertise. PPPs appear to be most appealing for large-scale projects that involve extensive maintenance and operating requirements over the project’s whole-of-life. This explains why highways are such prominent examples of PPPs.

PPPs have most commonly been applied for the provision of highway infrastructure. For example, Portugal’s ambitious EUR 5 billion National Road Programme employs PPPs. It is also used for other transportation infrastructure – such as airports and railways. The Netherlands is using a PPP programme to introduce high-speed rail links for the Thalys trains in the Netherlands. The new Athens airport was built on a PPP basis. PPPs are increasingly being used for environmental infrastructure projects such as water systems and solid waste facilities. In terms of number of projects, the greatest use has been for the provision of buildings – including schools, hospitals, nursing homes, prisons, embassies and general office buildings. In these cases, PPPs generally cover the building only and not the specialised services operated in the respective building.

The extent of use of PPPs should, however, not be exaggerated. In the United Kingdom, only about one-tenth of its total capital investments in public services in 2003-2004 are through PPPs and this has been relatively consistent over time. In other words, about nine-tenths of investments are conducted through traditional procurement practices.

Box 2.10. Public-private partnerships (PPPs) in OECD countries (cont.)

Appropriately structured PPPs have the potential to improve the efficiency of the design-build-maintain and operate phases. The largest analysis of a PPP program was undertaken in the United Kingdom in 2003 (United Kingdom Government, 2003). Nearly 90% of all PPP projects were delivered on time by the private partner whereas only around 30% of non-PPP projects were delivered on time. Four-fifths of all PPP projects were delivered on budget whereas only one-fourth of non-PPP projects were delivered on budget.

Lessons on PPP from OECD countries' experience indicate that the appropriate allocation of risk between the government and the private partner is fundamental to the success of PPPs. A common problem is the tendency for governments to retain the majority of the risks with PPPs. In addition, a comparison of the benefits and costs of PPPs versus traditional procurement needs to be rigorously conducted and PPPs should be subjected to at least the same scrutiny as traditional expenditures in the budget process.

Source: OECD (2005g).

2.3. Conclusion: Towards an integrated and coherent regional approach

Overall, the individual policies that are being applied in the Stockholm region for economic development are as good as those in its peer regions. In fact, many of them are probably more advanced. The issue for the Stockholm region is therefore how to maintain and grow from this position of strength. Knowledge-based policies (innovation, cluster and policies for SMEs and entrepreneurship) need to be integrated with policies that improve the enabling environment (such as transport infrastructure and housing) as well as with those that target less-tangible assets (human and social capital). Better co-ordination of investment decisions at a wider regional level is crucial for improving the competitiveness of the area and pursuing the integration of the Stockholm Mälars region.

There are a number of challenges to be addressed in terms of policy-making generally.

- *First*, the sum of the many individual competitiveness policies is less than the whole. The fragmented interventions do not send a clear and strong enough signal to the business community to influence firm behaviour. The lack of political leadership discussed above might be the main reason why it has been easier to launch many individually small programmes with limited co-ordination than an integrated overall strategy.

- *Second*, there is a bias towards efforts that are politically uncontroversial and fashionable. The openness to new approaches, like cluster development, is very positive. However, some efforts are focused more on a tool than the specific weakness in the business environment. For example, education has been a focal point in the efforts to increase entrepreneurship. While this is certainly a positive step, the incentive structure for small- and medium-sized companies is the more fundamental structural problem. Vocational training, although a useful tool to meet labour market needs and facilitate immigrant integration, appears to have fallen out of fashion.
- *Third*, the weighting of resources given to particular policy initiatives seems to favour the old economy, not the new knowledge driven economy. Support such as R&D funding and direct subsidies to firms has tended to go to established industries/major companies, generally through direct subsidies. This approach has been a key component of the Swedish traditional regional policy that was aimed at investing in hard infrastructure and saving old industries or struggling industries in the lagging Northern regions. Although national policies appear to be moving away from such a bias, it is as yet too early to distinguish rhetoric from reality.

A more coherent and regional wide economic development strategy is recommended. Even though regions experience short-term economic cycles, their market positions require the passing of generations before real shifts occur in the regional or global pecking order (Savitch and Kantor, 2003). In an increasing competitive, global and fluctuating economic environment, cities and regions must establish appropriate economic strategies with medium and long-term perspectives, and to implement them persistently. In preparing a strategic response it is important to examine the metropolitan region's objective position and to identify sources or potential sources of competitive advantage in detail, and to systematically analyse and evaluate them. An extremely wide range of factors can be targets for policy. In order to define policy strategies that are relevant for the regional/metropolitan context as well as fitting national policy objectives and constraints, it is essential to move from the listing of potential contributory factors, to an approach that sets priorities, assesses causal relationships in the regional economy, etc (OECD 2005a).

Stockholm needs to develop a strategy that clearly states the unique value the region intends to provide companies as a place to do business. Based on this positioning, the strategy would define an action agenda that targets those areas that are most critical for delivering the value promised.

One key element of such an action agenda is the integration of individual cluster efforts into an overarching strategy. Importantly, the strategy would also cut activities in areas that have less relevance from this strategic perspective. The region should define an action plan to manage the effects of growth whether or not it manages to define a competitiveness strategy. This would include efforts on infrastructure and housing that grow the capacity of the region in line with its economy and population. It would also include specific activities that ensure the availability of employees with low and medium-skills in the region, for example through vocational training programs and specific projects for low-cost housing.

A regional economic development strategy warrants governance structures that are consistent with the regional focus. There seems to be a clear consensus within the region, for the reasons described in this report, that such a structure is needed to strengthen the Stockholm Mälars region. The new structure probably needs the legitimacy of directly elected politicians to become the main forum for political decision making in the region, as simple co-ordination of the existing initiatives would be a positive step but insufficient. This is presumably easier to achieve at the level of Stockholm county (by shifting more resources and decision-making authority in that direction) than at the level of the entire the Stockholm Mälars region. Creating this new regional structure is a challenging undertaking but it would be very beneficial for the long-term competitiveness of the region (See chapter on Governance).

The creation of a Stockholm Competitiveness Council could be a concrete initiative to support the development of a regional strategy through political leadership and public/private dialogue (Box 2.11). Such a Council would be formally led by the region, county or municipal political leader (depending on the response to the previous recommendation) and a leading business executive. The council would include key representatives of the regional “triple helix” (public, private and research sectors). The Council could be given a key role in the development of an overarching economic strategy for the region (see Chapter 3). It could guide a number of working groups focused on specific clusters and cross-cutting issues. In these working groups, specialists from companies, government agencies, universities, and other institutions would identify specific actions and define responsibilities to execute them. The public sector’s role in the Council should be carefully assessed, as experience suggests that the private sector should have a key operational role if genuine partnership is to develop.

Box 2.11. Competitiveness Councils

The main purpose of establishing a competitiveness council is to provide a dialogue mechanism between the public, private, labour and academic sectors. Particularly by tapping the expertise and knowledge of those non public sectors, a competitiveness council is able to provide the government with well-substantiated and concrete policy recommendations and program of actions. It can also help to effectively mobilise the unique skills and resources of these non-government partners in implementing action recommendations. The establishment of a competitiveness council however should be deeply rooted in the national and regional socioeconomic and institutional context. The experience of building national competitiveness councils shows that they may differ in their institutional forms, membership, funding and focused areas when making policy recommendations. For example, in terms of the institutional forms, the Irish competitiveness council was instituted by an act of government. The council in Singapore was created based on a directive of the President of Singapore to the Ministry of Trade and Industry to study the future of Singapore's competitiveness. And the US Council on Competitiveness was created by a collation of company, university, and trade union leaders to work with government to "elevate national competitiveness to the forefront of national consciousness". The membership of each council represents a wide-range of sectors including senior levels of the government, private and public sector. Competitiveness councils may also vary in their specific duties and reporting requirements. The Irish council reports directly to the government to provide their work plans and specific recommendations on policy improvement. Ireland shows a most comprehensive reporting by providing an advisory benchmarking report and an annual policy recommendation report. A distinctive character of a competitive council from other forms of partnerships may be that rather than simply providing consulting and training services, it works hand in hand with the government in building and strengthening competitiveness policies. It should be noted however that although the councils provide strategies to the government, they do not supersede the ability and necessity of industries to get their own action agendas and strategize for industry competitiveness.

Competitiveness councils can also be built at the regional level to address local needs of facilitating local economic growth and building regional competitiveness. A particular example is the establishment of regional competitiveness councils in the State of Massachusetts. In 2003, in order to adopt a well co-ordinated approach to identify the state's strengths and weakness and maximising regional growth potential, Mitt Romney, the Massachusetts governor, set up six regional competitiveness councils, representing the following regions of the state: Berkshires, Cape and Islands, Central, Northeast, Pioneer Valley and the Southeast. Each of the six councils consists of about 25 members representing private businesses, higher education, and key elected officials in the respective region. They are each co-chaired by a local business leader and by the State of Massachusetts Secretary for Economy Development. The key difference (noted by Romney) between existing organisations and the new competitiveness councils is the inclusion of higher education leaders. Responsibilities of the regional councils include conducting an in-depth analysis of their regional climate, assessing local abilities to attract new companies, identifying companies and jobs are currently at risk, and developing a strategy to create opportunities by building on regional resources such as human capital, infrastructure and financial investments. The councils are expected to develop strategy documents for their regions that identify action priorities for government agencies as well as for the private sector and the research and education community. These regional councils was build in many ways on the experience from about a decade ago when Massachusetts created a Governor's Council on Economic Development for the entire State in response to its severe economic downturn.

Source: The Commonwealth of Massachusetts Executive Department (2003).

National policies should reflect the importance of the Stockholm Mälars region as an economic engine for all regions in the Swedish economy. Supporting Stockholm's economic growth has clear benefits for Sweden overall economy. The central government has a key role to play in helping other regions understand the benefits to them of Stockholm's economic growth. National policies that seek to contain Stockholm's growth, such as the current equalisation system and infrastructure investment priorities, do not support Sweden's international competitiveness. To keep in line with OECD trends, funding for policies and programmes with a regional dimension increasingly prioritise growth over redistribution. Likewise, consideration should be given to the impact of some ostensibly growth focused policies where on implementation the emphasis on ensuring equality appears to remain strong (such as the *Vinnväxt* programme which predominantly serve smaller, single cluster regions). The central government also has a role in promoting collaboration at the regional level and ensure that the powers and incentives are in place to ensure implementation of regional economic strategies.

Greater co-ordination and rationalisation of programs across governmental levels should be a priority. A number of OECD countries are increasingly focused on removing "programme clutter" by reducing the number of government agencies delivering programs and significantly consolidating the number of programmes. This streamlining is in response to feedback from the business community that is frustrated by all of the different and often overlapping government programmes, with different criteria, and delivered by different agencies. This clutter has detracted from the ability or willingness of business to engage in these programs, thereby reducing programme effectiveness. Sweden could take much more radical steps than it is now in reducing program clutter.

Notes

1. “We are not competing with Sweden but with the rest of the world.”, Rune Fransson, Director of the Karolinska Institutet, <http://www.stockholmregion.org/iusr/documents/Organisation/22-09-2003-med%20malar%20council.pdf>
2. The Stockholm BioRegion is an association of regional businesses, academic and public sectors and aims to turn the Stockholm region into an internationally competitive innovative entity in biotechnology and biomedicine along the axis of Strängnäs, Södertälje, Huddinge, Stockholm and Uppsala.
3. See USPTO database (<http://www.uspto.gov/patft/>) and European Commission (2002).
4. Recall the experience in mobile telephony where advanced demand conditions including a common Nordic standard were one of the driving forces for the later success of Ericsson, Nokia, and others.
5. The legislation to stop the provision of medical services through privately-owned companies is a recent example of how such an opportunity is missed.
6. See Fordel Stockholm Malardalregionen (2004b).
7. Funding for Time.Stockholm by the City of Stockholm was discontinued at the end of 2003.
8. En politik för tillväxt och livskraft i hela landet, 2001/02.
9. Orjan Solvell talks about the “Greta Garbo” effect, *i.e.*, Hollywood’s ability to attract the best global talent in movies.
10. This might also be one of the reasons why the integration of even skilled immigrants in economic networks proves so hard despite the strong political will to do so (see the next section).
11. The holding company at Uppsala University (UUAB) is, for example, a private limited company owned by the University that supports start-ups and spin-outs.
12. The Vice-Chancellors of Stockholm School of Economics, KI, KTH, Stockholm University, SLU and Uppsala University have recently formed a network which will co-operate in promoting the region to international researchers and attracting foreign investments in research. Stockholm Academic Forum is the result of co-operation between nine institutes in the region of Stockholm. The institutes have agreed on co-operation in

recruitment, student information and marketing of Stockholm as a region of excellence. The Forum is also running a web service where businesses can find competence within the system of higher education in Stockholm.

13. The assessment and validation of foreign qualifications still takes a significant amount of time and immigrants often have difficulty getting their degrees recognised in Sweden. In certain professions, a degree obtained abroad may not be accepted as equivalent to a Swedish degree, and employers may fail to understand exactly what qualifications immigrant candidates may have.
14. The new policy was presented in the Bill “Development and justice – A policy for the 21st Century” (Gov. Bill 1997/98:165). See Ministry of Justice (2003).
15. The Multiculturalism program pursues three general policy goals, which are: 1) Identity – fostering a society that recognises, respects and reflects a diversity of cultures such that people of all backgrounds feel a sense of belonging and attachment to Canada; 2) Social Justice – envisioning a society that ensures fair and equitable treatment of all and that respects the dignity of people of all origins; and 3) Civic Participation – working to ensure that everyone has both the opportunity and capacity to participate in shaping the future of their communities.
16. *www.vancouvereconomic.com*.
17. A new system for state interest rate subsidies for rental and cooperative housing construction introduced in 1993 was intended to reduce the government financial support, however, it has recently resulted in higher interest rate subsidies, when nominal interest rates are lower (around 5%) than the earlier system (more than 10%).
18. The effects of rent regulation on new construction of rental units will depend on the difference between the market rents and the regulated rents, and the elasticity of supply of rental housing. More discussion on this matter can be found in Economic Council of Sweden (2003).
19. Rent control on municipal housing was removed in 1950's while rent control on private housing was in force until 1968, when the indirect rent control scheme was introduced.
20. In the City of Stockholm, the number of conversions (municipal owned units 431 and other rental units 4 587) is almost double that of new constructions (2 715) in 2003 (City of Stockholm, 2003).
21. According to an inquiry made directly to the municipalities, some 55,000 flats in the non-profit rental housing sector were sold off during the period 1999-2002 to owners outside the non-profit municipally-owned rental

sector. 70% of the sales took place in the Greater-Stockholm area and more than a fourth within the city of Stockholm itself. In the Stockholm area most of the flats were converted to the cooperatively owned tenure form European Commission, EGUE (2004). In City of Stockholm, 5 000 dwellings have been converted to tenant-owner accommodations, of which 8.6% is from municipal rented (City of Stockholm, 2003)

22. See Martinson (2001), OECD (2005I) and European Commission (2004).
23. The Plan was confirmed by the National Commission Stockholmsberedningen, only partially approved by the National Parliament as a result of the National Investment Planning Process for the period up to 2015.
24. It is a joint financing: for instance, 25% of the Northern link (road) is financed by the City of Stockholm. The City banan (rail) under negotiation could be partly financed (25%) jointly by the City of Stockholm and the Stockholm County Council.
25. One aspect of infrastructure development is a concern for environment and landscape. In Stockholm two new tracks (as a result a quadruple track) are planned as the Mälar Tunnel connecting the northern part with the southern part is planned. The construction will start in 2006 and will add capacity of 400 trains per day. In addition, the Southern bypass of ring road, inaugurated in 2004, has a underground section of 4.5m tunnel, which have increased the capacity of 60 000 vehicles per day.
26. The single zone encompassing the inner city of Stockholm is designated and about 20 toll charging stations are located. Charges will be made automatically when passing into and out of the zone on weekdays from 6:30 to 18:30, with higher charges during peak hours. The charge per passage will be from EUR 1.10 to EUR 2.20 and maximum charge per day will be EUR 6.50. There are exemptions for taxis, public services, motorcycles and eco-friendly vehicles.
27. The secondary objectives of the trials: 1) reduce traffic volumes on the busiest roads by 10-15%; 2) increase the average speed on streets and roads; 3) reduce emissions of pollutants harmful to human health and of carbon dioxide; 4) improve the urban environment as perceived by Stockholm residents; and 5) provide more resources for public transport.
28. www.lta.gov.sg
29. There is an initiative to establish smoother access and develop Arlanda airport as the main hub in Sweden.
30. The Arlanda express train connects the Arlanda airport with Central Stockholm in 20 minutes.

Chapter 3

Building a metropolitan governance

Introduction

Over the past decades Stockholm has enjoyed noted successes, regularly quoted as one of the most innovative regions. This has been facilitated by mix of well performing public policies and institutions. Increasing opening to the international economy has shown that Stockholm is not an unchallenged leader but just one out of many metropolitan regions. As developed in previous chapters, maintaining Stockholm's liveability and hitherto strong performance in European and global markets requires rethinking its competitiveness strategy and capitalising on existing potentials for economies of agglomeration. The ability to meet these challenges will depend upon the institutional capacity to mobilise public, private and community resources in the long term. In other terms, the success of the implementation of policies and strategies strongly depends on an adaptive and innovative governance framework.

As in many OECD metropolitan regions, the current governance structure in place in the Stockholm region is outdated and not well adapted to the tasks it faces. Among the main challenges, there are:

- *The fragmentation of administrative jurisdictions within the metropolitan area*, which results in a mismatch between the existing administrative structure and the boundaries of the metropolitan region, and the absence of a metropolitan governance structure to deal with the issue. Stockholm has expanded geographically outward whilst old administrative boundaries have remained in place, creating a patchwork of municipalities within the urban area, each with its own vested interests to defend.

