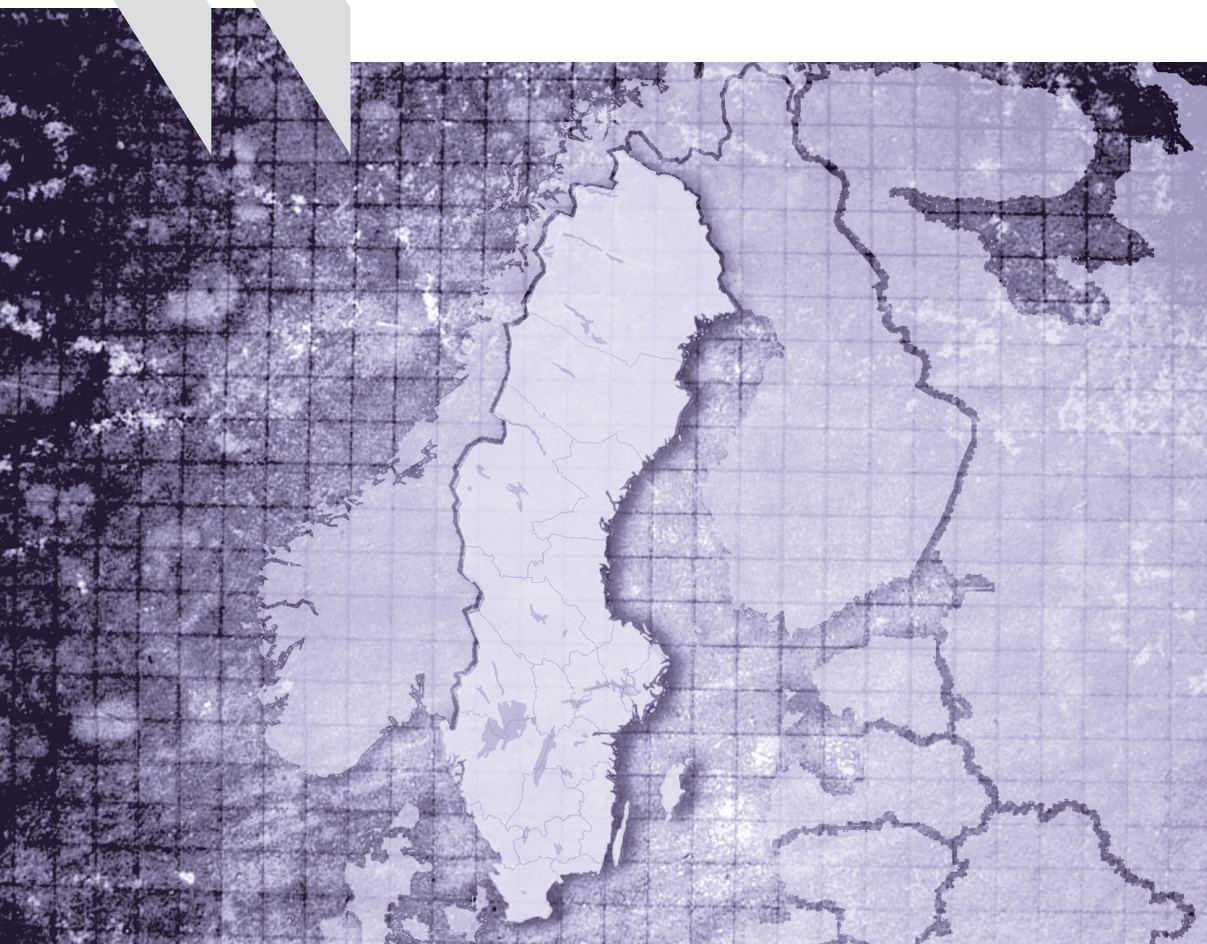




**OECD Territorial Reviews**

**SWEDEN**





OECD Territorial Reviews

# Sweden



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## Foreword

**A**t the beginning of this new millennium, regional economies are confronting momentous changes. The globalisation of trade and economic activity is increasingly testing their ability to adapt and maintain their competitive edge. There is a tendency for income and performance gaps to widen between and within regions, and the cost of maintaining social cohesion is increasing. Rapid technological change and greater use of knowledge are offering new opportunities for local and regional development but demand further investment from enterprises, reorganisation of labour and production, more advanced skills and environmental improvements.

Amid this change and turbulence, regions continue to follow very different paths. Some regions are doing well in the current phase of the growth cycle and are driving growth. Others are less successful at capturing trade and additional economic activities. Many territories with poor links to the sources of prosperity, afflicted by migration, and lagging behind with respect to infrastructure and private investment, are finding it difficult to keep up with the general trend.

At the same time, central governments are no longer the sole provider of territorial policy. The vertical distribution of power between the different tiers of government needs to be reassessed, as well as the decentralisation of fiscal resources in order to better respond to the expectations of citizens and improve policy efficiency. Public authorities need to weigh up current challenges, evaluate the strategies pursued in recent years, and define new options.

Responding to a need to study and spread innovative territorial development strategies and governance in a more systematic way, in 1999 the OECD created the Territorial Development Policy Committee (TDPC) as a unique forum for international exchange and debate. The TDPC has developed a number of activities, including a series of National Territorial Reviews. These studies follow a standard methodology and a common conceptual framework, allowing countries to share their experiences and disseminate information on good practices. This series is intended to produce a synthesis that will formulate and diffuse horizontal policy recommendations.

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This Review was drafted by a team composed of Mr. José-Enrique Garcilazo (Chapter 1), Ms. Soo-Jin Kim (Chapter 2) and Ms. Dorothée Allain-Dupré (Chapter 3) from the OECD Regional Competitiveness and Governance Division, under the direction of Mr. Mario Pezzini, Mr. Marcos Bonturi and Mr. Joaquim Oliveira Martins. Other contributions were provided by Mr. Carlos Icaza Lara, Mr. Mario Piacentini and Mr. Mauro Migotto. Ms. Varinia Michalun and Ms. Claire Charbit from the OECD Secretariat, and Mr. Don Christiansen, external expert, provided detailed comments on the draft.

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The report also draws on inputs from Mr. Howard Chernick, Professor, Department of Economics, Hunter College, US; Mr. Lars-Erik Borge, Professor, Department of Economics, Norwegian University of Science and Technology; and Mr. Paul Benneworth, Senior Researcher, University of Twente, Netherlands.

Ms. Doranne Lecercle edited the final manuscript and Ms. Jeanette Dubois prepared it for publication.

### Country Profile of Sweden

- **Area (square kilometres):** 410 313
- **Population:** 9.22 million people (2008 official estimate)
- **Form of state:** Unitary state with a constitutional monarchy and parliamentary democracy
- **Political system:** Executive branch headed by the Chief of State (the King) and the Prime minister elected by the Parliament; judicial branch with the Supreme Court as the highest tribunal; and legislative branch with a unicameral Parliament directly elected for a four-year term.

### Monetary unit: Swedish krona

#### Economic trends (2008)

- **GDP** (at current prices and current PPPs; USD billion): 343.951
- **GDP growth** (yearly % changes based on 2000 prices): -0.4% (forecast for 2009: -4.7% and 2010: 2%)
- **GDP per capita** (USD at PPP): 37 309
- **Unemployment rate** (% labour force): 6.29% (forecast for 2010: 10.3%)
- **Trade in goods and services** (as % of GDP): 42.2%

### Public finances (2006)

- **Share of sub-central government spending in total spending:** 44.8%
- **Share of sub-central government revenues in total revenues:** 34.7%
- **Share of taxes in sub-central government revenues:** 75%

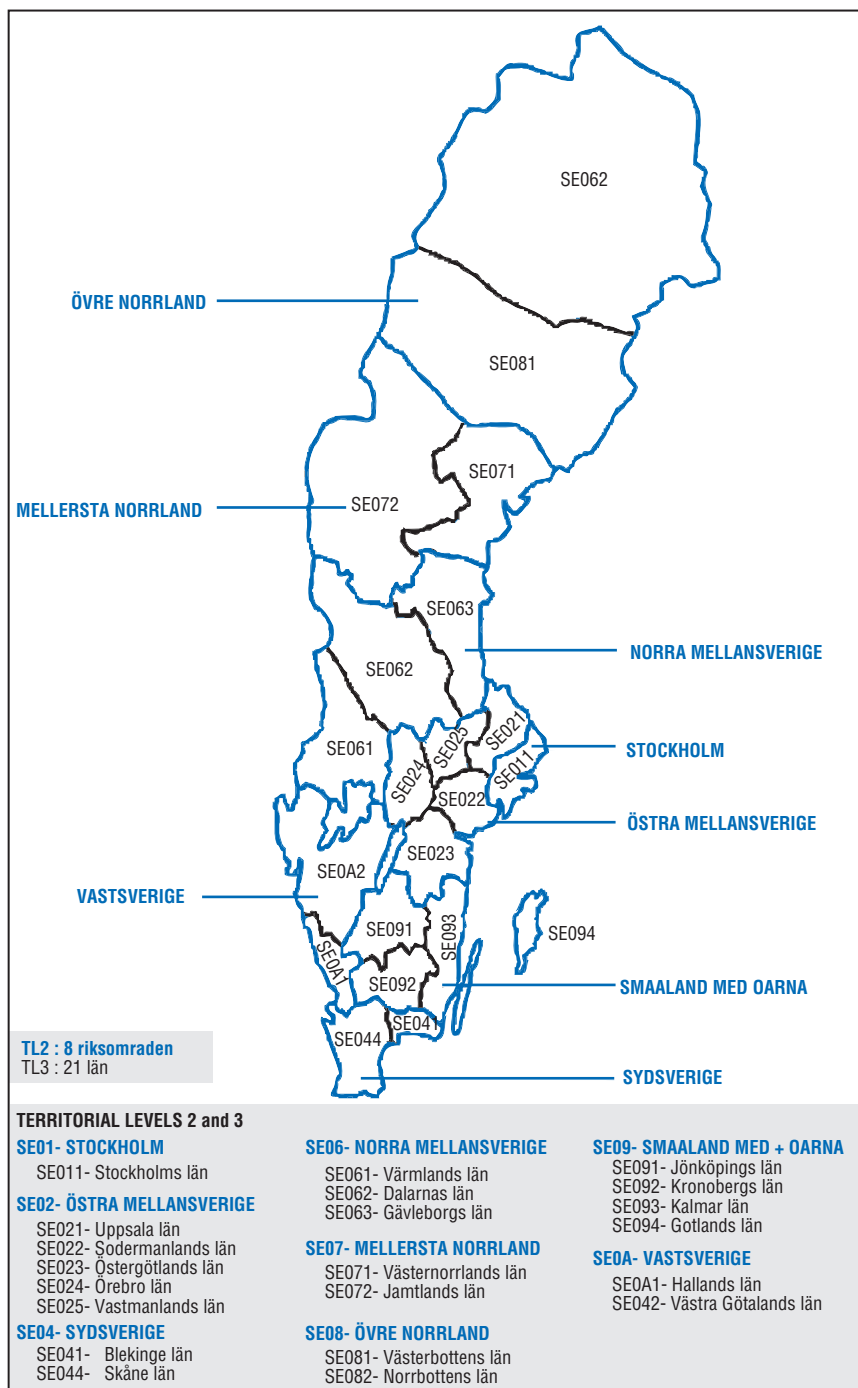
### Living standards (2008)

- **Life expectancy at birth:** 81.7 years
- **Income inequality** (Gini coefficient): 0.23
- **Poverty rate** (share of population under poverty line): 0.053%

### Territorial and institutional framework (2008)

Sweden has a two-tier system of sub-national government:

- **20 county councils** (*landsting*) at Territorial Level 3: they are run by directly elected assemblies and are mostly responsible for health services (80% of their budget). They may also engage in promoting culture, education and tourism. The responsibility for regional and local public transport is shared between the municipalities and the county councils (but accounts for less than 6% of county councils' budgets).
- **290 municipalities** (*kommuner*) at Territorial Level 4: they are responsible for basic and secondary education, kindergarten, elderly care, social services, communications, environmental protection, fire department, public libraries, water and sewage, waste management, civil defence, public housing and physical infrastructure.



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## Assessment and recommendations

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*The territorial dimension has long been at the core of Sweden's success in combining growth and equity objectives*

---

The combination of growth and equity objectives in Sweden has always had a strong territorial dimension. Based on an export-oriented, R&D-intensive industrial policy, Sweden has achieved one of the highest levels of GDP per capita and the strongest GDP growth rates over the past decade in the OECD area with a striking level of spatial concentration (51% of the national population and 57% of the national output are in the three regions of Stockholm, Västra Götaland, and Skåne in 2005). At the same time, Sweden has adhered to its historically deep rooted commitment to equity by maintaining one of the lowest Gini indices of regional disparities in GDP per capita and the second flattest distribution of disposable income disparities among individuals in the OECD. With the OECD's highest level of public social expenditure (29.4% of GDP in 2005), Sweden operates a comprehensive welfare system almost entirely decentralised to the 20 county councils (directly elected assemblies) and 290 municipalities. In parallel, an ambitious equalisation system eliminates most of the disparities among counties and municipalities in terms of revenue and public service delivery. The government's recent initiatives confirm this long standing commitment to growth and equity. Following its accession to the EU in 1995, Sweden aligned its regional policy with the EU Cohesion Policy, and by renaming it as the "Regional Growth Policy" in the 2008 Budget Bill, the government has shown a renewed focus on promoting business development through entrepreneurship and innovation in all parts of the country, including both urban and sparsely populated regions. Ongoing regional reforms recognise the regional heterogeneity of Sweden and are looking at ways to promote growth in different types of regions.

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*However, challenges to combine growth and equity objectives in the long term are increasing*

---

While the Swedish policy mix has successfully delivered growth and equity objectives so far, it is confronted with increasing challenges on two fronts. On the *endogenous* front, demographic ageing and rising expenditure for long-term elderly care will reinforce fiscal pressure on the sparsely populated regions with the highest dependency ratio (such as Norrbotten, Jämtland, Västerbotten, and Dalarna). Care for the elderly and the disabled already accounts for almost 30% of local government budgets, and 23.7% of Sweden's population is expected to be aged over 65 in 2050. This adds a significant burden to the "Swedish paradox" of strong R&D investment (especially in the business sector with around 3% of GDP) that translates into relatively low levels of new firm creation and entrepreneurship. National growth is mainly driven by densely populated urban regions but some regions adjacent to them struggle to fully absorb labour force, particularly in terms of youth unemployment (although the unemployment rate for 20-24 and 25-29 year-olds in Stockholm remains around 3% in 2007, it is above 5% in the surrounding counties of Västmanland and Södermanland) and integration of immigrants (over two-thirds of international migrants arriving in Sweden flow into the three largest regions in 2007).

On the *exogenous* front, the global crisis has also raised new challenges. Although Sweden entered the crisis with a fiscal surplus and greater room for manoeuvre than many OECD countries, its relatively small and open economy is projected to experience a strong contraction of output in 2009 before gradually recovering in 2010, with an unemployment rate exceeding 11%. While in absolute terms the worst affected regions are the largest urban regions most exposed to international markets (Stockholm, Västra Götaland, and Skåne), in relative terms the impact has been more severe on some regions close to large urban regions or some sparsely populated regions (such as Gävleborg, Västmanland, Södermanland, Värmland, Jönköping, Kronoberg and Blekinge) which have less diversified economies and thinner markets. Public spending capacity is eroding rapidly at the national but also the local level, owing to a combination of decreased tax revenues and increased social benefit expenditures. Local governments in Sweden are particularly vulnerable to such economic downturns because they have only one local tax (on income) and are required by law to maintain balanced budgets. This makes it all the more important for municipalities and county councils to intensify their efforts not only to improve cost-effective approaches to local public service delivery, but also to better exploit regional assets for growth.



---

*Solutions to enhance cost-effectiveness in local public service delivery are necessary...*

---

A typical way to address such fiscal challenges is to enhance cost-effectiveness in local public service delivery. Following the economic crisis of the early 1990s, Sweden sought to reap economies of scale by conducting wide-ranging structural reforms at the national level (e.g. pensions, health care, education and public administration) and strengthening inter-municipal collaboration. Swedish municipalities are relatively large by OECD standards (as a result of mergers from 2 498 municipalities in 1952 to 278 in 1974; currently 290 municipalities) and have developed inter-municipal co-operation tools for public service provision (e.g. local federations and common committees).

However, the scope of current challenges calls for further efforts to make the territorial equity objective sustainable in the long term, especially in sparsely populated northern regions, and to rationalise local public service delivery. Considering that the margin for further mergers is limited, diversifying sources of local revenues could be an effective option (by increasing the use of certain market tools, such as public-private partnerships or local user charges in certain sectors such as transport). Reintroducing a local property tax could also smooth out local revenues and make them less dependent on the economic cycle. The system of financing, and particularly cost equalisation, should remain neutral on horizontal co-operation and not act as a disincentive to exploit economies of scale. Although the equalisation system was reformed in 2005 (from a horizontal to a mainly vertical system), further adjustments may be needed to limit its potential disincentive effect. In particular, the Stockholm region, the main contributor to the system and the main driver of Swedish growth, could benefit from a slight reduction in the rate of equalisation and a reduction of the implicit tax rate (through an increase in the cost loading for higher wage costs). A parliamentary committee is currently examining whether the equalisation system has a disincentive effect, and if so, it will offer proposals on such pitfalls by the end of 2012.

Increasing efforts are also required in terms of performance monitoring of local public services and the development of innovative services in remote areas. The system of performance monitoring (e.g. the “Open Comparison project”, which promotes access to comparable information on quality, results and costs of public services) could be extended to all Swedish municipalities (one-third of municipalities do not participate at present) and all public services (not only health and education, but also support to economic development, entrepreneurship, and regulatory performance), in better co-ordination with

other existing indicator systems at the national, regional and municipal levels. Finally, although Sweden is the world's leading country in providing web-based services and applications for citizens, the picture is more mixed at the local level and the use of e-services in smaller municipalities could be further exploited.

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*... but not sufficient to support a virtuous circle of growth and equity reinforcing each other in the longer term, which requires a paradigm shift in regional policy*

---

Considering that Sweden's key goal is to sustain growth and equity objectives in the long term, enhancing the cost effectiveness of local public service delivery is necessary but not sufficient to address the magnitude of the structural challenges ahead. Whether Sweden can still achieve growth and equity objectives in the future will largely depend on its capacity to set in motion a virtuous circle based on synergies among sectoral policies in heterogeneous regional economies. This requires a shift from a top-down distribution of sectoral subsidies for lagging regions towards bottom-up integrated development strategies based on local assets. This forward looking policy mix could help build an overall environment conducive to innovation (in a broad sense) to maximise the competitive advantages of all regions, and calls for a collaborative process of policy design and implementation involving all levels of government as well as the private sector and the civil society.

---

*Sweden has made progress towards the paradigm shift during the past decade by promoting sources of growth in all types of regions...*

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Recent policy attention has focused not only on strengthening regional niches of excellence, but also on promoting sources of growth more broadly in all types of regions. Within a robust national innovation system of production and use of knowledge, Sweden has developed specific national programmes for regional innovation such as the Visanu programme (2002-04), the Regional Cluster Programme (2005-10) and the VINNVÄXT programme (since 2001). Compared with cluster programmes in other OECD countries, these programmes have successfully focused on strengthening regional competitive advantages, providing process support mechanisms, and encouraging collaboration between firms, academia and the public sector. The new Bill on research and innovation (presented in October 2008) also proposed to double public funding for R&D and to introduce a competitive allocation process for

universities; long-term funding for strategic research areas (primarily in medicine, climate, and technology); the creation of innovation offices adjacent to selected universities; and the strengthening of industrial research institutes. The government also pointed out the need for further dialogue between national authorities and regional actors on strategic work on research and innovation issues at the regional level.

In parallel to building regional excellence, Regional Growth Policy aims at fostering development opportunities in all parts of the country. All counties have been required to prepare Regional Development Programmes (RUPs), which aim at defining a holistic, long-term regional development strategy. In contrast with 2000-06, all regions of Sweden are eligible for EU Regional Competitiveness and Employment funding in the 2007-13 programming period. The ERDF Regional Operational Programmes are giving utmost priority to “innovation and renewal” (90% of indicative budgets for ERDF funds), while the remaining funds will be distributed among “skills supply and improved labour supply” (6%), “accessibility” (3%) and “strategic cross border co-operation” (1%). At the same time, the Rural Development Programme for Sweden 2007-13 promotes not only the competitiveness of agriculture and forestry (17% of funds), but also the environment and landscapes (66%), and economic diversification and quality of life in rural regions (14%).

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### *... and enhancing the role of regional actors*

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This shift in policy focus has been accompanied since the late 1990s by the gradual empowerment of regional actors, both through institutional changes in counties' competencies and new policy instruments (Regional Development Programmes and Regional Growth Programmes). The Swedish model has often been characterised as an “hourglass” in which the national government and the municipal level hold the majority of powers while the regional level is relatively weak. Sweden used to combine a high degree of decentralisation for welfare services (equity) with a relative centralised framework for regional development and strategic planning, considering that directly elected regional actors (county councils) are mainly involved in health issues, and the competency for regional development was attributed to national agencies at the regional scale (county administrative boards).

However, the Swedish “hourglass” started to change following the EU focus on the regional scale for the management of Structural Funds. Since the late 1990s, Sweden has developed a rather unusual regionalisation process by proposing different options to different regions and pursuing an asymmetric decentralisation. In contrast with reforms driven by the central government in some other OECD countries, Sweden's regionalisation reforms have adopted a

bottom-up approach based on a conscious choice to take the time to experiment, to achieve consensus through in-depth consultation, and to learn from results. The result is a very heterogeneous map in which regional development responsibilities (notably the task of designing Regional Development Programmes and Regional Growth Programmes) have been assigned to: *county councils* (directly elected regional authorities) in two “pilot regions” since the late 1990s (Västra Götaland and Skåne, both urban regions in Southern Sweden); *regional co-ordination bodies* (indirectly elected associations of all municipalities in a county, called *kommunala samverkansorgan*) in two thirds of counties through the 2000s; and still to *county administrative boards* in one fourth of counties (Norrbotten, Västernorrland, Jämtland, Västmanland and Stockholm).

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*But current adjustments in policy instruments  
and institutional arrangements remain an ongoing  
process to be pursued further*

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Recent adjustments reflect an ongoing process of transition and co-existence between the “old” and “new” paradigms rather than a substitution of the former by the latter in terms of budget and governance arrangements. Despite the all-region approach of Regional Growth Policy, the sparsely populated northern counties still receive the bulk of the formal funding for regional growth (although the latter only represents a small share of the total government budget). Although regional actors are more involved than previously in setting regional and national growth agendas, public investment remains relatively centralised in Sweden compared to OECD average. For example, the share of capital spending by municipalities and regions is among the lowest in the EU. A centralised framework for public investment may allow for more efficient decision making, but it may also limit the degree to which local governments are able to match investment priorities with local needs. Regional development represents only 3% of counties’ expenditures (compared to more than 80% for health care), and in most cases the directly elected regional actors (county councils) are not in charge of regional growth strategies.

Regional Development Programmes (RUPs) provide a useful strategic background for regional and local actors to co-ordinate their actions, but they remain broad in scope, are not attached to any budget, are not well connected with EU Structural Fund programmes, and lack enforcement mechanisms. Regional innovation policy is currently mainly shaped by national agencies, municipalities, firms and universities/research centres, with few examples of active involvement of counties in the VINNOVA programme for example. With the exception of the two pilot regions, counties have limited

enforcement capacity in terms of regional development and spatial planning. Regional co-ordination bodies could be an effective way to tackle common regional development challenges as they enjoy broad representation and involve all municipalities within the county. However, the lack of a clear mandate, enforcement tools, accountability mechanisms, and sufficient resources reduces their arbitration capacity and their ability to make regional strategies fully operational. From a democratic point of view, the creation of a second county-level body also makes the system less transparent for citizens.

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*The enlargement of some regional labour markets raises additional questions about the critical mass needed to address regional development challenges...*

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The enlargement of labour markets in some parts of the country (mainly in the centre and the south) is raising additional questions. While the number of municipalities has been drastically reduced in Sweden, the number of counties (21) is almost the same as in 1634. Their geographic size varies greatly from the north to the south but their average population is smaller than OECD average for TL3 regions. It has long been argued that many of today's counties are too small to cope with the complexity of health care provision. However, challenges go far beyond health care, as territorial fragmentation may jeopardise the design and implementation of major investment projects that require a broader focus to support regional development effectively (ranging from transport and housing to human capital and innovation). These projects call for more effective mechanisms of strategic planning and co-operation among municipalities and counties, particularly to enhance urban-rural linkages in high unemployment areas close to densely populated regions.

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*... while potential for cross-sectoral co-ordination is not fully exploited at the regional level*

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The potential for cross-sectoral co-ordination at the regional scale could be further exploited. Given the Swedish tradition of separating policy making from policy execution, the national government concentrates strategic functions while around 400 state agencies focus on policy execution and monitoring; they have a high degree of autonomy and their own representatives at the local level. In 1989, county administrative boards were assigned the task of co-ordinating the activities of sectoral state agencies at the county scale. However, this mandate has not been easy to implement, as the formal status of sectoral state agencies remains unchanged and the

representatives at the regional level still report directly to the national government rather than to the county administrative boards. Besides, the role of state agencies at the local level is often ambiguous and overlapping, especially in the field of infrastructure policies. This limits possibilities for exploiting the multiplier effect to be obtained from synergies across sectoral policies with strong local externalities, such as transport, higher education and innovation.

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*Exploiting cross-sectoral synergies at the regional scale could enhance the impact of infrastructure investment on regional development*

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Closer co-ordination of policies and actors at the functional regional scale could help expand the benefits of economies of agglomeration and improving urban-rural linkages in Sweden, notably with regard to the impact of infrastructure investment on regional development. The traditional struggle of Swedish transport policy to compensate for long distances from international markets and a harsh climate contrasts with relatively low levels of infrastructure stock, although the government's action to support recovery from the crisis may create new momentum for infrastructure investment. Public investment in transport infrastructure needs to be better articulated with housing and spatial planning, areas which at present are largely addressed at the municipal level through municipal housing companies and municipal planning, in accordance with national guidelines but without systematic co-ordination at the regional scale.

With the change of the planning method in 2008, Sweden is moving towards more strategic oversight of national infrastructure investment frameworks and larger influence of regional stakeholders. Regions were asked to establish their own priorities in terms of objectives and modes of transport, and consultations were carried out to promote open dialogue among traffic agencies, counties and municipalities. In autumn 2009, proposals for 2010-21 were presented to the government, which will decide on the measures to be included in the national infrastructure plan and approve the financial frameworks for the regional infrastructure plans in the first quarter of 2010. The government's plans to introduce a new joint traffic agency in charge of developing and managing infrastructure from a holistic perspective in 2010 could be a further step towards more effective integration of infrastructure policies with other sectoral policies.

A co-ordinated infrastructure development strategy at the functional regional scale can have a particularly strong impact on cross border development. Among many others, two examples have suggested that cross sectoral

co-ordination can be a key factor in successful cross border integration. First, the two cities of Haparanda (Sweden) and Tornio (Finland) have developed an extensive set of co-operation projects ranging from culture and education to numerous agreements for joint public services. Second, the construction of the Öresund bridge between Malmö (Sweden) and Copenhagen (Denmark) in year 2000 served to achieve a more integrated labour market with a greater critical mass and to develop stronger clusters in knowledge-intensive industries (pharmaceuticals, food processing, software, design and environment technologies, ICT, biotechnology). Following the enlargement of the EU in 2004, further potential could be exploited with the implementation of the EU strategy for the Baltic Sea Region (based on four thematic pillars: environment, economic development, accessibility, and security).

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*In order to promote innovation opportunities in all regions, joint policy action at the regional scale is needed to reduce youth unemployment and better integrate immigrants in the labour market...*

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Econometric evidence on factors of growth in OECD regions suggests that infrastructure alone has little impact on regional growth unless it is associated with human capital and innovation. Well intentioned infrastructure projects to enlarge regional labour markets may eventually generate “leakages rather than linkages” if they are conducted in isolation from other policies at the functional scale and fail to enhance the overall business and living environment conducive to innovation and growth. In particular, Sweden has scope for more effective collaboration between national, regional and local actors in addressing challenges of high youth unemployment and integration of immigrants in the labour market, which tend to raise particularly strong issues in large metropolitan regions.

Part of the solution to help reduce youth unemployment could be to enhance the role of universities in stimulating competitive regional innovation systems. Despite a relatively high level of local business involvement in schooling compared with other OECD countries, improving school-to-job transition remains a concern in Sweden. Universities could play a crucial role by moving towards more needs-driven research and support to innovation in knowledge-intensive SMEs and start-ups. Giving universities more freedom and resources to develop their own strengths could help speed up students' entry into the labour market with jobs that best match their qualifications and promote the regional economy.

As in many OECD countries, the concentration of immigrants in the largest metropolitan regions of Sweden has raised challenges in terms of co-ordinating



national, regional and municipal actions for labour market integration, social assistance and housing among others. While special vocational counselling is currently being tested on a provisional basis in three cities and recent national measures (such as the “Step-in jobs” initiative for newly arrived immigrants and the introduction of a language bonus) seek to reduce labour market exclusion, continuous collaboration among national, regional and municipal actors will be necessary to increase the chances of using the potential of the immigrant labour force in the regional economy. Fiscal equalisation policy could also play a role through a review of cost loading for the foreign born to determine whether municipalities with higher concentrations of foreign born are adequately compensated for the extra costs this represents.

Closer co-ordination between central government agencies, county authorities and municipalities administering active labour market policy instruments and different sorts of benefits could also help avoid fragmentation of service delivery. The recent proposal to establish a “one-stop shop” for local labour services and the creation of “New Start Offices” (Nystartskontor) to provide tailored guidance to entrepreneurs are going in the right direction to enhance the efficiency of local labour services, which is particularly critical at a time of rising unemployment.

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### *... as well as build an entrepreneurial culture*

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Stimulating what is sometimes assessed as an “innovative but not entrepreneurial” labour force in Sweden can have a substantial impact on regional development. Sweden’s overall rates of entrepreneurship (in terms of business births, deaths and growth rates) remain low by international standards. The annual number of start-ups tends to be higher in large metropolitan regions, but the annual growth rate of start-ups is higher in rural regions and this potential should be exploited. Besides the extensive set of national measures to promote entrepreneurship and business support, almost all Regional Development Programmes (RUPs) include initiatives directed towards entrepreneurship and small business development. Some regions have developed successful private sector led bottom-up initiatives (such as the winter automotive cluster in the north). Further efforts, based on close collaboration between national, regional and municipal actors, should not only support business development and facilitate access to finance (especially to regional venture capital funds for early stage high-growth firms), but also focus on improving entrepreneurial awareness and entrepreneurial culture starting from early school years.

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*Strengthening the rural economy requires  
an integrated development strategy building  
on local assets*

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Developing a diversified and sustainable rural economy is a crucial component of effective regional development in Sweden. Although almost all of Sweden is classified as predominantly rural or intermediate in the OECD Regional Typology, rural Sweden is far from a homogeneous reality. A significant number of rural regions have actually outperformed the national average over a ten year period, and only five rural regions are growing more slowly than the average among OECD rural regions. Interdependencies between urban and rural regions are increasing and need to be further strengthened in order to raise the competitiveness of both urban and rural regions. Opportunities for rural development vary widely across regions. In addition to resource-based industries, some regions have significant potential for developing various forms of rural tourism, including agro-tourism, eco-tourism, hunting and fishing leisure activities, cycling, and cultural tourism, sometimes linked with indigenous populations such as the Sami community. Others actively promote the development of forestry and wind-based energy. In the long term, efforts need to focus on spreading and embedding the benefits of growing industries into the regional economy while avoiding the risk of lock-in. In particular, it will be increasingly crucial for rural regions to combine proactive actions to adapt the content of higher education to their specific needs (rather than following conventional attempts of knowledge transfer) and to exploit existing national measures for SME development and entrepreneurship, as well as programmes to improve access to public services.

Sweden has been moving in the direction of “rural proofing” at the national level; this helps consider the impact of a national policy on rural areas before it is implemented and requires wider cross-sectoral co-ordination. The approach to rural development so far has remained rather top-down and local governments (including county councils) have played a very limited role, although the government has stated its support for greater involvement of the regional level in a second step. This raises co-ordination challenges between regional policy and rural policy, challenges that Sweden shares with other European countries due to the separation between EU Cohesion Policy and Common Agricultural Policy (and their related financial instruments, Structural Funds and EAFRD). Enhanced co-ordination of regional and rural development policies would require better integration of rural development in the regional development work carried out at the regional level, as well as greater devolution of regional development competency to regional actors.

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*Improving regional strategies requires greater devolution of regional development competencies to county councils...*

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Designing and implementing regional strategies based on local competitive advantages require greater devolution of regional development competencies to county councils. According to various external assessments since the late 1990s, the two pilot regions created in 1997-98 have shown that greater empowerment of regional actors has positive results in terms of building a common vision for the region, better involving private actors in the design of strategies, and strengthening relations across levels of government with both municipalities and the national government. In its 2007 Report, the Parliamentary Committee on Public Sector Responsibilities relied on the examples of Västra Götaland and Skåne to argue in favour of stronger regionalisation (it suggested replacing county councils by six to nine larger regions to be created by 2010, with directly elected regional assemblies in charge of health care and regional development).

Although regional reforms have gained broad support in Sweden (especially among local governments), the reform promoted by the 2007 Committee has not been implemented as such. However, given the strong bottom-up demand for enhanced regionalisation, the government has announced in the 2010 Budget Bill that it would make pilot regions permanent and it has validated the request of two additional county councils to receive the same competencies for regional development (Halland and Gotland). In addition, the government supports a bottom-up approach for county councils in all Swedish counties to receive competencies for regional growth. The request has to come from the counties themselves and no institutional change will be imposed by the government. A distinction is made between *competencies* (for regional development) and *size* (mergers among counties), as a specific process has been put in place to deal with the latter (requested by seven counties so far). A remaining challenge is how to better co-ordinate programmes linked to EU funds and rural development at the regional level (by county councils).

The issue of merging counties and size of region is politically difficult and should be addressed with caution. Some large urban areas can offer a clear economic rationale for merging counties. For example, in the Stockholm-Mälars region, the functional region covers five counties which are all closely interrelated and interconnected. However, the economic rationale is less clear in sparsely populated northern areas, in which local labour markets have not widened appreciably and distances are significant. Considering that larger administrative regions do not necessarily lead to stronger regional growth,

in-depth cost-benefit analysis is needed and a broad set of criteria must be taken into account before deciding on a merger.

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*... and more effective co-ordination of sectoral policies by county administrative boards...*

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Enhanced devolution of regional development competencies needs to be accompanied by better state co-ordination at the regional level (i.e. deconcentration) in order to reduce overlaps across agencies and better exploit policy synergies. The role of governors as the main co-ordinators of national policies at the county (regional) level needs to be clarified. The Parliamentary Committee suggested in 2007 that national government supervisory activities should be consolidated in the county administrative boards and that the latter should be reorganised into a smaller number of authorities to exploit economies of scale. The government has recently commissioned an inquiry to review the national administration at the regional level and to make concrete proposals for improving the co-ordination of central agencies at the regional level and possibly for changing county boundaries. Conclusions are expected by December 2012, a rather distant horizon considering the already long timeframe of regional reforms.

Although the next steps in regional reforms have been recently clarified, the overarching challenge for Sweden is to find a balance between a *bottom-up* process, which has strong advantages in terms of consensus building, and *central leadership*, to avoid constantly delaying the reform process. Maintaining incremental reforms over an extended period requires consistent leadership to clarify medium-term objectives and set priorities. Central leadership will have a key role to play in the coming months, with the examination of the merger of counties and reforms of central administration at the regional scale.

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*... as well as more effective co-ordination tools across levels of government with a greater role devolved to regional development programmes*

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With county councils gaining new competencies for regional development, means of co-ordination across levels of government could be reconsidered in order to remedy gaps in regional policy co-ordination between national and regional actors. Given that Regional Development Programmes (RUPs) are the main strategic tools for regions (Regional Growth Programmes are not mandatory), they would benefit from stronger enforcement tools and a clearer financial framework. Examples of state-region contracts in other OECD countries could offer some inspiration (bilateral agreements between national

and sub-national governments on their mutual obligations, including financial commitments and enforcement mechanisms). Giving a stronger “contractual” dimension to RUPs would allow for greater inter-ministerial collaboration in the design of the contracts and greater accountability of regions/counties for programme implementation. It would help clarify the amount and allocation of resources for regional development, which are currently very complex to assess, and ensure that the focus on health care does not completely absorb the attention and capacity of county councils. The timeline and functioning of RUPs could be standardised across Swedish counties and aligned with EU programmes over the next financial period (2014-20) to facilitate co-ordination with EU Cohesion Policy and the evaluation process. Enhancing the contractual dimension of RUPs could be an option.

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*Better co-ordination of regional development issues  
at both regional and national levels could help  
address the crisis*

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Better co-ordination on regional development issues both at regional and national levels is particularly important in these times of crisis. At the *regional* level, a system of “regional co-ordinators” was introduced in two regions in early 2008 and was extended to all counties when the crisis hit Sweden in fall 2008. The regional co-ordinators are the county governors and the political leaders of the county councils or regional co-ordination bodies. Their mission is to report regularly to the government on their county’s situation, identify the need for government intervention (primarily in the areas of education and labour market policies) and co-ordinate policies at the county scale. The aim is to facilitate and strengthen the co-ordination of local, regional and national actors, policies and resources, at the scale which national policy-makers considered essential for dealing with the crisis. To some extent, the crisis has helped reveal the need for appropriate co-ordination mechanisms to address growth challenges at the regional scale, building on already established regional partnerships and long-term strategies. Already have helped start co-ordination.

At the *national* level, a co-ordinating group of state secretaries has been created to receive the regional co-ordinators’ proposals for government action and to facilitate co-ordination at the national level. Although it is too early to assess the functioning of these new bodies, many positive results have been reported and the short-term institutional responses to the crisis are likely to be made permanent. In particular, the national group of state secretaries can facilitate synergies among regional development policies at the national level. Given the marked need for cross-sectoral co-ordination in Sweden due to the

large number of sectoral agencies, such initiatives should be strongly encouraged.

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*Finally, strengthening regional partnerships and capacity building is critical to design adequate regional development strategies*

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Designing development strategies that draw on untapped regional resources requires regional partnerships and capacity building to involve a broad variety of stakeholders (private actors, SMEs, universities, NGOs, citizens). This is particularly critical at present in order to maximise the impact of the fiscal stimulus package, which plans to provide SEK 41 billion in 2009 to restore confidence in financial markets, provide incentives for jobs and firms, introduce labour market measures and help local authorities protect welfare. Although Sweden has developed better public-private co-operation than some other OECD countries, there is room for improvement in certain areas. While private actors are clearly involved in the financing of regional policy, their role in designing regional strategies seems more limited. With the current regional reforms, regional actors have a key role in ensuring enhanced public-private co-operation on the design of a regional development strategy based on regional comparative advantages.

Designing and enforcing regional strategies also requires regions to have the skills necessary to manage complex development programmes at the municipal or regional level. Sub-national governments have advantages in terms of local knowledge, but a lack of human and institutional capacities can affect their performance. In municipalities and regions in northern Sweden, the main challenge is to attract experts and experienced managers. The problem of staff shortage will only worsen in the coming years as a result of demographic ageing. Incentives are needed to enhance mobility among regions, reward work in remote regions, and facilitate exchanges of staff for certain periods of time.

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*The way forward*

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Strong commitment to growth and equity objectives is an essential characteristic of the Swedish development model. Sweden has nurtured a distinctive strength in terms of transparency and quality of its public institutions (second out of 133 countries in the 2009-10 *Global Competitiveness Report*). Sweden's inclusive policy-making process, its capacity to introduce innovative governance approaches, and the high level of trust among public and private actors and citizens constitute major competitive advantages in a knowledge economy

increasingly shaped by networks of open innovation and social innovation. In order to better exploit the strong growth potential both in urban and in rural areas of Sweden and to facilitate urban-rural linkages, measures to enhance the diffusion of innovation, to foster an entrepreneurial culture, and to integrate infrastructure with other sectoral policies should be taken at the regional scale. This requires further empowerment of regional actors and more effective co-ordination among the different types of regional programmes, by giving a greater role to Regional Development Programmes for example. Such initiatives should be accompanied by further efforts to strengthen regional partnerships and to build capacities at all levels. Reforms to capture complementarities between growth and equity at the regional scale will reinforce Sweden's capacity to remain among the OECD's best performers in the longer term.



## Chapter 1

### **Regional Development in Sweden: Trends, Achievements and Challenges**

Sweden is a small open economy exporting a large share of its domestic production. The cold climate and particular geography creates an uneven distribution of the population with pockets of concentration, and surprisingly low levels of inter regional inequalities. Chapter 1 is comprised of three main sections. The first section identifies Sweden's main macroeconomic strengths and challenges. The second section illustrates the high levels of economic and demographic concentration present in Sweden, their impact on national output and the low levels of inter regional inequalities. This section also evaluates the asymmetric impact of the global financial crisis on Swedish regions. The third section assesses the main factors of growth at the regional level and identifies opportunities for growth in the areas of promoting innovation, enlarging labour markets, improving inter regional linkages and examining future sources of growth in rural regions in renewable energies.

## Introduction

Following the banking crisis of the 1990s, Sweden's recovery was fuelled by strong macroeconomic performance owing to reforms undertaken in the banking sector and in labour markets, a technology-intensive economy and the pursuit of export-oriented growth policies. At the sub-national level, Sweden's economy is concentrated in three main agglomerations, Stockholm, Skåne and Västra Götaland, which are home of 51% of the Swedish population and produce 57% of the national output annually.

The three city-regions' buoyant growth rates exceed the national average. As a result they have contributed to 70% of national GDP growth over the past decade. Driven by the benefits of economies of agglomeration, GDP has continued to concentrate in these agglomerations and the population has increased over the past years. However, regional inequalities remain relatively small by OECD standards. Because agglomeration is working well, it should be pursued since there are no signs of congestion or diseconomies of scale and the national economy benefits significantly.

The benefits stemming from agglomeration could be expanded, especially to neighbouring and adjacent regions, by improving urban-rural linkages and strengthening commercial ties and networks with them. As Sweden's most underperforming regions are close to agglomeration regions, labour markets should encompass these areas.

Innovation can play a key role. In Sweden innovation is driven by the high levels of investment of a few large firms with international ties. As a result innovation is very concentrated in agglomeration regions. Encouraging entrepreneurial activity and SMEs could help to diffuse knowledge to other firms, other economic sectors and other regions and could encourage non-technological forms of innovation.

Possibilities for growth in Sweden are not limited to urban regions. Rural regions defined by the OECD typology (Annex 1.A1) – are not synonymous with decline. A significant number of rural regions have outperformed the national average over a ten-year period, and only five rural regions are growing more slowly than the average among OECD rural regions. Rural regions that depend heavily on primary goods can be vulnerable to shocks. They can benefit from diversifying their economic base into higher value added goods and services. A number of rural regions have a comparative advantage in renewable sources

of energy, mainly biofuels. This is an area that might represent an important source of growth for the medium and long term. Swedish rural regions can become global competitors in this area and should take stock of this source of green growth. Enlargement of local labour markets can bring the benefits of larger markets but this is not a solution for all regions, especially sparsely populated ones.

Recent challenges brought by the global financial crisis have an asymmetric impact on Swedish regions. In absolute terms the effects of the crisis are larger in Sweden's main metro-regions, the proportionate impact however is larger in more vulnerable regions with thinner markets and less diversified economic basis, such as in a number of regions adjacent to metro-regions and in several sparsely populated southern and coastal regions.

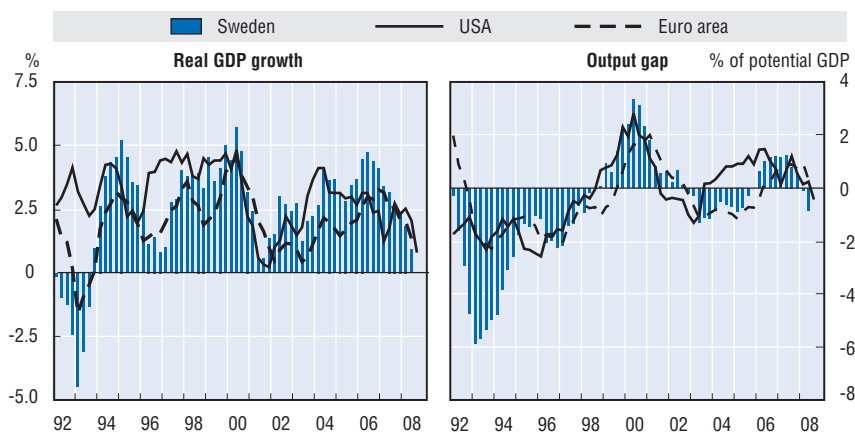
## 1.1. Sweden's macroeconomic performance

### **Main macroeconomic indicators**

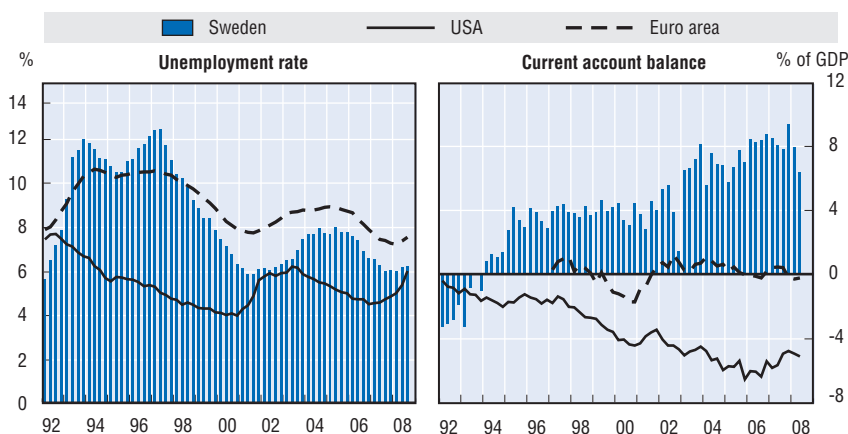
Sweden enjoys excellent macroeconomic performance with high rates of output and productivity growth, low and stable inflation, a strong fiscal position and a surplus in its current account. It has a small and open economy and exports high-technology products. However, tensions are visible in several areas. Joblessness is widespread among the young and immigrants, educational outcomes, in particular in mathematics and science, offer room for improvement, the high share of elderly population to total population creates challenges for public budgets and the pension systems, and finally the effects of the financial crisis are particularly severe in Sweden due to its small open economy.

At the macro level Sweden recovered fully from the crisis of the 1990s and outperformed most OECD countries over the past decade. Around 1970, Swedish gross domestic product (GDP) per capita was less than 10% below that of the United States, but following the crisis in the early 1990s the gap widened to nearly 25%. Since 1998, GDP growth in Sweden has outpaced growth in the euro area every year and growth in the United States since 2004 (Figure 1.1). Sweden's unemployment rates up to 2008, previous to the global financial crisis, were low by European standards. Inflation remains low and stable and the current account has enjoyed a surplus since 1994. In sum, the key macroeconomic indicators paint the picture of a solid economy.

Sweden's recovery has been fuelled by a technology-intensive economy and strong labour productivity. Labour productivity growth has been strong in recent years, with cyclical movements and an upward trend since the 1980s (Figure 1.2). With manufacturing output volume per hour worked growing almost 6% annually during the five years from 1999 to 2003, manufacturing productivity is growing faster in Sweden than in other countries (Table 1.1).

Figure 1.1. **National GDP growth output gap, 1992-2008**

Source: OECD (2008), *OECD Economic Outlook*, No. 84, OECD Publishing.

Figure 1.2. **Unemployment rates and current account balance, 1992-2008**

Source: OECD (2008), *OECD Economic Outlook*, No. 84, OECD Publishing.

Production of ICT equipment in general, and that of the telecommunications giant Ericsson in particular, account for a significant part of the increase, but productivity gains have also been noteworthy in the pharmaceutical industry and in vehicle and machinery manufacturing, although recent reports suggest productivity gains in the latter sector<sup>1</sup> are decelerating. Gains in value added per worker in the service sectors and efforts to deepen investments in research and development (R&D) have also boosted productivity. At 3% of GDP, business sector R&D is higher than in any other OECD country, to which is added public R&D spending at 1% of GDP.

Table 1.1. **Productivity growth by sector, value-added per hour worked, average annual change 1999-2003**

	CAN	DNK	FIN	JPN	NLD	NOR <sup>1</sup>	SWE	Share of total Swedish value-added, %
<b>Total<sup>2</sup></b>	<b>1.9</b>	<b>1.8</b>	<b>2</b>	<b>1.7</b>	<b>0.7</b>	<b>2.7</b>	<b>2.4</b>	<b>100</b>
Agricultural, hunting, forestry and fishing	3.4	2	5.6	-2.1	-0.3	4.3	4.8	1.9
Electricity, gas and water supply	-0.4	-1.4	6.6	3.5	3.8	9.5	2.9	2.6
Construction	1.1	1.1	-1.9	-0.5	0	-2.6	-0.3	4.3
<b>Total of manufacturing</b>	<b>2.6</b>	<b>3.4</b>	<b>4.4</b>	<b>4.5</b>	<b>1.6</b>	<b>3</b>	<b>5.9</b>	<b>20.9</b>
Food products, beverages and tobacco	2.1	3.3	3.3	0.1	1	5.5	1.3	1.4
Pulp, paper, printing and publishing	3.2	0.1	2.5	..	-0.1	2.1	3.5	2.6
Chemical, rubber, plastics and fuel products	3.5	2.9	1.4	..	4.5	1	7.8	2.5
Basic metals and fabricated metal products	2.1	3.2	1.5	-0.3	0.8	4	2.6	2.2
Machinery and equipment, including ICT	-0.4	4.1	8.4	8.3	0.9	1.2	9.3	3.9
Transport equipment	2.7	2.4	0.2	5.5	0.6	0	7.3	2.3
<b>Total of services</b>	<b>2</b>	<b>1.4</b>	<b>1</b>	<b>0.9</b>	<b>0.6</b>	<b>2.8</b>	<b>1.5</b>	<b>70.0</b>
<b>Producer services</b>								
Business and professional services	2.6	-0.7	-0.5	..	1.5	0.4	1	7.8
Financial intermediation	1	3.9	5	6.6	1.6	2.8	4.3	3.6
Real estate	2.7	-0.4	-0.1	3.8	-1.0	-0.6	0.4	8.6
<b>Distributive services</b>								
Wholesale and retail trade; repairs	3.3	2.1	2.6	..	0.8	5	3.1	10.5
Transportation	2.7	6	1.1	..	-0.8	1.6	2	4.5
Communication	4.3	4.6	10.1	..	9.1	11.5	6.4	2
Hotels and restaurants	0.4	-2.9	-1.0	..	-1.2	0.9	0.4	1.5
Community and personal services	1.1	0.2	-0.3	..	-0.4	1.4	0.6	25.1

1. 1999-2002.

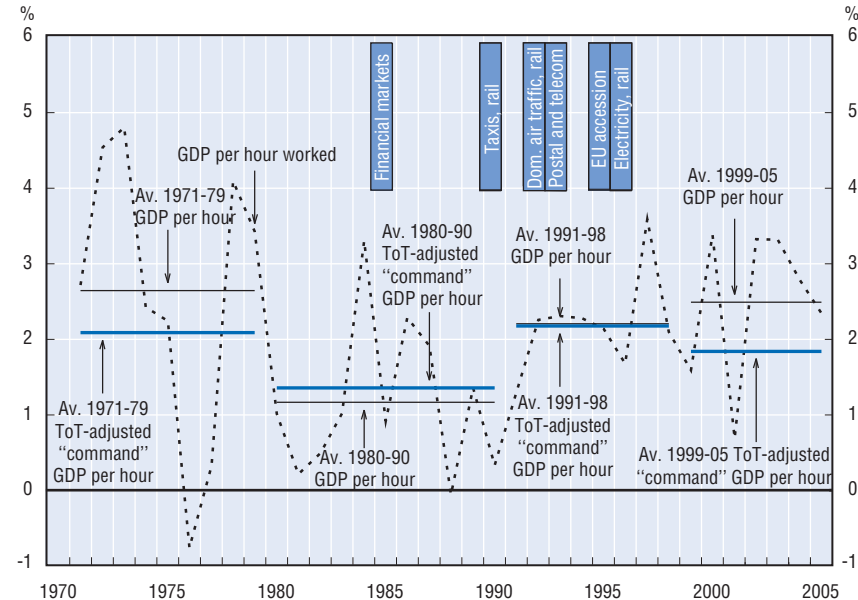
2. Sub-sectors accounting for less than 1% of value-added in Sweden are not listed separately, but are included in the totals.

Source: STAN Database, OECD calculations.

Sweden is among the most innovative OECD economies. It has the highest R&D intensity (3.73%) among OECD countries, a relatively high share of business R&D expenditure (2.79% compared to the OECD average of 1.56%), a high share of higher education R&D spending with respect to GDP (0.76%), the second highest share of researchers per thousand employment, one of the highest graduation rates in advanced research programme (PhD or equivalent) and fourth place in citations of scientific literature (Figure 1.4).

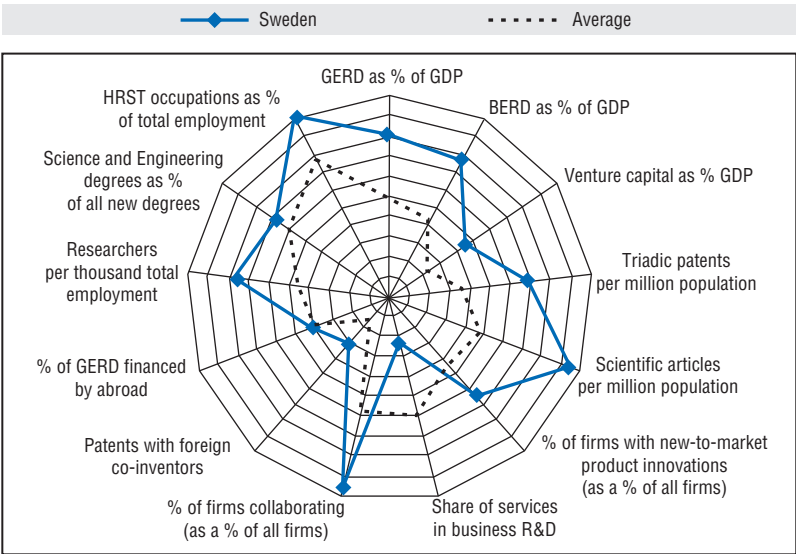
Recent fiscal reforms have resulted in a strong fiscal position. A series of reforms based on a policy framework and involving net lending targets, expenditure ceilings and balanced budget requirements for local governments has helped contain spending and reduce debt. As a result, the general government net financial position improved from net debt of over 25% of GDP in the mid-1990s to net assets of 20% of GDP by 2007.

Figure 1.3. Productivity growth in Sweden



Source: OECD Analytical Database and OECD calculations.

Figure 1.4. Science and innovation profile of Sweden



Source: OECD (2008), *Science, Technology and Industry Outlook*, OECD Publishing.

Recent labour market reforms have enhanced the attractiveness of work and addressed labour market exclusion. Key elements reforms introduced from 2006 onwards, include the establishment of an in-work tax credit; tapering of the unemployment benefit replacement rate as the period of unemployment lengthens; reductions in employer social security contributions for older workers, younger workers and people who have been out of work for an extended period; and tightening of administrative arrangements for access to sickness and disability benefits. As a result, the share of working age adults living from income benefits has fallen in recent years, from around 20-21% in 1997-2005, to 18% in 2007. Sickness absence has also declined significantly. These improvements have lasting positive effects: increased participation and lower structural unemployment.

As in many OECD countries the services sector dominates the Swedish economy, representing 71% of total value added and employing about three-quarters of the total workforce in 2005. The services sector is more prominent in Sweden than in Finland (65.7%), Norway (55.6%) and Canada (65.4%) and in OECD countries in general (68%). In contrast, the United States services sector represents a larger share of value, and in Norway and Canada it employs more people than in Sweden (Table 1.2).

Table 1.2. **Sectoral distribution of value added and employment, 1980 and 2005**

<b>Value added</b>	Sweden		Norway		Finland		Canada		United States		OECD24
Industry sectors	2005	1980	2005	1980	2005	1980	2005	1980	2005	1980	2005
Agriculture, hunting, forestry and fishing	1.1	4.5	1.5	4.1	3.0	9.9	1.9	4.3	1.1	2.2	2.2
Mining and quarrying	0.5	0.4	26.1	15.4	0.3	0.6	8.7	8.3	1.8	3.3	2.6
Construction	4.6	6.7	4.4	5.3	5.9	7.3	5.9	7.3	4.9	4.7	6.3
Manufacturing	19.7	21.9	9.8	15.6	23.0	27.5	15.6	18.5	13.1	20.7	18.0
Electricity gas and water supply	2.9	3.0	2.6	2.8	2.1	2.8	2.6	2.7	1.9	2.2	2.4
Services	71.2	63.5	55.6	56.8	65.7	51.9	65.4	58.9	77.3	67.0	68.5
<b>Total</b>	100	100	100	100	100	100	100	100	100	100	100
<b>Employment</b>	Sweden		Norway		Finland		Canada		United States		OECD
Industry sectors	2005	1980	2005	1980	2005	1980	2005	1980	2005	1980	2005
Agriculture, hunting, forestry and fishing	2.3	5.3	3.3	8.4	5.1	13.1	2.6	4.8	1.6	3.1	4.8
Mining and quarrying	0.2	0.4	1.6	1.0	0.2	0.4	1.1	1.5	0.4	0.9	0.4
Construction	5.5	6.6	6.6	7.0	6.9	7.5	6.6	6.8	6.2	5.5	7.6
Manufacturing	16.5	23.7	11.2	19.1	18.0	24.7	13.0	19.1	10.3	18.9	16.0
Electricity gas and water supply	0.7	0.8	0.6	0.9	0.7	1.1	0.8	0.8	0.4	0.6	0.8
Total services	74.8	63.3	76.7	63.6	69.1	53.1	76.0	67.1	81.1	71.0	70.5
<b>Total</b>	100	100	100	100	100	100	100	100	100	100	100

Source: Authors' calculations using OECD STAN Database for Structural Analysis (2008).

Although Sweden's service sector displays an overall lower value added per employee than in OECD countries, two subsectors in services record higher values. Financial intermediation and wholesale and retail trade, restaurants and hotels, add more value per employee on average than in OECD countries (Table 1.3). Sweden's service sector is quite efficient, adding more value per employee in all service subsectors than observed in Canadian subsectors and Finnish subsectors except in transport, storage and communications. Only the United States adds more value in all service subsectors than Sweden and Norway adds more value in transport, storage and communications, financial intermediation and community, social and personal services.

**Table 1.3. Value added per employee in the service sectors Sweden and five OECD countries, 1995 and 2005**

Service sectors	Sweden		Norway		Finland		Canada		United States		OECD22
	2005	1993	2005	1993	2005	1993	2005	1993	2005	1993	
Wholesale and retail trade, restaurants and hotels	48 414	29 845	42 239	25 176	41 168	28 599	30 483	23 466	53 091	35 916	41 197
Transport, storage and communications	66 860	44 743	68 213	44 618	84 136	50 255	64 962	48 908	107 779	72 120	77 423
Financial Intermediation	119 132	90 128	133 344	65 662	110 630	80 983	75 901	56 743	138 718	95 263	115 573
Real estate, renting and business activities	92 290	105 613	88 316	106 692	81 862	98 497	88 414	99 321	120 554	108 443	99 641
Community, social and personal services	32 684	30 891	34 736	33 285	30 085	32 611	38 841	37 683	45 247	46 114	40 694
Total services	50 999	42 150	50 011	39 859	47 854	42 466	48 307	41 693	69 277	57 358	57 247

Source: Authors' calculations using OECD STAN Database for Structural Analysis (2008).

Despite the declining trend in the manufacturing sector, it still represents an important source of competitiveness. With almost 20% of value added, Sweden's manufacturing sector has more weight than in Canada, the United States or other Nordic countries except Finland (with 23%). Over the past 25 years the declining share in manufacturing value added in most OECD countries has been less severe in Sweden, and manufacturing currently represents an important source of competitiveness on both domestic and export markets.

All of Sweden's manufacturing sub-sectors display higher levels of productivity than those of other OECD countries with one exception. In Sweden machinery and equipment (26%) is the largest contributor to value added in the manufacturing sector, followed by chemicals, rubber, plastic and



fuel products (16%), basic metals and fabricated metal products (15%), transport equipment (13%) and finally pulp, paper products, printing and publishing (12%). In addition to their large contribution, machinery and equipment and chemical, rubber, plastic and fuel products display levels of efficiency in manufacturing that are significantly above OECD averages. Although lower, other manufacturing sectors, with the exception of manufacturing n.e.c and recycling, also display higher levels of productivity than the OECD average (Table 1.4).

The public sector accounts for a large share of Sweden's services sector and financial intermediation has the highest level of efficiency among services. Within the services sector, community, social and personal services (Table 1.4) accounted for the highest share of services value added (36%) in 2005 owing to the prominence of the public sector in Sweden. This sector has been declining in recent years and has the lowest levels of productivity among services. As regards market services, real estate, renting and business services have grown strongly during the past 25 years with relatively high efficiency levels. Finally,

Table 1.4. **Value added and employment in manufacturing and services, 1980 and 2005**

Industries	Value added			Value added per employee			Value added per hour	
	Sweden		OECD24 2005	Sweden		OECD22 2005	Sweden 2005	OECD13 2005
	2005	1980		2005	% Δ 93-05			
<b>Manufacturing</b>								
Food products, beverages and tobacco	7%	7%	13%	61 481	48%	60 515	34.7	28.5
Textiles, textile products, leather and footwear	1%	3%	4%	43 790	44%	34 532	24.8	20.2
Wood and products of wood and cork	5%	6%	3%	51 633	83%	45 658	28.9	25.1
Pulp, paper, paper products, printing and publishing	12%	15%	9%	86 244	38%	78 318	49.8	37.9
Chemical, rubber, plastics and fuel products	16%	11%	18%	146 330	114%	110 060	83.0	53.9
Other non-metallic mineral products	2%	3%	5%	60 426	52%	67 962	33.3	35.4
Basic metals and fabricated metal products	15%	17%	14%	60 043	41%	59 374	32.1	31.0
Machinery and equipment	26%	23%	22%	107 565	462%	91 143	61.9	38.4
Transport equipment	13%	12%	9%	87 492	153%	83 172	48.7	45.6
Manufacturing n.e.c. and recycling	3%	3%	4%	28 107	104%	49 369	18.9	21.1
<b>Total manufacturing</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>82 623</b>	<b>140%</b>	<b>73 763</b>	<b>46.9</b>	<b>35.3</b>
<b>Services</b>								
Wholesale and retail trade, restaurants and hotels	18%	19%	21%	48 414	62%	41 197	29.4	21.7
Transport, storage and communications	11%	13%	11%	66 860	49%	77 423	40.5	35.7
Finance, insurance, real estate and business services	6%	7%	10%	119 132	32%	115 573	78.5	54.1
Real estate, renting and business activities	30%	18%	27%	92 290	-13%	99 641	61.4	55.1
Community, social and personal services	36%	43%	31%	32 684	6%	40 694	22.2	25.3
<b>Total services</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>50 999</b>	<b>21%</b>	<b>57 247</b>	<b>33.3</b>	<b>31.3</b>

Source: Authors' calculations using OECD STAN Database for Structural Analysis (2008).

financial intermediation, mainly concentrated in the Stockholm region, has the highest levels of efficiency in services and the second highest in all sub-sectors.

Sweden's economic model has been successful in combining efficiency and equity goals. Sweden's economic model, developed during the late 1940s and early 1950s, pursued both equity and efficiency goals. Recent OECD analysis of labour market policies suggests that high employment can indeed co-exist with low income disparities, but at a high budgetary cost. Sections 2 and 3 expand on these points with more in depth discussions on the efficiency-equity tradeoffs in the case of Sweden.