- *A comparatively weak and sometimes not functionally adapted intermediate level* represented by the counties, whose administrative boundaries do not fit the Stockholm metropolitan region. Created centuries ago, the counties neither reflect the Stockholm labour market area (which includes two counties) nor the expanded Stockholm Mälars region (five counties). The County Councils are simply another form of local government in the Swedish Constitution. Their responsibilities are mainly limited to health care (in some case regional transportation and economic development) in contrast with strong municipal autonomy and a strong central state level.
- *Limited horizontal co-ordination among local jurisdictions* (both municipalities and county councils) in certain areas of the Stockholm Mälars region which could result in transaction costs in the delivery of public policies and unexploited economies of scale and which, more importantly, does not allow the emergence of a regional vision to promote the competitiveness of the area. Existing institutional tools for horizontal co-ordination among local governments are limited but there are some interesting bottom-up initiatives.
- *Increasing strain on the financial/fiscal ability of local authorities* within the metropolitan area. Municipalities and counties in the Stockholm Mälars region enjoy a strong fiscal autonomy which makes the envy of many local governments in OECD countries. However, access to one single local tax, namely the income tax, exposes them heavily to economic cycles and stands as a disincentive to develop business offices and infrastructure investment. In addition, the current equalisation system that results in large transfers from the Stockholm region towards other Swedish regions is often viewed as an impediment to growth.
- *Loose inter-governmental co-ordination* due to the weaknesses within the current public sector administrative system and the lack of a comprehensive metropolitan policy from the central government. Coherence in the delivery and implementation of the current regional development policies is impeded by the lack of cross-sectoral co-ordination at the central level and a weak position of the central state administration at the regional level. The situation is further exacerbated by the fact that Stockholm is a large and complex metropolitan region.

- *Insufficient dialogue with the business sector* regarding economic development issues and lack of involvement in general of all non-public actors (business sector and civil society) in the debates related to metropolitan governance, the regionalisation process and administrative reforms.

This chapter starts by setting the Swedish institutional framework often referred to as the “hourglass model” due to the coexistence of strong central and local governments and a weak intermediate/regional level, highlighting the implications for the Stockholm metropolitan region. It will then address the issue of horizontal co-ordination reviewing existing institutional tools and bottom up initiatives. The different options to develop the metropolitan governance in the Stockholm region will be discussed, taking into account the current context for the regionalisation process in Sweden. In a third section, the focus will be on the role of the central government in metropolitan development, whereby the development of a new regional development policy is hampered by loose vertical relations, a weak cross-sectoral co-ordination at the central level and limited deconcentration of central level bodies at the local/regional level. The fourth section will address local finance issues for the Stockholm region. A particular emphasis will be put on the need to reform the current equalisation scheme in light of the pressure that the ageing population will exert on the system. The chapter will conclude with some general recommendations to improve the governance framework within the Stockholm region, which is the responsibility of all levels of government (it is the business of all).

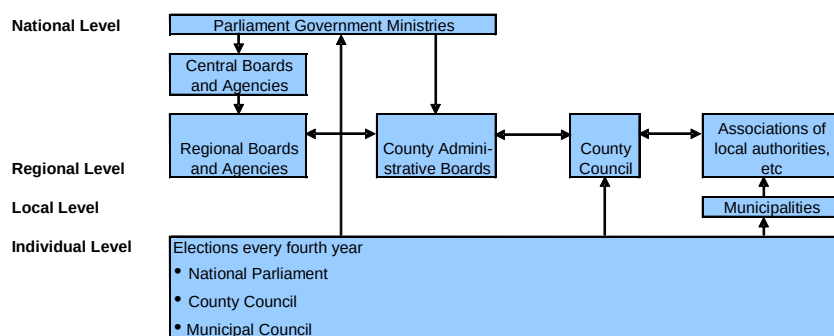
1. Stockholm in the Swedish institutional framework

1.1. Strong central and local governments with a weak regional level: the “hourglass”

The Swedish system of governance is characterised by centralised decision-making at the **national** level of government. Sweden is a unitary state, which is divided into 21 counties and 290 municipalities, thus it has three directly elected levels of government: the Riksdag (Swedish Parliament) at the national level, county councils at the regional level and municipalities at the local level (Figure 3.1). There is an undeniably strong central government, but not a large one. The central government *per se* is composed of only 9 ministries, the Prime Minister’s Office and the Office of Administrative Affairs. These offices and ministries collectively form the Chancery, where a total of about 4 500 staff are employed. These same

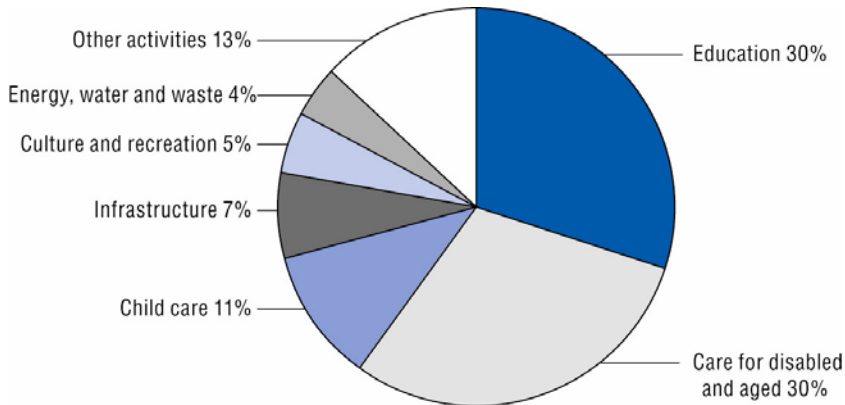
ministries direct over 300 agencies and central committees, which in turn employ about 250 000 civil servants. Decision making on overall national goals in such areas as health care, economic development and education is thus concentrated in the Chancery and its respective ministries, as is the monitoring of programme implementation to see that the desired results are achieved.

Figure 3.1. The Swedish institutional framework



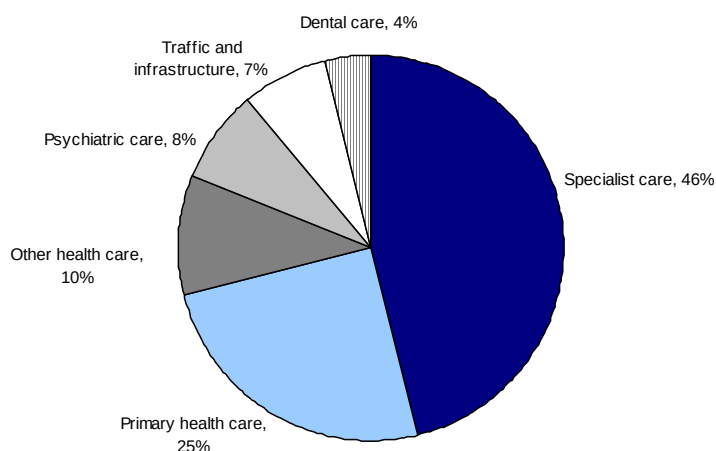
Source: Stockholm County Council.

Yet implementation is highly decentralised at the **subnational** -- and especially the municipal -- level. Sweden's 290 municipalities (*kommuner*) enjoy many far reaching responsibilities within a variety of fields. Sweden's extensive delegation of responsibilities to the local level, coupled with a comparatively large fiscal autonomy, provides municipalities with a high degree of autonomy from the central government. This approach allows for innovation in service delivery that responds to local needs. At the same time, increasing centralised decision-making on standards leads to a reduction of the flexibility of implementation by local governments. However, this does not mean that local governments are simply appendages of the centre. The high degree of local autonomy, a longstanding aspect of Swedish political culture, is also institutionalized in the 1974 constitution. The constitution requires either a national election or referendum prior to any change in the constitutional position of local government. By contrast, the central governments of most unitary states have a relatively free hand in making wholesale revisions to the structure, privileges and so forth of local governments. Municipalities' spending also occupies a very large role in the Swedish system, given heavy outlays on lower and upper secondary education, child care, elderly care, care of people with physical or intellectual disabilities, roads and water, waste and energy, and recreational and cultural activities (Figure 3.2). Municipalities own several companies (1 416 in 2003), mainly in housing and real estate.

Figure 3.2. **Basic spending categories of municipalities (in %), 2002**

Source: Statistics Sweden (2005).

The intermediate/regional level of county councils essentially provides health care and is weak both in terms of decision-making, implementation and political legitimacy. The regional level of administration, the 20 county councils, should be thought of as of another more specialised local level of government with a right to levy some tax rather than as a regional government that stands over the municipalities in Sweden's administrative hierarchy. Indeed, the Swedish Constitution includes only two levels of governments, local and national. However, since the 1862 reform counties have had an elected council which is independent from the national government. County Councils are primarily responsible for a large part of Sweden's healthcare. Over 80% of a county council's budget is spent on healthcare in order to implement nationally set standards. A little less goes to healthcare in the Stockholm County Council (76%), which is fully responsible for public transport that is normally a shared responsibility with municipalities. Some Swedish county councils have a wider role in promoting regional development (Figure 3.3). County councils receive very little earmarked state transfers and can raise their own taxes. Although health standards are quite strict, they have some freedom to decide on the health services they want to offer. However, in comparison to some local and regional authorities in other countries, their freedom to decide on both the level and type of the services they provide and on how they should spend their budget seems to be limited.

Figure 3.3. **Basic spending categories of county councils (in %), 2003**

Source: Ministry of Finance (2004b).

In addition to the County Councils, there are 21 County Administrative Boards which are branches of the central government at the regional level. They are seen as, ideally, an administrative bridge between the strategic goals of the national level and the implementation undertaken via local municipalities and County Councils. The boards have responsibility for the co-ordination and the implementation of the national policies in all counties. They also have some responsibilities for regional development. The boards are appointed by the central government. However, up to the reform in 2003, this board was appointed by the County Council, while the County Governor was (and still is) appointed by the Government. In about half of the Swedish counties, various solutions were found for transferring regional development tasks from the central government to local authorities.

1.2. The picture in Stockholm: weak and fragmented regional authorities

Strategic planning in the Stockholm Mälars region cannot be performed efficiently within the current institutional setting. As in most OECD countries, the geographical boundary of the Stockholm metropolitan region, whether defined by the functional labour market or by the expanded Stockholm Mälars region, does not fit one single administrative area. A number of issues, such as spatial planning and transport infrastructure,

housing and labour market policies, business clusters or private sector interests require a broader focus than that of the current 65 municipalities that form the Stockholm Mälars region (or the 36 municipalities within the Stockholm Labour Market). The county structure is also poorly adapted to deal with wider regional issues given the mismatching geographic boundaries with the Stockholm metropolitan region. Indeed, some of the counties are very small and the county limits are historic.¹ The Stockholm Labour Market area includes two counties (Stockholm and Uppsala) and the Stockholm Mälars area corresponds to five counties. These counties are all closely interrelated and interconnected on a functional basis.

Weak regional planning authority in Sweden is exacerbated by the institutional fragmentation that characterises the Stockholm Mälars region. The legacy of the Swedish “hourglass” administrative model is such that municipalities have extensive planning authority – often referred to as a “planning monopoly”. At the county level, the County Administrative Board (appointed by the central government) is responsible to draw up a regional plan by co-ordinating inputs from the central government for planning issues, especially linked to transport policy and environmental policy. However, in practice it possesses only a very limited scope to devise and enforce a regional plan, as the county plan is not binding for municipalities. In the Stockholm County, this responsibility has been transferred to the elected County Council, but here again, it is not binding for municipalities (Box 3.1). Even if County Councils were to have a more prominent role in the field of regional planning, their focus on healthcare might “cannibalise” the efforts and resources which they should direct to regional planning and economic development.

Box 3.1. Towards the integration of physical planning and economic development: the case of the Stockholm County Regional Development Plan (RUFS)

RUFS 2001 is a Regional Development Plan for the Stockholm County that was approved by the County Council in November 2002 and is valid up to 2008. RUFS is focused on physical planning and has its legally basis in the Plan and Building Act and the acts regulation on consultation.

RUFS serves as a point of departure for different types of plans for the region. The main focus of the plan is to increase regional accessibility by drastically improving the preconditions for bypassing and through traffic, and improving possibilities for travel across the region, as well as contacts with other regions and abroad. This requires co-ordination of land-use and transportation planning, as well as co-operation between different types of transportation. It is therefore often used as a basis for the selection of investments to be included in national planning for transport.

Box 3.1. Towards the integration of physical planning and economic development: the case of the Stockholm County Regional Development Plan (RUFs) (cont.)

During the process of developing the plan the perspective was widened to also include issues of innovation, integration and competence upgrading. Therefore, RUFs constitutes a unique Swedish example of the attempt to better integrate regional physical planning and regional development. It has also been recognised as the regional development programme (RUP) for the Stockholm County by the Stockholm County Administrative Board and national agencies. In 2005, an official revision and consultation process concluded that RUFs is still up to date.

The plan is based on five strategies that have evolved during the planning and consultation process; i) Increasing the region's capacity (housing and transportation, colleges and universities); ii) Strengthening the innovation environment of the region (educational and research resources) and creating regional cores in the outer areas; iii) Expanding and integrating the region together by improved interregional transport as well as internal connections; iv) Developing the structures and systems in the region and v) Internationalising the region (Openness, co-operation, exchanges and contacts with other regions by transport systems).

Source: Stockholm County Council (2003).

2. Horizontal co-ordination and metropolitan governance

2.1. *Inter-municipal collaboration: the state of the arts*

2.1.1. *A number of institutional tools...*

There are a variety of mechanisms in Sweden for allowing co-operation between local governments. Municipalities can enter into an *ordinary contract* on a specific object of co-operation (for example when one municipality needs to use space in a home for the elderly or capacity in a wastewater treatment plant that exists in another municipality). To provide for more extensive, organised co-operation, the parties can establish a *local government federation*. In such a federation, one or more municipalities may work together with one or more county councils. A local government federation may in addition be granted the right to exercise public authority, including decisions that affect the rights and obligations of individuals and companies. The number of local government federations in Sweden is growing and totalled 60 in 2000. Another form of co-operation is *joint ownership* whereby two or more municipalities or county councils form a joint board to handle a given operation, such as managing a school or a

health care centres. There were 22 of these in operation in July of 2004. Municipalities and county councils may also establish jointly owned corporations or foundations. These joint operations may not, however, include the exercise of public authority, such that decisions affect the rights and obligations of individuals and companies. Local governments operate about 1 600 corporations and foundations in Sweden. Although most of these entities are wholly owned by one municipality or county council they do represent a potential means of co-operation. The majority of these government-owned companies are created for sanitation services, energy distribution, public transport and property management.²

The Regional Co-operation Council is the most advanced form of local government collaboration so far. A Parliamentary Act from 2002 made it possible, for counties where all local municipalities agree, to form Regional Co-operation Councils, which are associations composed of the municipalities of the county. The County Council can be a facultative member. The Regional Co-operation Councils are indirectly elected and funded by a member fee. They are also partially funded by the state for the tasks taken over from the state representation at the county level, the County Administrative Boards. They are responsible for co-ordinating regional development work, deciding upon certain government envelopes for regional development, infrastructure planning and EU regional policy and structural funds. The members of the regional co-operation council can also focus on other items, such as public transport, cultural institutions, tourism, business development and international co-operation. So far nine counties³ have established Regional Co-operation Councils in Sweden. In the Stockholm Mälars region, Regional Co-operation Councils have been established in two out of the five counties (Uppsala and Södermanland) and there are on going discussions in one other (Örebro).

2.1.2...with an interesting bottom up initiative

At the Stockholm Mälars region level, there is an interesting initiative that has emerged from local and regional leaders. Collaboration among the Stockholm Mälars region's major localities date back to 1988 and become concrete in 1992 with the creation of the Council for the Stockholm Mälars Region (*Mälardalsrådet*) (Box 3.2). This Council was established as an informal non-profit organisation to facilitate exchanges of information and networking among the different jurisdictions on a voluntary basis. Its membership is composed of 5 county councils and 46 municipalities (out of 65). In 2003, the Council proposed a vision of creating an attractive region for individuals and businesses through a sustainable living environment in the context of growing global competitiveness. Since 2004, the Council has focused on several areas. They have worked to co-ordinate

infrastructure and transportation planning, Baltic Sea co-operation and awareness raising for global competitiveness. They have also fostered regional development and integration through co-ordinated work in the fields of the environment, business development and labour market, culture and tourism and polycentric development and planning.

Box 3.2. Collaboration among the Stockholm-Mälär region's major localities: from *Mälardalsgrupp* to *Mälardalsradet*

In 1988, a discussion group (*Mälardalsgrupp*) was created and acted as an informal forum for information exchange and discussions between the municipalities and county councils in the region. Much of the discussion focussed on the preservation of water quality of Lake Mälär which provides drinking water to more than 1.5 million inhabitants in Stockholm. One of the main objectives of this co-operation process was to prevent any pollution that could result from metal industries as well as the transportation of goods and chemicals. Infrastructure investment around the lake was also a major item of discussion as the region is projected to see a population increase of 600 000 up to the year 2030. The group itself initially consisted of civil servants from the four county councils located around the lake (Stockholm, Uppsala, Sörmland and Västmanland) and the four major municipalities in the region (the City of Stockholm, Uppsala, Eskilstuna and Västerås). In 1992, the discussion group (*Mälardalsgrupp*) became the Council for the Stockholm Mälär Region (*Mälardalsradet*), a non-profit special interest organisation with political representatives from the County Councils and the municipalities. Building on the earlier work of the *Mälardalsgrupp*, the purpose of the new council's deliberations was to promote integration and co-ordination on regional development issues. An important concern was the infrastructure planning, especially rail and roads, around Lake Mälaren.