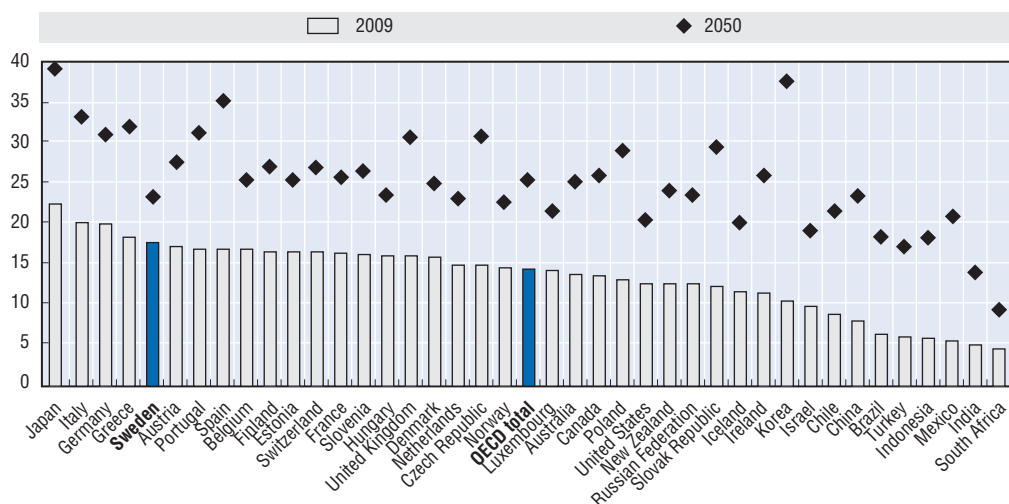
### **Areas of concern**

Despite solid macroeconomic indicators and recent positive developments in Swedish labour markets for core workers, Sweden still faces challenges in key areas, such as high youth unemployment rates, a large elderly population, low educational outcomes, and of course the recent challenges raised by the financial crisis.

Youth unemployment remains a problem in Sweden with rates significantly higher than the OECD average. Despite a high overall employment-to-population ratio, and relatively low unemployment rates, youth unemployment remains a serious concern. The rate of unemployment among Swedish youth stood at 19% in 2007, almost three times more than in Denmark, Iceland, the Netherlands and Norway. Moreover, among OECD countries, the ratio of the unemployment rates of youth to prime-age adults is less favourable to youth only in Luxembourg and Iceland. Even excluding full-time students, the unemployment rate for 15 to 24 year-olds stood at 14.3% in 2007. Reasons for the high rates are high wage floors and stringent employment protection rules. As a result strong skills are needed to obtain a regular job. This in turn depends on learning outcomes, an area that can also be improved.

Sweden's high ratio of elderly to total population creates challenges for public budgets and the pension systems. Its ratio of elderly population to total population is the third (18%) highest among OECD countries in 2009 approximately 3.4 percentage points higher than the OECD average. A high ratio of elderly population to total population implies a relatively low share of the population paying taxes and social contributions in relation to those receiving pensions and costly health services. Projections over time reveal the share of elderly to total population in Sweden will increase at a slower pace than on average in OECD countries. In 2050 projections estimate the ratio to be 23.7%, approximately two percentage points higher than the OECD value.

There is room to improve learning outcomes in Sweden, especially in mathematics and science. In compulsory schooling, learning outcomes,

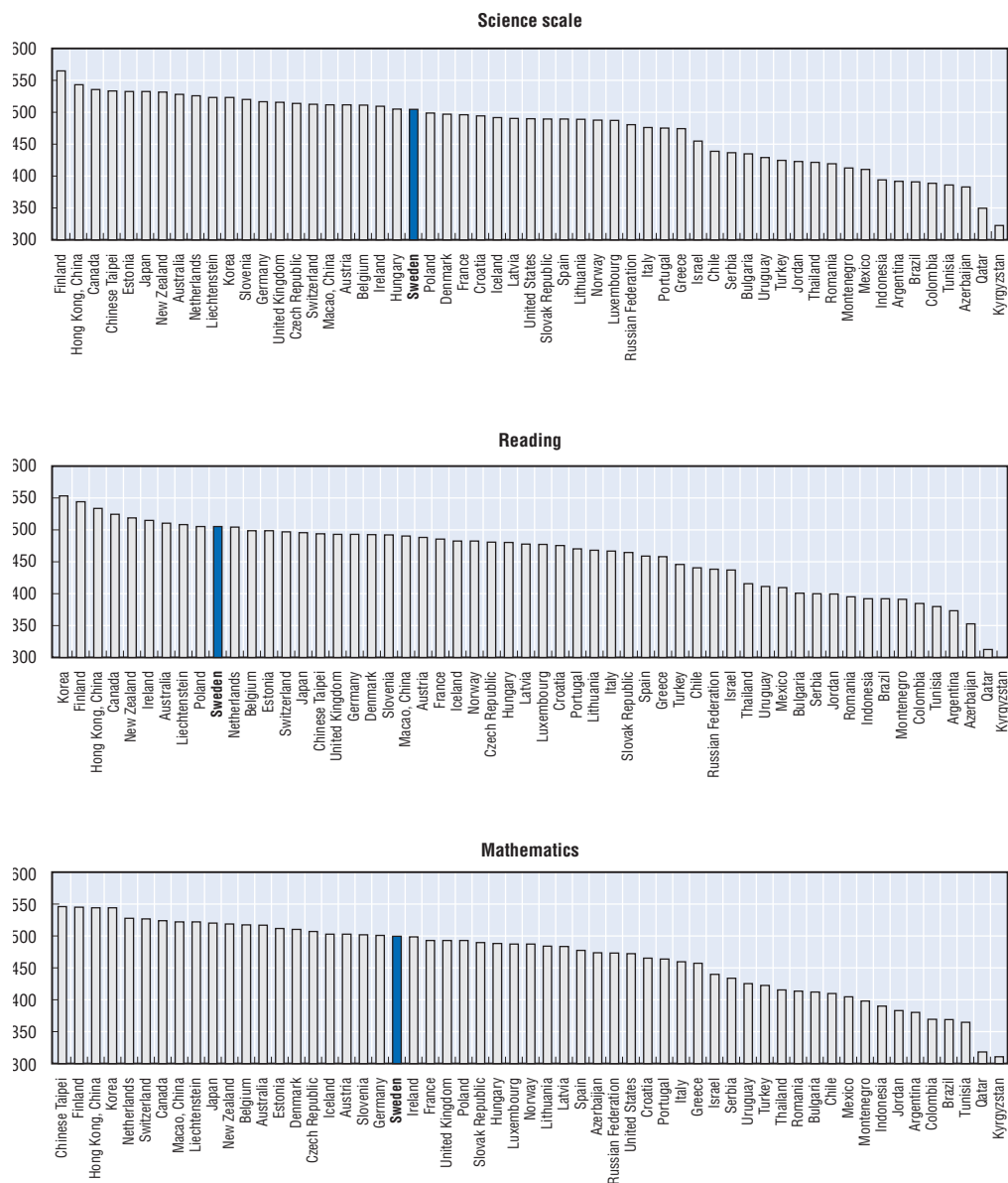
Figure 1.5. **Ratio of population aged 65 and over to total population, 2009**

Source: OECD (2009), *Factbook*, OECD Publishing.

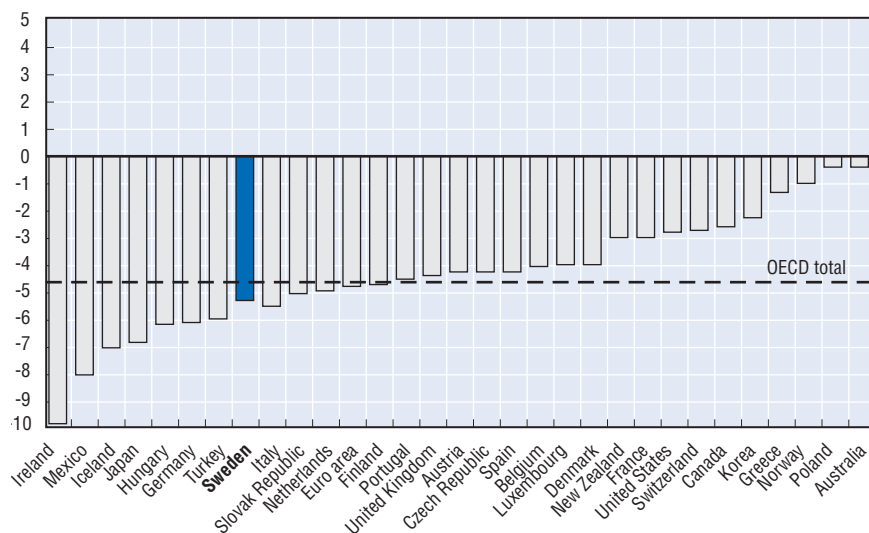
according to international standardised test results, are above average in reading, but not in mathematics and science (Figure 1.6). In secondary school, the programme structure is fragmented, and youth completing a vocational programme appear to lack important skills: they are not “job ready”. This is problematic in the context of a labour market characterised by high minimum wages, set in collective agreements, and stringent employment protection rules: those with low productivity have little chance to find a job, and employers are cautious about hiring youth whose skills are often hard to assess, in particular youth from an immigrant background.

Sweden’s economy has been particularly exposed to the financial crisis owing to its export-oriented economy. Sweden is a small open economy and exports a large share of its domestic production. The drop in international trade and overall demand resulting from the overall global downturn during 2008 and 2009 has affected the performance of the Swedish economy. In 2009, real GDP suffered the eighth largest drop (–5.5%) from the previous year among OECD countries, more than the total decline (–4.1%) in OECD countries (Figure 1.7).

Although the labour market has deteriorated as a result of the overall downturn in production, the decline will likely be less severe than during the domestic banking crisis of the early 1990s. The unemployment rate rose by ten percentage points during the crisis of the early 1990s. Unemployment is unlikely to rise during the present crisis as much due to mainly reforms in

Figure 1.6. **Pisa scores in science, reading and mathematics, 2006**

Source: OECD Database – PISA (2006).

Figure 1.7. **Percentage change in real GDP, 2008-09**

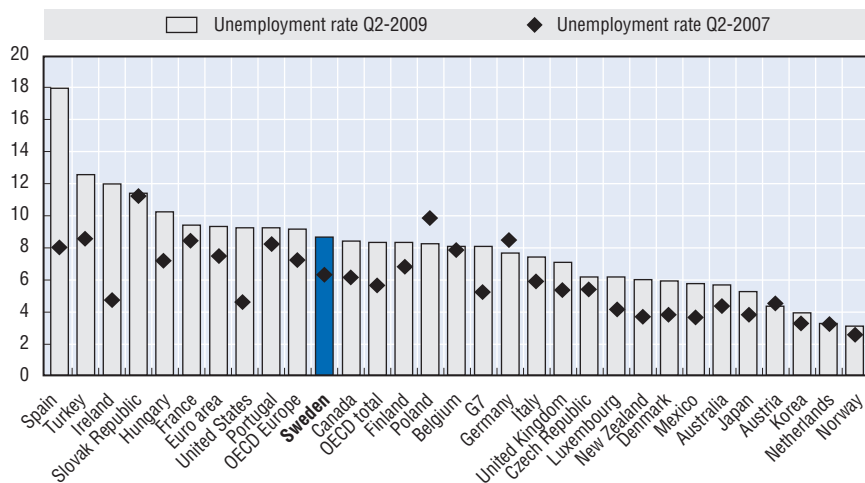
Source: OECD (2009), *OECD Economic Outlook 85*, OECD Publishing.

labour markets carried by the present government. As a result, sickness absence levels are very low owing to tighter administration in recent years, and so are unlikely to fall further and force additional layoffs. The effects of the crisis so far have increased Sweden's unemployment rate by 2.2 percentage points, from 6.27% in the second quarter of 2007 to 8.60% in the second quarter of 2009 (Figure 1.8). Sweden's percentage point increase (2.33) during this period was less severe than the overall increase in OECD countries (2.6). Furthermore Sweden's fiscal position facing the current crisis is stronger than during the early 1990s, although many municipalities and counties strongly hit by the financial problems due to the crisis are likely to experience declines in overall employment levels in the coming years.

## 1.2. Sub-national trends in Sweden

There are strong territorial asymmetries in Sweden. Demographic patterns and economic output are very concentrated in three city-regions – Stockholm, Skåne and Västra Götaland, home of more than half of the national population and producing 57% of national output. The three city-regions specialise in technology-intensive economic activities and knowledge intensive services and are profiting from positive dynamics from agglomerations.

Concentration in Sweden has increased over the last 25 years driven mainly by Stockholm's dynamic economy. Stockholm has not only outperformed peer Swedish regions, but also OECD metro-regions. All three

Figure 1.8. **Unemployment rate, second quarter of 2007 and second quarter of 2009**

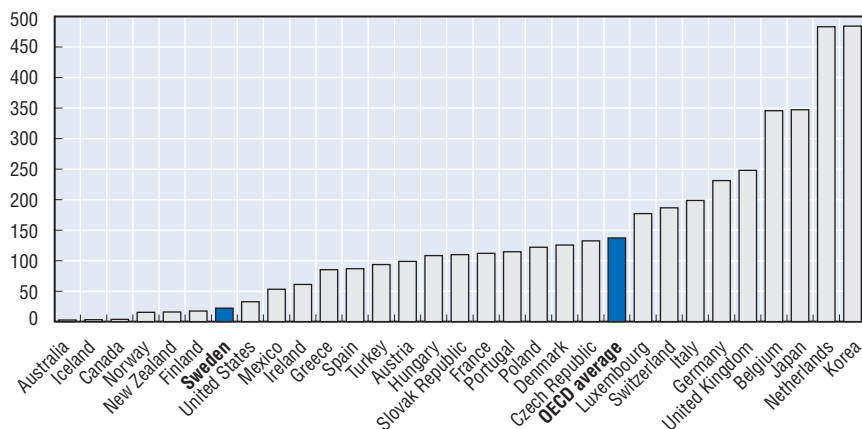
Source: OECD Reference Series.

metro regions are performing above national standards and as a result have contributed to 70% of national output over the last decade. Further benefits of agglomerations yield a more diversified economic base, ability to generate higher per capita income levels and capacity to absorb a larger share of labour into the workforce in comparison to other Swedish regions. Concentrations do not come without a cost to sparsely populated regions where a brain-drain effect of high-skilled labour occurs in addition to a higher share of elderly populations. The benefits of concentration are neither infinite nor linear. In Sweden however there are no visible signs of deceleration and inequality levels between regions remain relatively low in comparison to OECD standards.

The effects of the crisis will be more severe in Sweden's most vulnerable regions with thinner markets and less diversified economic bases and which are sparsely populated. Although in absolute terms the largest increases in inequality occurred in metro-regions, the proportional impact has been larger in non-agglomerations.

### Geography and concentration

Sweden's cold climate and particular geography create a very uneven regional distribution of cities and population. Comparing Sweden's population (9.1 million) to its land surface (410 313 kilometres) reveals very low population density (22 inhabitants per square kilometre) in comparison to other OECD countries (Figure 1.9). Only Australia, Canada, Finland, Iceland, New Zealand

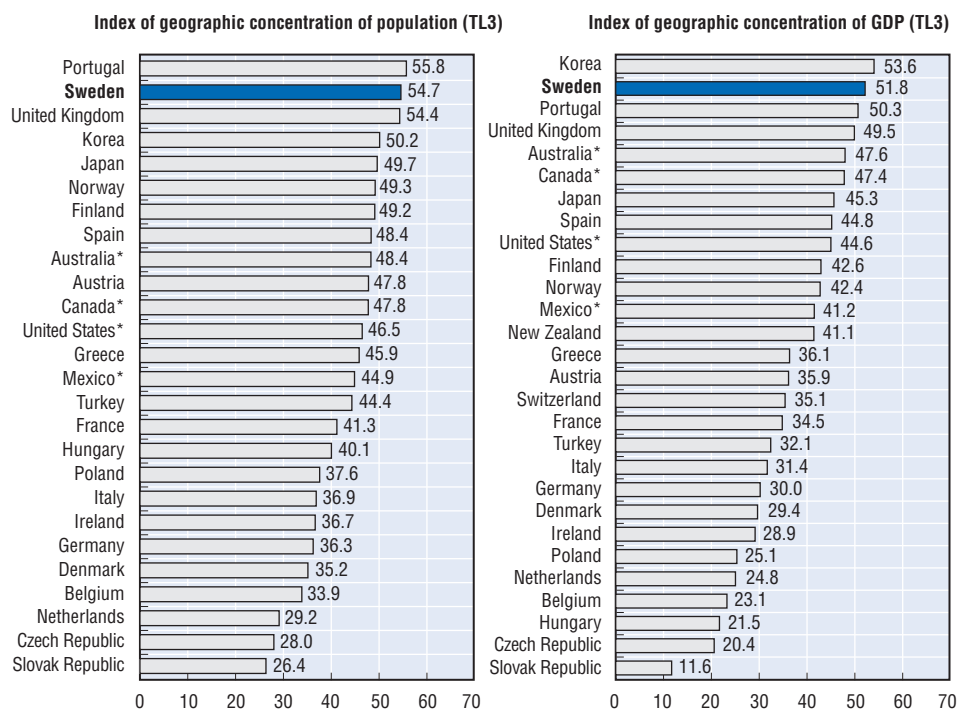
Figure 1.9. **Inhabitants per square kilometre in OECD countries, 2005**

Source: Calculations based on OECD Regional Database (2009).

and Norway have lower population density. Population is very unevenly spread: two-thirds of the country contains only 15% of the population. Sparsely populated areas represent a challenge for the provision of goods and services and market accessibility and lead to costly infrastructure solutions.

Sweden's demographic and economic patterns are very concentrated in comparison to other OECD countries. According to the geographic concentration index applied to all OECD Territorial Level 3 (TL3; see Annex 1.A1) regions, Sweden records one of the highest concentrations of population and GDP output. Only Korea displays a higher concentration of population and Portugal a higher concentration of GDP.

Although sparsely populated regions face the challenge of access to national and international markets recent initiatives have improved their access. Sweden's Stockholm, Västra Götaland and Skåne agglomerations are better connected than sparsely populated regions to European (Figure 1.11) and international markets as well as internal markets. For centuries, maritime shipping dominated, with Stockholm the main Baltic port. Today Västra Götaland and Skåne also benefit from international harbours which give them access to European, Asian and Russian markets. All three cities also have access to international airports and good road and train communication networks. In contrast it is difficult for sparsely populated regions, especially those in central and northern Sweden, to access national and international markets. Notwithstanding this difficulty air transports outside of the three biggest cities improve accessibility in many parts of remote regions (Figure 1.12) and northern counties are benefiting from harbours in the North, for example as it comes to bulk transports. In addition cross-border linkages

Figure 1.10. **Geographic concentration index of population and GDP (TL3), 2005**

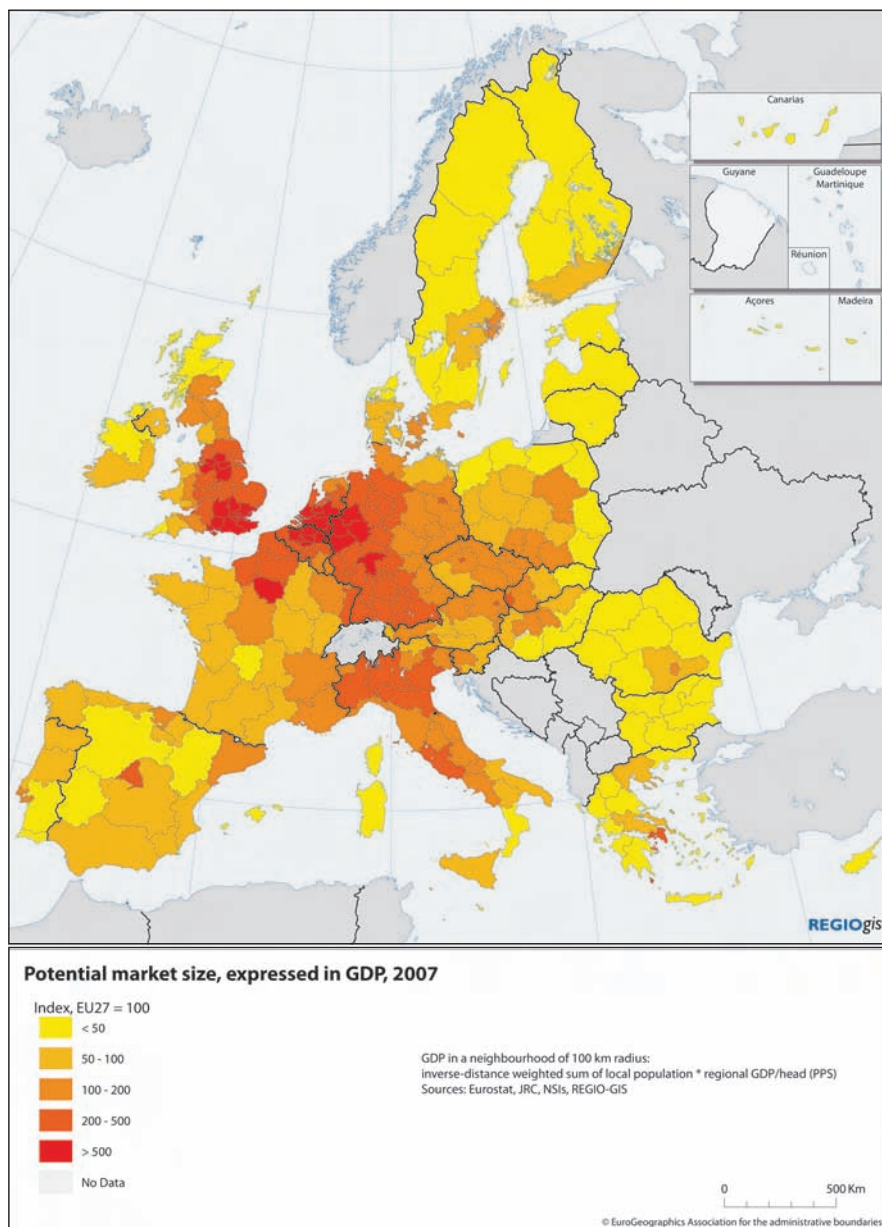
Source: OECD (2009), *Regions at a Glance*, OECD Publishing.

among regions and municipalities along the western border with Norway and the northern border with Finland can offer an important means of market access for these sparsely populated areas. Recent initiatives (e.g. improving train transportations) aim at further improving the accessibility to northern markets.

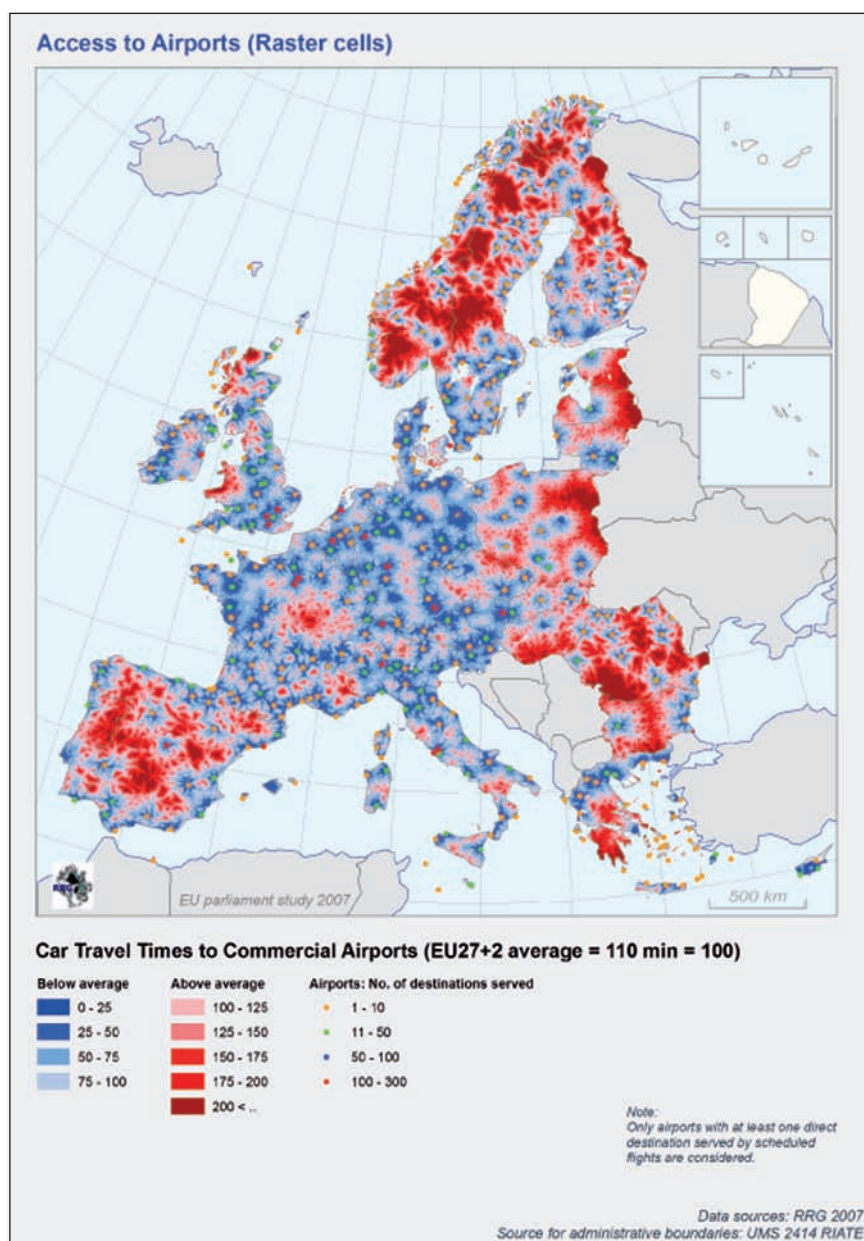
The bulk of Sweden's economic output and population is concentrated in the southern metro-regions of Stockholm, Skåne and Västra Götaland. Population and output in Sweden are mainly concentrated in three TL3 regions: Stockholm, Skåne and Västra Götaland, home of 51% of the national population and producing 57% of the national output in 2005. In addition to these southern regions, population is also concentrated along the northern coastline. In the remaining sparsely populated regions, the population tends to concentrate in small and medium-sized cities (Figure 1.13).

Economic concentration can bring benefits associated with agglomeration, but there are costs associated with concentration and the benefits are not unlimited. Agglomeration economies emerge in the presence of a pooled labour market, backward and forward linkages among firms, and



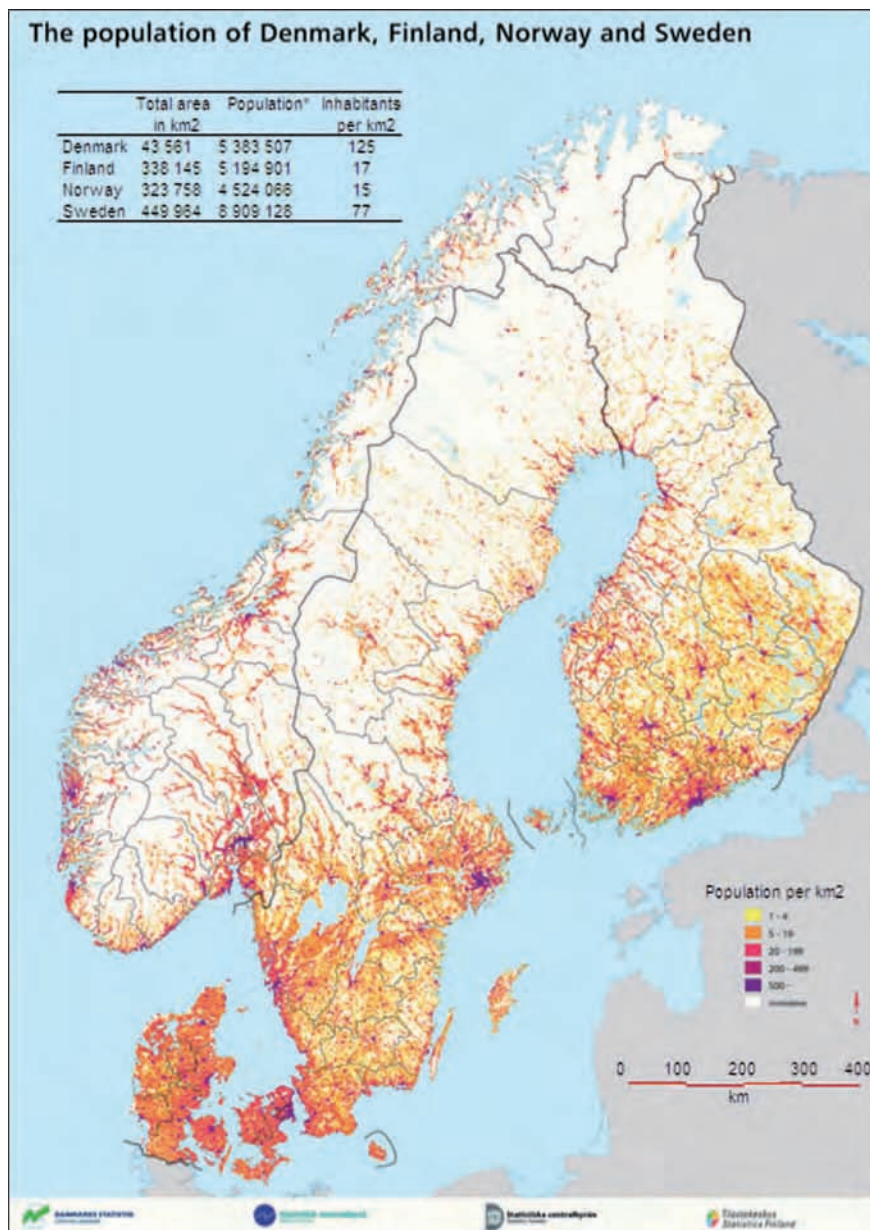
Figure 1.11. **Accessibility to markets (GDP), 2004**

Source: RRG 2007, Eurostat (2008). The report to the EU parliament where these maps were included was made by Nordregio.

Figure 1.12. **Accessibility to airports**

Source: RRG 2007, Eurostat (2008). The report to the EU parliament where these maps were included was made by Nordregio.

Figure 1.13. **Distribution of population in Sweden, Denmark, Finland, Norway and Sweden, 2002**



Source: ©EFGS (2009).

knowledge spillovers. Workers and firms are able to meet and match skills with jobs, thereby lowering costs and increasing the efficiency of firms' operations. Proximity between buyers and suppliers increases the efficiency of the value chain and reduces the risks of defaults on contracts. Proximity also facilitates the flow of workers' knowledge among organisations. Such agglomeration economies are present in urban areas and improve efficiency and income, and even health outcomes (i.e. recent studies in Sweden show people living in the bigger city regions are healthier, measured by sick leaves,<sup>2</sup> than people in rural regions). The benefits however are not boundless. Associated costs include higher transport costs (i.e. congested streets), a potential loss of productivity<sup>3</sup> due to longer commuting times, higher housing costs, higher health costs, and an impact on global warming due to a poor environment.

Sweden's three metro-regions specialise in knowledge-intensive services and in high and medium-high technology industries. The three city-regions attract a considerable share of business activity and population mainly because of benefits associated with agglomeration economies. People want to live where firms – and therefore job opportunities – are concentrated. For their part, firms want to locate where demand – and therefore population – is large. Learning mechanisms associated with agglomerations (Box 1.1) encourage knowledge-intensive economic activities. Stockholm, the largest metro-region, specialises in knowledge-intensive financial, insurance and business activities and in two high-technology industries, air transport and pharmaceuticals (Table 1.5). Västra Götaland, the second largest, is most specialised in medium-high-technology manufacturing: automotive, trucking and shipbuilding. Finally, Skåne is mainly specialised in chemicals and high-technology medical devices and products.

Forces of concentration are cumulative and create an urban-rural regional divide. The mechanisms associated with agglomerations attract further knowledge-intensive and high-technology activities to Sweden's three main metro-regions. Other regions specialise in different economic activities: forestry, agriculture and tourism are prominent in southern (Gotland, Kalmar, Halland, Kronoberg) and middle regions (Jämtland, Gävleborg, Dalarna, Värmland), and mining in the northern regions (Norrbotten and Västerbotten). Low and medium-low technology industries and public sector activities are scattered across all regions. This marked degree of specialisation creates an urban-rural divide among Sweden's regions. According to the OECD regional typology (see Annex 1.A2), Stockholm is the only TL3 region classified as predominantly urban, Skåne and Västra Götaland are the only intermediate regions, and the remaining 18 Swedish TL3 regions are all classified as predominantly rural.

**Box 1.1. Mechanisms that produce agglomeration economies**

There are three main mechanisms that work to produce agglomeration economies.

Mechanisms that deal with sharing of:

- Indivisible facilities such as local public goods or facilities that serve several individuals or firms. Some examples, other than public goods, are facilities such as laboratories, universities and other large goods that do not belong to a particular agent but where some exclusion is implicit in providing them.
- The gains from the wider variety of input suppliers that can be sustained by a larger final goods industry. In other words, the presence increasing returns to scale along with forward and backward linkages allows firms to purchase intermediate inputs at lower costs.
- The gains from the narrower specialisation that can be sustained with higher production levels. Several firms specialise in producing complementary products, reducing overall production costs.
- Risks. This refers to Marshall's idea that an industry gains from having a constant market for skills; in Krugman's words, a pooled labour market. If there are market shocks, firms can adjust to changes in demand if they have access to a deep and broad labour market that allows them to expand or contract their demand for labour.

Matching mechanisms by which:

- Agglomeration improves the expected quality of matches between firms and workers, so both are better able to find a good match for their needs.
- An increase in the number of agents trying to match in the labour market also improves the probability of matching.
- Delays are alleviated. There is a possibility that contractual problems arising from renegotiation among buyers and suppliers result in one of the parties losing out by being held up by the other party in a renegotiation. This discourages investment. However, if the agglomeration is extensive enough, agents can find an alternative partner.

Learning mechanisms based on:

- The generation, diffusion and accumulation of knowledge. This refers not only to the learning of technologies, but also the acquisition of skills.

Source: Duranton, G. and D. Puga (2004).

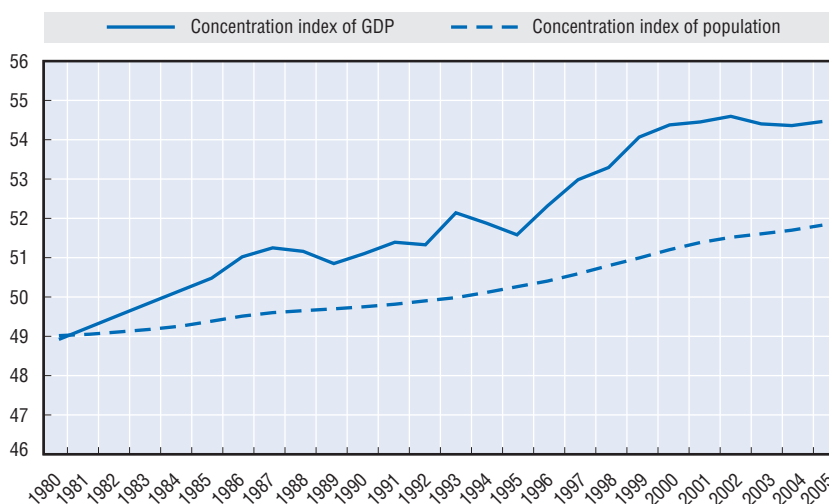
Forces of attraction are stronger for economic output than for population, although concentration has been increasing in both over the past 25 years. In 1980 GDP and population displayed a similar degree of concentration according to the index of geographic concentration (Figure 1.14). Over the past

Table 1.5. **Main sectors of specialisation in Stockholm, Skåne and Västra Götaland, 2007**

Industry (specialisation index)		
Stockholm	Skåne	Västra Götaland
Air transport (2.94)	Chemicals excluding pharmaceuticals (1.98)	Motor vehicles, trailers and semi-trailers (2.93)
Pharmaceuticals (2.30)	Other non-metallic mineral products (1.87)	Coke, refined petroleum products and nuclear fuel (2.90)
Finance and insurance (2.23)	Food products, beverages and tobacco (1.77)	Water transport (2.32)
Radio, TV and comm. equipment (1.98)	Agriculture, hunting and forestry (1.54)	Textiles, textile products, leather and footwear (2.25)
Busin. activities excluding real est. (1.58)	Medical, precision and optical instruments (1.45)	Building and repairing of ships and boats (2.08)

Note: See Annex 1.A2 for computing the index of specialisation. A value above 1 shows specialisation in an industry and a value below 1 shows lack of specialisation. Specialisation reveals a larger proportion of sectoral activity relative to the national average it does not measure the overall size sectors.

Source: Authors' calculations based on data from Statistics Sweden.

Figure 1.14. **Concentration index of GDP and population in Swedish regions (TL3)**

Source: Authors' calculations based on Cambridge Database (2009).

25 years the forces of concentration were greater with respect to economic output (GDP) than to population. The population increase was more gradual, with settlement and commuting patterns following to the pockets of economic concentration. In contrast the increase in GDP was somewhat volatile, reflecting changing economic conditions, and was greater owing to the benefits associated with economies of agglomeration such as increasing returns to scale and positive spillovers.



Demographic concentration brings challenges associated with an ageing population to sparsely populated regions and high youth dependency ratios to densely populated regions. Swedish regions with the lowest population density such as Norrbotten (2.6), Jämtland (2.6), Västerbotten (4.7) and Dalarna display higher elderly dependency ratios (28%, 29%, 25% and 29% respectively) than the national average (24%), while regions with the highest population density, such as Stockholm (299) or Skåne (39), display higher youth dependency ratios (Figure 1.15). In general Swedish regions with low population densities face the challenge of having to generate sufficient resources to provide for the needs of the elderly (e.g. health care, assistance, home care, transport). This capacity depends on the balance between those who are economically active and continue to generate wealth and those who are no longer active because of age. The high proportions of youth in densely populated areas represent a potential asset for the region provided that they can easily transition to the workforce, are able to contribute to the region's productive activities, have adequate levels of schooling, and can raise the proportion of highly skilled workers in the region.

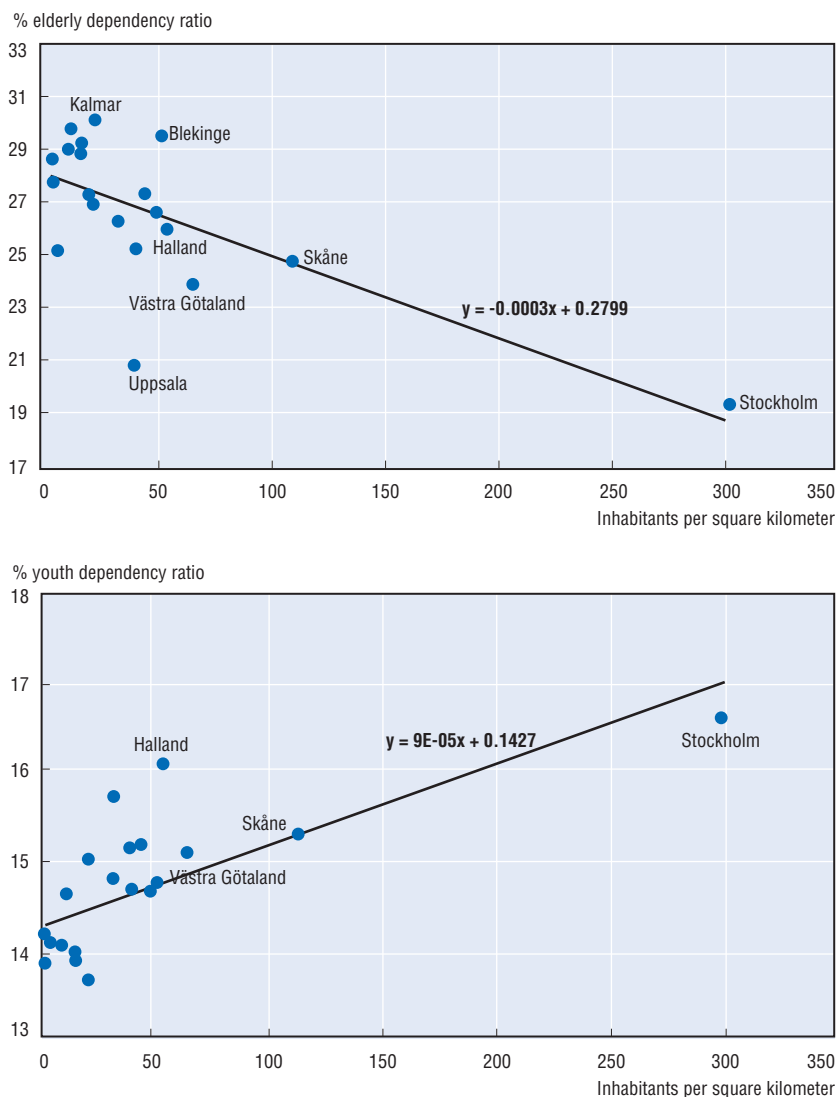
Densely populated regions, despite higher youth dependency ratios, have a greater capacity to absorb the youth into their workforce. Pre-financial crisis data reveals lower rates of youth unemployment in densely populated Swedish regions, especially in Stockholm, Västra Götaland, Skåne, Halland and Uppsala, where youth unemployment rates – between 20-24 years and between 25-29 years – remains below 5% (Figure 1.16). Among sparsely populated regions, youth unemployment is particularly high. Youth unemployment is also relatively high in Blekinge, Västmanland, Södermanland, Östergötland and Örebro; regions with above average population density level.

Stockholm's buoyant and dynamic economy is the main source of increasing economic concentration in Sweden. In 1980, the three metro-regions produced 49% of Sweden's GDP. In 1990 they produced 53% of GDP and in 2005 the share increased to 57% (Figure 1.17). The increase was mainly driven by Stockholm increasing its share of national GDP over a 25-year period by eight percentage points, from 21% in 1980 to 29% in 2005. In contrast the shares of Västra Götaland (16%) and Skåne (12%) remained fairly stable over the period.

### **Is concentration sustainable?**

OECD research finds that the benefits associated with economies of agglomeration are not unlimited. Data from 78 metro-regions reveal that only 45% of metro-regions grow faster than their respective countries in terms of GDP per capita. Cities, and agglomerations in general, can indeed reach a point where they no longer provide increasing returns and become less competitive. This situation usually arises when the external

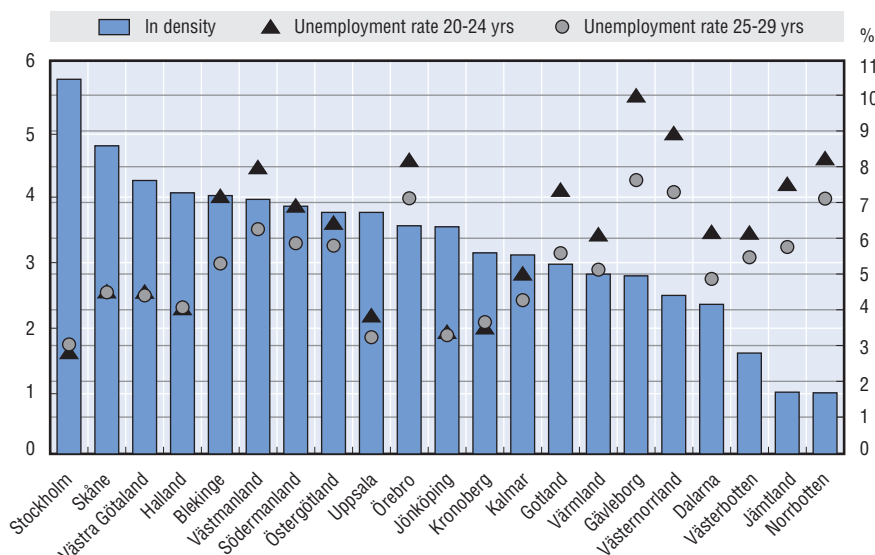
**Figure 1.15. Elderly and youth dependency ratio and population density in Sweden (TL3), 2007**



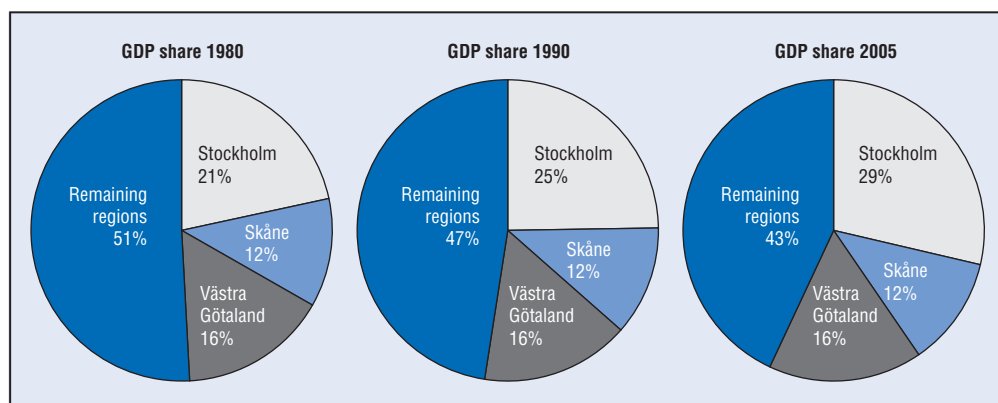
Source: Authors' calculations based on OECD Regional Database (2009)

economies of scale are overtaken by the external diseconomies of congestion. Cities exceeding 7.3 million inhabitants are more likely to suffer from congestion costs and diseconomies of scale (OECD, 2006, *Competitive Cities in the Global Economy*). Encouraging more concentration under these conditions will not yield higher growth rates in per capita GDP.



Figure 1.16. **Youth unemployment rates and population density, 2007 Q3**

Source: Authors' calculations based Statistics Sweden.

Figure 1.17. **Share of national GDP by three city-regions (TL3), 1980, 1990, 2005**

Source: Authors' calculations based on Cambridge Database (2009).

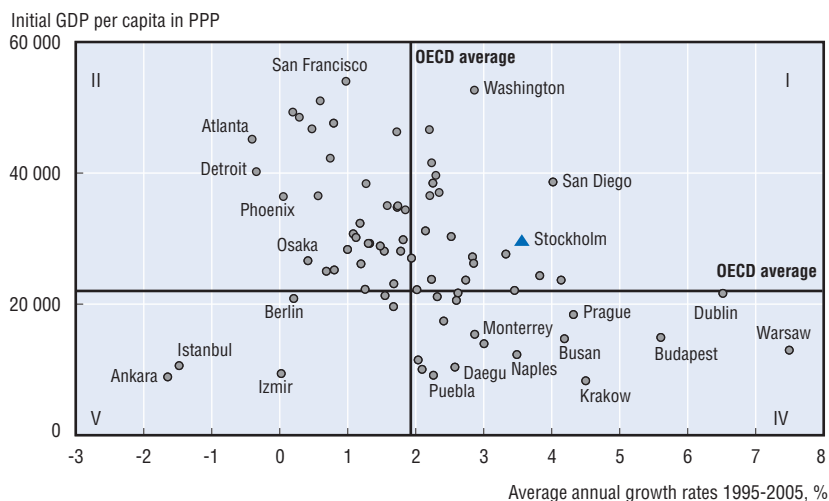
Increasing levels of inequality are also a negative consequence of concentration.

Sweden's three main agglomerations have recorded buoyant growth rates over the past years, and signs of diseconomies of scale are not yet visible. Based on their population size there appears to be room for further growth

based on the positive dynamics of agglomerations. Despite the increase in economic concentration, regional inequalities in GDP per capita among Sweden TL3 regions remain relatively low by OECD standards.

Sweden's agglomerations perform above international and national averages. Signs of deceleration or diseconomies of scale are not yet visible. Stockholm (1.8 million inhabitants), Skåne (1.1 million)<sup>4</sup> and Västra Götaland (1.5 million) are far below the population threshold level of 7.3 million where metro-regions are more likely to suffer from congestion costs. It is thus no surprise that there are no visible signs of deceleration in their respective growth patterns. Over the past decade Stockholm has outperformed most OECD metro-regions in GDP per capita growth (Figure 1.18), and growth in Skåne and Västra Götaland has been buoyant, above the national rate (Figure 1.21).

Figure 1.18. **Level and growth of GDP per capita in 78 metro-regions, 1995-2005**



Note: Annex 1.A3 describes the methodology for measuring metro-regions.

Source: Authors' calculations based on OECD Regional Database (2009).

Sweden's regional inequalities remain relatively low despite the rise in economic concentration over the last years. The rise in economic concentration over the past years has not brought excessive inequality. Sweden's levels of regional inequality in terms of GDP per capita among TL3 regions are relatively low in comparison with other OECD countries. According to the Gini index (Figure 1.19) Sweden displays the lowest levels of inequality in GDP per capita and in productivity (i.e. GDP per worker). Over the last ten years, however, inequality in GDP per capita among Swedish regions has been increasing.

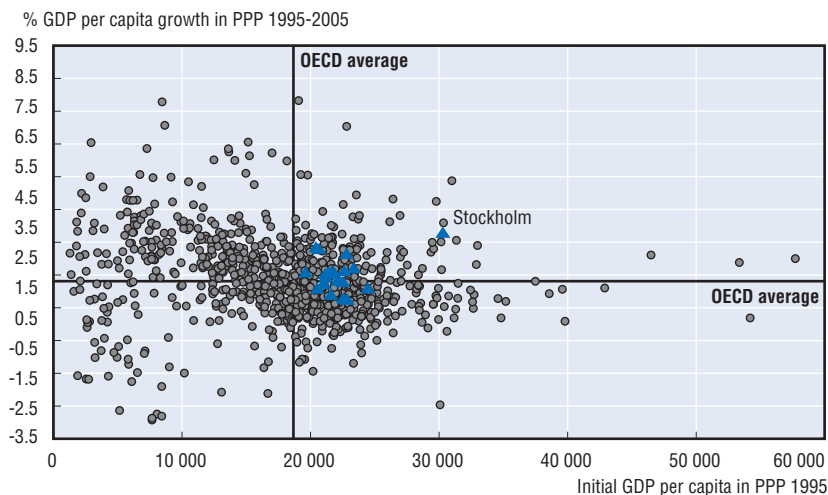
Figure 1.19. **Gini index of inequality of GDP per capita and GDP per worker in OECD regions, 1995-2005**



\* Data at TL3 are missing in Australia, Canada, Mexico and the United States, therefore we use GDP per capita for TL2 regions from these four countries.

Source: Authors' calculations based on OECD Regions at a Glance (2007)

Figure 1.20. **Level and growth of GDP per capita in OECD regions (TL3), 1995-2005**



Source: Authors' calculations based on OECD Regional Database (2009).

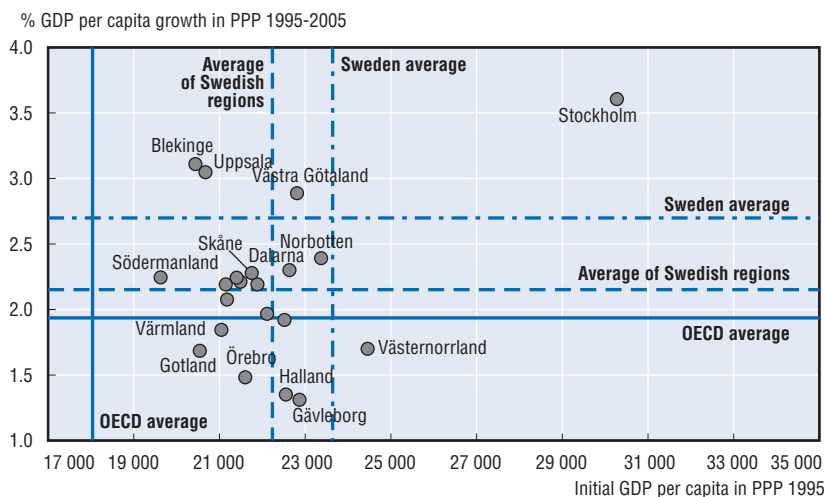
### **Regional performances and their impact to national output**

In comparison to OECD regions, Sweden's TL3 regions all display higher levels of GDP per capita. In 2005, GDP per capita in Swedish regions ranged from USD 43 358 in Stockholm to USD 24 232 in Gotland. This is above the OECD average (USD 23 483). Following Stockholm, the region with the second highest GDP per capita is the metro-region Västra Götaland (USD 30 382), and the city-region of Skåne (USD 27 934) had the sixth highest GDP per capita. The region with the lowest level of GDP per capita is the island Gotland, an island followed by Södermanland (USD 24 529) and Västmanland (USD 25 036).

Although buoyant growth in Sweden's agglomerations has a strong impact on national output, pockets of strong growth are also visible elsewhere. Stockholm experienced the fastest annual average growth rate in GDP per capita (3.6%) from 1995 to 2005. The other two city-regions, Västra Götaland (2.89%) and Skåne (2.29%), grew faster than the national average (2.20%). Owing to their large size and faster growth rate, their contribution to national output over the past decade was quite remarkable: the three city-regions contributed to 70%<sup>5</sup> of national output. Nonetheless there are also high growth rates in non-agglomerations. For instance 61% (or 11 out of 18) of Sweden's rural regions grew faster than the average of all OECD regions annually (Figure 1.21).

Agglomerations have a better capacity to absorb shocks owing to their large size and diversified economies. The benefits of agglomeration (i.e. higher innovative activity and productivity) occur both when firms from the same

Figure 1.21. **Level and growth of GDP per capita in TL3 Swedish regions, 1995-2005**

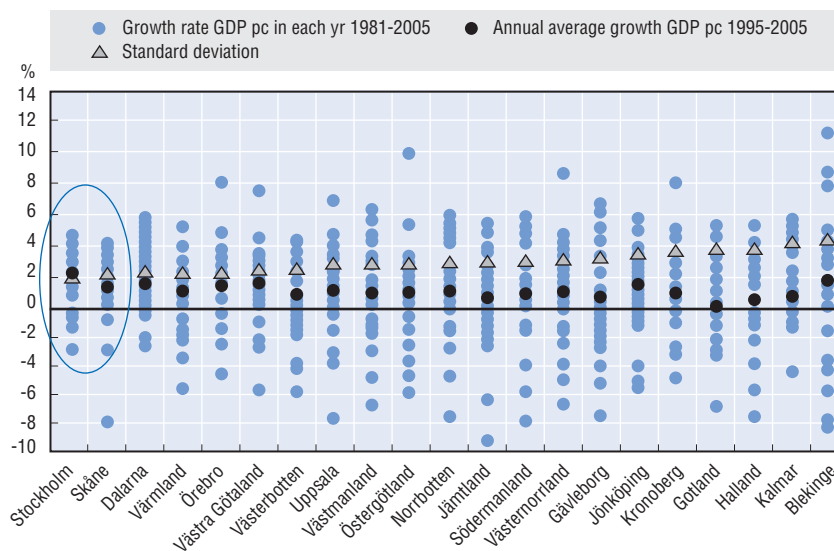


Source: Authors' calculations based on OECD Regional Database (2009).

industry locate close to each other (specialisation) and when firms from different industries (diversification) locate in a common space. Specialisation favours intra-industry transmission of knowledge and inter-firm competition leads to efficiency gains. Diversification facilitates the transfer of ideas between sectors, lower transport costs (i.e. by sharing infrastructure) and a greater capacity to offer more kinds of goods and services to the economy. Such benefits attract further economic activity which eventually yields levels of critical mass sufficient for absorbing economic shocks. As a result Sweden's main agglomerations are less vulnerable to economic shocks and record smaller fluctuations in economic output. Among the three, Västra Götaland has had greater variability owing to its volatile history of structural change.

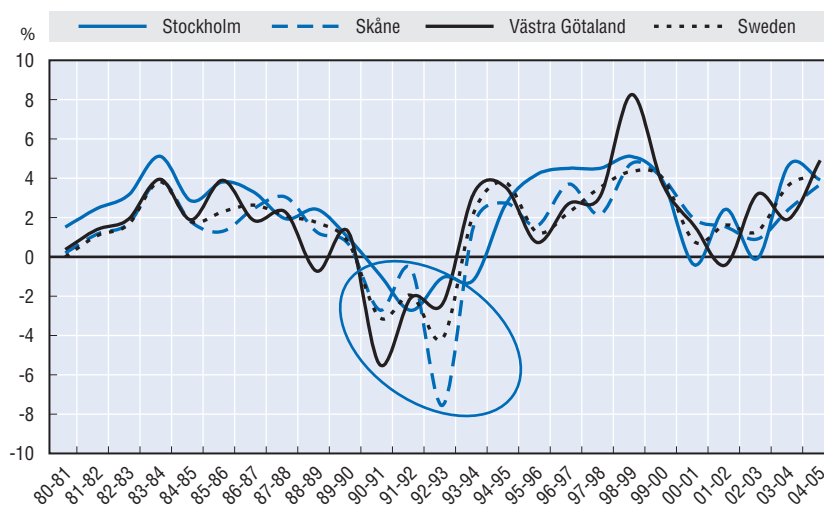
Although the benefits of concentration have a strong impact on national output, national growth becomes vulnerable to the business cycle of the largest metro-regions, especially Stockholm. The pattern of the business cycles of Stockholm, Skåne and Västra Götaland during 1980-2005 (see Table 1.2 for Swedish structural changes over a longer time period) reflect the strong links and interdependence of the three economies – a drop during the banking crisis of the early 1990s, a recovery up to the early 2000s, a drop during the ICT bubble and a subsequent recovery (Figure 1.23). Of the three, Västra Götaland is the most volatile; Skåne experienced the largest drop during the banking crisis and the smallest during the ICT bubble. Stockholm's business cycle has a strong influence on the national business cycle and led the drop during both the banking and the ICT crisis.

Figure 1.22. GDP per capita growth and variation, 1980-2005



Source: Authors' calculations based on OECD Regional Database (2009).

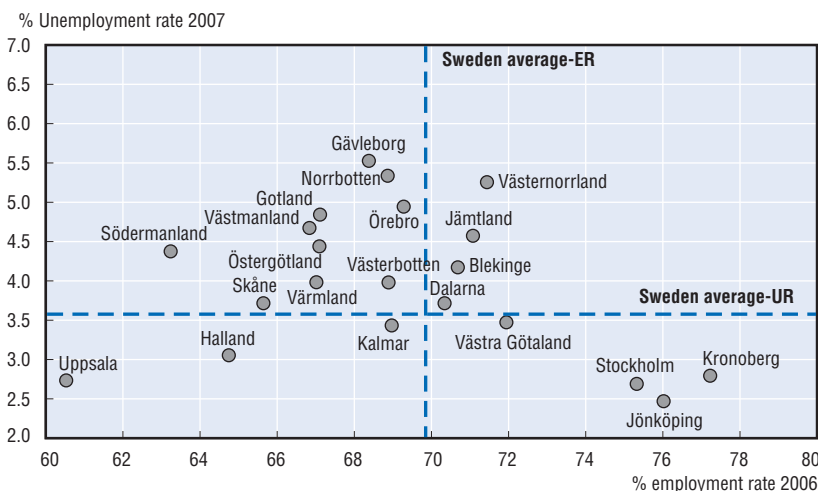
Figure 1.23. Level and growth of GDP per capita in Swedish regions (TL3), 1995-2005



Source: Authors' calculations based on OECD Regional Database (2009).

Agglomerations have a greater capacity to absorb workers into the workforce than sparsely populated rural regions which face labour market pressures. Pre-financial crisis data reveal lower unemployment rates than the

Figure 1.24. **Unemployment and employment rates in Swedish regions (TL3), 2006 and 2007**



Note: data are from the pre-crisis period for examining the impact of the crisis on regional labour market indicators see Section 1.2.

Source: Authors' calculations based on OECD Regional Database (2009).

national average in Stockholm and Västra Götaland<sup>6</sup> (Figure 1.24). At the same time their economies employ a larger share of the workforce. Lower employment rates in Skåne may be slightly biased because of cross-border commuting to Denmark's Öresund Region<sup>7</sup> especially for young workers searching for labour market opportunities in Denmark where Danish labour market regulations (e.g. flexicurity) make it easier for young people to obtain employment as opposed to the situation in Sweden. In addition there are a surplus of young workers in Malm ö and a shortage in Denmark's Öresund Region. Unemployment rates are highest in the sparsely populated regions of Gävleborg (5.53%), Norrbotten (5.34%) and Västernorrland (5.25%), the home of only 8% of Sweden's workforce.

Although Sweden's agglomerations have the highest per capita output levels, there is room to spread the benefits to adjacent and neighbouring regions. Stockholm and Västra Götaland, the two Swedish regions with the highest GDP per capita in 2005, have neighbouring regions with among the lowest levels. Södermanland (USD 24 530), adjacent to Stockholm, and Västmanland (USD 25 037), very close to Stockholm, have Sweden's second and third lowest levels of GDP per capita,<sup>8</sup> respectively. The regions adjacent to Västra Götaland, Värmland (USD 25 247) and Halland (USD 25 878), recorded the fourth and fifth lowest GDP per capita in 2005. However, the benefits of Stockholm seem to have spread to Uppsala (USD 27 833) and vice versa since both economies are highly interlinked and the benefits of Skåne to Blekinge

### Box 1.2. **Structural change in the Swedish economy**

Sweden's economy has undergone periods of marked structural change during the past 200 years with profound effects on its economy performance during the different periods.

During the first half of the nineteenth century the agricultural sector and the rural society dominated the Swedish economy. In the late nineteenth century, particularly in the 1880s, international competition became fiercer for agriculture and early industrial branches. The integration of world markets led to falling prices and stagnation in the demand for Swedish staple goods such as iron, sawn wood and oats.

The decades around the turn of the twentieth century meant a profound structural change in the composition of Swedish industrial expansion that was crucial for long term growth. New and more sophisticated enterprises were founded with more emphasis on scientific knowledge and more complex engineering skills. The electrical motor became especially important in Sweden. A new development block was created around this innovation that combined engineering skills in companies such as ASEA (later ABB) with a large demand in energy-intensive processes and with the large supply of hydropower in Sweden. A number of innovative industries were founded – all related to increased demand for mechanization and engineering skills. Companies such as AGA, ASEA, Ericsson, Separator (AlfaLaval) and SKF, labeled as “enterprises of genius” and all represented with renowned inventors and innovators.

During 1910-50, Sweden's economy experienced high growth rates mainly due a considerable financial injection to the Swedish market brought by the First World War, favorable demographic developments and a very viable structure created at the end of the nineteenth century consisting of new industries and new infrastructures that involved industrialists and financial capitalists, as well as public sector support. It also involved industries meeting a relatively strong demand in war times, as well as in the interwar period, both domestically and abroad.

From the 1950s to the 1970s, the Swedish economy was part of the European Golden Age of growth, although Sweden's acceleration was less pronounced than in the rest of Western Europe, which to a much larger extent had been plagued by wars and crises. The Swedish post-war period was characterised primarily by the full fruition of development blocks based upon the great innovations of the late nineteenth century (*e.g.* the electrical motor and the combustion engine) and the cementation of the “Swedish Model” for the welfare state. It was labeled “solidaristic wage policy” with two elements. The first was to achieve equal wages for equal work, regardless of individual companies' ability to pay. The second was to raise the wage level in low paid areas and thus to compress the wage distribution. The program aimed to increase the speed in the structural rationalisation of industries and eliminate less productive companies and branches.



**Box 1.2. Structural change in the Swedish economy (cont.)**

In the 1970s and early 1980s, a number of industries – such as steel works, pulp and paper, shipbuilding, and mechanical engineering – ran into crisis. New global competition, changing consumer behavior and profound innovative renewal, especially in microelectronics, made some of the industrial pillars of the Swedish Model crumble.