The Council for the Stockholm Mälär region remains a non-profit and informal forum to facilitate exchanges and networking on a voluntary basis and has no official institutional framework. The vision presented by the Council is clear but lacks of practical measures and concrete mechanism to realize it. The Council has no formal role for regional planning and economic development. With a secretariat of five and a small budget of SEK 10.7 million coming from membership fees, it is currently a mere NGO which does little more than establish a network between the various public authorities in the region and strives to operate as a platform for raising awareness and promoting a common understanding of the main strategic regional development issues on the greater Stockholm Mälär region level. While creating an avenue for communication (in addition to Regional

Co-operation Councils and other local authority associations) is constructive for the purposes of dialogue, it does not provide any formal mechanism for decision making, conflict resolution or issue management.

2.2. Bolstering metropolitan governance at the regional level

Further horizontal co-ordination is required within the Stockholm Mälär region to deal with a number of regional-wide issues that cannot be performed efficiently at the current county level and in such fragmented institutional framework. These issues include transport and housing infrastructure, strategic planning and economic development. Overall, inter-municipal co-operation leads the way but current initiatives lack formal structures and mandates for arenas of co-operation. They act more as forums for discussion than action oriented, collective decision making organisations. Furthermore, it is very likely that the general public has little if any knowledge of their operation, possibly even of their very existence. The search for the appropriate solution has to take into account the current context of regionalisation process in Sweden and conducted in line with the ongoing discussions of the Parliamentary Committee on Public Sector Responsibilities (see below). The essential choice for Stockholm appears to be whether to set up a new organisation with directly elected representatives and independent finances or to adopt a “lighter” form of metropolitan governance, possibly by reinforcing an existing structure of co-operation.

2.2.1. The regionalisation context in Sweden

The debate on regionalisation in Sweden is a long-standing one. It was the prospect of Sweden’s accession to the European Community, and then the actual accession, which re-launched in the early 1990s the debates on regionalisation. The debates were fuelled by the new opportunities for transfrontier co-operation and access to the structural funds. In this regard, a number of approaches have been considered with a view to tailoring the intermediate level to the development of regionalisation. The most radical reform, which was discussed in a 1992 report, was to reduce the number of counties to between 6 and 12 and to set up in each resulting region both a central government department and a local authority with an elected regional council. Other approaches were advocated in the same report: *i*) reinforcing state responsibility at county level, in line with the concentration of state departments under the authority of the Governor; *ii*) developing inter-municipal co-operation: responsibilities currently held by the county council or the central government in the county would be transferred to the “super-municipalities” thus created; *iii*) reinforcing regional power by transferring attributions from the central government departments in the

counties to the elected county councils, perhaps accompanied by a reduction in the number of counties.

Regionalisation has regained a momentum with the new regional development policy. The debate on regionalisation and regional government were boosted three years ago when the official governmental regional planning and economic development objective was changed from redistribution to growth. This is a very important and almost ideological change and, if thoroughly implemented, its implications may be extremely empowering for regional governance and also for regional institutions. Moreover, it is very probable that this policy will continue even after the parliamentary elections scheduled for September 2006 and independently of the results thereof. As mentioned in Chapter 2, the logic and main objective of the national policy on regional development used to be aimed at ensuring the poorer regions did not lag behind the better-off ones and that discrepancies between the general development of the various regions is kept to a minimum. This objective called for small and rather weak regions and for a very comprehensive and complete equalisation scheme. While the equalisation system is not really brought into question, the new view on regional development requires that regions develop harmoniously and they all participate in the general development of the country. This should normally mean larger, more functionally integrated regions, which have a say in the regional development policies in order to adapt the measures implemented to the realities and needs of the region.

Experimental regionalisation policies in two regions since 1997 have proven positive and could serve as examples for other regions. These two regions are Västra Götaland (three counties including the City of Göteborg) and Skåne (2 counties). The experiment led to the amalgamation of the counties in the two regions and to the creation of 'Regional Councils'. These councils are in charge not only of the traditional county council tasks such as health care but also of the regional and economic development programmes, normally dealt with by the County Administrative Board. Later, a new regional division of responsibilities was introduced, two regions with directly elected political bodies – Skåne and Västra Götaland – one region with an indirectly elected regional council – Kalmar – and one region where a municipality assumes regional functions – Gotland. The regions have taken over certain tasks from the state, including responsibility for regional development, support of businesses and decisions on investment in regional infrastructure. These regions became responsible for regional development for a trial period. As to Skåne and Västra Götaland, whose geographical borders were also changed, the trial period has been prolonged until 2010. Kalmar and Gotland had their responsibilities prolonged on a permanent basis in accordance with the parliamentary bill. However, the

Congress of Local and Regional Authorities of the Council of Europe has highlighted a few elements of assessment in its report on local and regional report in Sweden adopted in June 2005.⁴ It stresses notably the fact that “the region has experienced an economic growth and capacity to administer a variety of development programmes, from transport to health care, that would not have happened if the trial had not taken place”.⁵ The report also mentions that the support from municipalities for the experiment has been strong. The preliminary assessment on this ‘decentralisation’ experience seems, according to this report, to be positive in these regions.

2.2.2. Which options for Stockholm?

An elected regional body

One potential solution to strengthen the regional level is a directly elected regional/metropolitan government endowed with its own finances. This kind of organisation would have the political legitimacy and autonomy to bring much clarity as well as efficiency into regional governance. A noted example of this kind of institution is the American city of Portland’s “Metro”, or Metropolitan Service District (Box 3.3). The problem with this sort of option is that it is likely to be politically unpopular. Fiscal powers would need to be displaced from one level of government to the newly created level. Yet, a body that will be in charge of a domain which does not provide a direct and clearly identifiable service to citizens is unlikely to increase transparency and to be considered as very useful by the citizens. In the case of Portland Metro, municipalities were already used to being extensively interfered with by the state level of government. So when they vested powers in a regional body, they were largely just shifting the locus of authority to a body whose council they would have direct representation in. In the Swedish case, a new regional institution of this type would mean a real shift of fiscal and administrative powers from municipal governments who enjoy very high levels of autonomy and have never experienced strong regional government. There seem to be very few, if any, scenarios in Sweden in which this kind of redesign of local government is politically possible.

Box 3.3. Example of an elected metropolitan government: Metro (Portland, Oregon)

The Metropolitan Service District, usually known as Metro, is a government for the Portland metropolitan area in Oregon, and the only directly-elected regional government in the United States. Metro serves more than 1.3 million residents in Clackamas, Multnomah and Washington counties, and the 25 cities in the Portland, Oregon, metropolitan area. Metro was created by voters to join the Columbia Region Association of Governments (CRAG) and the Metropolitan Planning Commission in a May 1970 election. Metro in its current form went into operation on January 1, 1979.

Metro is governed by a council president elected region-wide and six commissioners who are elected by district. Metro also has an auditor who is elected region-wide. Each elected official serves a four-year term. The council appoints a chief operating officer and an attorney. Metro has its own financing, predominantly from user fees, and has been one of the most effective planning bodies in the United States.

Metro manages the Urban Growth Boundary, which legally separates urban from rural land in the region. It also develops long-range development, transportation and land-use plans, handles waste disposal and environmental protection. Metro programs and planning tools help protect air, water, parks, natural areas and fish and wildlife habitat. More specifically, it performs the following functions:

- Provides land use planning and is responsible for maintaining the Portland-area urban growth boundary, a legal boundary which separates urban from rural land, and is designed to reduce urban sprawl. It co-ordinates with the cities and counties in the area to ensure a 20-year-supply of developable land.
- Serves as the metropolitan planning organisation for the area, responsible for the planning of the region's transportation system, though TriMet operates most of the region's buses and MAX light rail.
- Manages several park facilities, including Blue Lake and Oxbow Regional Parks, Howell Territorial Park, Glendoveer golf course, the Sauvie Island and Gleason Memorial Boat Ramps, Chinook Landing Marine Park, the Smith and Bybee Lakes Wildlife Area, Beggars-tick Wildlife Refuge, and fourteen pioneer cemeteries in Multnomah County.
- Is responsible for maintaining landfills and recycling transfer stations.
- Owns and operates the Oregon Convention Center, Oregon Zoo, Portland Center for Performing Arts, and Portland Metropolitan Exposition Center.
- Is responsible for regional fish and wildlife habitat protection and cartography.

Source: http://en.wikipedia.org/wiki/Metropolitan_Service_District and <http://www.metro-region.org>.

Within the Swedish context, the experience of regionalisation in Skåne and Västra Götaland could be adapted and implemented at least in the Stockholm County, or ideally at the Stockholm Labour Market area that includes the Stockholm County and the Uppsala County. The apparent success of the experiments of regional self-governments in Skåne and Västra Götaland opens up the question as to whether an asymmetrical approach might be possible with some regions adopting the Skåne approach. Such an asymmetrical approach is increasingly being adopted in other European countries such as the United Kingdom, Spain, France and Italy. In the case of Stockholm, the two counties of Stockholm and Uppsala would be merged into a single one. This new region would have an elected council and a president and would implement both the current tasks of the two county councils as well as regional and economic development planning. This solution seems to be the best. While it has already been discussed several times and it is still on the table of the Committee on public sector responsibilities, it is not yet clear whether it would be politically acceptable. A technical evaluation of the potential positive effects of the experiments of regional self-governments in Skåne and Västra Götaland is a precondition for making a fully informed decision. Any analysis of the possibility to apply this model to the Stockholm region should make a distinction between the objective results of these experiments, the possible differences in the situation of the three regions as well as the expectations of the public.

Lighter forms of metropolitan governance

Establishing an inter-municipal body could be envisaged without the creation of a new layer of government. In terms of efficiency, it may be second-best to rely on a co-operative mechanism rather than a self-financed and directly elected administrative organ, but it has its own merits of fostering communication and possibly limiting the tendency to bureaucratic mission creep. The lighter forms of inter-municipal bodies are generally in charge of mobilising local actors around a common strategic vision for the whole area such as in the Great Lyon Area or the metropolitan region of Bilbao. In certain cases, they are also responsible for providing metropolitan-wide services such as the Greater Vancouver Regional District GVRD in charge of drinking water, sewage treatment, recycling and garbage disposal (Box 3.4).

Box 3.4. Some examples of structure of light metropolitan governance

The Greater Vancouver Regional District (GVRD)

Canada's Greater Vancouver Regional District is voluntary organisation that has achieved striking successes in the Vancouver metropolitan region. This is a region confronted with enormous challenges from rapid growth, underinvestment in infrastructure and so on. Vancouver, like Stockholm, is a relatively small municipality located within a broader metropolitan region. The Greater Vancouver region is likewise similar to Stockholm-Mälardalen. Canada, like Sweden, has three levels of government. Many of the intergovernmental dynamics are therefore similar – multiple jurisdictions have direct and indirect roles on particular issues, regional planning and resource management is impacted by local government decisions, and conflicting policy priorities interfere with the effectiveness of initiatives. Although responsibilities are distributed differently in Canada, Vancouver's experience offers insight into the opportunities and challenges of intergovernmental collaboration from a local perspective.

The GVRD is a partnership between the over 20 municipalities that make up the Greater Vancouver metropolitan area. The City of Vancouver is a partner in the Greater Vancouver Regional District (GVRD). The GVRD's role is to: (i) deliver essential utility services like drinking water, sewage treatment, recycling and garbage disposal that are most economical and effective to provide on a regional basis; (ii) protect and enhance the quality of life in the region by managing and planning growth and development, as well as protecting air quality and green spaces. The GVRD serves as a collective decision-making body. The system is structured so that each member municipality has a say in how the GVRD is run. The GVRD's Board of directors is comprised of mayors and councillors that serve on members' local councils, on a representation by population basis.

A number of principles that guide the GVRD's structure and operations are relevant to the Swedish experience:

- *Accountability and transparency.* The GVRD is made up of locally elected officials, and meetings are usually open to the public. Because the GVRD does not have its own elected officials but rather is made up of representatives that serve on other bodies, local and regional governance is linked and separate councils cannot make political gain through opposition to their counterparts; they must decide together.
- *Avoiding duplication and redundancy.* The GVRD allows the regional authority to avoid the bureaucratic build-up and duplication often associated with full-blown two-tier regional governments.
- *Communication and collaboration.* The linkages between local governments and the regional district create an interface between local and regional issues. Each remains abreast of the others' priorities and plans. When a regional policy changes, other regional actors are fully aware of the implications of these changes.

Box 3.4. Some examples of structure of light metropolitan governance (cont.)

- *Formal decision-making and responsibility.* The GVRD is administered as a body that has formal responsibility for a number of operations. In addition, it can choose to take on other roles on a voluntary basis. This ensures that its role is not confused with other local authority associations, such as the Union of British Columbia Municipalities, which serves more as a political advocacy organisation.
- *The collective pursuit of a common vision.* The GVRD has created a liveable region strategy that is endorsed by all members. As a result, despite local differences, all partners have committed to pursue.

The Lyon Urban Region

The Lyon Urban Region (LUR) in France is an association that was created in 1989 on a voluntary basis by several departments – the equivalent of the county level in Sweden – and focuses on elaborating plans and strategies for economic and sustainable development at the level of the functional metropolitan region. LUR represents 2.6 millions inhabitants and gathers different sets of administrative levels: 4 departments, 700 municipalities as well as a number of intermunicipal bodies (50 associations of municipalities (*communautés de communes*), the Urban Community of Lyon that includes 55 municipalities, and the Community of Agglomeration of Saint-Etienne that includes 43 municipalities).

With a budget of EUR 540 000 funded by the different members, LUR focuses on elaborating strategic plans on a wide variety of topics such as: mobility within the region; sustainable development policies; attractiveness of the region, infrastructures, logistics, metropolitan functions. The goal is to define the functions and strategies of the whole metropolitan territory (accessibility, major infrastructures, green spaces) and to co-ordinate the ‘master plans’ of the different entities of the Lyon urban area.

The creation of Lyon Urban Region has optimised the economic development of the area, which is one of the most integrated in France. Co-operation was particularly successful in the areas of mobility, public transport (as tariffs were harmonised at the regional level), and sustainable development (with the elaboration of a common strategy in 1998). The openness of Lyon Urban Region to neighbouring urban areas (*Saint-Etienne Metropolis, Vienne, Villefranche, Isère, Ambérieu-Plaine*) favours the development of plans to build a polycentric metropolitan region.

In the case of the Stockholm Mälars region, this new structure of co-ordination should be given at least the responsibility for regional planning and establishing a common strategic vision. To remain within the existing Swedish framework, an option is to create a Regional Co-operation

Council for the Stockholm Mälars region. This would imply the dissolution of the current two Regional Co-operation councils and the creation of a single Regional Co-operation Council for the whole Stockholm Mälars region (covering five counties). Membership and rules of procedure would follow those which are applicable to the current Regional Co-operation Councils. The five County Councils would not be affected with respect to their core responsibilities in the field of health care. Only the Stockholm County would need to give up its responsibility concerning regional planning in favour of the new pan-regional council. Furthermore, it should be decided whether public transportation should be transferred to the newly created Council (a solution which could have advantages) or whether the current situation (public transport ensured by municipalities and by the Stockholm County Council) could persist (a solution which would raise less opposition). However, while the Regional Co-operation Council approach is clearly inter-municipal and has the advantage of a large and clear implication of all municipalities, it also presents a series of disadvantages. There is no clearly identified responsibility; therefore, with municipalities often having divergent priorities, such programmes are difficult to draw and to implement. The creation of a second (in fact, a third, if one counts the county administrative board) county level council might prove to be expensive and will definitely make the administrative structure and operation less transparent for the citizens. Besides, it is not clear whether these councils will be in a position to harmonise the positions of their members and to deal with the other partners (state agencies but also, very importantly, businesses, NGOs and others).

One option is to use the current *Council for the Stockholm Mälars Region* with some adaptation to render it more effective. The feasibility of a solution to create one single Regional Co-operation Council at the Stockholm Mälars region level has already been proven by the creation of the current *Council for the Stockholm Mälars Region* by a vast majority of the local authorities in the region on a voluntary basis. As it stands, this *Council for the Stockholm Mälars Region* has an NGO status and currently very little means to perform regional and economic development planning. A similar (or even the same) body, which would receive legal recognition and tasks, a coherent financing system and a set of rules of procedure could clearly help the region to prepare plans concerning its main axis of development. Ideally, it should be in charge of strategic planning for economic development and transport infrastructure.

A hybrid solution?

Ideally, a hybrid solution could be envisaged to reflect current development pattern of the Stockholm region. On one hand, the functional labour market of Stockholm will be represented by a direct elected regional body, if possible following the Skåne and Västra Götland model and by a merging of the current two County Councils, with some possible adaptation to reflect the specifics of this metropolitan region. On the other hand, a lighter form of metropolitan governance could be established at the Stockholm Mälars region, with the mandate to co-ordinate efforts for a common and shared vision for economic development and infrastructure planning.

3. Central government and metropolitan development

The role of the central government in metropolitan development is very narrow and the efforts that could support such development suffer from weaknesses in the intergovernmental administrative system. There is presently no comprehensive multi-sectoral metropolitan development policy in Sweden. However, the Stockholm region has started to benefit more from the new regional development policy that addresses all types of regions in Sweden, not just those lagging behind. Stockholm also benefited from the so-called ‘metropolitan policy’, however, this policy is only a neighbourhood action plan for distressed areas. To implement these regional and metropolitan policies, the central state has developed institutional tools which should help to encourage both vertical and horizontal co-operation among the different levels of governments. However, the effectiveness of such approach is hampered by obstacles linked with the intergovernmental governance system including a weak cross-sectoral co-ordination at the central level, insufficient devolution, lack of consistency in the geographical area of state policies, and blurred division of responsibilities among levels of governments. Introducing more financial incentives could help to target some objectives such as improved horizontal co-ordination and metropolitan governance.

3.1. Vertical co-ordination and collaboration

3.1.1. Loose intergovernmental relations...

Weak cross sectoral co-ordination on regional development issues at the national level impedes the establishment of coherent strategic plan at the local and regional levels. There is no one single entity at the central level

which co-ordinates the policies on regional development, but it is the responsibility of many different ministries and agencies, with no clear division of responsibility among them. For example, as to economic development, Ministry of Industry, Employment and Communications have responsibilities through its agencies including NUTEK, Vinnova, ISA, etc. Planning responsibilities of transport infrastructure are shared by each sector, that is, the state authorities (National Rail Administration and National Road Administration) and agencies (maritime and air transport). Other central state actors with important roles in planning include the National Board of Housing, Building and Planning and the Environmental Protection Agency.

Central government agencies dealing with regional development issues are not well co-ordinated with local governments. Municipalities, which have a quasi-monopoly on land-use planning, have tight relations with the main agencies that provide infrastructure. In their current form, county councils seem to have rather remote connections with the central government, its local representatives and its agencies. Furthermore, implementation of national policies at the local level is pursued either at the municipal, the county or other regional subdivision without a clear rationale behind it. For instance, whilst the Rail Administration is organised into geographical units based on functional transport flows, some policies such as the competitiveness oriented RTP and RUP are still implemented at the county level. This makes operational matters and further co-operation difficult for those that participate in regional infrastructure and economic development planning. The same is true for other national administrative agencies – particularly those in charge of road networks and education – which base their action on regional divisions other than those of the counties. National agencies, and especially the ones which are involved in the development of infrastructure, such as the National Rail Administration and the National Road Administration, usually prepare their own long-term development projects. Although they consult their own plan with counties and other administrations, it is not clear to what extent local inputs are integrated in the plan.

State co-ordination at the regional level could be improved by strengthening the position of the state representative at the regional level. In 1989, the County Administrative Boards were made responsible for co-ordinating activities of sectoral state agencies at the regional level. However, this extended mandate has not been easy to implement. The formal status of the sectoral state agencies has remained the same, thus state agency staff in local offices still directly report to the central government. Despite the importance of some county Governors' political status, in a number of cases, they are overridden by a stronger influence from both the

manager of the state-level agency and the municipal representatives, who tend to have a closer link to the central government and its ministers. In 2004, the Swedish government tasked the county administrative boards with an assignment to suggest how their state coordination at the regional level could be improved. The county administrative boards suggest in their recent published response, among other things, that the central government's instruction for the responsibility for implementing national objectives at the regional level must be more specific and coherent.⁶ Furthermore, they warn against setting up new national agencies for new issues and instead task the county administrative boards with handling these issues. Already existing national agencies could also cooperate more intensely with the county administrative boards in order to pursue their regional efforts.

3.1.2...with emergence of new tools of vertical collaboration

New tools of vertical collaboration for regional policies of the central government are developing in Sweden. This is in line with a trend in OECD countries whereby central governments have progressively revised their mode of relationship into a less unilateral and a more flexible form of interaction based on a partnership/contract approach with local governments. The two main types of instruments are the (i) Regional Development Programmes and the Regional Growth Programmes (RUP and RTP) and (ii) the Local Development Agreements.

(i) The Regional Development Programmes (RUP) and the Regional Growth Programmes (RTP) have been the main instruments of the new Swedish regional policy since 2001 focussing on regional competitiveness (See Chapter 2). Both instruments aim broadly to sustain regional growth and better co-ordinate efforts of local actors, through collaboration for the elaboration of strategic plans that set out ambitions for performance outcomes. They are elaborated at the county level either by the County Administrative Boards or by the Regional Co-operation Council when they exist and the new regional self-governments (in Skåne and Västra Götland). In the case of Stockholm County, a special legislation gives the County Council the responsibility for long term physical planning, transport planning and regional development. The timeframes for both types of programmes vary – UP being more long-term oriented than RTP. The **RUP** is like an umbrella programme which covers various sectors and acts as a basis for other strategies in regional development such as for RTP, EU structural funds, transportation plans, environmental plans etc. It is used for co-ordination and negotiation with the State and the local governments. The central government does not provide any guidelines as the RUP can be regarded as a master plan elaborated by the regional actors. The **RTP**, one of subsidiary programmes based on RUP, is programme-oriented, financed by

the public and private sectors and is voluntary. The central government is supposed to provide financial means or other assistance. Contrary to the RUP, RTP is not mandatory. However, the central government provides each county with detailed instruction and guidelines.

RTPs and RUPs could provide a useful mean to create synergies among actors but the weak position of counties combined with the lack or insufficient financial incentives do not help to ensure efficient planning and implementation of actions. The RTPs and RUPs should be made through consultation at local and regional levels but in practice, such co-operation remains difficult to achieve. The current weak position of both the county administrative boards and the county councils in regards to municipalities that hold substantive power in economic development impedes the effective implementation of these programmes. Municipality plans have no obligation to refer to the RUP – this happens on a voluntary base. The weak position of the governors does not allow them for representing appropriately the various departments of the central government at the regional level during steps of negotiation and implementation. Furthermore, the programmes are regarded as platforms for common understanding with no directed financial means allocated. The agreement should pinpoint the actors who will finance and co-ordinate implementation (public and private) and define how follow-up and evaluation are to be accomplished. For some regions, although not for the Stockholm Mälars region, the EU structural funds are an important source of funding. Both programmes are voluntary collaborations and financing contracts between parties, but they are not legally binding. Thus, not all counties have so far formulated an RUP since it involves no funding whilst all counties did formulate a RTP that is more closely linked with the budget. Both instruments can be categorised as regional development contracts, with the RUP being more a Programme Contract and the RTP an Implementation Contract, but they might be missing or weak for some of the aspects that define a contractual tool such as the goals, the nature of the transfers, the conditions attached to the transfers and the obligations of the different parties (OECD 2005a).

The effectiveness of the RTP and RUP tools is further compromised in such a complex and large metropolitan region as the Stockholm Mälars region. As they are individually prepared by five counties, the plan areas reflect neither the local labour markets nor the aspirational Stockholm Mälars region, complicating the elaboration and the implementation of a comprehensive economic development strategy. Informal consultations between the five neighbouring counties do exist but they will not ensure sufficient consistency and coherence of an action plan for the whole region. Furthermore, the Stockholm County has formulated a long term (30 years) overall vision regional plan entitled *The Regional Development Plan 2001*

for the Stockholm Region (RUFs 2001). RUFs fulfils the requirements for a Regional Plan according to the Planning and Building Act and has been adopted on these grounds; RUFs 2001 also constitutes the RUP of the Stockholm county. This plan, which was approved in May 2004 by the Assembly of the Stockholm County Council, includes a proposal that extends to the wider Stockholm Mälars region. In other words, further collaboration among the five counties has emanated from the regional level with no incentive from the central government.

Table 3.1 **RUPs and RTPs in the Stockholm Mälars Region**

County	Responsibility	RUP	RTP
Stockholm	County administrative board for RTP and the County Council for RUP/RUFs	RUFs 2001 equals RUP	Yes
Uppsala	Regional Co-operation Council	Yes	Yes
Södermanland	Regional Co-operation Council	Not yet (in 2006)	Yes
Västmanland	County administrative board	Not yet (in 2006)	Yes
Örebro	County administrative board	Yes	Yes

(ii) At the local level, Local Development Agreements (LDAs) have been developed as the main tool for the implementation of the new Swedish metropolitan policies but they are limited in area and scope. These agreements are elaborated by the districts, the municipalities and the State and implemented by municipalities. Several districts within the Stockholm region have benefited from such agreements.⁷ As mentioned in Chapter 2, LDAs target specific deprived district area focussing on measures to improve inclusion of segregated residents in the labour market, *i.e.* mostly immigrants. These instruments could not be considered as constituting a comprehensive metropolitan policy, as they address issues that are very limited, both in terms of geographic area and scope. While they follow a holistic approach from the point of view of labour market integration, they do not from the point of view of urban development. Experiences within OECD countries of urban partnerships focussing on distressed neighbourhoods have proved to be more successful when they adopt a multi-sectoral approach. The City Contract in France provides here a useful example of a neighbourhood action plan that engages one or several local governments along with the State to implement a pluri-annual program based on different measures ranging from labour market integration towards building renewal and business development. An important aspect of the City Contract is that it is negotiated within the broader State-Region Planning Contract to ensure that the policies are being integrated within a global strategy for the development of the urban region (Box 3.5).

Box 3.5. City Contract in France

Given the proliferation of municipalities, agreements and actors during the 1990s, the national government decided to clarify the institutional framework. In addition, the government established a legal framework which allowed inter-municipal and inter-governmental relations in urban areas to be based on contracts.

The French city contracts (*contrats de ville*) are one of these tools to enhance the collaboration between municipalities and the central government. They were introduced in 1993 to foster cross-sectoral collaboration for urban policy. They focus on distressed areas, and aim to sustain their economic development and to counteract social segregation in these areas.

The French city contracts are for a period of several years, usually seven, and serve as development programmes for urban distressed areas at the scale of the city or larger urban communities. More than 1300 areas and 6 million inhabitants benefit today from the actions led under the framework of *contrats de ville* under 247 such contracts. Other stakeholders than the State and local government actors are involved in the process: for instance housing and transportation agencies, as well as various associations and NGOs.

In a 2005 report, the French Senate recognised that French city contracts have contributed to facilitate horizontal collaboration at the local level – and notably to involve civil society in the decision-making process concerning urban issues. However, the Senate also criticised in its report the complexity of these contracts and their lack of readability. They are not well articulated with the other types of contracts such as those for urban agglomerations. The Senate report also states that city contracts have reached only 50 % of their objectives. The Senate thus recommend simplifying the procedure. An earlier 2002 Report of the *Cour des Comptes* had also recommended that the central government clarify the process and better articulate the differences between contracts linked to urban development issues.

3.1.3. A better catalyst for horizontal collaboration

The Swedish central government could be more active in promoting horizontal collaboration and more efficient governance at the metropolitan level. As mentioned before, further collaboration among local governments within the Stockholm Mälar region will help generate a regional economic development strategy. In the OECD countries, rarely have reforms of metropolitan governance emanated from purely local initiatives. In most cases, the state has played a leadership role either by imposing or by encouraging reform, with the logic that metropolitan authorities are necessary to promote the growth of cities and thus national growth. Two

examples of OECD countries seem to be particularly relevant for the Swedish/Stockholm case: (i) The metropolitan development policy in Finland for large cities with a specific approach for the Helsinki metropolitan region, a very useful comparison given the urban similarities between both countries; (ii) The French ‘metropolitan contracts’ that are a good example of partnerships between the central government and metropolitan regions, which take into account the functional region and promote improved horizontal and vertical co-ordination.

(i) The Finnish government, by proposing legislation for a reform of the Helsinki metropolitan area, has motivated local political decision makers to develop greater collaboration. The role of large cities in the national economy has also been duly recognised in Finland and a particular emphasis has been put on the Helsinki metropolitan region. In particular, the national government has been concentrating on improving the governance framework of the Helsinki metropolitan region for the past two years. As pointed out in the *OECD Territorial Review of Helsinki* (2003), lack of co-operation between municipalities where interdependence of problems – from immigration to economic development and housing – is on the rise, threatening the competitiveness of the whole metropolitan region (OECD 2003). A major challenge is to intensify inter-municipal co-operation in an operating area that reaches beyond the Helsinki Metropolitan Area Council area.⁸ In 2003, an *Advisory Commission on the Helsinki Region* chaired by the Minister in charge of regional development was established including representatives of several ministries, the mayors of the four core municipalities and regional council members of Uusimaa and Itä-Uusimaa. A proposal for legislation has been prepared and is still publicly debated.⁹ The positive dialogue based on this proposal concerns municipalities of the Helsinki Metropolitan Area (Advisory Committee of Helsinki Metropolitan Area), Central Uusimaa as well as a few other fringe municipalities. The core contents of a proposed agreement for co-operation prepared by 14 municipalities would cover housing, land-use and transportation. Co-operation would be voluntary, progressive and based on partnership principles. As a concrete first step, municipalities would prepare a common land-use strategy. A wide consensus has been reached between municipalities, meaning that if this model brings results, no legislation might actually be enacted. The proposals provide impetus for political decision makers bringing new dynamics to collaboration within the Helsinki Region.

(ii) The French metropolitan contracts foster greater collaboration among local governments belonging to a wider functional region around a competitiveness-oriented common project. The French government has long experience in fostering collaboration through establishment of inter-municipal structures such as urban communities that have been

encouraged by financial (intergovernmental contractual tools) and fiscal incentives. These initiatives have been pursued mainly to improve efficiency of the public sector in service delivery and to deal with territorial spillovers. More recently, the State launched a new policy for its metropolitan regions with the objective to develop projects that will support the competitiveness of the areas, including actions for economic development, access to infrastructure, research, higher education, cultural development, etc. In June 2005, fifteen metropolitan regions were selected to benefit from funding of the central government and to develop ‘metropolitan projects’. The projects will then be translated into formal contracts between the State and the relevant local actors (the first set of metropolitan contracts will be signed in early 2007). The amount of state funds is quite modest (EUR 5 millions for the first phase¹⁰) but has created an impulse among local leaders that have not been keen to engage into a common project.

3.2. Reorganisation of the central state administrative system

3.2.1. Towards further clarity of responsibilities...

Better vertical relations require a clarification of the public sector framework. The Parliamentary Committee on Public Sector Responsibilities (Ansvarskommittén) was created in January 2003 to examine the structure and division of responsibilities in the system of public administration. The Committee is composed of members of parliament and other representatives from the parliamentary political parties. In addition, high level experts from the central government offices and from the national association for local and regional authorities participate in the work of the committee. In December 2003, the Committee produced its first report entitled “Innovation capacity for sustainable welfare”. Among other things, the Committee proposed that the design of the regional system of public administration should be given special priority in the continued enquiry.¹¹ In June 2004 the Committee had its mandate expanded to include an examination of the relationship between the national government and the state agencies as well as the division of responsibilities between the state, the county councils and the municipalities when it comes to the system for health and medical care. In its second stage, the Committee purview includes: (i) requirement to assess whether local government co-operation can be an effective and suitable alternative to structural changes and the division of responsibilities; (ii) an examination of the control and co-ordination of public sector services, and in particular the use of rights legislation and framework laws; and (iii) the national government’s governance capability in regards to the regional and local implementation of programs and regulations¹² (Swedish Government, 2003).

3.2.2. *Improving state actions at the local/regional level*

Several options are possible to improve co-ordination on regional and urban development issues at the central level in Sweden. Within the OECD, the spectrum of models ranges from bodies charged with co-ordinating the activities of sectoral ministries to full-fledged ministries with broad responsibilities and powers that encompass traditionally separate sectors. In some countries, similar approaches have been applied to urban policy (Box 3.6). In any event, greater inter-ministerial co-ordination for regional development should go hand in hand with more efficient devolution policies which require better clarification of the role of Governors as the main coordinators of state agencies and local governments.

Box 3.6 Improving co-ordination of territorial policies at national level

The simplest and most common instrument for regional development is co-ordination through inter-ministerial committees and commissions. OECD governments all have numerous inter-ministerial committees to deal with cross-sectoral issues, among which there are generally co-ordinating bodies responsible for territorial policy domains such as regional policy, urban policy and rural development policy. Some co-ordinating structures are relatively informal, others are more structured. Austria, for example, has developed an informal approach that emphasises consensus building among different ministries, while Switzerland uses a more formal approach to policy co-ordination where ministries dealing with territorial development issues have to convene regularly in an inter-ministerial body.

Several countries augment cross-sectoral co-ordination mechanisms with the use of special units or agencies that provide planning and advisory support to help ensure policy coherence across sectors. In Norway, the Regional Development Unit of the Ministry of Local Government and Regional Development has been given responsibility to co-ordinate the regional dimension of the policies of other government departments, principally through inter-ministerial groups. In the UK, the Regional Co-ordination Unit – currently placed within the Office of the Deputy Prime Minister – was set up to implement cross-cutting initiatives and advise departments. In Japan, the National and Regional Planning Bureau within the Ministry of Land Infrastructure and Transport has developed a new perspective of territorial/regional policy and provided a network for local authorities as well as other local actors. In France, the DATAR (*Délégation à l'Aménagement du Territoire et à l'Action Régionale*) is an inter-ministerial body directly linked to the office of the Prime Minister (which co-ordinates national territorial policy and handles the planning contracts and the European Structural Funds) and receives the different ministries' information regarding their regional priorities and the strategic objectives identified by the regional prefects. DATAR also plays an important role in the allocation of funds: every year it collects budget requests from the regional prefects and allocates the budget to related ministries, and if necessary organises inter-ministerial meetings with the prefects and the ministries. When the ministries decide the amount of money they will distribute, they inform DATAR which in turn informs the local representative of the central government known as the prefect.

Box 3.6 Improving co-ordination of territorial policies at national level
(*cont.*)

While co-ordinating bodies represent an important tool, decision-making power remains principally in the hands of the individual sectoral ministries that implement policies. As such, while the planning stage is more or less well integrated, implementation is potentially compartmentalized. To overcome problems relating to sectoral implementation and in line with the increasing importance accorded to regional development policies, in some cases inter-ministerial co-ordination bodies have been empowered and given some responsibilities for implementation. The DATAR in France is an example of an inter-ministerial body that is charged with ensuring co-ordination but that also has a formal role in territorial development planning, decision-making and policy implementation. The Office of the Deputy Prime Minister in the UK has also evolved towards a broader and more active role than its original policy co-ordination remit. In Italy the Department for Development and Cohesion Policies within the Treasury Ministry has broad competence for programming and co-ordinating investments with particular reference to the Mezzogiorno regions.