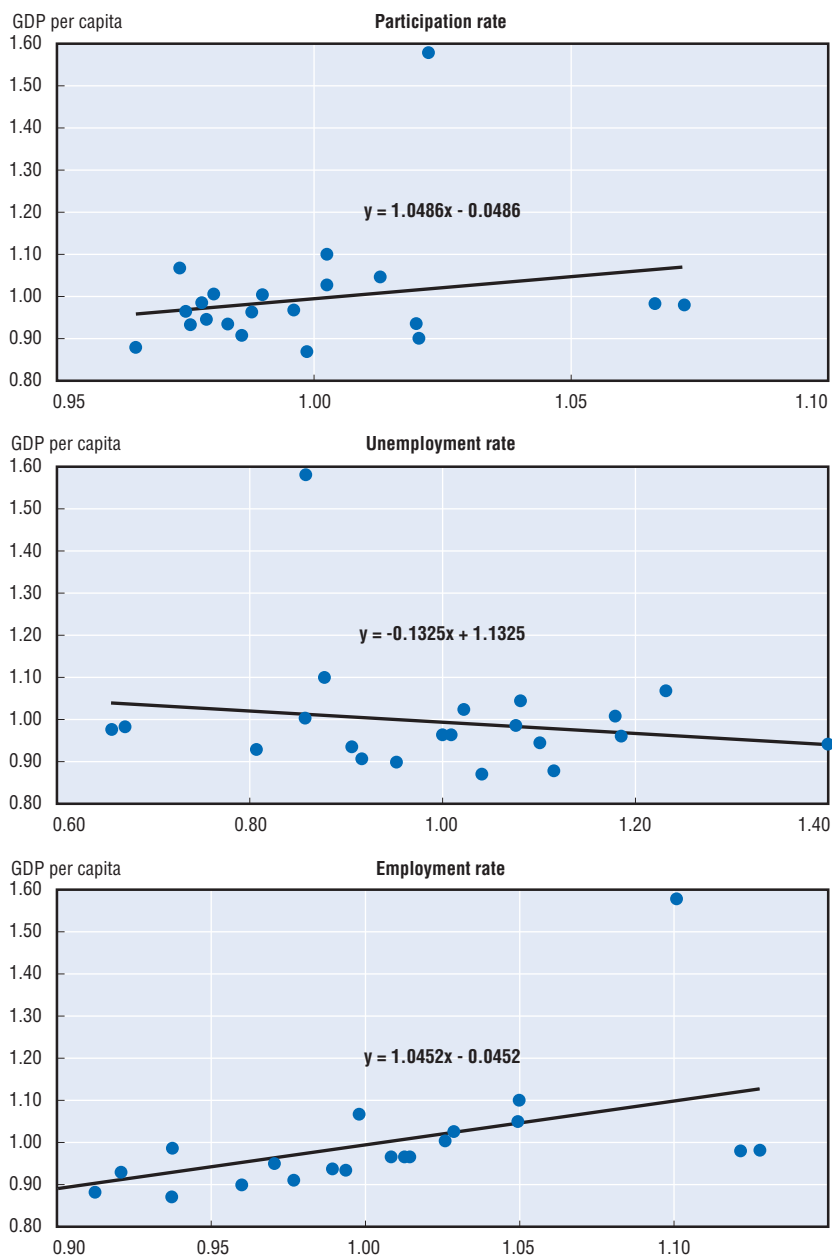
During the 1980s, some of the constituent components of the Swedish model were weakened or eliminated. Centralised negotiations and solidaristic wage policy disappeared. Regulations in the capital market were dismantled under the pressure of increasing international capital flows simultaneously with a forceful revival of the stock market. The expansion of public sector services came to an end and the taxation system was reformed with a reduction of marginal tax rates. Thus, Swedish economic policy and welfare system became more adapted to the main European level that facilitated the Swedish application of membership and final entrance into the European Union in 1995.

During the 1970s and 1980s, growth in Sweden was very slow and marked by the great structural problems that the Swedish economy had to cope with. From the 1990s up to 2005, Swedish growth accelerated quite forcefully in comparison with most Western economies. Thus, the 1980s may be considered as a Swedish case of the “productivity paradox”, with innovative renewal but with a delayed acceleration of productivity and growth from the 1990s.

Source: Schön, L. (2008).

(USD 27 935). There appears to be room to spread the benefits of agglomeration more broadly.

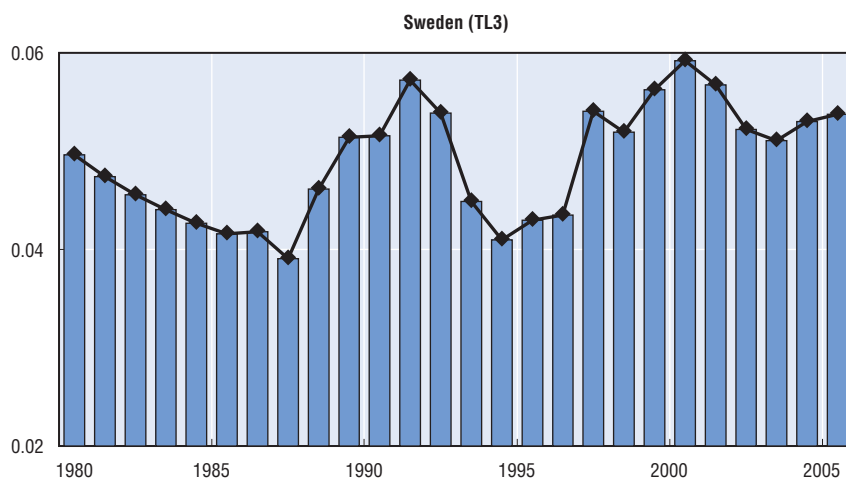
Regions with high levels of GDP per capita have better labour market outcomes. Swedish regions with employment rates 1% higher than the national average enjoy approximately a 1.5 point higher per capita income than the national level (Figure 1.25). Similarly, regions with unemployment rates 1% below the national average enjoy approximately a one-fifth of a percentage point higher GDP per capita than the national level. This implies that the level of GDP per capita is directly proportional to the share of those in employment. Stated differently, lagging regions are operating below their growth potential, and underutilisation has a direct impact on productivity and income. The line of causality can run either way, just as Swedish regions with higher GDP per capita have a greater capacity to employ workers, improving labour market conditions in regions can also lead to higher income levels.

Figure 1.25. **Employment, unemployment and participation rates and GDP per capita, 2005**

Source: Authors' calculations based on OECD Regional Database (2009).

Regional disparities in per capita output reflect differences in economic performance and persist over several decades. Regional disparities in GDP per capita reflect regional variations in economic performance due to a complex combination of interconnected factors such as geography, demographics, specialisation, productivity, physical and human capital, infrastructure, and innovation capacity, to mention a few. The great amount of regional heterogeneity also creates differences in job opportunities and income levels. Although disparities in GDP per capita among Swedish TL3 regions are relatively small by OECD standards, they fluctuate but persist for decades or even generations (Figure 1.26). Income convergence is slow or non-existent. New theories of place-based economic growth imply that the growing populations and wealth of major urban areas is an unavoidable result of the economies of scale that they enjoy, and not something that necessarily requires corrective action.

Figure 1.26. **Gini index of inequality of GDP per capita across Swedish regions (TL3), 1980-2005**



Source: Authors' calculations based on Cambridge Econometrics.

Labour mobility could reduce regional imbalances but is limited. Although consideration should be given to obstacles hindering geographic labour mobility arising for example from housing policies, migration will not be the ultimate cure for regional imbalances. The fact that income differentials in Sweden have persisted for many generations despite the lack of legal barriers to internal migration suggests that workers' response to wage differentials and job opportunities can be very sluggish.

In addition to encouraging labour mobility, regions can mobilise their labour force through various initiatives: i) aiding commuters to access local labour markets by reducing the cost of commuting through better accessibility

and flexi-time arrangements; ii) aiding the transition of youth into the workforce through training programmes and adequate links between the private sector and educational institutions; iii) reducing secondary school dropout rates as these result in unfavourable future employment opportunities; and iv) promoting adult training programmes and entry into the workforce. These initiatives can improve the participation of potential employees in the workforce and should be complemented by other initiatives aimed at improving the competitiveness of Swedish regions.

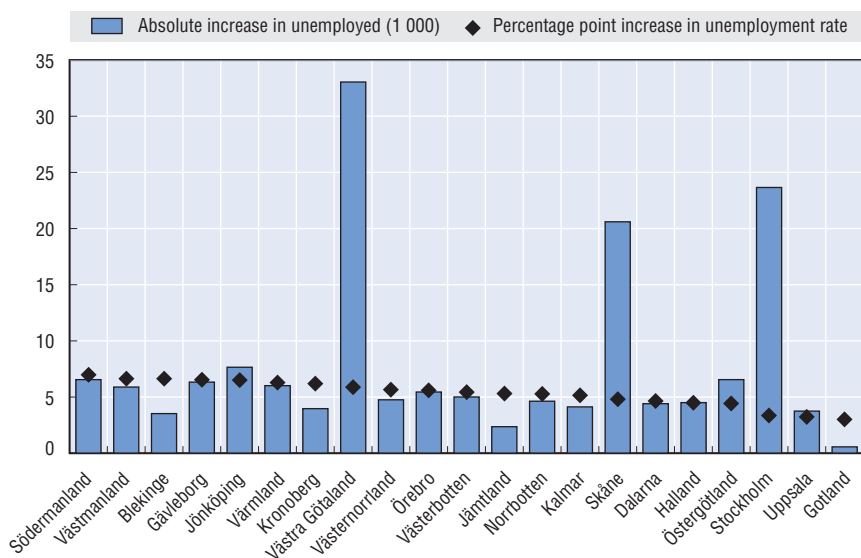
### ***The impact of the crisis on Swedish regions***

Sweden's small export-oriented economy is very dependent on global markets and foreign direct investment (FDI). As a result, Sweden has suffered from the effects of the financial and economic crisis, in particular the drop in global demand. In absolute numbers, the worst affected regions in Sweden are those exposed to international markets, with a large element of manufacturing industry and services, mainly Västra Götaland, Stockholm and Skåne. Nonetheless, the economic base in these regions is more diversified and they are more likely to bounce back quicker once the overall level of demand recovers. In proportional terms, the impact of the crisis is larger in undiversified regions with thin markets and high dependence on few sectors.

Although in absolute terms the effects of the crisis are larger Sweden's main metro-regions, the proportionate impact is larger in more vulnerable regions adjacent to metro-regions and in sparsely populated coastal regions in the south with thinner markets. In absolute terms, the largest increases in unemployment – from the third quarter of 2008 to the third quarter of 2009 – occurred in the metro-regions of Västra Götaland (33 034 unemployed), Stockholm (23 662) and Skåne (20 602). The proportional impact however was larger in Stockholm's, Skåne's and Västra Götaland's adjacent regions Södermanland, Blekinge and Värmland with percentage point increases in unemployment rates of 3.83, 3.64 and 3.44 respectively (Figure 1.27). In addition the coastal/middle regions of Västmanland (3.64) and Gävleborg (3.58) and the southern region Jönköpings (3.56) with thinner and less diversified economies suffered the largest proportional increases among Sweden's regions. Amongst the three metro-regions, Stockholm (1.77) suffered the smallest proportion increase and Västra Götaland (3.21) the largest.

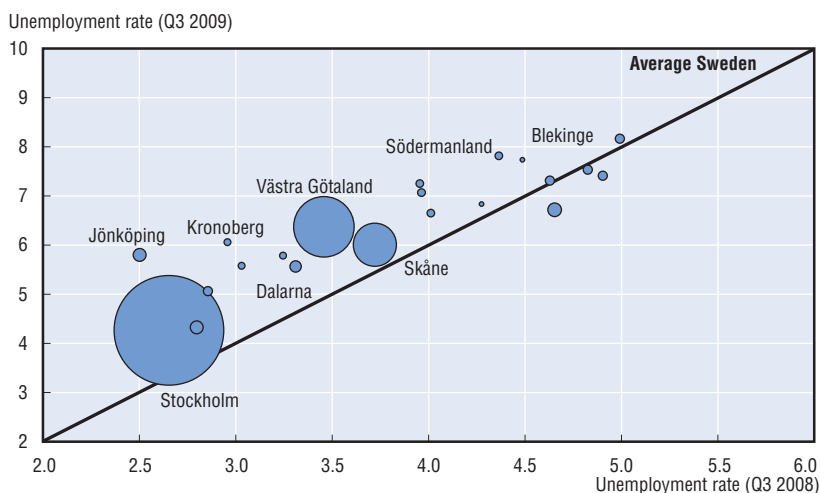
The crisis brings an equalisation effect in labour market outcomes among Swedish regions with the exception of Stockholm and Uppsala. Regions with pre-crisis unemployment rates below the national average are now (i.e. 3rd quarter 2009) at the national average, especially Jönköping and Kronoberg increasing their pre-crisis (i.e. 3rd quarter 2008) unemployment rates from 35% and 23% below the national average to only 10% and 6% below the national average in the third quarter of 2009 (Figures 1.28 and 1.29). In contrast regions with the highest pre-

Figure 1.27. **Change in unemployment and unemployment rate, Q3 2008-Q3 2009 (TL3)**



Source: Authors' calculations based on data from Swedish Public Employment Service.

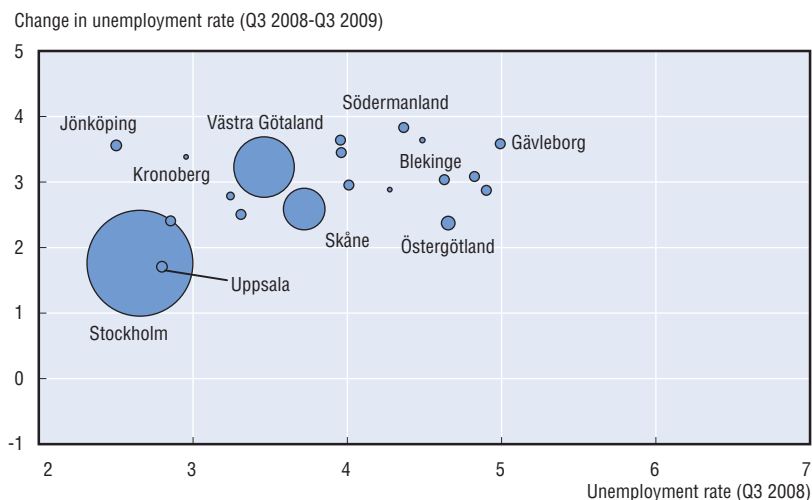
Figure 1.28. **Movements in rates of unemployment, Q3 2008-Q3 2009 (TL3)**



Source: Authors' calculations based on data from Swedish Public Employment Service.

crisis unemployment rates experienced a lower proportionally increase: Gävleborg, Norrbotten and Västernorrland with respective pre-crisis unemployment rates of 30%, 28% and 26% above the national average, reduced their above average rates to 27%, 18% and 16% respectively.

Figure 1.29. **Percentage change of unemployment rate, Q3 2008-Q3 2009 (TL3)**



Source: Authors' calculations based on data from Swedish Public Employment Service.

### 1.3. Opportunities for growth in Swedish regions

The benefits of agglomeration only spread to adjacent and neighbouring regions when urban-rural linkages are effective. Traditional measures of innovation are very concentrated in Sweden as a result of high expenditures by a few very large firms. Signs of non-technological innovation, measured by a proxy of entrepreneurship, are more evenly spread. Encouraging entrepreneurial activity and SMEs could help to diffuse knowledge to other firms, other economic sectors and other regions and could encourage non-technological forms of innovation.

While a number of rural regions are among the fastest-growing, seven, the home of almost 20% of the workforce, are still underperforming with annual average growth rates below the OECD average. Opportunities for growth are present in rural regions especially in the field of renewable energies. Enlargement of local labour markets can bring the benefits of larger markets but this is not a solution for all regions, especially sparsely populated ones.

The patterns of growth of OECD regions are quite diverse. There is no single growth path even for similar types of regions. OECD analysis reveals that over the past decade a significant number of OECD urban regions have grown faster than rural regions, but also that a significant number of rural regions have outperformed urban ones in growth of GDP per capita. The wide variation in economic performance reflects regions' heterogeneity in terms of levels of income, rates of employment, mixes of activities with high and low productivity,

endogenous and exogenous assets, comparative advantages, stages of development, and public policies. Differences in growth rates result from differences in regions' assets but also in their capacity to mobilise these assets.

### Assessing the key determinants of growth

Regions vary in their mix of assets and comparative advantages. Nonetheless OECD studies find evidence that sustainable growth rates only occur when regions mobilise their endogenous assets instead of depending on transfers and subsidies. The path to high sustainable growth rates varies among OECD regions: just as a significant number of urban regions outperform the OECD average, higher than average growth rates also exist in intermediate and rural regions. At the same time, regions of all types (urban, intermediate and rural) can be found among the underperforming regions.

Using the econometric technique summarised in Box 1.3, OECD analysis has identified six key factors of growth in OECD TL2 regions: a region's initial level of GDP per capita, human capital, motorway infrastructure, innovation activity, economies of agglomeration including industrial mix, and market accessibility. Comparative benchmarking of the performance of key determinants of growth in Swedish regions (Table 1.6) with respect to the OECD average makes it possible to identify potential areas for improvement in the following areas:

- **Human capital:** Human capital is perhaps the most important factor for regional growth and takes on average about three years to have an effect on growth (Box 1.2). All Swedish TL2 regions have higher proportions of the labour force with tertiary attainment than average OECD regions (25%), with

Table 1.6. **Regional determinants of growth (Swedish TL2 regions), 2005**

Regions	Patent applications	Motorway density	Prim and lower-sec. attmt. over LF	Tertiary attmt. attmt. over LF	Bus RD % GDP	Public RD % GDP	HED RD % GDP	Accessibility to markets
Stockholm	717	0.15	14%	37%	3.14	0.27	0.79	1.96
Östra Mellansverige	392	0.31	18%	28%	2.48	0.26	1.25	0.70
Sydsverige	466	0.22	19%	30%	3.35	0.08	0.98	5.05
Norra Mellansverige	109	0.10	19%	23%	1.07	0.08	0.18	1.13
Mellersta Norrland	37	0.04	17%	25%	0.56	0.09	0.24	0.69
Övre Norrland	67	0.01	13%	29%	0.74	0.18	1.63	0.69
Småland med öarna	87	0.21	20%	23%	0.85	0.01	0.20	1.00
Västsverige	556	0.22	18%	28%	4.50	0.12	0.70	1.12
<b>Av. OECD TL2 regions</b>	<b>371</b>	<b>0.22</b>	<b>29%</b>	<b>25%</b>	<b>0.93</b>	<b>0.21</b>	<b>0.37</b>	<b>2.27</b>

Note: Motorway density is expressed by motorway kilometres by population; see Annex 1.A2 on measuring accessibility to markets. HED RD measures research and development expenditures in the higher education sector to GDP.

Source: Authors' calculations based on OECD Regional Database (2009); patent applications derived from OECD DSTI REGPAT Microdatabase.

the exceptions of Norra Mellansverige (23%), and Småland med öarna (23%). In contrast, no Swedish regions have significantly higher proportions of low-skilled workers in their labour force.

- ❖ Analysis of enrolment rates at a lower level (e.g. TL3) reveals:
- *Innovation*: Innovation has a positive impact on growth of GDP per capita in TL2 regions in the medium and long term (OECD, 2009). Comparing innovation indicators of Swedish TL2 regions to OECD average values reveals:
  - ❖ Patenting activity is only higher than the OECD average in agglomeration regions (Västra Götaland, Stockholm and Skåne); other Swedish regions lag well behind.
  - ❖ Business R&D intensity is above the OECD average (0.93%) in all Swedish TL2 regions with the exception of Övre Norrland (0.74%), Mellersta Norrland (0.56%) and Småland med öarna (0.85%).
  - ❖ Public R & D intensity is lower than the OECD average (0.21%) in all Swedish regions except Stockholm (0.27%) and its adjacent region, Östra Mellansverige (0.26%).
  - ❖ R&D intensity in higher education (the ratio of R&D in higher education to GDP) is higher than the OECD average (0.37%) in all Swedish TL2 regions, except Mellersta Norrland (0.24%), Småland med öarna (0.20%) and Norra Mellansverige (0.18%).
- *Infrastructure*: Motorway infrastructure has a positive impact on regional growth provided that other factors such as human capital and innovation are also present in the region (OECD, 2009). Motorway density is poor in most Swedish regions. In fact only Östra Mellansverige (0.31) has a higher value than

### Box 1.3. Measuring growth in OECD TL2 regions

Recent studies (OECD, 2009) have tested the effects of key drivers of growth among OECD TL2 regions through a series of econometric techniques, including a cross-sectional specification, a dynamic panel specification and a spatial-econometric technique. The analysis covers 1995-2005 and includes 337 OECD TL2 regions when full data are available. The results are summarised below:

- Human capital and innovation positively influence regional growth as endogenous growth theories suggest.
- Elements of new economic geography theories, such as agglomeration economies, are also relevant and reveal that there is a strong spatial dimension to growth.
- Infrastructure becomes a necessary but not a sufficient condition for growth and is only relevant if human capital and innovation are present.



**Box 1.3. Measuring growth in OECD TL2 regions (cont.)**

These results suggest that to promote regional growth policy makers should have a comprehensive regional policy which not only links regions through infrastructure investments, but also fosters human capital formation and facilitates the innovation process. The risk of partial regional policies lies – as the models seem to suggest – in leakage (brain drain) instead of linkage if only infrastructure or human capital is promoted.

Analysis based on dynamic econometric modelling reveals that:

- Infrastructure and human capital require three years to positively influence growth.
- Innovation is a longer-term process which has a positive effect on regional growth only after five years.

A third type of analysis is based on a knowledge production function that relates innovation input variables such as human capital and R&D to innovation outcomes such as patenting activity. The results show that:

- Human capital has a strong impact on regional growth both directly (from previous analysis) and indirectly through patenting.
- R&D is an indirect determinant of growth through its impact on patenting activity.
- Geographic space plays a role in determining innovation in these models as agglomeration economies emerge as a determinant.

The analysis based on spatial econometrics shows that neighbouring regions strongly determine the performance of any given OECD region. This spatial correlation with growth also confirms that infrastructure and human capital drive economic expansion, but it does not confirm previous results for innovation. These results suggest that as capital and talent agglomerate they tend to positively influence growth in neighbouring regions – and *vice versa* – but innovation remains a very local element that does not necessarily influence growth in their neighbours.

Source: OECD (2009).

OECD TL2 regions (0.22). In relation to its population even Stockholm has lower than average levels of motorway infrastructure. The particularly low value observed in Övre Norrland (0.01) creates an important challenge in terms of connectivity and accessibility to other regions and markets.

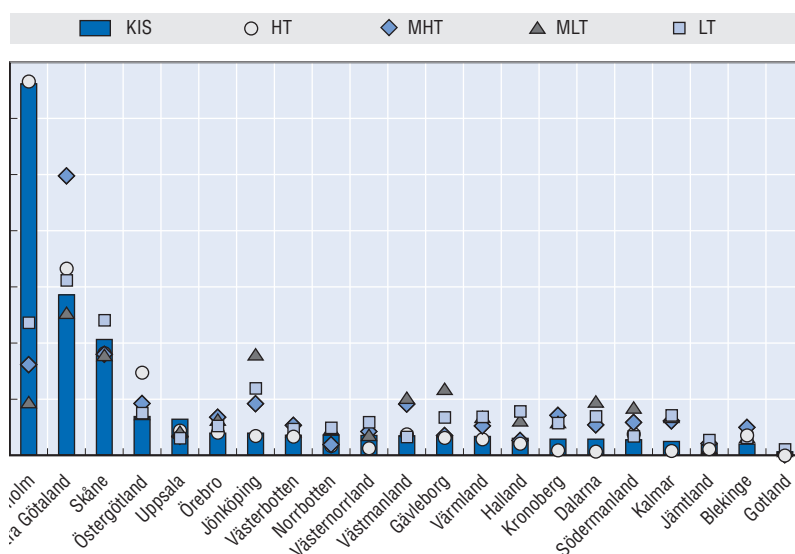
- **Accessibility:** All Swedish TL2 regions have poor accessibility to markets in comparison to other OECD TL2 regions with the exception of the two regions closest to European markets, Sydsverige and Stockholm.

## Agglomerations and industry mix

Although more than 50% of Sweden's overall employment works in Stockholm, Skåne and Västra Götaland, the internal industrial composition of regions is quite heterogeneous. Jönköping, Kronoberg and Västmanland display the largest share of employment in manufacturing representing 28%, 26% and 25% of the total employees. Stockholm, Uppsala, Gotland and Jämtland employ more than 70% of their workforce in services related industries, among which Stockholm (5%), Gotland (3%) and Västernorrland (2%) display the highest share in financial intermediation, Stockholm (20%), Uppsala (16%), Skåne, Västra Götaland (13) and Östergötland (13%), the highest share in real estate renting and business and Gotland (47%), Västerbotten (44%) and Jämtland (43%) display the highest share in community and social and personal services. In mining activities Norrbotten (3%) employs the highest share, and Gotland, Jämtland and Kalmar employ 6%, 4%, and 4% of the workforce in agriculture, hunting, forestry and fishing.

The bulk of knowledge-intensive and high-technology activities are in Stockholm, Västra Götaland and Skåne. These agglomerations concentrate 66% of knowledge-intensive employees and 68% of employees in high-technology industries. In contrast, other regions have the bulk of medium-low (70%) and low-technology (55%) workers (Figure 1.30).

Figure 1.30. **Regional employment by industry type, 2007**  
Knowledge intensive (KIS), high technology (HT), medium-high technology (MHT), medium-low technology (MLT) and low technology (LT)



Source: Authors' calculations based on data from Statistics Sweden.

Table 1.7. **Share of employment across industries in Swedish regions (TL3), 2007**

Percentage

	Agriculture, hunting, forestry and fishing	Mining and quarrying	Manuf.	Electricity gas and water supply	Constr.	Services						Sweden	
						Sum Services	Wholesale and retail trade, restaurants and hotels	Transport, storage and comm.	Financial intermediation	Real estate, renting and business activities	Community, social and personal services		
Stockholm	0.4	0.0	9.0	0.5	5.8	84.2	17.8	7.2	4.7	19.9	34.7	100	<b>23.6</b>
Uppsala	2.0	0.1	10.9	1.1	7.5	78.3	13.2	4.8	1.3	16.2	42.8	100	<b>3.1</b>
Södermanland	2.3	0.0	20.4	0.5	7.5	69.2	13.7	4.9	1.2	9.2	40.3	100	<b>2.5</b>
Östergötland	2.3	0.1	19.2	0.8	6.4	71.2	14.0	5.0	1.2	12.8	38.1	100	<b>4.3</b>
Örebro	1.9	0.4	18.9	0.5	6.6	71.7	14.7	5.4	0.9	10.8	39.9	100	<b>2.9</b>
Västmanland	1.5	0.1	25.2	0.7	6.8	65.7	13.7	4.4	1.0	10.6	36.0	100	<b>2.6</b>
Jönköping	2.1	0.1	28.4	0.5	5.5	63.4	14.3	6.3	0.8	7.6	34.5	100	<b>3.9</b>
Kronoberg	2.8	0.1	25.7	0.4	5.8	65.2	14.4	5.6	1.4	10.2	33.6	100	<b>2.1</b>
Kalmar	3.7	0.1	23.4	1.3	6.4	65.1	13.1	5.1	1.0	7.7	38.3	100	<b>2.4</b>
Gotland	5.8	0.6	9.3	0.3	8.2	75.7	14.2	5.4	2.6	6.4	47.0	100	<b>0.6</b>
Blekinge	2.2	0.1	22.6	0.7	6.0	68.4	10.5	5.0	0.9	9.9	42.1	100	<b>1.6</b>
Skåne	2.1	0.1	15.4	0.6	7.0	74.8	16.7	6.1	1.5	13.4	37.2	100	<b>12.2</b>
Halland	3.0	0.1	17.2	1.8	7.4	70.5	18.2	4.9	1.3	8.3	37.7	100	<b>2.9</b>
Västra Götaland	1.4	0.1	19.5	0.5	6.3	72.2	16.0	6.3	1.4	13.0	35.6	100	<b>17.3</b>
Värmland	2.6	0.1	20.3	0.6	6.6	69.8	14.6	5.1	1.1	9.2	39.8	100	<b>2.8</b>
Dalarna	2.6	0.3	20.9	0.7	7.5	68.0	14.0	4.8	0.9	7.9	40.4	100	<b>2.9</b>
Gävleborg	2.6	0.1	21.7	0.8	7.4	67.5	12.7	5.3	0.9	10.1	38.4	100	<b>2.9</b>
Västernorrland	2.6	0.1	16.1	1.0	7.7	72.6	13.0	7.1	2.4	9.4	40.8	100	<b>2.6</b>
Jämtland	4.1	0.3	11.9	1.0	7.0	75.6	14.3	5.3	1.5	11.3	43.2	100	<b>1.4</b>
Västerbotten	2.6	0.7	16.1	1.1	6.6	72.9	12.5	5.6	1.3	9.8	43.7	100	<b>2.8</b>
Norrbottn	2.4	3.3	12.7	0.9	8.2	72.5	12.4	6.2	1.2	9.9	42.8	100	<b>2.7</b>
<b>Sweden</b>	<b>1.8</b>	<b>0.2</b>	<b>16.6</b>	<b>0.7</b>	<b>6.5</b>	<b>74.3</b>	<b>15.5</b>	<b>6.0</b>	<b>2.1</b>	<b>13.3</b>	<b>37.4</b>	<b>100</b>	<b>100.0</b>

Source: Authors' calculations based on data from Statistics Sweden.

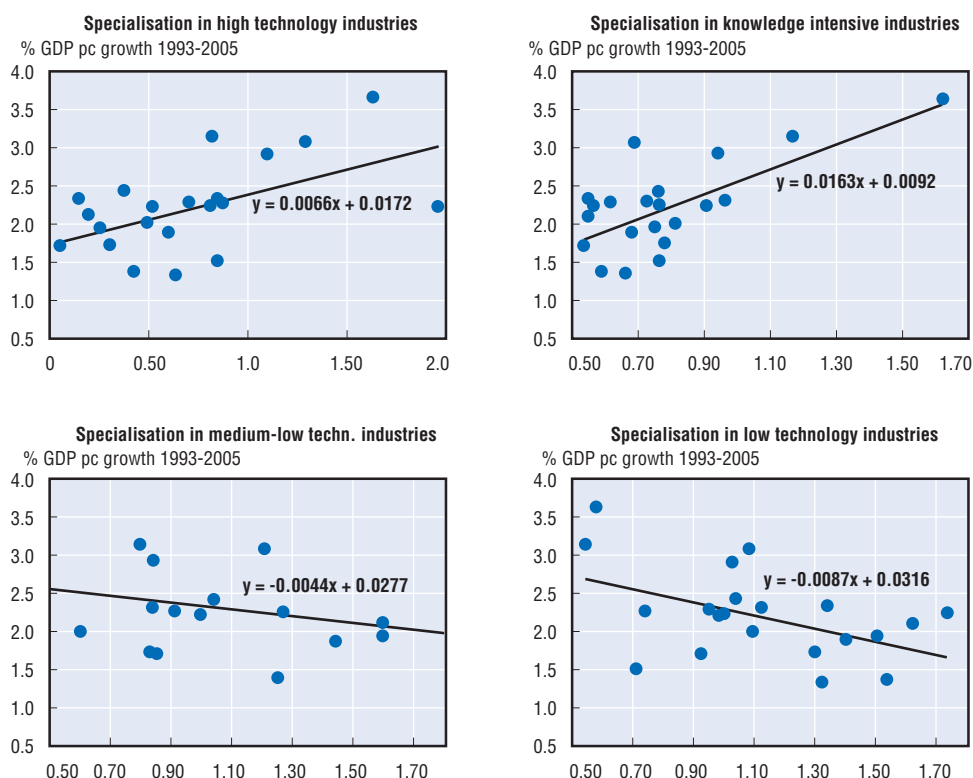
Sweden's three main agglomerations specialise in different but complementary sectors. While Stockholm exploits knowledge-intensive services, Västra Götaland focuses on high-technology automotive, trucking and shipbuilding manufacturing and Skåne on chemicals and high-technology medical devices and products. This polycentric setting, composed of three differentiated agglomerations, allows Sweden to take account of complementary synergies but also allows each agglomeration to exploit its areas of specialisation.

Specialisation in high value added activities brings efficiency gains to the region. When firms locate close to each other benefits of knowledge spillovers, forward and backward linkages and proximity of suppliers and clients enhance innovative activity and productivity in the region. These benefits may occur when firms from the same industry locate close to each other (*e.g.* specialisation) and also when firms from different industries (*e.g.* diversification) locate in a common space. The former favours intra-industry transmission of knowledge and inter-firm competition leading to efficiency gains, and the latter facilitates the transfer of ideas between sectors, the sharing of infrastructure and informal interactions of more goods and services to the economy. Specialisation and diversification are not mutually exclusive and in many cases specialisation in high value added sectors can attract economic activity to the area creating a more diversified economic base over time.