The other approach to sectoral co-ordination is to overcome departmental boundaries by merging and combining departments. This is generally only a partial consolidation. For example: in 2001, Japan reorganised cabinet level ministries and agencies in order to establish more effective political leadership, improve transparency, streamline the central government, and improve efficiency. The new Ministry of Land, Infrastructure and Transport (MLIT) was created by amalgamating four ministries and agencies (the National Land Agency, the Hokkaido Development Agency, and the Ministries of Transport and Construction). The UK, similarly, created the Department of Environment, Transport and the Regions (DETR) which brings together several departments involved with spatial development. Responsibility for this large department rests with the Deputy Prime Minister, whose Office is also responsible for co-ordinating policy for the regions more generally. Nonetheless, the Department of Trade and Industry retains important regional economic development functions, and a range of departments and agencies combine to manage rural development policies.

Some countries have established regional development ministries, with broad responsibilities for different aspects of regional policy design and implementation. Good examples are provided by the former EU accession countries – Hungary and the Czech Republic, for example – in which regional development bodies were responsible for managing EU regional aids.

Some countries have also focused especially on the co-ordination of urban issues. Initially, Ireland entrusted these functions to the Office of the Prime Minister to give them political weight and Denmark created an urban commission comprised of key ministers. In the United Kingdom, various agencies and ministries are responsible for urban policy, but it is the Office of the Deputy Prime Minister which is the leader on the issue, responsible for inter-ministerial co-ordination. The Netherlands appointed a Secretary of State for Urban Affairs. France instituted an inter-ministerial delegation for cities (“*Délégation Interministerielle à la Ville*” – DIV¹³) to co-ordinate its actions, notably in the field of city housing.

Source: OECD (2005a).

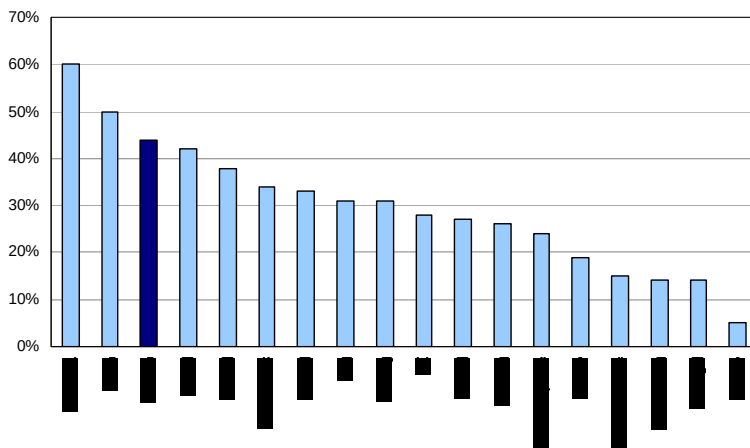
4. Urban finance and intergovernmental fiscal relations

4.1. High local fiscal autonomy

4.1.1. A relatively favourable local tax system

Overall, the Swedish intergovernmental fiscal system is considered to be favourable to local municipalities which enjoy a strong fiscal autonomy. A system of local finance can have a substantial influence on the competitiveness of region (Chemick and Reschovsky, 2005). Sub-national governments can be responsible for providing services that are relevant for the productivity, such as education and infrastructure, and the way by which they are financed can have a tremendous impact. In 2003, Sweden's total public sector spending was SEK 1 426 billion, of which 44.5% were sub-national government's outlays totaling SEK 634 billion. Compared to other unitary states, Sweden has a high ratio of overall general government spending being performed at the sub-national level (Figure 3.4). However, a high ratio in this respect does not automatically imply a great deal of effective decentralisation. As is seen in Japan, to take a notable example, some intergovernmental systems have a high ratio of local expenditure funded by massive transfers from the central government, leading to fiscal dependence that is generally believed to inhibit local autonomy (OECD 2005k). But Swedish local governments enjoy a constitutionally enshrined right to levy sufficient taxes to finance their extensive functions (Loughlin and Martin, 2004) and do in fact finance the bulk of their spending.

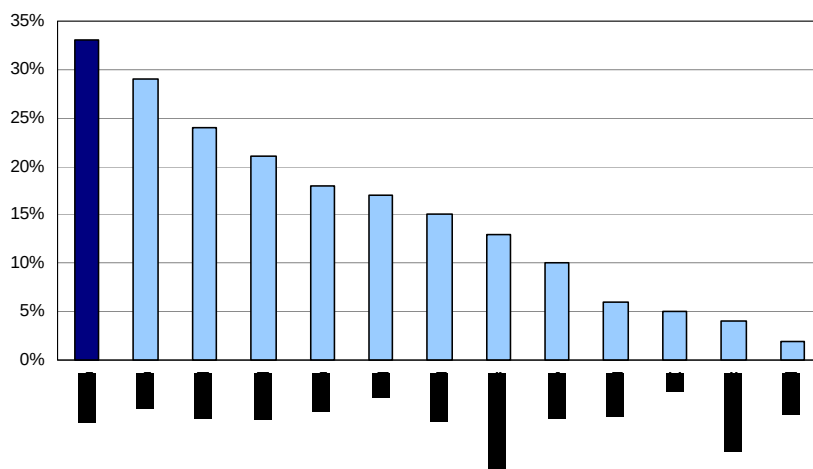
Figure 3.4. **Sub-national expenditures in unitary OECD states, 2003**
% of general government spending



Source: OECD National Accounts Statistics.

In contrast with most local governments in OECD countries, Swedish subnational governments levy a local income tax and are generally free to set the rate. Sub-national taxes account for a relatively large share of the local governments' budget both for municipalities and county councils. On average 65% of the municipal revenues in Sweden comes from local taxation, but it can vary widely per municipality.¹⁴ The budget of the municipality of Stockholm for example is financed for 82% by local taxes (City of Stockholm, 2004). The average percentage of sub-national local taxation in Sweden is very high from an international perspective (Figure 3.5). The local authorities are generally free to set a proportional rate for the income tax, barring occasional central government freezes,¹⁵ while the national government determines the income tax base and sets the tax rate for the higher income brackets, thus determining the national income policy. Successive reforms to the Swedish local income tax have, moreover, removed capital income from the local tax base, leaving it a tax on households' earned income. This means that the tax is assessed on all earned income, including income from employment, pensions, and parental allowances. For about 80% of taxpayers, the only income tax they pay is to the local level, as the central government's income tax is only applied to over middle-class levels of income.

Figure 3.5. **Sub-national taxes as percentage of total government revenues in unitary OECD countries (2003)**



Source: OECD Revenue Statistics.

The tax rates in the Stockholm Mälars region are consistent with other regions. Local income tax rates in 2004 averaged 20.8% for municipalities and 10.7% for the county councils, while the overall burden from both varied regionally from 29% to 34%. In Stockholm County, the aggregate local income tax rate for 2004 was 31.0%, with 18.81% for the municipalities and 12.27% for the County council (the latter being the highest county council tax rate in the entire country). In the City of Stockholm, though, the municipal rate was a little lower at 18.08%, leaving the aggregate municipal and county council rate at 30.35% (Table 3.2).

Table 3.2. **County council and municipality tax rates, 2004**

County/Municipality	% of household earned income		
	Total tax rate 2004 (%)	Tax rate municipality (%)	Tax rate county council (%)
SWEDEN	31.51	20.8	10.71
County level			
Stockholm county	31.08	18.81	12.27
Uppsala county	31.88	21.51	10.37
Södermanland county	31.26	21.54	9.72
Västmanland county	31.50	21.22	10.28
Örebro county	31.99	21.31	10.68
Västra Götaland county	31.79	21.54	10.25
Skåne county	30.69	20.30	10.39
Municipality level			
City of Stockholm	30.35	18.08	12.27
Uppsala	31.90	21.53	10.37
Eskilstuna	31.70	21.98	9.72
Västerås	30.77	20.49	10.28
Örebro	31.90	21.22	10.68
Göteborg	31.80	21.55	10.25
Malmö	31.23	20.84	10.39

Source: Statistics Sweden.

4.1.2...but with risks for tax rate increases and high volatility...

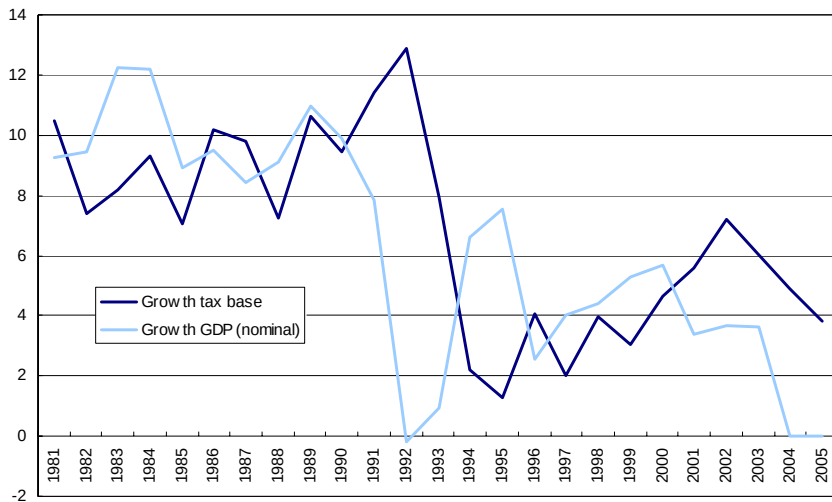
Municipalities and county councils in the Stockholm Mälars region over the last decade increased tax rates considerably. A rise in local tax rates can lead to undesirable consequences for the central government, because it can

hinder attempts to stabilise the economy and could lead to irresponsible wage rises. Two local tax hikes have occurred during 1994-1996 and one beginning in 1999 mainly caused by tax increases from the counties of Stockholm, Uppsala and Södermanland. Over the period 1999-2004, tax increases for Stockholm, Uppsala and Södermanland counties amounted to respectively, 8%, 4% and 4%, *i.e.* higher than most of the other regions that had an increase between 1% and 3%. This last upward tax creep eliminated more than one quarter of the tax relief granted by the central government in 2000 and 2001. The central government has tried to prevent the increases in sub-national tax rates, by subsequently capping local tax rates and cutting general grants. Since such capping has been suspended, sub-national governments can in principle still raise their tax rates. Since a considerable part of the population seems to consider the current level of taxation near the maximum of what is acceptable, in practice, the room for significant increases in tax rates seems to be limited.

Access to a single tax source exposes local governments in the Stockholm Mälars region to economic cycles and discourages business attraction and infrastructure development. The income tax, the only local tax for both municipalities and county councils, is a volatile and pro-cyclical income source. In other words it moves in the same pattern as the general business cycle and is subject to variations. These revenue characteristics could hinder effective sub-national planning. Although changes in the income tax base are not exactly the same as the developments in GDP, they seem to be closely related (Figure 3.6).¹⁶ Since the revenues of the income tax finance a large part of the municipal (and county council) budget of Stockholm, much larger than in many other Swedish regions and municipalities, the budget of Stockholm is relatively more pro-cyclical. Other municipalities are to a larger extent financed by intergovernmental transfers that are less pro-cyclical. In addition, the lack of a balanced tax base risks weakening incentives to attract businesses and to invest in infrastructure. As there is neither a local business tax nor a local property tax in Sweden, local authorities have been reluctant to develop regional infrastructure. This has been illustrated in Stockholm where some local leaders asked for the destruction of the Bromma airport¹⁷ in order to build an apartment complex of 6 000 units.

Figure 3.6. **Pro-cyclicality tax base, Sweden 1981-2005**

In per cent



Source: Based on data by Statistics Sweden (SCB).

4.1.3....suggesting diversifying local revenues' sources

Reinstituting a property tax as a sub-national tax would help smooth out local revenues as well as balance local economic development decisions. Considering the large range of decentralised tasks in Sweden, the property tax alone would not be a sufficient source of sub-national financing, but it could partly replace the sub-national income tax. This would make sub-national revenue sources more stable, although only to a limited extent since the amount of sub-national spending far exceeds the current revenues of the national property tax. The property tax is about 4% of the local tax revenue. There is precedent in the Swedish context for this kind of local taxation. From the 1920s the property tax provided part of municipal revenues in Sweden, though gradually the local income tax became the more important municipal tax. In 1953 the property tax as a separate local revenue source was abolished and was replaced by a guaranteed sum of income from property that was given to municipalities. The guaranteed sum of property tax revenues was abolished in relation with the 1990-1991 tax reform. It may therefore be wise to devolve at least some of the property tax to the local level. In that case, it will then be important to consider the differences in property values between Swedish regions, which might result in uneven distribution of incomes from a property tax.

Although user fees can be an efficient local revenue source and promote greater liveability, their use is not promoted by the central government. One reason for this is that it puts most pressure on low income groups. User fees can however be efficient revenue sources since they put a price on a service, and thereby create transparency. This could enhance accountability. User fees provide about 7% of the City of Stockholm's budget. Although it is not a particularly low percentage, some countries with sub-national expenditures comparable in extent, have managed to finance a higher percentage of their revenue by fees. Municipalities in Norway, for example, get 14% of their revenues from fees and user charges. The Swedish central government effectively put a clamp on the fee increases in the 1990s and various central government decisions have placed restrictions on how much municipalities could charge in the form of fees for pre-school activities and elderly care. Swedish local governments have been reported to desire more flexibility with fees, as they can be used to influence demand for services.¹⁸ Low reliance on user fees appears to be due to the citizens' dislike to pay "double" for services they already fund through their taxes. One alternative solution could be to adopt a form of "smart taxation", a way of financing that tries to realise several goals at the same time, such as a congestion charge (See Box 2.9 in chapter 2).

4.2. A highly redistributive equalisation scheme

4.2.1. A main tool for egalitarianism

Massive regional redistribution takes place via the Swedish equalisation scheme. Most of the unconditional grants (which represent with earmarked grants the second largest source of local revenues) are related to the system of inter-governmental equalisation.¹⁹ There are large inter-regional fiscal gaps to equalise in Sweden. Two-thirds of the revenues of Swedish municipalities consist of receipts from the local income tax, and the average per capita revenues vary greatly from municipality to municipality. The tax base varies from an average of SEK 112 816 per inhabitant in the rural, south-eastern municipality of Högsby to SEK 250 479 in affluent and central Danderyd. The equalisation system is very ambitious. It aims at equalising 100% of the spending needs and a large part of the tax base (personal income) (Box 3.7). According to some authors, the grants system offsets somewhere between 62.5% and 100% of the potential revenue loss from lower fiscal capacity. This percentage is relatively high compared to the equalisation achieved in other countries (Chernick, 2004). One could thus conclude that the objective of equity is effectively reached.

Box 3.7. The Swedish equalisation scheme

Through income equalisation the central government transfers grants to municipalities that have a per capita income tax base smaller than 115% of the average tax base. The grant compensates 90% of the difference between what a county council and 95% of what a municipality gets from its own local income tax (using an average tax rate) and the revenues derived by levying an average tax rate on a tax base that is 115% of the average per capita income. Municipalities with a tax base bigger than 115% of the average will have to contribute 85% of the revenues they get from having an above-average tax base (supposing again that they are using the average tax rate). The principle for county councils is the same, although the exact numbers are different: the percentage for them is not 115% but 110%.

The cost equalisation among municipalities is based on standard spending assessments in nine different areas. In these assessments the standard costs for providing a certain service to certain kinds of citizens are calculated. One example is child care: when a municipality has relatively more children than other municipalities, it has to shoulder more costs for child care and is thus compensated for this by the cost equalisation scheme. The principle of the cost equalisation scheme for county councils is the same, although it has only two different areas of spending assessments.

4.2.2...for which Stockholm is the main contributor

Eleven of the thirteen municipalities that have to pay for the municipal equalisation scheme are located in Stockholm County. In the current equalisation scheme, thirteen municipalities are net contributors while 277 municipalities gain from it. The largest contributor in absolute terms is the municipality of Täby (in Stockholm county), which contributes SEK 460 million. The next largest contribution totals SEK 350 million and is made by the municipality of Stockholm. The largest contributor in per capita terms comes from the wealthy municipality of Danderyd (in Stockholm county), with SEK 11 054 per inhabitant. The inhabitants of the municipality of Stockholm themselves pay SEK 454 per inhabitant. The municipalities that profited most from the equalisation scheme were Malmö and Göteborg which receive approximately SEK 2.5 billion and SEK 1.7 billion respectively. In per capita terms some municipalities in the northern part of Sweden reap the highest returns from the system.²⁰

Stockholm County Council is the only county council nationwide that is a net contributor to the county council equalisation scheme, and the other four county councils in the Stockholm Mälars region receive very little. The system of equalisation among municipalities is largely replicated at the county council level, as is the rather lopsided pattern of many recipients and

very few contributors. In fact, Stockholm County Council is the only net contributor and pays a fee of around SEK 2 billion (SEK 1 074 per resident). The other 20 county councils all receive a grant, the largest grants going to the southern counties of Skåne (SEK 2.4 billion) and Västra Götaland (almost SEK 2.5 billion). The largest per capita grant goes to Gotland in the south (SEK 5 287 per resident) and two counties in the north, Norrbotten (SEK 4 300 per inhabitant) and Jämtland (SEK 4 113 per inhabitant). Stockholm County Council is a net contributor since its tax capacity is considerably higher than the average of the other county councils. According to the cost equalisation scheme, the structural costs for the tasks delegated to county councils (health care and public transportation) are slightly higher in Stockholm than in the average county council. But these higher costs do not outweigh the income equalisation aspect of the system.²¹ The other four counties in the Stockholm Mälars region receive smaller grants. The largest recipient in the region is Örebro, which receives SEK 2 095 per inhabitant and SEK 573 million in total. Uppsala which has the lowest structural costs for the tasks delegated to the county councils receives only SEK 156 per inhabitant, or SEK 47 million in total.

The lack of transparency concerning which municipalities and county councils contribute and how much has been further obscured by a recent fusing of equalisation and general grants. The figures provide some insight into the relative positions of different municipalities and county councils, but they do not give a comprehensive picture of who gains and who contributes to equalisation and by how much. This is because the equalisation scheme does not simply shift funds among the municipalities and the county councils. The central state finances most of the general grant from its own resources. This practice obscures the real net contribution of a given municipality or region, and the problem has been exacerbated by reforms undertaken in 2005. Prior to 2005, the equalisation grant and the general grant were separate, but as a result of the reforms the two grants are fused into a common system. This pooling of funds has produced an equalisation scheme that, on the surface, leaves the impression that fewer municipalities are net contributors and that they are actually contributing less than before. Whereas 24 municipalities were contributing to equalisation in 2004, this number has dropped to 13 in 2005. Yet the central government funds distributed in the scheme are themselves taxed out of local areas, so the system has large regional redistribution effects.

The actual contribution of Stockholm county taxpayers is higher than its direct equalisation payment, since the general grant to other regions is to a large extent paid by the indirect (central) tax revenues that they generate. Some of the 26 municipalities in Stockholm county get a grant and some have to pay a fee, but in total they contribute SEK 136 million in 2005.

Stockholm County Council itself contributes SEK 2 billion to the equalisation scheme for county councils. On the surface, therefore, the Stockholm region seems to pay a little over SEK 2.1 billion for the equalisation. However, the net equalisation grants paid out in 2005 total SEK 42.6 billion for municipalities and SEK 12.6 billion for county councils. This means that the central government transferred a total of SEK 55.2 billion for the equalisation scheme. By contrast with, say, the interregional equalisation system in Japan, there is no earmarking of revenue sources to fund the Swedish system. Taking as an assumption that the equalisation scheme is financed nationally by revenue from indirect taxes such as a value added tax, and since taxes levied in the Stockholm region are the source of 54% of the central government's indirect tax revenue,²² it could thus be argued that Stockholm pays SEK 30.2 billion (54% of 55.2 billion) to fund the equalisation scheme. Combined with the fee of SEK 2.1 billion that it has to pay from its own resources, the net transfer from the Stockholm region to other regions comes to approximately SEK 32.3 billion.

The City of Stockholm is a net contributor because it has a larger tax base per capita. The cost equalisation scheme also does weigh certain regional characteristics relatively heavily. However, certain costs that weigh more heavily on the City of Stockholm and its surrounding municipalities do not seem to be included with equal emphasis. An example of these costs is the relatively higher salary level in Stockholm. Although the equalisation system should not provide incentives to increase wages (by paying the bill via a higher cost equalisation grant), it does not seem wholly justified to ignore the higher costs of living and the tighter labour market in Stockholm that results in higher salaries. For Stockholm, this element could have an impact in two ways. First, since higher wage costs are not taken into account in the cost equalisation scheme, Stockholm is not compensated for some of the higher costs it almost certainly bears in its own spending. Second, since higher salaries in turn mean a larger tax base, Stockholm ends up having to contribute more funding to the income equalisation scheme. In addition to the matter of salary levels, it appears that there are other factors missing from the equalisation scheme. For example, it might be useful to take into account the income generated by public municipal companies (that generated a net profit of SEK 3 billion in 2003 that is unevenly spread over the country) and to compensate for the premium that has to be paid to doctors willing to go to the northern part of Sweden. Including these items would not favour Stockholm, but would appear to be valuable in an overall revamp of equalisation's cost calculations.

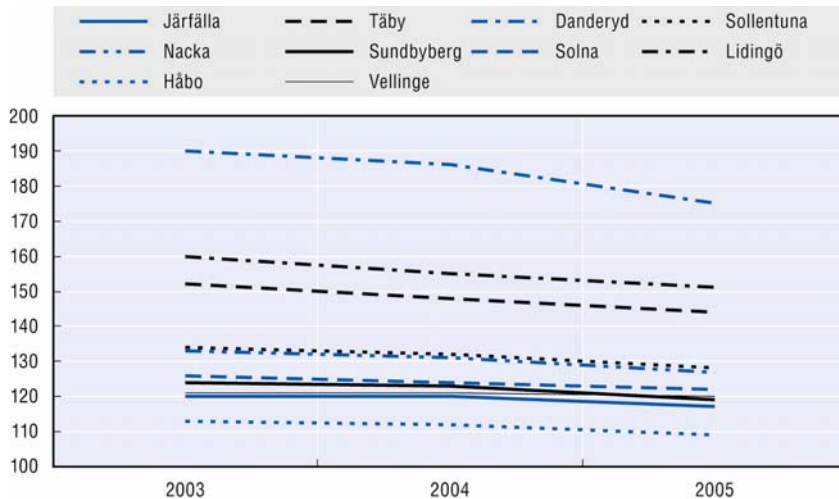
4.2.3. *Incentive effects...*

The structure of income equalisation discourages subnational governments from investing in activities that increase the tax base and integrate low income and unemployed residents. If a jurisdiction's tax rate is less than the national target rate, then the net equalisation revenue received by the municipality would decline if its tax base were to increase. Since one could expect that relatively lower tax rates are to be found in jurisdictions with relatively higher tax capacity, this would imply that over time the tax capacity will grow slower in jurisdictions with high tax bases. Furthermore, municipalities will face less direct pressure to improve efficiency in service delivery. By reducing the responsiveness of the tax price to a municipality's fiscal choices, its signalling value weakens and the community is less likely to achieve the optimal tax rate. A further downside from the cost equalisation scheme is that the equalisation grant declines in value as the share of unemployed and low-income residents falls. In other words, the equalisation scheme actually penalizes the municipalities for trimming the ranks of the unemployed and low-income workers – since their benefits are paid by the central government, they cannot keep the expenditures that they saved by reducing unemployment. This might not be the best incentive for municipalities to integrate local residents into the labour market. From fiscal year 2005, the percentage contribution from municipalities with a tax base bigger than 115% of the average per capita income has been reduced from 95% to 85%. For the county councils with a tax base bigger than 110% of the average, the percentage has been reduced from 95% to 90%. This alters the effects of the equalisation system to some extent, but still leaves many of the incentive effects of the equalisation scheme in place.

Within the Stockholm region as a whole, the relative reduction of the tax base was considerably higher in those municipalities that are the largest net contributors to the equalisation scheme. Over the past few years, Sweden appears to have seen a less rapid growth in the tax base of municipalities with an already high tax base. The ten municipalities (of which nine in the Stockholm county) that were the biggest contributors to the municipal equalisation scheme in 2002 have from 2003 onwards all witnessed a considerable reduction of the tax base, relative to the average tax base of Swedish municipalities (Figure 3.7). The municipalities in Stockholm county as a whole saw a 2.5 % relative reduction of their tax base, whereas such big net contributors to equalisation as Danderyd, Lidingö and Täby witnessed a reduction of 7.4%, 7.4% and 5.9%.²³

Figure 3.7. **Reduction in the tax base of the ten biggest municipal per capita contributors in fiscal equalisation scheme, 2003-2005**

Average tax base in Sweden = index 100



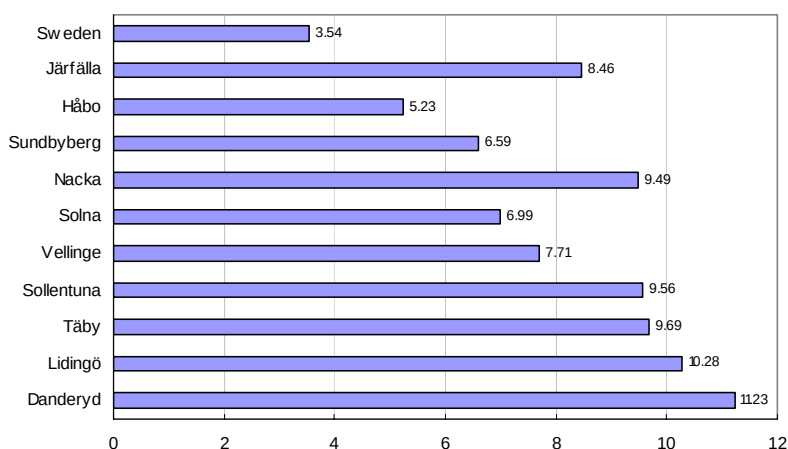
Source: Based on data by Statistics Sweden (SCB).

Another negative result of income equalisation is that it could stimulate tax rate increases. Municipalities with a larger per capita tax base than the average have an incentive to raise their tax rates faster than the average tax rate increase. This can be explained as follows. If a tax rate increase leads to a subsequent reduction of the base (as when the richer residents vote with the feet and leave for elsewhere), this reduction of the base is compensated for by the equalisation scheme. So municipalities with a large tax base per capita do not have an incentive to moderate tax increases. Because of the equalisation scheme they do not suffer financially from a reduction of the subsequent tax base per capita. Looking again at the ten biggest contributors in 2002, this effect seems to have occurred in practice: whereas the average local tax rate rose 3.5% over the period 2002-2005, the ten municipalities showed a tax increase two to three times larger during the same period (Figure 3.8). This does not necessarily mean that the incentives in the equalisation scheme led to underdevelopment of the tax base and relatively higher tax rates. These elements might be explained by regional circumstances, such as a lagging regional economic growth or by the fact that drops in growth rates manifest themselves first in the Stockholm region, with the other regions lagging behind. The economy in the Stockholm region grew with 2.5% over the period 2002-2003, whereas the average growth rate in Sweden was 3.6% over this period. A critic of the Swedish equalisation scheme might suggest that the equalisation scheme provided incentives to the Stockholm area not to invest in tax

bases, but instead raise tax rates, which then leads to lower regional economic growth. Since the relative reduction of tax bases was considerably higher in the biggest contributing municipalities than in the Stockholm region as whole, it seems that the incentives in the equalisation scheme might actually have had some distortionary effects. There are not many indications that richer inhabitants tended to leave these municipalities relatively more often, but the figures might instead indicate that less investment in the tax base took place, relative to other municipalities.

Figure 3.8. **Tax rate increases, 2002-2005**

In per cent



Source: Based on data by Statistics Sweden (SCB).

The ageing population in Sweden will put further pressure on the equalisation scheme and thereby on Stockholm as a net contributor given its higher tax base and relatively younger age structure. Over 70% of the services provided by the municipalities depend on the size and age structure of the population, which will lead to an increasing expenditure burden over time. Age-related costs are projected to increase by about ½% per year over the next decade. In addition, more substantial increases in the cost of ageing are expected after 2010. Already 80% of Swedish municipalities are exceeding the budget for elderly care, while two-thirds report overruns on disabled care costs (IMF 2003). Relatively fewer elderly people live in the counties of Stockholm and Uppsala than is the average for Sweden as a whole. Thus direct age-related challenges to the sustainability of sub-national public spending are likely to be less severe in these areas. Yet it

is also true that Stockholm County Council and municipalities in the County of Stockholm contribute substantially to other regions via the equalisation system. If the equalisation scheme is not amended, this will continue to be the case. Therefore to the extent that demographic developments put further pressure on the equalisation system, they will also put pressure on finances in Stockholm through a greater equalisation contribution.

4.2.4....raise a debate for reform

While the extent of equalisation remains a political question, the current distortionary effects can be mitigated through revisions to the allocation system. The evidence reviewed in this report certainly suggests that due to the distortions that the equalisation scheme can create for sub-national taxation, the function of a sub-national tax rate as a signal for competency of politicians in achieving local preferences is weakened. In other words, voters are less able to hold politicians accountable for the level of service delivery achieved with their tax contribution. Sweden could therefore consider several interesting reform possibilities that reduce distortions and render the system more transparent.

- *Reducing equalisation ambitions.* These distortions can be limited by reducing the extent to which tax capacity is equalised. Currently, 90% of the differences between the per capita income tax base of a municipality with a below average tax base and the norm tax base (115% of the average) are equalised. This percentage could be reduced, to 80% for example.
- *Revision of cost equalisation.* As far as the cost equalisation is concerned, a case can be made for taking account of wage differentials in different municipalities. To avoid strategic wage setting (increasing extra pay in order to get more of the general grant), an objective proxy, such as tightness of the local labour market, could be considered. A committee has been installed by the Swedish government to look into the wage cost factor in the equalisation system. The committee's findings are expected to be presented by the end of 2006.
- *Simplification of allocation mechanism.* From the perspective of accountability, a simpler and easily understandable allocation mechanism is advisable. Since every allocation mechanism that takes differences in spending needs into account, is to some extent subjective, it is an illusion to think that extensive fine-tuning will make it more effective. In general, it will just make it more complex, less easy to understand by the local authorities and the general public and thereby less open to accountability.

- *Independence of allocation mechanism.* Given the complexity of the system, the allocation criteria can be manipulated by central politicians – and central government officials who want to pursue certain departmental interests – in a way that does not increase efficiency or equity. Therefore, a case can be made for permanently delegating responsibility for setting the formula of the general grant to an independent body, as is the case in Australia (Box 3.8). The above-mentioned Committee on Public Sector Responsibilities also has the task of proposing an organisational set up for a permanent follow-up of the system.

Box 3.8. Grants commissions in Australia

Every state in Australia has its own Local Government Grants Commission. These bodies are independent and their task consists of allocating the non-earmarked grants received from the Australian national government (the Commonwealth) for distribution among municipal councils. The Commissions have to take certain conditions as given, such as the level of overall funding provided by the central government, the need for horizontal equalisation and the requirement to provide each sub-national government with at least a minimum grant. But apart from that, each Commission can decide how it will assess needs and thus how it will distribute the non-earmarked grant among the municipal councils within its respective state jurisdiction (Travers and Esposito, 2004). The Commissions appear to do a commendable job. Evidence of politicisation in the distribution of grants has been found in countries as diverse as Sweden, the United States (Grossman, 1994), Albania (Case, 2001) and Austria (Worthington and Dollery, 1998). But there does not appear to be strong evidence of politicised grant allocation in Australia (Bungey 1991). This suggests that the independent body in Australia actually manages to achieve an impartial distribution.

If Sweden chooses not to transfer some or all of the property tax revenue to the local level, the grant system could be used more actively by the central government to moderate sub-national public expenditure and reduce the pro-cyclicality of the sub-national budget. The general grant is established by the central government after negotiations with the sub-national governments' associations. Although certain principles have to be respected, such as the rule that the government has to provide funds to sub-national government for each task that it wants to decentralise, the central government could use the general grant more actively as a tool to counter the pro-cyclicality of high rises of sub-national taxes.

5. Conclusion: Improving the Stockholm governance is a matter for all

Stockholm needs to reform its metropolitan governance with the support of all actors at all governmental levels as well as the private and the non-profit sectors. Changes in governance will have the greatest impact on a metropolitan area's ability to better exploit economies of scale and develop a long-term strategy for economic development. However, there is not one optimal governance structure. Co-operation is not a good as such; it depends on what it facilitates, how it is realised and who benefits. Thus, the governance structure of each large city must be tailored to its specific situation and national context. The challenge is to produce appropriate forms of governance which optimise the growth potential of a given metropolitan region. These forms must be flexible enough to adapt to rapid economic and social change. They must also involve and serve all actors, public and non public. Such reforms are clearly choices that Stockholm cannot take alone but that Sweden will need to take as a country. The need for reform is clear; the question is how to implement that reform in the most appropriate way.

A hybrid governance system combining two solutions appears to be the most appropriate given the development pattern of the Stockholm Malar region and the current institutional and political context in Sweden.

- *Strengthening the regional governance at the Stockholm Labour Market level.* The full integration of the two local labour markets of Stockholm and Uppsala calls for new form of management that goes beyond traditional *ad hoc* inter-municipal/counties collaboration arrangements. This will be in line with a recent decision from representatives of the two Chambers of Commerce of Stockholm and Uppsala to merge the two chambers into one. The ideal solution here is to follow the regionalisation process, eventually applying the model of regional self-governments in Skåne and Västra Götaland, to the new Stockholm Labour Market through a merger of the two county councils.
- *“Lighter” governance for the larger Stockholm Mälars region as a first step.* The integration process within the greater Stockholm Mälars region is less advanced than in the Stockholm labour market and therefore requires less radical governance changes. To accelerate the integration process and exploit existing linkages and potential for agglomeration economies, it is necessary to reinforce strategic discussion and planning about the future of the region, engaging the main economic and social actors in this process. A regional body could be established, ideally by reinforcing the current association of the *Council for the Stockholm Mälars Region*.

In a second step, this regional body could eventually evolve towards a kind of consortium or Metropolitan Agency also in charge of co-ordinating public investments infrastructures in the Region.

The new regional body for the Stockholm Mälars region would serve as a vehicle to market the greater Stockholm region internationally. The consolidation of the larger conurbation of the Stockholm Mälars region will provide Sweden with greater international visibility and a larger gateway to the world. The region will require the participation and the involvement of all actors towards a common international marketing strategy. For the moment, each county is promoting its own image and developing its own international co-operation policy. Even some municipalities are developing their own marketing strategies, further detracting from the benefits of a regional brand. The promotion of the image of a “Great Stockholm area” at the EU level and internationally should be the responsibility of the body established at the Stockholm Mälars region. This will also help to strengthen the position of the area in relations to other big cities of the Baltic Sea Area.

In addition to marketing at the international level, there is a need to improve the relations of the Stockholm Mälars region with the other territories within Sweden. This national level relationship building among regions is important to move beyond the divisive debate about equalisation. This equalisation focus has distracted actors within the region from addressing other important local issues such as the costs generated by the lack of horizontal co-ordination, the absence of a regional strategy and the ineffectiveness to involve the private sector. Furthermore, the Stockholm Mälars region needs to effectively communicate that all regions of Sweden will win with such a strong metropolitan gateway. The gateway will be able to attract greater foreign investment and be the engine of the whole nation in a competitive world. To overcome the fear and the distrust of the inhabitants of other parts of Sweden, the regional association at the Stockholm Mälars region level and its partners should develop a national marketing within Sweden. They will also need to recognise that, until some point in the future, the economic advantages coming from a new regional structure should be shared with the rest of the country, at least at the short term. In that sense, more synergies with other territories should be developed, including the other two urban regions in Sweden.