Regional specialisation in high-technology and knowledge-intensive activities is conducive to higher GDP growth rates, while specialisation in low and medium-low technology industries yields lower growth rates. Increasing global competition requires OECD regions to move up the value chain in order to stay competitive. Competitive regions tend to move towards more knowledge-intensive and higher value-added activities, boosting productivity levels and consequently growth, while labour and material-intensive industries decrease in importance. Sweden is no exception to this trend. Labour and material-intensive industries such as food processing, textiles and metals have stagnated or even decreased in importance, while high-technology sectors such as chemicals, biotechnology, information technology, electronics and engineering have brought dynamism to regions specialised in these industries (Figure 1.31). In contrast Swedish regions specialised in medium-to-low-technology industries have stagnated during the past decade.

Comparing specialisation patterns over time reveals that although agglomeration regions are becoming more specialised in activities with high value added, a number of regions adjacent to agglomerations and rural regions also specialise in such activities. Comparing specialisation patterns in knowledge-intensive and high-technology industries over time among Swedish TL3 regions reveals that:

Figure 1.31. **Specialisation in employment by sectors and GDP per capita growth (TL3), 1993-2005**



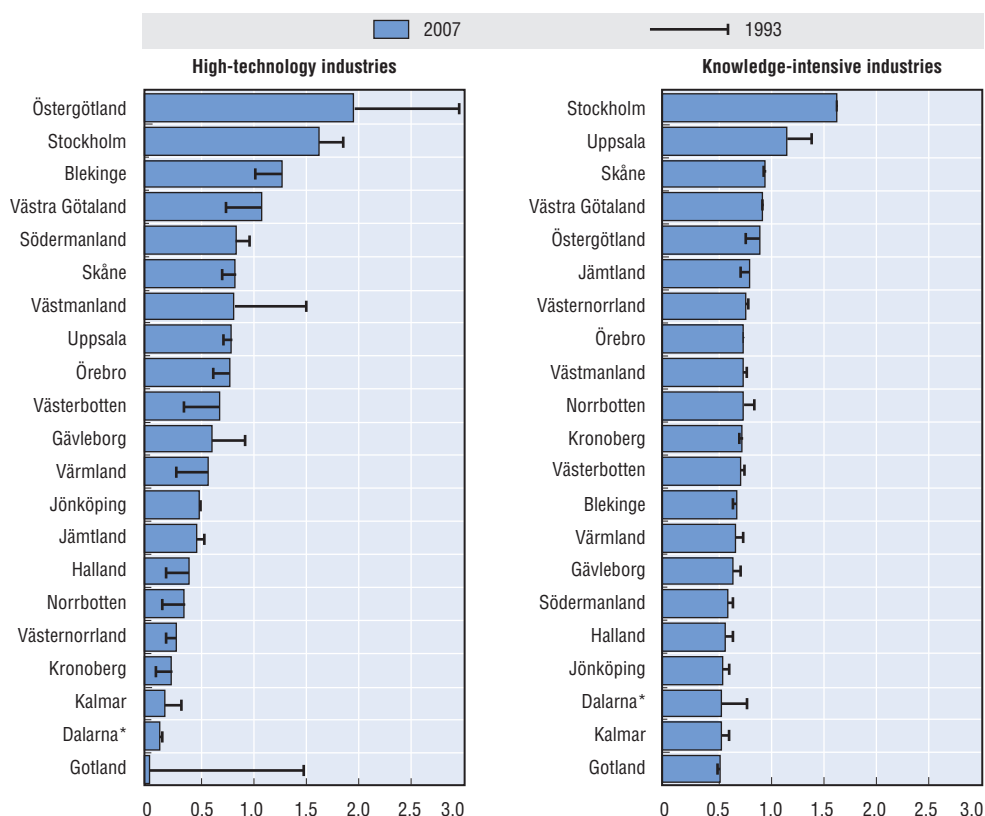
Source: Authors' calculations based on Statistics Sweden data.

- Sweden's agglomerations are among the most specialised regions in terms of activities with high value added. Skåne and Västra Götaland are becoming more specialised in high-technology industries while Stockholm is becoming less so, and instead is specialising in knowledge-intensive services, especially business activities and finance and insurance.
- A number of regions adjacent to agglomerations specialise in activities with high value added and are becoming more specialised over time.
  - ❖ Blekinge, adjacent to Skåne, is the third most specialised region in high-technology industries. Over the past decade it has become more specialised in this area and in knowledge-intensive activities.
  - ❖ Uppsala, adjacent to Stockholm, is the second most specialised region in knowledge-intensive activities. Although it has lost ground in this sector, it has gained specialisation in high-technology industries.

- ❖ Finally Värmland, north of Västra Götaland, has gained some specialisation in high-technology industries over the past decade. Nonetheless, it remains highly specialised in low-technology industries.
- A number of predominantly rural Swedish regions, according to the OECD typology, are moving towards more value-added activities. Östergötland is most specialised in high technology, and although it has become less specialised in this sector over the past decade it is increasingly specialised<sup>9</sup> in knowledge-intensive activities. Västerbotten and Örebro have become more specialised in high-technology industries over the past years.

In contrast a number of Swedish predominantly rural regions specialised in medium-low and low-technology industries have become even more specialised over the past 14 years. Swedish TL3 regions that were among the most specialised in medium-low-technology activities in 1993 and have

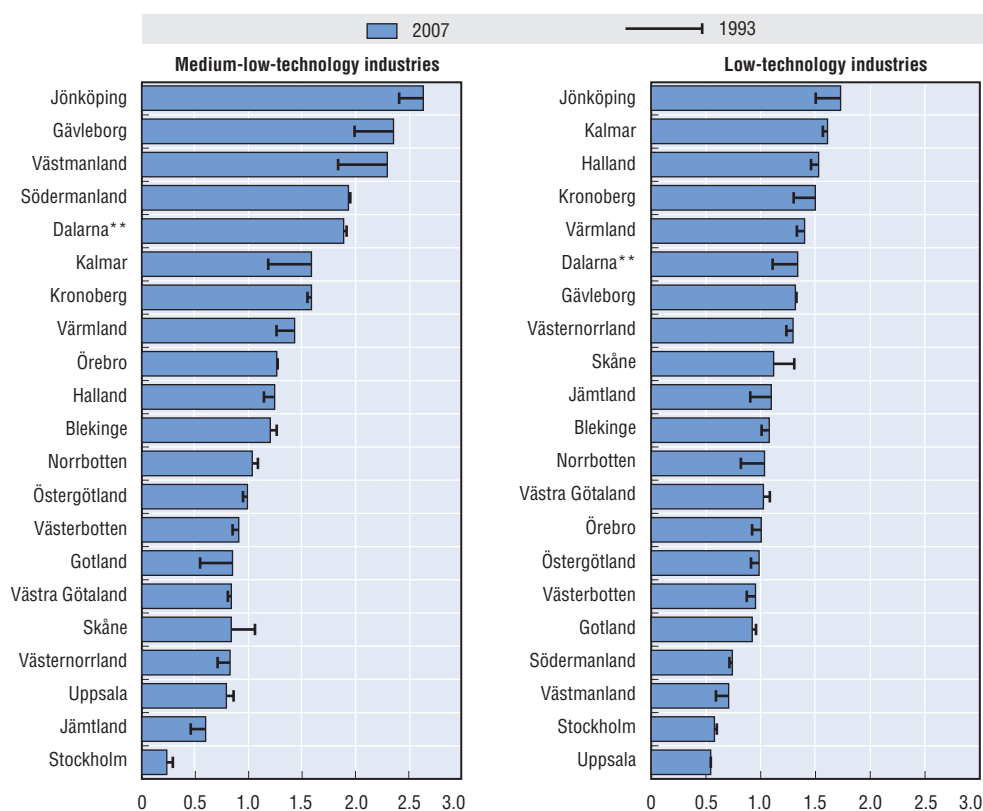
Figure 1.32. **Regional specialisation in high technology, and knowledge intensive industries (TL3), 1993 and 2007**



Source: Authors' calculations based Statistics Sweden data.

become more specialised include Jönköping, Gävleborg, Västmanland, Kalmar and Värmland. Similarly, regions that were specialised in low-technology industries in 1993 and have become more specialised include Jönköping, Kalmar, Halland, Kronoberg, Värmland and Dalarna. Specialisation does not imply increases or declines in overall employment levels in these sectors rather it compares the proportion of workers that are employed in these sectors relative to all economic activities in comparing to the proportion observed in all other Swedish regions.

Figure 1.33. **Regional specialisation in medium-low and low-technology industries (TL3), 1993 and 2007**



Source: Authors' calculations based on Statistics Sweden data.

## Innovation

Innovation is a key factor of growth in OECD countries. Globalisation and rapid advances in new technologies, notably ICTs, reinforce the importance of innovation by creating new sources of competition and opening new markets for

innovative products and services. There is mounting pressure for OECD countries to move up the value chain and to engage in a continuous process of adjustment and innovation. Recent empirical evidence across OECD countries confirms the link between innovation – the introduction of a new or significantly improved product (good or service), process, or method – and growth.

At the regional level the link between innovation and growth is also apparent (OECD, 2009). Indeed if the regional business environment is not dynamic and innovative, economic benefits from human capital investments and infrastructure are unlikely to accrue in the target region. In recent years the notion of innovation has broadened. In particular interest has grown in non-technological forms of innovation (*e.g.* organisational changes, marketing, design, etc.) and their contribution to productivity growth. The main focus of non-technological innovation is the services sector.

Although Sweden ranks among the most innovative-intensive economies in OECD countries at the national level (see Section 1.1), it has room for improvement. In particular it needs to transform its high levels of R&D expenditures more efficiently into productivity growth at both regional and national levels. Innovation is dominated by the small number of large firms that account for the bulk of R&D investments. These large firms have international ties and are mostly located in Sweden's main agglomerations. Encouraging entrepreneurial activity and SMEs can help to diffuse this knowledge to other firms, economic sectors and regions. Adequate levels of human capital, more efficient interaction and sharing of knowledge, a healthy business environment and effective networks of relevant stakeholders (triple helix model) are key means of improving the commercialisation of innovation and the efficiency of the system as a whole.

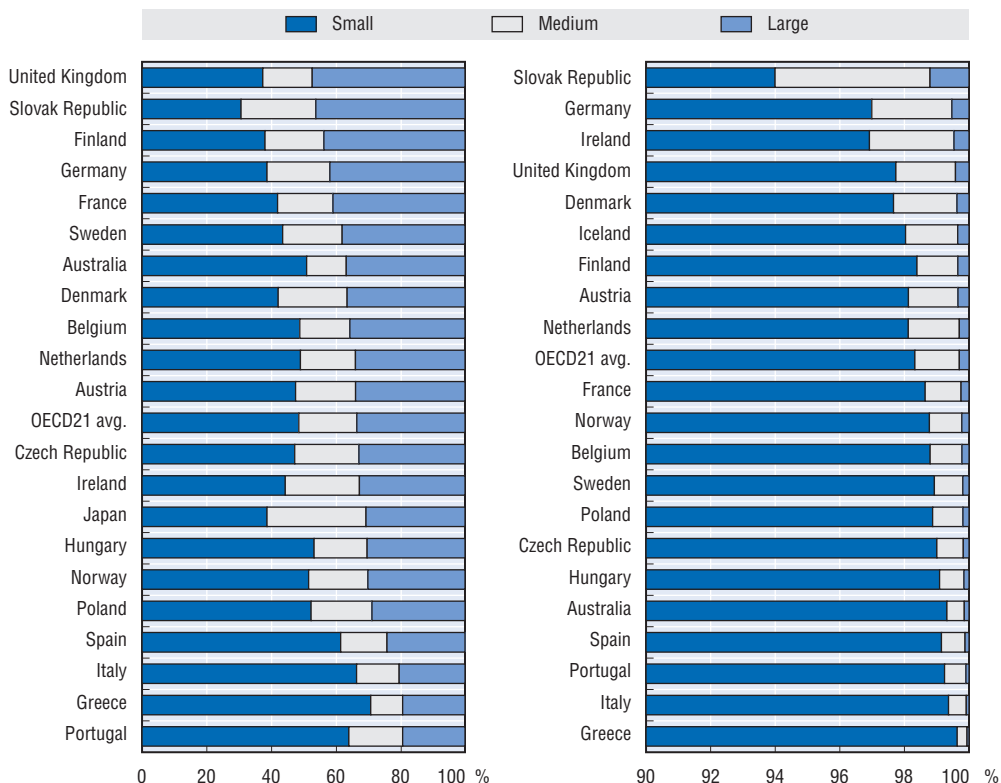
### ***Sweden's regional innovation systems***

Large firms are less prominent in Sweden than in other OECD countries but they employ a larger share of the workforce. Large enterprises (more than 250 employees) absorb a higher proportion of the total workforce in Sweden (38%) than the average in 21 OECD countries (35%). However, they are less numerous (0.19%) than in 20 other OECD countries (0.22%). This means that on average Sweden's few large firms absorb a larger share of workforce. Small firms are more abundant in Sweden (99%) than on average in OECD countries, but they employ a smaller share of the workforce, 44% as opposed to the OECD average of 48%.

A few large Swedish firms are the source of most R&D expenditures. According to the index of geographic concentration among TL2 regions, Sweden has the strongest concentration of R&D expenditures among OECD countries (Figure 1.35). This high degree of concentration is driven by the presence of a few firms that account for the bulk of national R&D expenditures



Figure 1.34. **Employment and number of firms in the manufacturing and market services industries, by firm size, 2005**



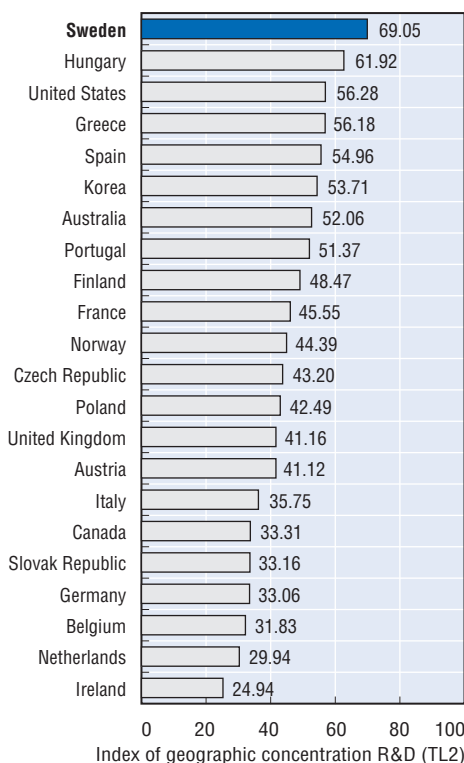
Note: small enterprises are defined as those employing fewer than 50 workers, medium-sized enterprises between 50 and 250 workers, and large enterprises more than 250 workers. Market services exclude financial intermediation (ISIC 65-67) and community, social and personal services (ISIC 75-99).

Source: OECD (2008), *Structural and Demographic Business Statistics* (SDBS).

and are mostly located in Sweden's main agglomerations. Strong concentration of R&D expenditures can limit the diffusion of knowledge to other sectors and firms and to other regions, unless there are adequate transmission mechanisms and sufficient capacity to absorb and adapt these technologies in other sectors and regions.

Most patenting activity in Sweden is carried out in agglomeration regions or regions adjacent to them. Like R&D, patenting activity is very concentrated. According to the index of geographic concentration, Sweden displays the third highest concentration of patents among TL2 regions and above OECD average levels among TL3 regions (Figure 1.36). The bulk of Swedish patent applications (68%) are from TL3 regions with economies of agglomeration (29% in Stockholm, 20.5% in Västra Götaland and 19.4% in Skåne). More than half

Figure 1.35. **Geographic concentration index for research and development (TL2), 2005**

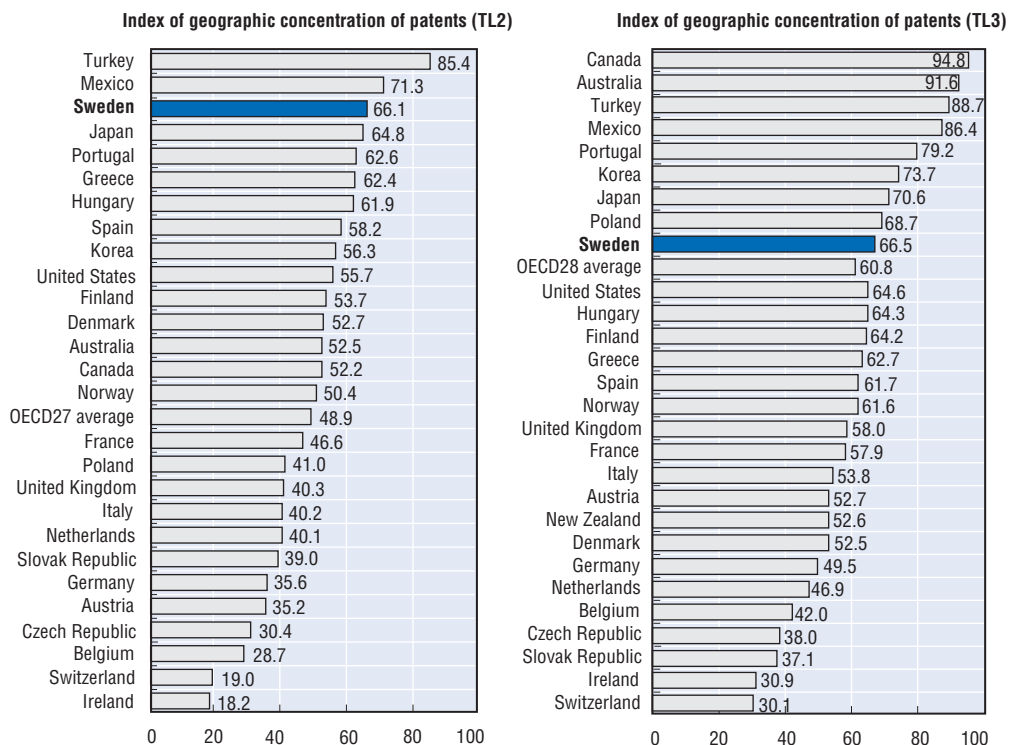


Source: Authors' calculations based on OECD Regional Database (2009).

(54%) of the remaining 32% of patent applications are from regions adjacent to agglomerations: 7.7% adjacent to Stockholm in Uppsala (5.6%) and Södermanland (2.1%); 5.8% adjacent to Västra Götaland in Värmland (1.3%), Jönköping (2.1%) and Halland (2.4%); and 3.7% adjacent to Skåne in Blekinge (0.8%), Kronoberg (0.5%) and Halland (2.4%).

There is room to spread the creation of new knowledge to more Swedish regions and to encourage more non-technological forms of innovation. The high concentration of R&D intensity and patenting activity in Sweden shows that the creation of knowledge occurs mainly in agglomeration regions and is a main driver of Swedish innovation. Innovation in Sweden has been the result of the R&D investments of large firms with links with international businesses. Innovation of this type is carried out mainly within the boundaries of these large multinational firms. There is room however to spread this new knowledge into other sectors and other regions and to encourage non-technological forms of innovation by other actors.

Figure 1.36. **Inequality in patent applications among TL2 and TL3 regions, 2005**



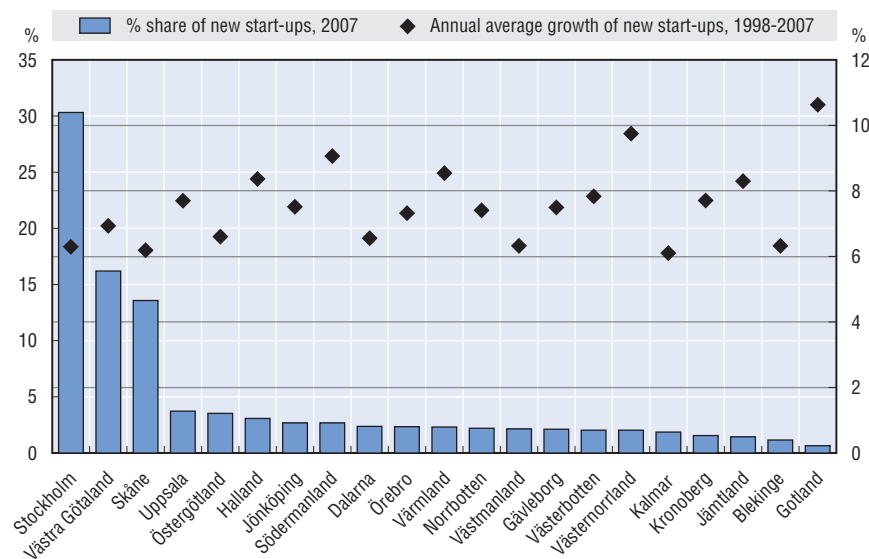
Source: Authors' calculations based on OECD Regional Database (2009).

Small and medium-sized enterprises (SMEs) can improve the commercialisation of innovation, technology transfer and technology absorption. Although the capacity to innovate has traditionally been understood as the ability to create new knowledge, OECD research suggests that non-technological forms of innovation and the capacity to anchor, diffuse and absorb innovation play an equally important role. Encouraging SME activities in Sweden can assist in the latter process by fostering the creation of knowledge beyond the large multinational firms, enhancing their capacity to absorb innovation and therefore improving the diffusion of innovation.

In Sweden, although most entrepreneurial activity occurs in the three main agglomerations, new start-ups also arise in rural regions. Since entrepreneurs create SMEs, business start-ups are often used as a proxy for entrepreneurial activity. The entry and exit of companies is a key component of the industrial dynamics of regions. In a process of creative destruction, new innovative firms replace older firms. In Sweden, although

61.2% of entrepreneurial activity is located in the three main agglomerations – Stockholm (31.5%), Västra Götaland (16.3%) and Skåne (14%) – rural regions can also be successful locations of entrepreneurial activity. In fact, from 1998 to 2007, rural regions recorded faster growth of new start-ups (Figure 1.37).

Figure 1.37. **Swedish start-up firms and annual average growth rates (TL3), 1998-2007**



Source: Authors' calculations based on OECD Regional Database (2009).

Chapter 2 discusses policies aimed at promoting the diffusion of knowledge by better linking the university-industry-government relationships. In addition it also discusses policy actions geared to improve the commercialisation of innovation and entrepreneurial activity. These efforts will assist in spreading innovation to more economic activities and geographic areas as well as to better absorb innovation.

### **Administrative and functional regions and linkages between regions**

Regions are defined by their administrative borders, and institutions and administrative bodies have responsibility for providing public goods and services within their boundaries. However, administrative borders do not necessarily correspond to the economic (e.g. functional) nature of the region. This creates tensions for co-ordinating policies to deliver services adequately to different areas. For example, an area with a low employment rate that is located in an administrative region with a high employment rate may receive

no assistance from the national government to boost employment through active labour market policies.

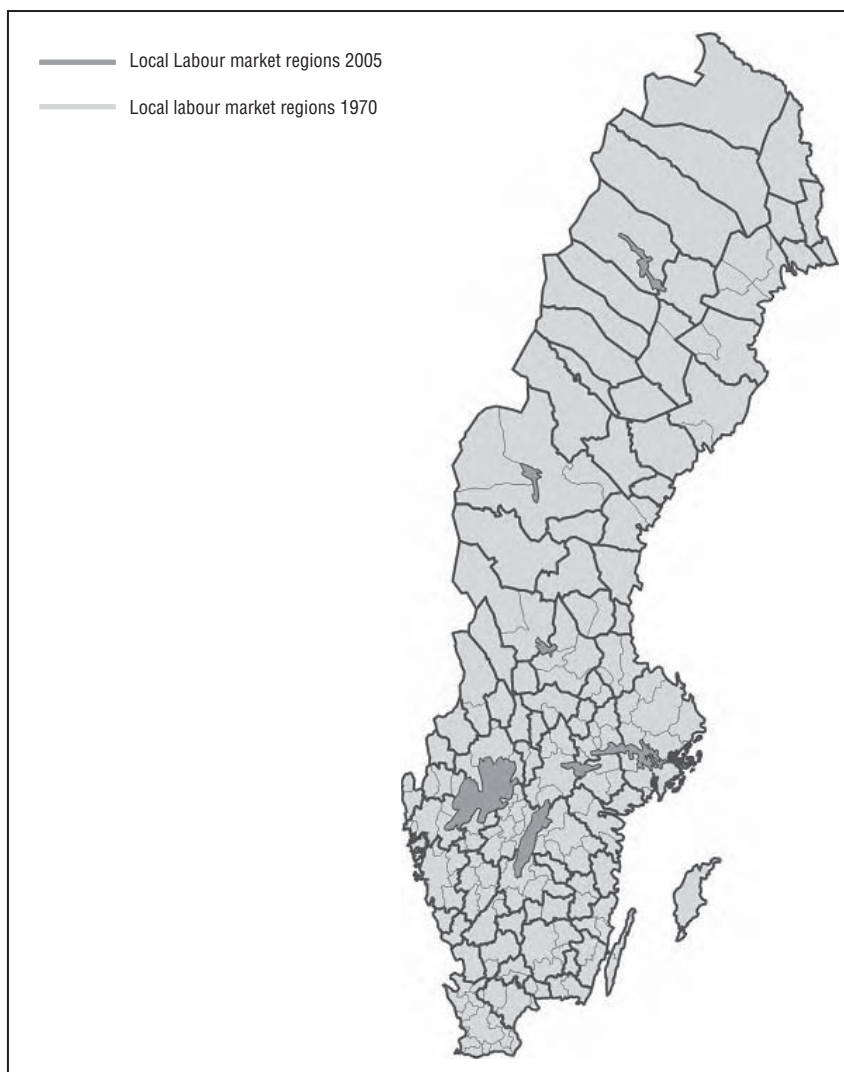
Yet a functional economic region is the logical basis for regional economic development since it maximises activities that are important to such a region's development. Medium and long-term planning should therefore take account of such functional boundaries. Administrative regions will necessarily differ from functional regions given changing commuting patterns in the latter and the costs and difficulties associated with modifying administrative borders by reorganising local government structures. Moreover, changes in administrative borders can work against long-term development plans.

When linkages among administrative regions are strong, it is possible to exploit the advantages of functional regions, especially when there are dense networks, such as good transport connections, high levels of social capital, strong social cohesion, and good communication infrastructure. These can help provide a better match between employers and workers, help spread the benefits of agglomerations, thicken networks and consequently markets, and help spread knowledge and innovation over a larger area.

Certainly, where possible, merging administrative units to cover larger areas can bring benefits by reducing the cost of providing expensive public goods and services (*e.g.* health care) through economies of scale. This would mainly concern denser metropolitan areas. In regions with low density, such benefits should be weighed against the costs of expanding administrative borders since a larger territory may reduce the capacity of sub-national governments to take adequate account of citizens' needs and to design regional development plans that exploit local comparative advantages. Furthermore, in large, sparsely populated areas with low network density account should be taken of the adverse effects of fragmented markets. This issue is further discussed in Chapter 3.

Sweden's functional regions have increased in size and declined in numbers by almost half since the 1970s. There are two main definitions of Sweden's functional regions. One, by the former state agency Nutek, defines 72 functional labour market regions for 2005 that are used for economic analysis and forecasting. The second, by Statistics Sweden, defines 82 local labour market regions in 2006. The latter illustrates how labour market regions changes year by year. The number of local labour market regions has declined from 187 in the 1970s to the current 82 (Figure 1.38). The enlargement of labour markets reflects the increasing trend towards economic concentration in Sweden during the past decades, technological advances allowing for longer commuting times, and a more integrated economy which facilitates migration.

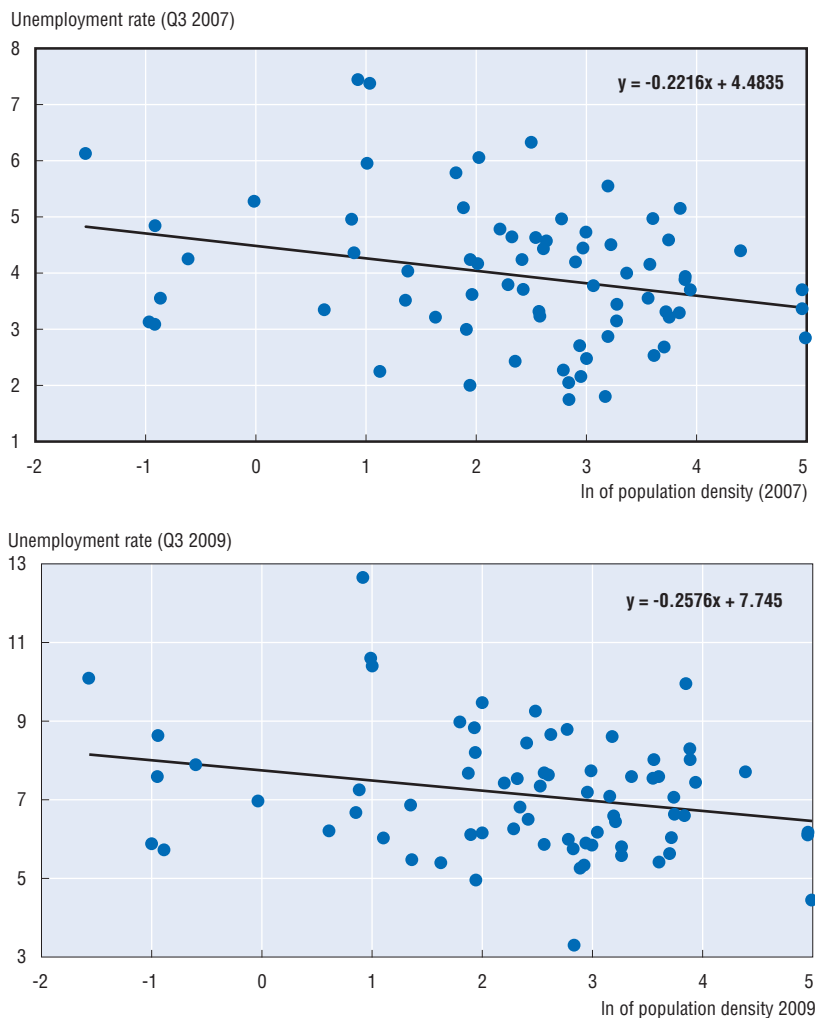
Functional regions and municipalities with thicker markets have a greater capacity to mobilise the workforce. Local labour market regions with higher

Figure 1.38. **Swedish local labour market regions, 1970 and 2005**

Source: Statistics Sweden.

density of population display lower rates of unemployment both prior to the crisis and after the crisis (Figure 1.39). This relationship is also observable among municipalities (Figure 1.40). More densely populated municipalities display lower rates of unemployment as opposed to lesser densely populated municipalities, especially after the crisis (i.e. 2009). This reveals the vulnerability of sparsely populated municipalities to the adverse effects of the crisis.

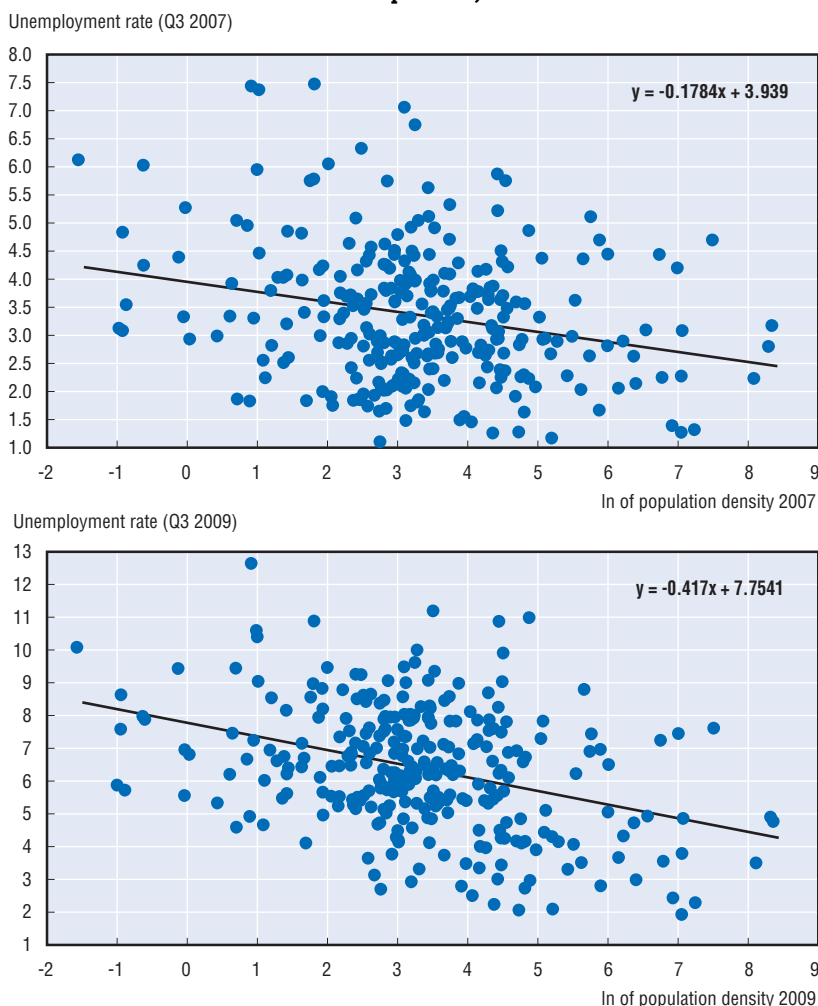
**Figure 1.39. Unemployment rates and population density in Swedish local labour market regions, 2007 and 2009**



Source: Authors' calculations based on data from Statistics Sweden.