Other important element is the relation between the Stockholm Mälars region and the Central State. In many other OECD countries, national governments have started to recognise and support the competitiveness of their large metropolitan regions. The recent shift in regional development policy in Sweden should go in the same direction. A better reorganisation of the State government at the Stockholm Mälars region, not only will help to

improve efficiency of actions at the regional/local level, but also ensure a stronger political position of the State. Ongoing reforms of the public administration system, which may clarify specific roles and responsibilities, and reduce any redundancies or gaps, will be a window of opportunity for improving intergovernmental affairs. Additional attention should however be given to the promotion of formal collaboration, consensual decision making and targeted policy development across all levels of government, for instance through development incentives from the central state. Actors at the local/regional level have also a key role in promoting their interest at the central level which requires a special effort of the coalition pro-Mälars Region. It will be also important for the central government to be associated with the strategic planning process of the Stockholm Mälars region through some form of clear representation for instance in a regional body established for that purpose.

Thus far, the debates related to the development of the metropolitan region, the regionalisation process and administrative reforms have not sufficiently included private actors. As pointed out in previous chapters, the difficulty to work constructively with the private sector is particularly exacerbated in the Stockholm region. An ineffective dialogue between the private and public sector has serious costs at the regional level: politicians lack sufficient information about the business environment, and the effectiveness of government policies is seriously diluted if there is no underlying trust in broader economic policy environment. Insufficient co-operation with the private actors impedes the elaboration of a comprehensive regional economic strategy and limits the credibility of any strategic plans. Regional and economic planning is not a goal in itself but a means to be used for the ultimate benefit of the population, not of the administration. There is no information concerning the possible involvement of the civil society in the planning process. This is even more striking for administrative reforms and regionalisation, which is high on the agenda in Sweden.

Whatever forms of governance are adopted, public and private linkages must be institutionalised. The *Comunidad Autónoma* of Madrid is a good example of such a fruitful co-operation: several collaboration arrangements exist with the Chamber of Commerce, trade unions and employers' associations, and allow a good participation of private actors in the decision-making process. Another example of such cooperative agreements are the French development boards (*conseils de développement*), which have been created as a platform of exchange between municipal/regional actors and private sector stakeholders. These boards participate in the elaboration of the '*contrats d'agglomération*' – which are signed between a municipality and the State, in order to improve a city's competitiveness. The

development boards represent a variety of economic, social, cultural and association groups. They must be consulted during the preparation of the project and on the final project prior to signature of the contract. They can be associated with the elaboration of the contract.

The newly created/reformed body in charge of producing a regional economic development strategy would have to rely on works and recommendations provided by other key economic actors. As suggested in Chapter 2, the group of key representatives could be formed according to the regional “triple helix” (public, private and research sectors) around a Regional Competitiveness Council. Such a Council would be formally led by a key political leader and a leading business executive. This partnership could be a concrete initiative to support the development of a regional strategy through political leadership and public/private dialogue.

Notes

1. It should be noted that while the municipalities have been radically reformed, reducing their numbers from 2 500 in 1952 to 270 then to a current 290, the map of the counties (totalling 21) is almost the same as in 1810.
2. In addition, the municipalities also co-operate through the Swedish Association of Local Authorities (SALA, or *Svenska Kommunförbundet*), whose regional-level counterpart is the Federation of County Councils (FCC, or *Landstingsförbundet*). Both organisations are dedicated to safeguarding the common interests of municipalities and county councils, representing their interests in public forums, promoting co-operation among their members and supplying them with services and expert assistance. As of January 1, 2005, the two organisations have formed new headquarters with joint administrative units: the Swedish Association of Local Authorities and Regions (SALAR). In 2007, the two organisations (SALA and FCC) are slated to merge and form a new, joint federation, which should offer another important avenue for collaboration among municipalities and county councils.
3. In 2003, the councils of Kalmar and Gotland have set up indirectly elected regional co-operation development councils and were followed by the counties of Blekinge, Halland, Östergötland, Uppsala and Dalarna. In 2004, the county of Södermanland formally created a regional co-operation council and in 2005 the county of Jönköping.
4. Monitoring report, to be adopted in 2005: www.coe.int/cplre.
5. http://www.coe.int/T/E/Claae/_5._Texts/3._Reports_country_by_country/Part_II_CG_12_7_Sweden_E.pdf?L=E
6. This response is a joint response from all 21 county administrative boards. The Governors Lorentz Andersson, Västernorrland County, and Sören Gunnarsson, Örebro County, have been responsible for coordinating and elaborating the publication. Samordning för regional hållbar utveckling [Co-ordination for regional sustainable development] – Svar till regeringen angående uppdrag om länsstyrelsernas samordning av de statliga myndigheternas insatser i det regionala utvecklingsarbetet [The County administrative boards' response to the government assignment concerning the coordination of the national authorities' regional development efforts], December 2005, Publication number 2005:52, Örebro County Administrative Board.
<http://www.regeringen.se/content/1/c6/05/52/54/44ddf13d.pdf>

7. Of a total of 7 municipalities involved in Sweden, 5 municipalities are located in the Stockholm county and cover 16 of the overall 24 areas selected - Botkyrka (3 areas), Haninge (1), Huddinge (3), Stockholm (5) and Södertälje (4).
8. Consisting of Helsinki, Espoo, Vantaa and Kauniainen. Operating areas formed by adjacent municipalities within the sphere of influence of the Helsinki Metropolitan Area (the Central Uusimaa and Lohja regions) will be supported to reinforce the development of the greater Helsinki area. Several fields for co-operation within the Helsinki region have been identified including planning and land use, housing, transport, and to a lesser extent, economic development, education and culture. A specific problem to be addressed is the housing shortage in the Helsinki region due to in-migration but also to the fact there could be a disincentive for municipalities to develop new construction, as additional population would entail pressure on budget allocations for basic public service delivery.
9. Based on Rapporteur ad int. Jussi-Pekka Alanen's proposals.
10. This initiative is to take place in three phases: phase 1: a call for projects aimed at supporting engineering for better metropolitan co-operation; phase 2: a metropolitan project prepared by the communities; phase 3: a metropolitan contract starting in 2006 will apply to highly formative activities.
11. This first report in fact is more a description of the challenges and domains which could benefit from further examination rather than actual substantial recommendations as to the solutions to be retained.
12. The Committee is supposed to deliver its final report in 2007. However, due to the elections which will take place in September 2006, it is possible that the committee will only propose solutions on a limited number of the items under review.
13. *<http://www.ville.gouv.fr/>*.
14. Tax revenues will be lower when the tax base is considerably lower.
15. Note that the central government froze local income tax rates from 1991 to 1993, and between 1997 and 1999 cut central government grants to local authorities that increased their local income tax rates.
16. The pro-cyclicality of central revenues is normally mitigated since it has several tax revenue sources. Important taxes in the Swedish fiscal system are for example household taxes, company taxes and value added tax. Since the sub-national governments only dispose of the income tax, they

do not have this diversification and thus their revenues are generally more pro-cyclical.

17. This is a small airport situated only a few kilometres away from the historic centre of Stockholm. Most large European capitals and in particular those which derive a lot of their wealth from being traditional centres of corporate headquarters for multinational companies, would see the existence of an airport in the town centre as an invaluable asset. All the more so, since the next nearest airport is 35 km away. While the excellent train system can reach the Arlanda international airport in as little as 20 minutes, Arlanda is hardly appropriate for small planes, and a car can take as much as 45 minutes to reach it.
18. www.sweden.se/templates/cs/FactSheet_____11476.aspx?PageNr=9.
19. Prior to 1993 over 2/3 of the monetary value of the grants was delivered through (or conditional) grants. In the wake of extensive reforms in the 1990s, about 2/3 of grant transfers in Sweden are transferred as general (or unconditional) grants.
20. The ten highest per capita payouts are for municipalities in the county of Norrbotten, Västerbotten and Jämtland. The municipality of Pajala receives the most, at SEK 22 508 per inhabitant.
21. Similarly, the large amount of grant received by the county councils of Skåne and Gotland can be explained by their low tax capacity, not by higher structural costs (which are in fact lower). The circumstances of the northern county councils are quite different. Their overall tax capacity is not much lower than in other parts of Sweden, but their assumed structural costs are considerably higher. This difference is primarily due to the higher percentage of elderly in their populations and much lower levels of population density than the average.
22. The percentage of 54% is a calculation over 1998, made by NUTEK 2000. It is assumed that the equalisation scheme is centrally financed by indirect taxes, since most of the direct taxes are local taxes.
23. The index of tax capacity in the municipalities in Stockholm county was 121 in 2002 (100 is the average tax base) and 118 in 2005. Tax capacity of Danderyd was 189 in 2002 and 175 in 2005; Lidingö: 163 in 2002 and 151 in 2005; Täby: 153 in 2002, 144 in 2005.

Annex 1. Identifying the determinants of regional performances

GDP per capita (in logarithms) can be written as:

$$\frac{GDP}{Population} = \frac{GDP}{Employment} + \frac{Employment}{Labour\ force} + \frac{Labour\ force}{Population}$$

$$GDP\ per\ capita = Productivity + \frac{Employment}{Labour\ force} + Activity\ rate$$

Therefore, the difference in GDP per capita between a give metropolitan region and the average of all metropolitan regions is equal to:

$$\begin{array}{ccccccc} \text{Difference in GDP per} & = & \text{Difference in} & + & \text{Difference in} & + & \text{Difference in} \\ \text{capita} & & \text{Productivity} & & \text{Unemployment} & & \text{Activity rates} \\ & & & & \text{rates} & & \end{array}$$

Decomposition of differences in productivity

Average labour productivity in region i is equal to a weighted average of sectoral productivity:

$$1. \quad \frac{GDP_i}{E_i} = \sum_j \frac{E_{ij}}{E_i} * \frac{GDP_{ij}}{E_{ij}}$$

where j indicates the sector.

From-the-average difference in productivity can be decomposed as:

$$2. \quad \left(\frac{GDP_i}{E_i} - \frac{GDP}{E} \right) = \sum_j \left(\frac{E_{ij}}{E_i} - \frac{E_j}{E} \right) * \frac{GDP_j}{E_j} + \sum_j \frac{E_{ij}}{E_i} * \left(\frac{GDP_{ij}}{E_{ij}} - \frac{GDP_j}{E_j} \right)$$

The first term on the right-side of the equation measures the proportion of the difference in productivity due to regional specialisation.

Decomposition of differences in activity rates

Activity rate in region i is equal to a weighted average of activity rates by age groups:

$$3. \quad \frac{LF_i}{P_i} = \sum_j \frac{P_{ij}}{P_i} * \frac{LF_{ij}}{P_{ij}}$$

where j indicates the age group.

From-the-average-difference in activity rates can be decomposed as:

$$4. \quad \left(\frac{LF_i}{P_i} - \frac{LF}{P} \right) = \sum_j \left(\frac{P_{ij}}{P_i} - \frac{P_j}{P} \right) * \frac{LF_j}{P_j} + \sum_j \frac{P_{ij}}{P_i} * \left(\frac{LF_{ij}}{P_{ij}} - \frac{LF_j}{P_j} \right)$$

The first term on the right-side of the equation measures the proportion of the difference in activity rates due to the age-profile of the regional labour population.

Table A.1. **GDP per capita in 66 selected OECD metropolitan regions (2002)**

Metropolitan region	Country	Rank by GDP per capita	Year	Population	Real GDP per capita (USD PPP)	National GDP per capita (USD PPP)	Ratio Regional / national
Boston	USA	1	2002	3 304 030	80 780	36 121	2.24
San Francisco	USA	2	2002	1 673 765	66 079	36 121	1.83
Seattle	USA	3	2002	2 433 901	49 673	36 121	1.38
New York	USA	4	2002	9 185 826	48 869	36 121	1.35
Denver	USA	5	2002	2 158 288	46 750	36 121	1.29
Tokyo	Japan	6	2001	12 138 000	46 555	26 493	1.76
Washington	USA	7	2002	5 162 029	45 815	36 121	1.27
Dallas	USA	8	2002	3 689 427	45 237	36 121	1.25
San Diego	USA	9	2002	2 813 678	44 426	36 121	1.23
Region Munich-Ingolstadt	Germany	10	2002	2 936 300	44 285	26 613	1.66

Table A.1. **GDP per capita in 66 selected OECD metropolitan regions (cont.)**

Metropolitan region	Country	Rank by GDP per capita	Year	Population	Real GDP per capita (USD PPP)	National GDP per capita (USD PPP)	Ratio Regional / national
London	UK	11	2002	7 371 200	43 295	26 954	1.61
Los Angeles	USA	12	2002	9 630 575	42 677	36 121	1.18
Houston	USA	13	2002	4 346 443	42 656	36 121	1.18
Minneapolis-St Paul	USA	14	2002	3 056 652	42 170	36 121	1.17
Chicago	USA	15	2002	8 290 146	42 158	36 121	1.17
Paris- Île-de-France	France	16	2002	11 106 700	42 004	26 955	1.56
Milan	Italy	17	2002	3 713 400	41 856	27 028	1.55
Atlanta	USA	18	2002	4 310 754	41 269	36 121	1.14
Portland-Vancouver	USA	19	2002	1 986 486	38 712	36 121	1.07
Baltimore	USA	20	2002	2 653 817	38 661	36 121	1.07
Philadelphia	USA	21	2002	4 989 901	38 538	36 121	1.07
Phoenix	USA	22	2002	3 259 000	38 325	36 121	1.06
Darmstadt	Germany	23	2002	3 755 000	37 556	26 613	1.41
Cleveland	USA	24	2002	2 204 453	37 334	36 121	1.03
Stockholm	Sweden	25	2002	1 844 700	37 066	26 901	1.38
Pittsburgh	USA	26	2002	2 278 401	36 868	36 121	1.02
Detroit	USA	27	2002	4 404 088	36 716	36 121	1.02
Tampa-St-Petersburg	USA	28	2002	2 441 379	35 840	36 121	0.99
St-Louis	USA	29	2002	2 588 142	35 624	36 121	0.99
Region Hamburg	Germany	30	2002	3 108 000	35 565	26 613	1.34
Toronto	Canada	31	2003	5 114 549	34 505	31 070	1.11
Noord-Holland	Netherlands	32	2002	2 566 300	34 485	29 517	1.17
Rome	Italy	33	2002	3 714 000	33 702	27 028	1.25
Stuttgart	Germany	34	2002	3 975 100	33 576	26 613	1.26
Miami	USA	35	2002	2 286 228	33 111	36 121	0.92
Turin	Italy	36	2002	2 168 800	32 518	27 028	1.20
Aichi	Japan	37	2001	7 087 000	31 660	26 493	1.20
Karlsruhe	Germany	38	2002	2 708 300	31 254	26 613	1.17
Rheinland	Germany	39	2002	6 652 100	31 221	26 613	1.17
Zuid-Holland	Netherlands	40	2002	3 431 900	30 772	29 517	1.04
Osaka	Japan	41	2001	8 818 000	29 866	26 493	1.13
Comunidad de Madrid	Spain	42	2002	5 499 800	29 548	22 061	1.34

Table A.1. **GDP per capita in 66 selected OECD metropolitan regions (cont.)**

Metropolitan region	Country	Rank by GDP per capita	Year	Population	Real GDP per capita (USD PPP)	National GDP per capita (USD PPP)	Ratio Regional / national
Noord-Brabant	Netherlands	44	2002	2 395 700	29 211	29 517	0.99
Montreal	Canada	45	2003	3 577 386	28 750	31 070	0.93
Freiburg	Germany	46	2002	2 163 600	26 333	26 613	0.99
Barcelona	Spain	47	2002	4 854 000	25 934	22 061	1.18
Detmold	Germany	48	2002	2 066 200	25 543	26 613	0.96
Rheinessen-Pfalz	Germany	49	2002	2 013 500	25 164	26 613	0.95
Greater Manchester	UK	50	2002	2 522 500	24 916	26 954	0.92
Kanagawa	Japan	51	2001	8 570 000	23 872	26 493	0.90
Seoul	Korea	52	2003	10 024 308	23 622	20 516	1.33
Ruhrgebiet	Germany	53	2002	6 747 000	23 553	26 613	0.89
Nord	France	54	2002	2 564 300	23 189	26 955	0.86
Budapest	Hungary	55	2002	2 826 900	22 700	13 848	1.64
Fukuoka	Japan	56	2001	5 032 000	22 161	26 493	0.84
Valencia	Spain	57	2002	2 238 700	22 037	22 061	1.00
Region Berlin	Germany	58	2002	5 101 000	21 769	26 613	0.82
Chiba	Japan	59	2001	5 968 000	21 448	26 493	0.81
Gyeonggi	Korea	60	2003	9 846 778	19 204	20 516	1.08
Saitama	Japan	61	2001	6 978 000	18 955	26 493	0.72
Attiki	Greece	62	2002	3 910 100	18 136	17 100	1.06
Incheon	Korea	63	2003	2 615 133	18 044	20 516	1.02
Naples	Italy	64	2002	3 067 900	17 364	27 028	0.64
Busan	Korea	65	2003	3 685 290	15 627	20 516	0.88
Daegu	Korea	66	2003	2 547 231	12 911	20 516	0.73

Notes:

(1) The data for European metropolitan regions are from EUROSTAT either at TL2 or TL3; (2) The data for Korea and Japan are collected from national statistical offices; (3) The population data for most metropolitan areas are from American Community Survey 2002 Profile of the US Census Bureau which is limited to the household population and excludes the population living in institutions, college dormitories, and other group quarters; (4) The population data for Minneapolis-St. Paul, MN-WI MSA is from the Real Estate Centre at Texas A&M University <http://www.recenter.tamu.edu>; (5) The population data for Portland-Vancouver, OR-WA PMSA comes from Metro Regional Data Book (January 2005) from www.metro-region.org; (6) The population data for Phoenix-Mesa MSA comes from the Greater Phoenix Economic Council <http://www.gpec.org>; (7) The population data for Washington D.C. PMSA and Baltimore PMSA comes from the Federation for American Immigration Reform: Metro Area Factsheet <http://www.fairus.org>; and (8) The GDP data for the US metropolitan regions are collected from the US Conference of Mayors <http://www.usmayors.org>.

Source: OECD Territorial Database.

Table A.2. **Explanatory factors of differences in GDP per capita (2002)**

Country	Metropolitan region	Year	Percentage difference in (compared to the average)			Proportion of the difference in GDP per capita due to		
			Produc- tivity (%)	Emple- ment rate (%)	Activity rate (%)	Produc- tivity (%)	Emple- ment rate (%)	Activity rate (%)
USA	Boston	2002	107.9	1.9	12.7	117.3	2.9	19.1
USA	San Francisco	2002	67.3	0.9	15.7	73.6	1.3	20.8
USA	Seattle	2002	31.9	-0.4	11.6	34.1	-0.4	13.5
USA	New York	2002	59.1	-1.0	-8.3	56.7	-1.3	-10.6
USA	Denver	2002	25.6	1.1	8.7	27.2	1.4	10.0
Japan	Tokyo	2001	28.5	1.3	5.7	29.9	1.5	6.5
USA	Washington	2002	20.9	3.0	8.7	22.4	3.5	9.9
USA	Dallas	2002	21.6	-0.9	10.8	23.0	-1.0	12.1
USA	San Diego	2002	24.5	2.3	3.1	25.5	2.6	3.6
Germany	Region München- Ingolstadt	2002	23.0	2.8	3.5	24.0	3.2	4.0
UK	London	2002	26.2	-0.4	1.7	26.8	-0.5	2.0
USA	Los Angeles	2002	26.0	-1.1	1.1	26.4	-1.2	1.3
USA	Houston	2002	21.4	0.2	3.6	22.1	0.2	4.0
USA	Minneapolis-St Paul	2002	2.8	2.4	18.2	3.2	2.7	19.0
USA	Chicago	2002	23.6	-0.7	1.5	24.0	-0.8	1.7
France	Paris- Île de France	2002	30.3	-1.9	-2.9	30.0	-2.2	-3.3
Italy	Milano	2002	31.5	1.9	-7.7	31.0	2.1	-9.1
USA	Atlanta	2002	13.1	1.3	6.4	13.9	1.5	6.9
USA	Portland-Vancouver	2002	7.9	-1.2	7.3	8.3	-1.3	7.7
USA	Baltimore	2002	8.9	1.6	3.2	9.3	1.8	3.4
USA	Philadelphia	2002	10.1	0.7	2.7	10.5	0.7	2.9
USA	Phoenix	2002	10.8	0.8	1.4	11.2	0.8	1.5
Germany	Darmstadt	2002	13.1	0.7	-2.6	13.3	0.8	-2.9
USA	Cleveland	2002	6.1	0.1	3.8	6.4	0.1	4.1
Sweden	Stockholm	2002	-0.9	2.5	7.8	-1.0	2.6	8.2
USA	Pittsburgh	2002	3.2	1.2	4.3	3.4	1.3	4.5
USA	Detroit	2002	4.4	-1.1	5.1	4.7	-1.2	5.3
USA	Tampa-St-Petersburg	2002	-1.2	2.1	4.9	-1.3	2.3	5.2
USA	St-Louis	2002	0.0	0.2	5.0	0.0	0.2	5.3
Germany	Region Hamburg	2002	8.8	-1.1	-2.3	9.1	-1.2	-2.5
Canada	Toronto	2003	-6.3	-1.5	10.4	-7.6	-1.7	11.5
Netherlands	Noord-Holland	2002	-7.6	4.0	6.0	-9.2	4.6	6.8
Italy	Roma	2002	16.8	-1.6	-13.4	5.5	-0.6	-5.1
Germany	Stuttgart	2002	-0.6	2.0	-2.2	-0.4	1.3	-1.4

Table A.2. **Explanatory factors of differences in GDP per capita (2002) (cont.)**

Country	Metropolitan region	Year	Percentage difference in (compared to the average)			Proportion of the difference in GDP per capita due to		
			Produc- tivity (%)	Empley- ment rate (%)	Activity rate (%)	Produc- tivity (%)	Empley- ment rate (%)	Activity rate (%)
USA	Miami	2002	3.5	-0.9	-4.6	3.0	-0.8	-4.1
Italy	Torino	2002	8.3	0.2	-11.5	7.3	0.2	-11.1
Japan	Aichi	2001	-15.8	2.0	8.9	-16.0	1.9	7.9
Germany	Karlsruhe	2002	-4.5	1.3	-4.5	-4.3	1.2	-4.3
Germany	Rheinland	2002	2.8	-0.4	-9.9	2.5	-0.4	-9.6
Netherlands	Zuid-Holland	2002	-13.9	3.7	1.9	-13.9	3.4	1.7
Japan	Osaka	2001	-12.2	-0.9	1.3	-11.9	-0.8	1.2
Spain	Comunidad de Madrid	2002	-1.5	-0.8	-10.6	-1.4	-0.8	-10.3
Canada	Vancouver	2003	-20.0	-0.9	9.3	-20.4	-0.9	8.2
Netherlands	Noord-Brabant	2002	-20.6	4.2	4.3	-21.1	3.8	3.8
Canada	Montreal	2003	-19.1	-3.4	8.7	-19.2	-3.2	7.6
Germany	Freiburg	2002	-21.0	2.2	-3.6	-20.6	1.9	-3.2
Spain	Barcelona	2002	-13.5	-4.4	-7.4	-12.6	-3.9	-6.6
Germany	Detmold	2002	-16.9	-1.2	-8.0	-16.0	-1.1	-7.2
Germany	Rheinhesen-Pfalz	2002	-20.7	0.4	-6.7	-19.9	0.3	-5.9
UK	Greater Manchester	2002	.	.	.	.	.	.
Japan	Kanagawa	2001	-35.0	1.8	6.5	-36.1	1.5	5.3
Korea	Seoul	2003	-30.2	2.0	-2.0	-29.9	1.6	-1.7
Germany	Ruhrgebiet	2002	-17.5	-2.8	-13.3	-16.0	-2.3	-11.9
France	Nord	2002	-10.7	-7.8	-16.8	-9.3	-6.7	-15.2
Hungary	Budapest	2002	-24.2	2.5	-13.7	-22.7	2.1	-12.1
Japan	Fukuoka	2001	-23.8	2.7	-16.4	-22.0	2.2	-14.5
Spain	Valencia	2002	-25.1	-5.4	-8.1	-23.4	-4.5	-6.8
Germany	Region Berlin	2002	-28.9	-10.0	0.6	-27.5	-8.5	0.5
Japan	Chiba	2001	-42.2	1.8	7.7	-43.8	1.4	5.9
Korea	Gyeonggi	2003	-43.2	3.4	-3.4	-43.0	2.5	-2.6
Japan	Saitama	2001	-49.3	1.1	9.2	-51.3	0.8	6.7
Greece	Attiki	2002	.	.	.	.	.	.
Korea	Incheon	2003	-44.0	2.3	-6.9	-42.9	1.7	-5.3

Notes: The data for Canada and Korea are for 2003. The data for Japan are 2001.

(1) The labour force and employment data for the US metropolitan areas refer to place of residence (July 2002) and are collected from the US Bureau of Labour Statistics. Unemployment estimates are aggregates of persons previously employed in industries covered by state unemployment (UI) laws and entrants to the labour force data from the Current Population Survey (CPS). The data reflects the standards and definitions established by the U.S. Office of Management and Budget, dated June 30, 1996, http://www.bls.gov/news.release/archives/metro_08282002.pdf; (2) the data for the selected regions in Japan and Korea are collected from the national statistical offices Japan Statistical Office <http://www.stat.go.jp/data/roudou/2004n/ft/zuhyou2/ken02.xls>; and (3) the data for the selected European regions are collected from EUROSTAT.

Source: OECD Territorial Database.

Table A.3. Ranking of OECD metropolitan regions based on employment (2002)

Country	Metropolitan region	Em- play- ment rate	Index Stock- holm =100	Rank	Country	Metropolitan region	Em- play- ment rate	Index Stock- holm =100	Rank	Country	Metropolitan region	Em- play- ment rate	Index Stock- holm =100	Rank
Netherlands	Noord-Brabant	0.98	102	1	Germany	Karlsruhe	0.95	99	26	Germany	Region Hamburg	0.93	97	51
Netherlands	Noord-Holland	0.97	102	2	Japan	Tokyo	0.95	99	27	USA	Detroit	0.93	96	52
Netherlands	Zuid-Holland	0.97	101	3	USA	Pittsburgh	0.95	99	28	USA	Portland-Vancouver	0.93	96	53
Korea	Gyeonggi	0.97	101	4	USA	Denver	0.95	99	29	Germany	Detmold	0.92	96	54
USA	Washington	0.96	100	5	Japan	Saitama	0.95	99	30	Canada	Toronto	0.92	96	55
Germany	Region Munich-Ingolstadt	0.96	100	6	USA	San Francisco	0.94	98	31	Italy	Rome	0.92	96	56
Japan	Fukuoka	0.96	100	7	USA	Phoenix	0.94	98	32	France	Paris- île de France	0.92	96	57
Korea	Busan	0.96	100	8	Germany	Darmstadt	0.94	98	33	Germany	Ruhrgebiet	0.91	95	58
Hungary	Budapest	0.96	100	9	USA	Philadelphia	0.94	98	34	Canada	Montreal	0.90	94	59
Sweden	Stockholm	0.96	100	10	Germany	Rheinessen-Pfalz	0.94	98	35	Spain	Barcelona	0.90	93	60
USA	Minneapolis-St Paul	0.96	100	11	USA	St-Louis	0.94	98	36	Spain	Valencia	0.89	92	61
Korea	Daegu	0.96	100	12	USA	Houston	0.94	98	37	France	Nord	0.86	90	62
Korea	Incheon	0.96	100	13	Italy	Turin	0.94	98	38	Germany	Region Berlin	0.84	88	63
USA	San Diego	0.96	100	14	USA	Cleveland	0.94	98	39	Italy	Naples	0.75	79	64
Germany	Freiburg	0.96	100	15	USA	Seattle	0.93	97	40					
USA	Tampa-St-Petersburg	0.96	100	16	UK	London	0.93	97	41					
Japan	Aichi	0.96	100	17	Germany	Rheinland	0.93	97	42					
Germany	Stuttgart	0.96	100	18	USA	Chicago	0.93	97	43					
Korea	Seoul	0.96	100	19	Spain	Comunidad de Madrid	0.93	97	44					
Italy	Milan	0.95	99	20	USA	Dallas	0.93	97	45					
USA	Boston	0.95	99	21	Japan	Osaka	0.93	97	46					
Japan	Kanagawa	0.95	99	22	USA	Miami	0.93	97	47					
Japan	Chiba	0.95	99	23	Canada	Vancouver	0.93	97	48					
USA	Baltimore	0.95	99	24	USA	New York	0.93	97	49					
USA	Atlanta	0.95	99	25	USA	Los Angeles	0.93	97	50					

Note: The data for Canada and Korea are for 2003 and for Japan related to 2001.

Source: OECD Territorial Database.

Table A.4. Ranking of OECD metropolitan regions based on activity rate (2002)

Country	Metropolitan region	Activity rate	In-dex Stock-holm =100	Rank	Country	Metropolitan region	Activity rate	In-dex Stock-holm =100	Rank	Country	Metropolitan region	Activity rate	In-dex Stock-holm =100	Rank
USA	Minneapolis-St Paul	0.60	110	1	USA	Houston	0.53	96	26	Italy	Milan	0.47	86	51
USA	San Francisco	0.59	107	2	Germany	Region Munich-Ingolstadt	0.53	96	27	Germany	Detmold	0.47	85	52
USA	Boston	0.57	104	3	USA	Baltimore	0.52	96	28	Spain	Valencia	0.47	85	53
USA	Seattle	0.57	103	4	USA	San Diego	0.52	96	29	USA	New York	0.47	85	54
USA	Dallas	0.56	103	5	USA	Philadelphia	0.52	95	30	Germany	Rheinland	0.46	84	55
Canada	Toronto	0.56	102	6	Netherlands	Zuid-Holland	0.52	94	31	Korea	Busan	0.46	83	56
Canada	Vancouver	0.56	101	7	UK	London	0.52	94	32	Spain	Comunidad de Madrid	0.45	83	57
Japan	Saitama	0.55	101	8	USA	Chicago	0.52	94	33	Italy	Turin	0.45	82	58
Japan	Aichi	0.55	101	9	USA	Phoenix	0.51	94	34	Germany	Ruhrgebiet	0.44	80	59
USA	Washington	0.55	101	10	Japan	Osaka	0.51	94	35	Italy	Rome	0.44	80	60
Canada	Montreal	0.55	101	11	USA	Los Angeles	0.51	94	36	Hungary	Budapest	0.44	80	61
USA	Denver	0.55	101	12	Germany	Region Berlin	0.51	93	37	Japan	Fukuoka	0.42	78	62
Sweden	Stockholm	0.55	100	13	Korea	Seoul	0.50	91	38	France	Nord Pas de Calais	0.42	77	63
Japan	Chiba	0.55	100	14	Germany	Stuttgart	0.50	91	39	Italy	Naples	0.36	65	64
USA	Portland-Vancouver	0.54	100	15	Germany	Region Hamburg	0.50	91	40					
Japan	Kanagawa	0.54	99	16	Germany	Darmstadt	0.49	90	41					
USA	Atlanta	0.54	99	17	France	Paris-île de France	0.49	90	42					
Netherlands	Noord-Holland	0.54	98	18	Korea	Gyeonggi	0.49	90	43					
Japan	Tokyo	0.54	98	19	Germany	Freiburg	0.49	89	44					
USA	Detroit	0.53	97	20	Germany	Karlsruhe	0.48	89	45					
USA	St-Louis	0.53	97	21	USA	Miami	0.48	88	46					
USA	Tampa-St-Petersburg	0.53	97	22	Germany	Rheinhesen-Pfalz	0.47	87	47					
USA	Pittsburgh	0.53	97	23	Korea	Daegu	0.47	86	48					
Netherlands	Noord-Brabant	0.53	97	24	Korea	Incheon	0.47	86	49					
USA	Cleveland	0.53	96	25	Spain	Barcelona	0.47	86	50					

Note: The data for Canada and Korea are for 2003 and for Japan related to 2001.

Source: OECD Territorial Database.

Table A.5. Ranking of OECD metropolitan regions based on average labour productivity (USD PPP) (2002)

Country	Metropolitan region	Product-ivity	Index Stock-holm =100	Rank	Country	Metropolitan region	Product-ivity	Index Stock-holm =100	Rank	Country	Metropolitan region	Product-ivity	Index Stock-holm =100	Rank
USA	Boston	148 039	210	1	USA	Cleveland	75 518	107	26	Germany	Rheinessen-Platz	56 486	80	51
USA	San Francisco	119 078	169	2	USA	Detroit	74 341	105	27	Germany	Freiburg	56 249	80	52
USA	New York	113 290	161	3	USA	Miami	73 681	104	28	Japan	Fukuoka	54 264	77	53
USA	Seattle	93 932	133	4	USA	Pittsburgh	73 446	104	29	Hungary	Budapest	53 947	76	54
Italy	Milan	93 609	133	5	USA	Minneapolis-St Paul	73 218	104	30	Spain	Valencia	53 305	76	55
France	Paris- Île de France	92 768	132	6	Germany	Rheinland	73 155	104	31	Germany	Region Berlin	50 586	72	56
Japan	Tokyo	91 512	130	7	USA	St-Louis	71 169	101	32	Korea	Seoul	49 723	70	57
UK	London	89 873	127	8	Germany	Stuttgart	70 787	100	33	Japan	Kanagawa	46 285	66	58
USA	Los Angeles	89 707	127	9	Sweden	Stockholm	70 542	100	34	Japan	Chiba	41 158	58	59
USA	Denver	89 419	127	10	USA	Tampa-St-Petersburg	70 349	100	35	Korea	Gyeonggi	40 434	57	60
USA	San Diego	88 608	126	11	Spain	Comunidad de Madrid	70 091	99	36	Korea	Incheon	39 861	57	61
USA	Chicago	87 973	125	12	Germany	Karlsruhe	67 960	96	37	Japan	Saitama	36 119	51	62
Germany	Region Munich-Ingolstadt	87 560	124	13	Canada	Toronto	66 723	95	38	Korea	Busan	35 600	50	63
USA	Dallas	86 584	123	14	Netherlands	Noord-Holland	65 779	93	39	Korea	Daegu	28 462	40	64
USA	Houston	86 401	122	15	Italy	Naples	64 532	91	40					
USA	Washington	86 047	122	16	France	Nord Pas de Calais	63 598	90	41					
Italy	Rome	83 174	118	17	Japan	Osaka	62 526	89	42					
USA	Atlanta	80 534	114	18	Spain	Barcelona	61 566	87	43					
Germany	Darmstadt	80 493	114	19	Netherlands	Zuid-Holland	61 275	87	44					
USA	Phoenix	78 881	112	20	Japan	Aichi	59 913	85	45					
USA	Philadelphia	78 400	111	21	Germany	Detmold	59 128	84	46					
USA	Baltimore	77 528	110	22	Germany	Ruhrgebiet	58 753	83	47					
Germany	Region Hamburg	77 439	110	23	Canada	Montreal	57 586	82	48					
Italy	Turin	77 135	109	24	Canada	Vancouver	56 981	81	49					
USA	Portland-Vancouver	76 792	109	25	Netherlands	Noord-Brabant	56 517	80	50					

Note: The data for Canada and Korea are for 2003. The data for Japan are 2001.

Source: OECD Territorial Database.

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PRINTED IN FRANCE
(04 2006 02 1 P) ISBN 92-64-02252-X – No. 55015 2006

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ISBN 92-64-02252-X
04 2006 02 1 P