International migration primarily concerns urban and intermediate regions. Over two-thirds of international migrants arriving in Sweden flow into the three main agglomeration regions: 32% to Stockholm, 19% to Skåne and 15% to Västra Götaland in 2007. In relation to population, the incoming flow of migrants to agglomeration regions, especially Stockholm and Skåne, is higher than in other regions (Figure 1.41). This can represent a challenge for these regions given the propensity of international migrants to be

Figure 1.40. **Unemployment rates and population density in Swedish municipalities, 2007 and 2009**



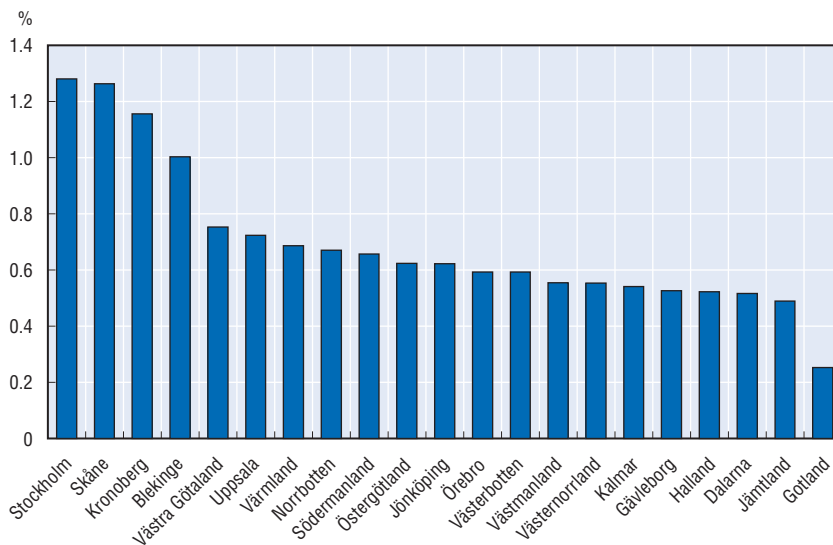
Source: Authors' calculations based on data from Statistics Sweden.

unemployed. Agglomeration regions will need to make an effort to facilitate the transition of international migrants into the labour force (e.g. through training programmes) and to integrate them into Swedish society in order for them to participate in the regions' productive activities.

Domestic migration flows reveal that densely populated regions are attracting highly skilled workers from less densely populated regions. For low-density regions, migration might come at a cost, as the propensity to migrate is much higher among the highly skilled, leaving the region with a majority of less skilled workers. To become more competitive low-density regions should



Figure 1.41. **Number of international migrants as a share of population (TL3), 2007**



Source: Authors' calculations based on data from Statistics Sweden.

seek to become more attractive to high skilled workers, by incentivising inflows of foreign and national private capital, improving their accessibility and connectivity to other regions, and by identifying untapped resources that are potential sources of dynamic advantages and endogenous growth. Regression analysis (see Annex 1.A4) reveals a negative relation between densely populated regions and the ratio of less skilled to highly skilled migrants, thus indicating a brain drain, or departure of the highly skilled, from less dense to very dense regions. This brain drain can represent a significant loss in terms of human and fiscal resources.

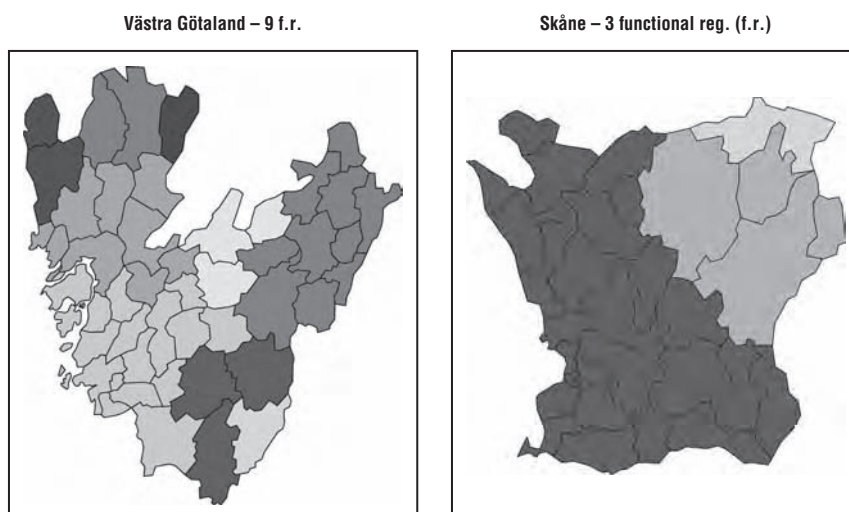
Although urban-rural linkages are good in several Swedish regions adjacent to agglomerations, there is room for improvement in others in order to spread the benefits of agglomeration to a larger area. Analysis carried out previously in this chapter suggests that benefits of agglomeration are spreading to some adjacent regions and vice versa through strong linkages as the case of Stockholm and Uppsala, which almost represent a common functional region, or Blekinge, adjacent to Skåne. In contrast the linkages are significantly lower in Södermanland adjacent to Stockholm and Halland adjacent to Västra Götaland and Skåne. There appears to be room to improve linkages between Stockholm-Södermanland, Västra Götaland-Halland and Skåne-Halland and thus spread the benefits of agglomerations to a larger area.

The number of functional regions contained in administrative regions varies significantly in Sweden from one in Stockholm to ten in Norrbotten among TL3 regions, and from one in Stockholm to 18 in Övre Norrland among TL2 regions. On average there are four functional regions in Swedish TL3 regions and ten in TL2. The number of functional regions contained in agglomeration TL3 regions also varies significantly – one in Stockholm, three in Skåne and nine in Västra Götaland (Table 1.8). The mismatch between administrative and functional regions is not a specifically Swedish issue and is a challenge in most OECD countries, and in general it also varies considerably from one region to another. The fragmentation of labour market regions calls for enhanced horizontal cross-sectoral co-operation by local governments and improved spatial planning at the functional scale of regions. Concerning mergers of regions, as currently discussed in Sweden, in-depth cost-benefit analysis is needed before conducting them; especially in sparsely populated regions. This is further discussed in Chapter 3 (Section 3.2).

**Table 1.8. Number of functional regions in Swedish administrative regions (TL2 and TL3), 2007**

TL3		TL2	
Administrative regions	# labour market regions	Administrative regions	# labour market regions
Stockholm	1	Stockholm	1
Uppsala	2	Östra Mellansverige	12
Södermanland	3	Sydsverige	4
Östergötland	2	Norra Mellansverige	17
Örebro	4	Mellersta Norrland	6
Västmanland	3	Övre Norrland	18
Jönköping	4	Småland med öarna	12
Kronoberg	3	Västsverige	10
Kalmar	4		
Gotland	1		
Blekinge	2		
Skåne	3		
Halland	2		
Västra Götaland	9		
Värmland	7		
Dalarna	6		
Gävleborg	4		
Västernorrland	4		
Jämtland	2		
Västerbotten	8		
Norrbotten	10		
<b>Average</b>	<b>4</b>		<b>10</b>

Source: Authors' calculations based on data from Statistics Sweden.

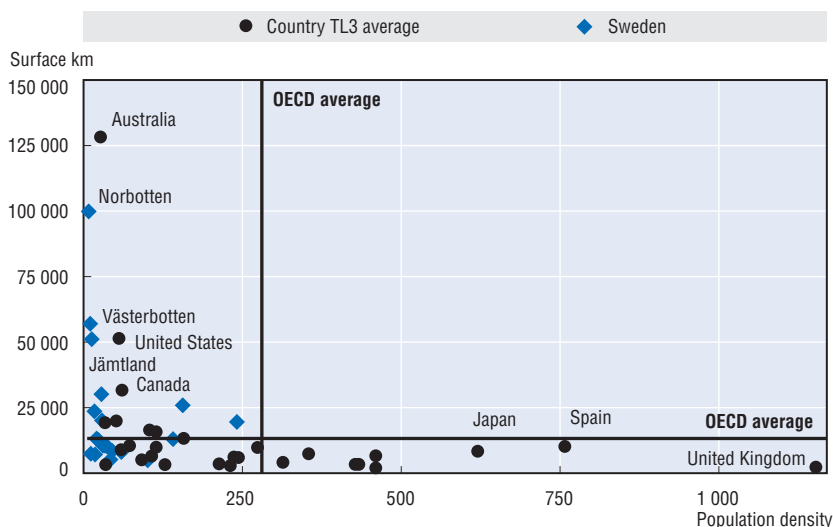
Figure 1.42. **Local labour market areas in Västra Götaland and Skåne, 2006**

Source: Authors' calculations based on data from Statistics Sweden.

In terms of the density and the geographic size of Swedish TL3 regions, six display a larger surface area and lower population density than the OECD average. All Swedish TL3 regions are less densely populated than the average of OECD TL3 regions. Västernorrland, Västra Götaland, Dalarna, Jämtland, Västerbotten and Norrbotten are larger, in terms of land area, than on average OECD TL3 regions. Large, sparsely populated regions typically have network flows of low density and thus fragmented markets. Although the proposal to enlarge administrative regions could reduce the cost of providing goods and services to the supplier this would greatly increase transport costs for users. Consideration must be given to the different needs of regions, which may vary significantly between metropolitan areas and low density areas in the north. Enlarging administrative regions in low density regions will not necessarily enlarge markets. In fact, when network density is very low, markets may become further fragmented and the capacity of sub-national governments to adequately take into account the needs of citizens may be reduced. Debate on this issue has been lively in Sweden over the past decade. The subject is addressed further in Chapter 3.

### **Growth in rural regions**

Both urban and rural regions can exhibit high growth rates. The path to high growth is quite diverse in OECD TL3 regions. In fact 44% of predominantly rural OECD regions grew faster than the average of all OECD TL3 regions during 1995-2005. Swedish rural regions should seek sustainable growth strategies by mobilising their assets and resources instead of depending on subsidies and transfers. Not only can they achieve sustainable growth rates in

Figure 1.43. **Surface kilometres and density in Sweden and OECD TL3 regions, 2006**

Source: Authors' calculations based on OECD Regional Database (2009) and Statistics Sweden.

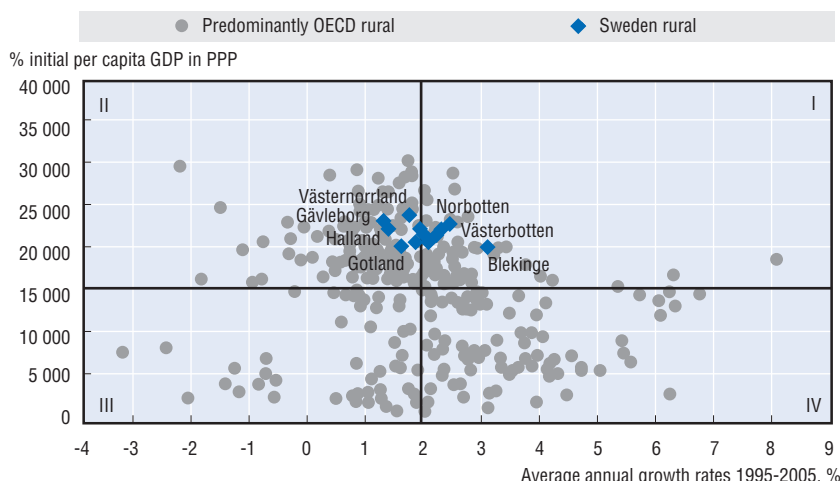
the medium and long term in this way, they will also be able to attract skilled labour and investments. In Sweden there are already signs of fast-growing rural regions where a number of regions are finding successful ways to exploit their assets and amenities. An important source of potential growth for the medium and long term will come from renewable energy sources where a number of Swedish regions can exploit comparative advantage in this area and become global competitors.

Although some Swedish regions are sparsely populated with remote access to international markets, the presence of amenities and abundant natural resources can represent an important source of growth. Rural Swedish regions are endowed with rich natural resources ranging from a vast areal land of forests in large parts of the country covering 23 of Sweden's 41 million hectares of total land area, mines and hydro power in the northern regions and agriculture in southern regions. The combination of a vast geography and cold climate in northern regions creates unique assets to these regions that can be branded for tourism or to exploit niche markets (see Boxes 2.16 and 2.17 in Chapter 2) in innovative ways.

A number of Swedish rural regions have high growth rates and only five have grown more slowly than OECD rural regions on average. According to the OECD regional taxonomy (see Annex 1.A1) among the six fastest-growing Swedish regions in terms of GDP per capita over the past decade four are predominantly

rural regions: Uppsala (3.11%), Blekinge (3.07%), Norrbotten (2.40%) and Dalarna (2.32%). Uppsala and Blekinge are adjacent to agglomerations and benefit from well functioning urban-rural linkages. Compared to all OECD rural regions only Gävleborg, Halland, Gotland, Västernorrland and Värmland recorded lower GDP per capita growth rates (Figure 1.44).

Figure 1.44. **Level and growth of GDP per capita in predominantly rural OECD regions (TL3), 1995-2005**



Source: Authors' calculations based on OECD (2009) regional data.

One-third of Swedish regions, home of 17% of the workforce, grew more slowly than the OECD average during the past decade. Seven regions recorded slower annual average growth in GDP per capita than the OECD average: Gävleborg (1.32%), Halland (1.36%), Västmanland (1.50%), Gotland (1.68%), Västernorrland (1.73%), Värmland (1.87%), and Kronoberg (1.93%). All are classified as rural regions according to the OECD typology. Among these, Gävleborg recorded the highest unemployment rate in Sweden, Halland the third lowest employment rate, and Kronoberg the sixth lowest.

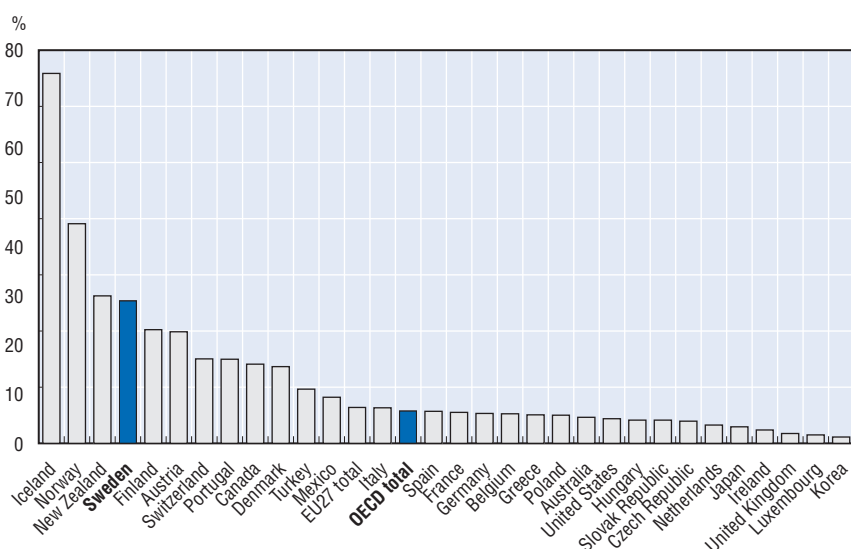
Sweden's rural regions must particularly face the challenges of large geographic distances, low density of population and cold climate. Common challenges to OECD rural regions are the presence of low density of population, prevalence of distance and lack of critical mass; in Sweden these challenges are particularly attenuated. Markets work best in highly densely connected networks yielding low connection and transaction costs and allowing for dense interactions among market participants. In order to overcome these challenges Swedish rural regions can use technology (e.g. internet in particular) in innovative ways, strengthen coalitions among different localities, and build upon existing connections and skills.

Sweden's cold climate can bring advantages to rural regions as world temperatures will likely rise in the coming decades. OECD research estimates greenhouse gas (GHG) emission will rise world temperature by four, and possibly six degrees Celsius by 2100 without policy action (OECD, 2009). Policy efforts aim to reduce the rise to two degrees by 2100. The effects of higher temperatures will produce a higher share of rainfall increasing Sweden's potential energy output in renewable hydroelectric energy sources. In addition there will be more arable agricultural land, bringing new assets to Swedish rural regions.

Sweden's renewable energies represent an important share of the total primary energy supply where almost one third of total primary energy supply is derived from renewable energies (Figure 1.45). This ratio is the fourth highest among OECD countries. Greenhouse gas emissions originating from energy production are exceptionally low given that the production of electricity in Sweden is dominated by hydro and nuclear plant power and the production of heat is by bio energy and waste incineration. Indeed Sweden is ahead of many OECD countries in shifting towards a cleaner, low-carbon economy. This sector can represent an important area of competitive advantage for Sweden's economy.

Renewable energies can represent an important source of sustainable growth for rural regions given the location or of natural resources and raw

Figure 1.45. **Contribution of renewable to energy supply as a percentage of total primary energy supply, 2006**



Source: OECD (2009), Factbook, OECD Publishing.

materials needed to generate renewable energies in these types of regions. About half of electricity production comes from hydro power which is located mainly in northern rural regions. One fifth of the energy consumed in Sweden is in bio energy. The forest industries represent a major user and producer of energy based on biomass and forest industries are mainly located along the coast. Wind energy is rapidly growing in Sweden, currently producing about 1.4 TWh of electricity (in 2007) from about 1 000 wind mills located in southern rural regions and in rural coastal regions.

Rural regions need to ensure the benefits steaming from renewable energies spillover to local economies and to other sectors. Converting primary materials into renewable energy requires innovative intensive activities such as the extraction of biomass from forest residuals or the production of electricity from wind parks. Efforts and policies favouring renewable energies are already in place such as the law on renewable electricity certificates, energy and waste taxations as well as large R&D programmes with a focus on renewable energy. Policies aimed to strengthen the links between universities and private firms and to facilitate education programs tailored for these sectors will help increase the supply of high skilled workers needed for these sectors.

## Notes

1. Sweden's auto-industry sector has become less competitive with lower productivity gains compared with other industries and declining shares of world export and increasing large share of employment (Source: *Fordonsindustrin i nationell och regional belysning*, WSP Group, 2009-03-10).
2. Source: The Swedish Social Insurance Agency.
3. The effects of commuting on productivity can be positive or negative. On the one hand longer commuting time can reduce time spend at the office reducing productivity. In addition an equality or gender aspect can decrease productivity indirectly if one person in a household commutes longer distances, the other person might have to work part-time, which not would have been the case otherwise, especially for families with younger children. On the other hand commuting might increase productivity if it can improve matching of labour supply and demand in the labour market.
4. The 1.1 million inhabitants corresponded to the administrative TL2 region of Skåne. The metro-region of Malmö is also part of a larger metro-region of Öresund encompassing Copenhagen.
5. The contribution to national growth depends on the growth rate of each region and their overall size (i.e. share of GDP).
6. Västra Götaland has been severely hit by the crisis recording the largest job losses (33 034) in absolute numbers from the 3rd quarter of 2008 to the 3rd quarter of 2009. Section 1.2.3 examines the impact of the crisis on Swedish regions.
7. Cross-border commuting (14 500 in 2007) involves approximately 1 % of the workforce.

8. GDP per capita figures in Södermanland, Västmanland and Halland are biased downward due to the effects of commuting.
9. Becoming specialised does not measure absolute increases in employment, rather it measures an increase in the ratio – of employment in a given sector in relation to the sectors in the regions – relative to the ratio of the country. For more information see Annex 1.A2.

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## ANNEX 1.A1

## OECD Regional Classification and Regional Typology

### Regional grids

In any analytical study conducted at a sub-national level, defining the territorial unit is of prime importance, as the word *region* can mean very different things both within and among countries. In order to have a measure that is comparable, the OECD has developed a regional typology for classifying regions within each member country.

The classification is based on two territorial levels. The higher level (Territorial Level 2 – TL2) consists of 335 large regions, while the lower level (Territorial Level 3 – TL3) is composed of 1 679 small regions. All the regions are defined within national borders and in most cases correspond to administrative regions. Each TL3 region is contained within a TL2 region.

This classification – which, for European countries, is largely consistent with the Eurostat classification – helps to compare regions at the same territorial level. Indeed these two levels, which are officially established and relatively stable in all member countries, are used as a framework for implementing regional policies in most countries. In Sweden TL2 regions corresponds to eight riksområden (NUTS 3 in EU) and TL3 to 21 län.

### OECD regional typology

The OECD typology classifies TL3 regions as predominantly urban, predominantly rural and intermediate. This typology, based on the percentage of regional population living in rural or urban communities, allows for meaningful comparisons among regions of the same type and level. The OECD regional typology is based on three criteria. The first identifies rural communities (*kommun* in Sweden) according to population density. A community is defined as rural if its population density is below 150 inhabitants per square kilometre

(500 inhabitants for Japan to account for the fact that its national population exceeds 300 inhabitants per square kilometre). The second criterion classifies regions according to the percentage of population living in rural communities. Thus, a TL3 region is classified as:

- predominantly rural (rural), if more than 50% of its population lives in rural communities.
- predominantly urban (urban), if less than 15% of the population lives in rural communities.
- intermediate, if the share of population living in rural communities is between 15% and 50%.

The third criterion is based on the size of the urban centres. Accordingly:

- A region that would be classified as rural on the basis of the general rule is classified as intermediate if it has an urban centre of more than 200 000 inhabitants (500 000 for Japan) representing no less than 25% of the regional population.
- A region that would be classified as intermediate on the basis of the general rule is classified as predominantly urban if it has a urban centre of more than 500 000 inhabitants (1 000 000 for Japan) representing no less than 25% of the regional population.

## ANNEX 1.A2

*Specialisation Index*

We defined the specialisation index as  $Sp_i = \frac{Y_{ij} / Y_j}{Y_i / Y}$

Where:

- $Y_{ij}$  is total employment of industry  $i$  in region  $j$ ,
- $Y_j$  is total employment in region  $j$  of all industries,
- $Y_i$  is the national employment in industry  $i$ , and
- $Y$  is the total national employment of all industries.

A value of the index above 1 shows specialisation in an industry and a value below 1 shows non-specialisation.

## ANNEX 1.A3

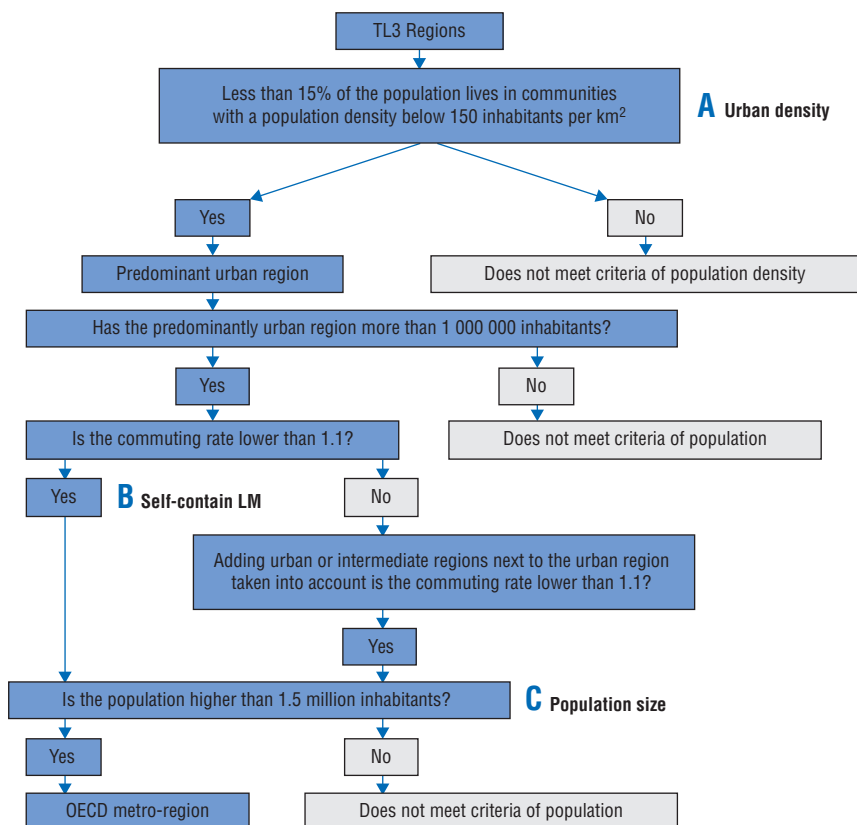
### *Defining OECD Metro-regions*

The methodology to define Metropolitan Regions (MRs) is a functional definition that uses three criteria to delineate MRs: 1) population density, 2) self-contained labour markets and 3) population size (see Table 1.A3.1 and Figure 1.A3.1). The definition uses TL3 region as units of analysis. Since GDP data are missing at the level of TL3, it makes the exceptions and/or estimations, therefore comparisons across the MR's should be taken with caution.

- In Canada MRs are defined according to: Census Metropolitan Areas (CMA).
- In the United States MRs are defined according to: Metropolitan Statistical Areas (MSA).
- In Australia and Switzerland we apply the OECD metro-definition and **estimate** GDP at TL3 from remuneration data.
- For Mexico we apply the OECD metro-definition using **municipalities** as building blocks and **estimate** GDP with remuneration data.

Table 1.A3.1. **Criteria to classify OECD metro regions**

<p><b>a) Population density:</b> It selects Predominantly Urban regions according to the OECD Regional Typology. According to this definition, OECD (2005, pp. 205-206) classifies TL3 regions on the basis of the percentage of population living in rural communities. Then a TL3 region is classified as <i>Predominantly rural</i> if more than 50% of its population lives in rural communities (a community will be a TL3 rural community if its population density is below 150 inhabitants per square kilometre (500 inhabitants for Japan)). As <i>Predominantly urban</i> if less than 50% of the population lives in rural communities. And <i>Intermediate</i>, if the share of the population living in rural communities is between 15% and 50%.</p> <p>Later on, a region classified as rural is reclassified as intermediate if it has an urban centre of more than 200 000 inhabitants (500 000 for Japan). And a region classified as intermediate is reclassified as urban if it has an urban centre of more than 500 000 inhabitants (1 000 000 for Japan) representing no less than 25% of the regional population.</p> <p><b>INTERMEDIATE STEP:</b> This consists in checking if the Predominantly urban region selected in the first step is bigger than 1 000 000 inhabitants. If the amount of population of the TL3 is lower than this measure, the region is rejected.</p> <p><b>b) Self-contained labour market:</b> The second step consist in calculating a net commuting rate (NCR) using workers' commuting flows for each of the regions. If the NCR is higher than 1.10, then the region has significant exchanges with other regions, and the proposal is to aggregate neighbouring regions with a negative commuting rate – either PU or Intermediate (IN) but not Predominantly rural (PR) – and recompute the NCR for the combination of PU areas. But if the commuters' account is lower than 10% of the resident labour force, the region is considered to be self-contained and to delimit an integrated economic space (functional region).</p> <p>Three criteria have been taken into consideration when deciding the sequence for adding neighbouring regions to the pivot region:</p> <ul style="list-style-type: none"> <li>● <i>Geographical proximity:</i> select the neighbouring regions first.</li> <li>● <i>Commuting rate:</i> begin with the region with the lowest commuting rate.</li> <li>● <i>Transport infrastructure:</i> if appropriate, consider non-neighbouring regions connected to the pivot region by highways, railway, etc.</li> </ul> <p><b>c) Population size:</b> It is considered a metro region if its population is above 1.5 million people.</p>	<p><b>a) Population density:</b> It selects Predominantly Urban regions according to the OECD Regional Typology.</p> <p>According to this definition, OECD (2005, pp. 205-206) classifies TL3 regions on the basis of the percentage of population living in rural communities. Then a TL3 region is classified as <i>Predominantly rural</i> if more than 50% of its population lives in rural communities (a community will be a TL3 rural community if its population density is below 150 inhabitants per square kilometre (500 inhabitants for Japan)). As <i>Predominantly urban</i> if less than 50% of the population lives in rural communities. And <i>Intermediate</i>, if the share of the population living in rural communities is between 15% and 50%.</p> <p>Later on, a region classified as rural is reclassified as intermediate if it has an urban centre of more than 200 000 inhabitants (500 000 for Japan). And a region classified as intermediate is reclassified as urban if it has an urban centre of more than 500 000 inhabitants (1 000 000 for Japan) representing no less than 25% of the regional population.</p> <p><b>INTERMEDIATE STEP:</b> This consists in checking if the Predominantly urban region selected in the first step is bigger than 1 000 000 inhabitants. If the amount of population of the TL3 is lower than this measure, the region is rejected.</p> <p><b>b) Self-contained labour market:</b> The second step consist in calculating a net commuting rate (NCR) using workers' commuting flows for each of the regions. If the NCR is higher than 1.10, then the region has significant exchanges with other regions, and the proposal is to aggregate neighbouring regions with a negative commuting rate – either PU or Intermediate (IN) but not Predominantly rural (PR) – and recompute the NCR for the combination of PU areas. But if the commuters' account is lower than 10% of the resident labour force, the region is considered to be self-contained and to delimit an integrated economic space (functional region).</p> <p>Three criteria have been taken into consideration when deciding the sequence for adding neighbouring regions to the pivot region:</p> <ul style="list-style-type: none"> <li>● <i>Geographical proximity:</i> select the neighbouring regions first.</li> <li>● <i>Commuting rate:</i> begin with the region with the lowest commuting rate.</li> <li>● <i>Transport infrastructure:</i> if appropriate, consider non-neighbouring regions connected to the pivot region by highways, railway, etc.</li> </ul> <p><b>c) Population size:</b> It is considered a metro region if its population is above 1.5 million people.</p>
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Figure 1.A3.1. **Criteria to classify OECD metro regions**

Source: OECD (2005), *Comparing Global Cities Proposal for an OECD Definition of Metropolitan Regions*, OECD Publishing, Paris.

## ANNEX 1.A4

*Migration Flows*

Analysis studying determinants of migration flows through OLS (Ordinary Least Squares) regressions in Swedish Regions is presented in Table 1.A4.1. As can be seen foreign migration inflows (models 1 and 2) and total migration inflows (models 3 and 4) are strongly correlated with population density of the destination region. This is not surprising given that density captures also the size of the regional labour market.

More interestingly, the size of the coefficient for density is larger in the regressions for skilled migration inflows (models 1 and 3) than for unskilled migration inflows (models 2 and 4) and this is particularly true for what concerns international migration (e.g. a Chow test yields a chi squared statistics of 45.86, strongly rejecting the null hypothesis that the coefficient for density is the same for skilled and unskilled foreign migrants).

This result can be interpreted as evidence that more dense or agglomerated regions manage to attract higher inflows of educated migrants, with possible positive effects of their human capital endowments. Model 5 provides some descriptive evidence that low populated regions can experience outflows of educated people (brain drain) to the advantage of highly populated, more densely populated regions. In fact, the ratio between the outflows of skilled and unskilled individuals is decreasing with population density, basically meaning that low populated regions are losing a higher fraction of their skilled through the internal migration process.

For what concerns the other variables, the unexpected positive sign on the unemployment probably reflects an issue of reverse causality, the higher unemployment rates of migrants explaining the positive correlation. This interpretation is supported by the fact that the unemployment rate is statistically significant only for the international migrants, those experiencing more problems in labour market participation. The tertiary enrollment rate is positively correlated with migration inflows, and it is not significant only for the total unskilled migration inflows.

Table 1.A4.1. **Foreign and national migration in Swedish regions**

	OLS (model 1)	OLS (model 2)	OLS (model 3)	OLS (model 4)	OLS (model 5)
	Skilled foreign	Unskilled foreign	Skilled internal	Unskilled internal	Outflow ratio skilled/unskilled
Lag log density	0.723*** (-0.069)	0.591*** (-0.062)	0.494*** (-0.049)	0.412*** (-0.039)	-0.0118*** (-0.003)
Lag unemployment rate	0.105*** (-0.033)	0.0610* (-0.035)	0.0333 (-0.025)	0.00928 (-0.023)	0.00363** (-0.002)
Lag log GDP per capita	0.337 (-0.568)	0.292 (-0.482)	0.227 (-0.384)	0.113 (-0.273)	0.0126 (-0.010)
Lag tertiary school rate <sup>1</sup>	23.03*** (-2.768)	10.93*** (-2.363)	18.42*** (-1.902)	0.13 (-1.725)	2.686*** (-0.138)
Year 2001	0.386 (-0.257)	0.291 (-0.241)	-0.0185 (-0.184)	0.273* (-0.156)	-0.0506*** (-0.008)
Year 2002	0.613** (-0.270)	0.536** (-0.260)	0.167 (-0.193)	0.129 (-0.171)	0.0102 (-0.010)
Year 2003	0.552** (-0.273)	0.548** (-0.261)	0.316 (-0.193)	0.0842 (-0.174)	0.0430*** (-0.011)
Year 2004	0.451* (-0.272)	0.41 (-0.255)	0.321* (-0.188)	0.0154 (-0.170)	0.0540*** (-0.011)
Year 2000	0.238 (-0.292)	0.118 (-0.315)	0.0737 (-0.199)	0.000985 (-0.175)	0.0111 (-0.009)
Year 2006	0.3 (-0.295)	0.664** (-0.294)	0.251 (-0.198)	-0.0902 (-0.18)	0.0883*** (-0.011)
Year 2007	0.702** (-0.304)	0.784*** (-0.294)	0.367* (-0.206)	-0.0927 (-0.186)	0.102*** (-0.011)
Constant	-2.053 (-6.873)	-1.512 (-5.834)	2.919 (-4.642)	4.11 (-3.316)	0.962*** (-0.122)
Observations	148	148	148	148	148
R-squared	0.538	0.466	0.563	0.535	0.813

Note: Robust standard errors are in italic and \*\*\* r represents statistical significance at 99%, \*\* at 95% and \* at 90%

In model 1 and 2 the dependent variables are count of skilled and unskilled foreign migrants' inflows to the region (in logs). In model 3 and 4 the dependent variables are count of skilled and unskilled internal migrants, foreign and national, from all Swedish regions (in logs). Model 5 is the ratio between outflows of skilled and unskilled individuals from the region (both in log)

1. The tertiary schooling rate is the ratio between the number of male and female individuals enrolled in tertiary education and the population in working age (15-64)

Source: Authors' calculations based on data from Statistics Sweden.

A second regression analysis presented in Table 1.A4.2 replicates the exercise but excludes from the sample the regions with the largest cities, i.e. Stockholm, Skåne, and Västra Götaland. These three regions are the only ones that have seen remarkable variations in both foreign and total migration inflows and outflows in the decade 1998 and 2007 (Figure 1.A4.1), all the others having steady net migration rates. It is interesting to see that the



unemployment rate has now the expected negative sign, significant for the total migration rates. This suggests that the foreign migrants' unemployment problem, driving the reverse causation in Table 1.A4.1, is less important outside the largest agglomerates. It is even more interesting to observe that when excluding the more dynamic regions in the model the tertiary education rate is highly correlated with skilled migration inflows, insignificantly correlated with foreign unskilled inflows, and negatively correlated with total inflows. While reverse causality is an issue here, the finding gives some suggestive evidence of complementarities between efforts to raise participation in tertiary education and capacity to attract skilled foreigners and return of the skilled.

Failing to attract educated migrants and to retain the locally educated labour force can imply substantial costs for regional competitiveness. Raising the quality and attractiveness of the regional educational infrastructure at the upper-secondary and tertiary level can be the only way to raise the regional human capital endowments in the medium-long term, as there might be little hope to wait for migrants to fill the skill gap: skilled international migrants tend to converge to those regions where skilled natives are. The brain drain, or departure of the highly skilled, can be counteracted through strengthened connections between educational institutions and the local job market, and regional policies can contribute to a better networking of businesses and universities (for example coordinating "Career Services" within the universities, where local businesses can post demands for "stages" and training). In less dense and less urbanised regions, where labour markets are less diversified, a stronger focus on technical education might be needed. Vocationally-oriented programmes at upper-secondary level, professional degrees at university level, in-company and labour market training (continuing vocational training), municipal adult education are all options that might reduce the incentives of educated to leave, thus reducing the competitiveness and fiscal cost of the regional brain drain.

Table 1.A4.2. **Foreign and national migration in Swedish Regions, excluding large agglomerations**

	OLS (model 1)	OLS (model 2)	OLS (model 3)	OLS (model 4)
	Skilled foreign	Unskilled foreign	Skilled internal	Unskilled internal
Lag log density	0.140*** (-0.048)	0.104 (-0.072)	0.0883** (-0.036)	0.0933* (-0.055)
Lag unemployment rate	-0.0429 (-0.028)	-0.0723* (-0.038)	-0.0649*** (-0.020)	-0.0718*** (-0.027)
Lag log GDP per capita	1.714 (-1.06)	2.373* (-1.28)	0.726 (-0.69)	0.443 (-0.75)
Lag tertiary schooling rate	13.36*** (-2.308)	2.496 (-2.805)	11.69*** (-1.773)	-5.582*** (-2.085)
year 2001	-0.0441 (-0.124)	-0.101 (-0.156)	-0.281*** (-0.097)	0.261** (-0.113)
Year 2002	0.0895 (-0.115)	0.0332 (-0.148)	-0.149* (-0.081)	0.0599 (-0.106)
Year 2003	0 0	0 0	0 0	0 0
Year 2004	-0.0487 (-0.105)	-0.106 (-0.131)	0.053 (-0.079)	-0.0305 (-0.108)
Year 2000	-0.199 (-0.160)	-0.387* (-0.232)	-0.153 (-0.118)	-0.00347 (-0.137)
Year 2006	-0.0318 (-0.187)	0.254 (-0.25)	0.116 (-0.124)	-0.0345 (-0.153)
Year 2007	0.188 (-0.216)	0.166 (-0.246)	0.118 (-0.14)	-0.119 (-0.161)
Constant	-16.09 (-12.960)	-24.58 (-15.760)	-1.271 (-8.508)	1.446 (-9.216)
Observations	124	124	124	124
R-squared	0.298	0.264	0.448	0.332

Note: Robust standard errors are in italic and \*\*\* represents statistically significance at 99%, \*\* at 95% and\* at 90%

In column 1 and 2 the dependent variables are count of skilled and unskilled foreign migrants'inflows to the region (in logs). In column 3 and 4 the dependent variables are count of skilled and unskilled internal migrants, foreign and national, from all Swedish regions (in logs).

Source: Authors' calculations based on data from Statistics Sweden.

Figure 1.A4.1. **Net foreign immigration in Skåne, Stockholm and Västra Götaland**



Source: Authors' calculations based on data from Statistics Sweden.



## Chapter 2

### **Exploiting Cross-sectoral Synergies through Regional Policy in Sweden**

*Reinforcing Sweden's capacity to sustain growth and equity in the long term requires synergies among sectoral policies at the national and regional scale in order to enhance innovation and entrepreneurship in all regions. Building on the government's renewed commitment to regional growth policy, recent initiatives have focused on promoting business development in all parts of the country including sparsely populated regions. Further efforts to facilitate the diffusion of knowledge and to improve the functioning of regional labour markets through more effective urban-rural linkages could help maximise regional growth potential. This chapter starts with an overview of recent regional policy in Sweden. It then discusses policy options to strengthen regional innovation systems, to fully exploit regional skills, and to explore regional opportunities for green growth. Finally, it considers ways to better link infrastructure investment with regional development priorities.*

## Introduction

Sweden's uncommon economic and social success story often commands international attention. A world leading exporter in both resource-based industries (timber, hydropower, iron ore) and knowledge-intensive industries (ICT, automotive industry, pharmaceuticals), Sweden has achieved a seemingly ideal combination of prosperity and welfare with a visible regional dimension. More than half of Sweden's population of 9 million has concentrated in the three major urban regions (Stockholm, Västra Götaland and Skåne) which have consistently accounted for the bulk of national growth, while an ambitious fiscal equalisation system balances public service delivery levels throughout the country.

Whether Sweden can sustain economic growth and fulfil its deep-rooted societal choice of equity in the long term will largely depend on its ability to continue to generate jobs and revenues in a heterogeneous economy. This means a forward-looking policy mix that helps translate structural adjustment into employment growth and promotes endogenous innovation. In this respect, synergies among sectoral policies at the national and regional scale are essential to ensure a business and living environment conducive to exchanges of knowledge and entrepreneurship. Moreover, policies will increasingly need to factor in the asymmetric impact that global challenges are having on Swedish regions. The financial crisis has severely hit regional economies; demographic ageing and rising expenditure for long-term elderly care will reinforce fiscal pressures on the regions with the highest dependency ratio; and growing awareness of policy needs in terms of climate change mitigation and adaptation is opening new economic prospects in several regions. Building on the government's renewed commitment to promote all regions' competitive advantages, the collective capacity of Swedish actors to exploit regional assets in serving national strategic goals in the long term will largely determine the success of the ongoing regionalisation reforms in Sweden.

This chapter starts with an overview of recent regional policy in Sweden. It then discusses policy options to strengthen regional innovation systems by building on the regional dimension of innovation policy, better exploiting regional skills, and exploring regional opportunities for green growth. Finally, it considers ways to better link infrastructure investment with regional development priorities.

## 2.1. The transition towards “regional growth policy” in Sweden

### ***Reinventing welfare with a regional perspective***

Regional policy in Sweden is intimately bound up with a broader set of long-term reforms. Following the recession in the early 1990s, a sense of national crisis stimulated a re-examination of the Swedish state and business organisation. A number of pressures, including European Community membership, retrenchment by leading Swedish multinationals, and concerns related to sluggish national productivity and growth came together to demonstrate the need for profound changes. The post-war corporatist consensual model, which brought together government, business organisations and universities, was abandoned in favour of privatisation. At the same time, the government wished to respect the national desire for the continuation of an active welfare policy, to be delivered close to citizens. New kinds of regional policy instruments for more effective policy co-ordination and delivery were a central element of the wider effort to reform the Swedish state.

The first driver of change was the vulnerability of an unreformed Swedish welfare model which became apparent during the crisis of the 1990s. Banking sector reforms of the mid-1980s had sought to accelerate the sluggish growth in living standards, but in parallel with very low real interest rates, this led to an uncontrolled lending bubble, which later burst in a way reminiscent of the contemporary credit crunch. Currency reforms, including accession to membership in the European Exchange Rate Mechanism (ERM), increased the Swedish economy's exposure to the global economy. The tightening of fiscal conditions created a series of knock-on effects, which were exacerbated by the 1990 oil shock and a set of parallel slowdowns across advanced trading nations. ERM membership forced Sweden to defend its currency by raising interest rates to unsustainably high levels, which pushed a large part of the overexposed banking sector into bankruptcy. The government's bailout reduced the availability of public funding for Sweden's social welfare model and led to generalised public spending cuts.

The second driver was the realisation of the fragility of Sweden's industrial base in the face of the increasing globalisation of its leading businesses. The post-war welfare model was based on strong government support for key industries. This created stable employment across the country, thanks to sustained purchasing from the Swedish supply chain. However, as the leading pharmaceutical, aerospace and engineering firms grew and diversified into overseas markets, they created fewer jobs in Sweden. When they began to rationalise employment, and in particular employment in Sweden's periphery, the resulting job losses highlighted the vulnerability of some regions that were dependent on a very limited number of employers. This may be an embryonic version of what would later become known as the “Swedish paradox”, namely

the fact that despite a very high level of R&D expenditure, entrepreneurship and new firm creation levels remained relatively low. The realisation of the negative impact of the crisis on all regions also provided momentum for a renewed policy aiming at strengthening all regions.

The third driver – which was intimately linked to the two previous ones – was Sweden's accession to the EU in 1995. The depth of the crisis helped persuade Sweden of the importance of much tighter integration into a wider economic space to mitigate the problems of its fiscal cyclic variation. EU membership also greatly reduced the attractiveness of the previous corporatist model as a solution to emerging problems, so that the Swedish government no longer supported its outlying regions by subsidising firms to remain in specific regions or with larger agricultural subsidies. A need to adhere to the *acquis communautaire* – the legislation applicable to all EU members – reinforced the need for a set of administrative reforms to bring Swedish structures in line with European governance norms, and hence to maximise the direct benefits which Sweden derived from EU membership.

These drivers came together to stimulate a comprehensive reform of the Swedish welfare model to replace the corporatist structures which had been dismantled in the late 1980s. Two key benefits were sought: first, to provide the Swedish government with the capacity to steer its economy; and second, to maintain welfare services without stifling the benefits of deregulation and privatisation. The creation of regional co-ordination capacity for economic development offered to deliver both, by allowing the central government to support industrial development based on regional competitive advantages to maximise citizen welfare, while bringing that support closer and more flexibly to citizens. The negative impact of the economic crisis on Swedish regions in the 1990s underlined the need to strengthen all regions. Chapter 3 explores the regionalisation process in more detail, but it can be noted here that the origins of what is currently described in Sweden as regional growth policy lie in the regional reforms which began in the mid-1990s, notably with the 1996 White Paper *Society's Regional Structures*.

### **Sweden's regional policy agenda over time**

As in many OECD countries, the emergence of regional policy in Sweden has been closely tied to concerns about spatial balance, which have been remarkably consistent over time. As productivity gains in resource-based industries in northern regions and faster industrialisation in southern regions were generating disequilibria on regional labour markets, Sweden combined an active labour market policy and an R&D-intensive industrial policy with a series of compensatory measures, including transport and housing subsidies, and fiscal measures to support municipalities in offering equal service for education, health care and care for the elderly (Table 2.1). What has remained



constant throughout the post-war period has been concern to ensure that public investment provides balanced access to welfare services. However, the main recipients of those investments have varied over time. In the 1950s, the emphasis was on developing infrastructure in the *northern regions*. In the 1960s, subsidies were provided to *old industrial regions* to support large firms and sustain employment. In the 1970s, the *public sector* became an increasingly important means of providing services and creating employment. In the 1980s, the government turned to the decentralisation and expansion of *universities* to support regions undergoing industrial and population decline.

The emergence of the regionalisation agenda in the mid-1990s represents an important break with the past. Traditional Swedish governance was characterised by relatively small national ministries in charge of defining strategic orientations, and public policy was mostly enacted by arm's length national agencies. Increasing emphasis on the regional scale for policy implementation revealed new tensions within the system, which subsequent

Table 2.1. **Key components of Swedish regional policy over time**

Period	Economic context	Policy focus	Policy instruments
1950s	Shortage of labour in industrial districts in southern regions vs. surplus of labour in northern regions	Localisation policy for “balanced expansion”	Information and guidance to promote migration and infrastructure in low productivity regions
1960s	Dominance of industrial migration pattern, strong geographical mobility of labour	Active labour market policy to transfer labour from low-productivity to high-productivity firms	Aid for localisation in northern regions R&D investment Large subsidies to industries ( <i>e.g.</i> textile, shipyard)
	Rapid urbanisation, construction boom	Industrial policy inspired by economic dualism theories, aiming at addressing the time lag in the development of different regions	Creation of the Swedish National Board for Technical Development (STU)
1970s	Increase in female labour force participation	Regional balance policy to redistribute population	Expansion of public sector Rise of county planning
	Economic recession, structural change ( <i>e.g.</i> agriculture and forestry, steel, textile, shipyard)		Delocalisation of public authorities from Stockholm to other parts of the country Introduction of a new transport subsidy (1971) Employment-creating measures (1976)
1980s	Housing shortage in large cities vs. high vacancy rates in northern regions	Decentralisation and expansion of universities	Investment in human capital development ( <i>e.g.</i> creation of technical centres) Reduction of payroll taxes in some northern regions to stimulate labour-intensive industries and create employment Rent controls by municipal housing companies and large subsidies for residential housing construction, mainly in municipalities outside the capital

Table 2.1. **Key components of Swedish regional policy over time** (cont.)

Period	Economic context	Policy focus	Policy instruments
1990s	Banking crisis (early 1990s) Tax reform (1990-1991) EU accession (1995) Pension reform (late 1990s) to reduce pension entitlements and introduce self-balancing income pension system	EU Cohesion Policy	EU Structural Funds (Objective 2, 5b and 6)  Regional aid programmes within the framework of EU guidelines ( <i>e.g.</i> regional investment aid, transport grant, employment grant, regional grant for business development, social security concessions)  Deregulation of housing sector, simplification of housing financing procedures  Creation of NUTEK (Swedish Agency for Economic and Regional Growth) in 1991 by merging the Agency for Industrial Development, the Energy Agency, and STU
2000s	Burst of ICT bubble (2001) Global financial and economic crisis (since 2008)	Regional Development Policy (2001 Government Bill)  “Regional Growth Policy” (2008 Budget Bill)	Introduction of Regional Growth Agreements (2000), later replaced by Regional Growth Programmes (RTPs) and Regional Development Programmes (RUPs)  Creation of VINNOVA (2001)  Creation of <i>Tillväxtverket</i> (Swedish Agency for Economic and Regional Growth) and <i>Tillväxtanalys</i> (Swedish Agency for Growth Policy Analysis)

Source: Information from various sources including NIBR Report 2004 (section 4.2.2 « Regional policies in Sweden »).

reforms have attempted to resolve. Prior to 1995, regional policy was primarily a national concern (exogenous approach). From 1995 onwards, more power was granted to local and regional actors to shape the implementation of national policies in their territory. This encouraged regions to rely on their strengths and build new types of partnerships (neo-endogenous approach). This complex and still unfinished shift from one paradigm to another is under way in many OECD countries (Table 2.2). “Regional Growth Policy” (2008 Budget Bill) aims at promoting opportunities for all areas of the country to develop their own strengths and is pursuing objectives such as: exploiting the unique strengths of different types of regions, such as sparsely populated and rural areas, small and medium-sized towns and metropolitan areas; strategic measures for sustainable growth in interplay with actors at local, regional, European and global levels; a cross-sectoral and multi-level working method; good access to commercial and public services for citizens and businesses in all areas of the country; increased labour supply by increasing mobility within and between regions; and a stronger focus on business development through entrepreneurship and innovation.

Reforms to the EU Structural Funds have been profoundly influential in shaping the current approach to regional policy in Sweden. The regional

**Table 2.2. Old and new paradigms of regional policy:  
Where does Sweden stand?**

	Old paradigm	New paradigm
Objectives	Compensating temporarily for locational disadvantages	Tapping under-utilised potential for enhancing regional competitiveness
Targeted areas	Lagging regions	All regions
Unit of intervention	Administrative units	Functional areas
Strategies	Sectoral approach	Integrated development projects
Tools	Subsidies and state aids	Mix of soft and hard capital investment
Actors	Central government	Different levels of government; private sector and civil society

Source: OECD (2009), Ministerial Report.

category created by the EC in 1995 (the so called “Objective 6” for regions with extremely low population density) applied specifically to regions in Sweden and Finland. Sweden’s old industrial areas were also eligible for Objective 2 funding, and rural areas outside the Objective 6 area were eligible for Objective 5b funding. Following the 1989 reform of the Structural Funds according to five key principles (subsidiarity, transparency, additionality, programming and concentration), Sweden had to establish regionally oriented structures that were suitable for working with the Structural Funds. The 1996 White Paper introduced the idea of developing Regional Growth Agreements – which later became Regional Growth Programmes and Regional Development Programmes (Box 2.1) – and set in train a process of experimental devolution (further examined in Chapter 3).

The European impact on Swedish regional policy was not restricted to process but also affected content, particularly the increasing focus on innovation as a major driver of regional policy. It has been increasingly recognised that the competitiveness of places is shaped by their capacity to foster innovation, an interactive process that takes place within knowledge networks and depends on the ability of regional partners to work together on region-specific strategies. European innovation policy has developed a standardised methodology, including mapping regional innovation potential, identifying regional innovation networks and structural gaps in those networks, and developing concrete collaborative projects.

Recent Swedish efforts to reform regional policy have been influenced by the European Union’s reform of Cohesion Policy as a tool to serve the renewed Lisbon Agenda. Following the election of a centre-right government in 2006, which replaced the succession of social democrat cabinets in power since 1994, the renaming of regional policy as “Regional Growth Policy” in the 2008 Budget Bill illustrated a renewed focus on promoting “dynamic development in all areas of the country with greater local and regional competitiveness”

### Box 2.1. **Regional Development Programmes and Regional Growth Programmes**

#### **Regional Development Programmes (RUPs)**

Regional Development Programmes (RUPs) are intended to provide an overarching instrument for defining a holistic, long-term sustainable regional growth and development strategy for the region. Every region is required to prepare a RUP. The RUP is prepared by the respective regional authority (regional co-ordination body/*kommunalt samverkansorgan*, County Administrative Board or regional autonomous body). Municipalities, County Councils, businesses, relevant state authorities and other organisations co-operate in developing and implementing the programme. The RUP sets out the region's long-term strategy for sustainable regional growth. It constitutes the basis for activities and programmes concerning regional growth, such as the Regional Growth Programmes (see below), Structural Funds Programmes, County Plans for Infrastructure, Environmental Programmes and other relevant programmes. However, some co-ordination challenges remain. For instance, according to NUTEK's annual evaluation report of 2007, co-operation within the RUP has been successful at the regional and local level but co-operation with the national level is often limited, and the cross-sectoral dimension could be improved (see Chapter 3).

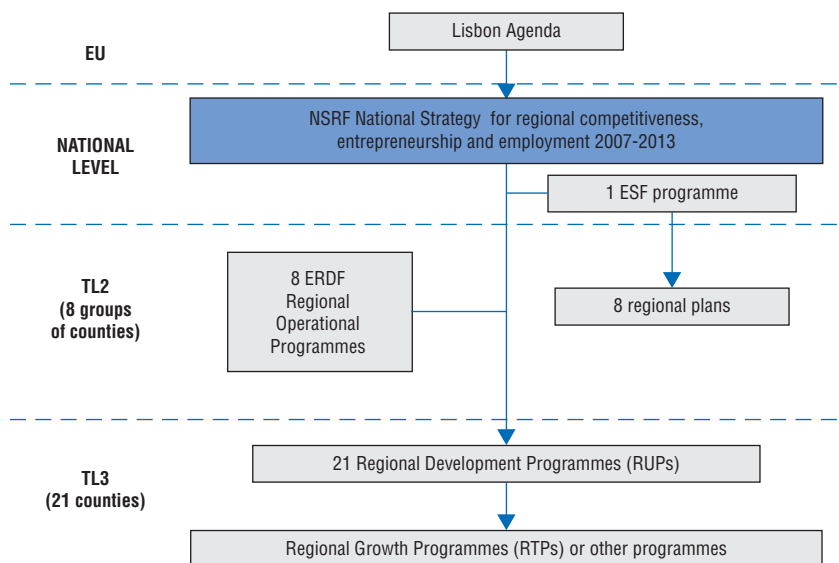
#### **Regional Growth Programmes (RTPs)**

Regional Growth Programmes (RTPs) were introduced in 2004 as the successor to the Regional Growth Agreements (RDAs), which were first implemented in 2000. The RTP can be seen as an operational sub-programme of the Regional Development Programme (RUP) mentioned above: it lays out the region's priorities and measures in more detail, including funding and implementation modalities. The policy issues covered by the RTP are in general focused on business development and range from labour supply, entrepreneurship, self-employment, entrepreneurial climate, and innovation systems, to sustainable development. Since 2007, the RTP is a voluntary document and is not regulated by the government. Most, but not all, counties still have RTPs even if they are labelled differently in some cases. NUTEK's annual evaluation report of 2007 recommended a clearer definition of the roles and objectives of the different actors involved, more effective adjustment of public action to regional characteristics, better co-operation between the different levels of government (including better involvement and co-ordination of sectoral state agencies), and more systematic evaluation of the programmes (see Chapter 3).

(Budgetpropositionen för 2008). Since its approval by the European Commission in July 2007, the Swedish National Strategic Reference Framework (NSRF) – entitled “A National Strategy for Regional Competitiveness, Entrepreneurship and Employment 2007-13” – is being

implemented via 21 Regional Development Programmes (RUPs), eight European Regional Development Fund (ERDF) Regional Operational Programmes, and one European Social Fund (ESF) programme (Figure 2.1).

Figure 2.1. **Regional policy architecture in Sweden under the 2007-13 EU Cohesion Policy**

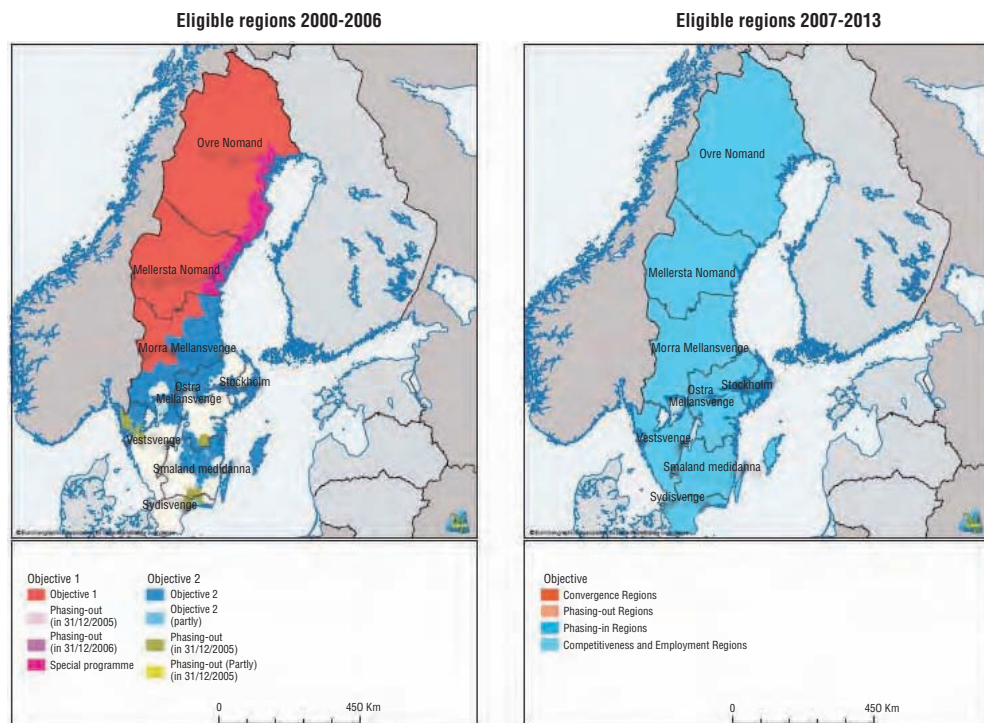


Several aspects of the Swedish NRSF underline the new approach to regional policy:

- **Area of intervention:** in contrast with the 2000-06 programming period, all of Sweden is eligible for the EU Regional Competitiveness and Employment objective (Figure 2.2). The NRSF outlines geographical priorities in the northernmost sparsely populated areas as well as in cities.
- **Thematic priorities:** according to the indicative budgets available, the eight ERDF programmes give utmost priority to “innovation and renewal” (90% of ERDF funds); the remaining funds are shared across “skills supply and improved labour supply” (6%), “accessibility” (3%), and “strategic cross-border co-operation” (1%) (Figure 2.3).
- **Bottom-up approach:** the NRSF underlines the role of Regional Development Programmes (RUPs) as a collaborative platform to define comprehensive regional development strategies (Box 2.1 above).

While the recent adjustment in official rhetoric contrasts with Sweden's long established tradition of spatial redistribution, the evolution of policy instruments is more nuanced. In particular, an ongoing transition process

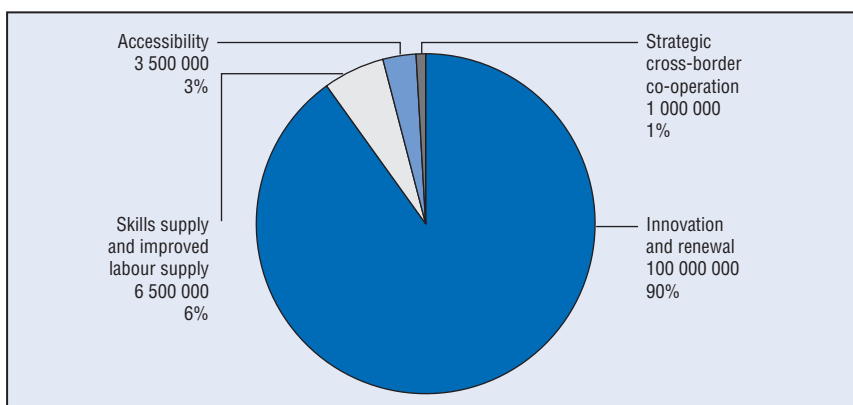
Figure 2.2. **All of Sweden is eligible for the EU Regional Competitiveness and Employment objective under the 2007-13 EU Cohesion Policy**



Source: European Commission, DG Regio.

Figure 2.3. **Indicative budget of the Swedish ERDF Operational Programmes, 2007-13**

Unit: EUR



Source: Authors' calculations based on data from the Ministry of Enterprise, Energy and Communications.

appears to have been taking place over the last 15 years, with some co-existence of “old” and “new” paradigms, rather than a radical substitution of the former by the latter. For example:

- Despite the all-region approach of the NSRF, the bulk of funding in absolute terms still flows to the sparsely populated northern counties.
- In addition to the EU Cohesion Policy and the Swedish government's Regional Growth Policy *per se*, many Swedish regions still benefit from regional aid instruments (Box 2.2 and Figure 2.4).
- Sweden receives relatively modest funding from the EU Cohesion Policy, which accounts for only 0.09% of GDP in the current programming period. In comparison, Poland receives the equivalent of around 4% of its GDP.

### Box 2.2. Regional aid instruments in Sweden

In Sweden, Areas A and B eligible for regional aid in 2007-13 are broadly unchanged from 2000-06, although population coverage fell from 15.9% to 15.3%. Most regions in the sparsely populated north which have fewer than 12.5 inhabitants per square kilometre are eligible, as well as several regions in central Sweden and in the south-east. In Areas A, the maximum aid level is 15% for large firms and 25-35% for SMEs, while in Areas B, the maximum aid level is 10% for large firms and 20-30% for SMEs. The main regional aid instruments include: the regional investment aid, the regional grant for business development, the employment grant, the transport grant, and the reduction of social security contributions in SMEs. Other forms of support, which are not limited to the eligible aid areas, include the possibility for firms to receive seed financing.

**Regional investment aid.** Regional investment aid finances a range of investments, including buildings, machinery, training and consultancy services. Within Aid Area A, certain areas can be eligible only for large strategic investments. Within Aid Area B, aid can be granted for projects which are of strategic importance or otherwise assessed as important for the region's development, and when a loan cannot cover the need for capital. The aid varies according to firm size, type of investment, investment costs, eligible area, and impact on the area (i.e. estimated increase in employment and growth). Maximum aid levels range between 10% and 35% of the approved investment costs.

**Regional grant for business development.** The regional grant for business development is targeted at SMEs in rural and sparsely populated areas. The grant is available for a range of investments, including machinery, buildings, equipment, product development, training and information campaigns. The grant can also be awarded to encourage a firm's participation in the Regional Growth Programme or in the Structural Funds Programmes. The grant levels vary between 25% and 50% of the approved investment costs, with a maximum of SEK 1.2 million over a three-year period.



### Box 2.2. Regional aid instruments in Sweden (cont.)

**Employment grant.** The employment grant can be available for firms that create new and lasting employment opportunities in most parts of Aid Areas A and B. Within Aid Area A, the grant can be awarded to newly established firms unless the vacancy is of strategic importance or otherwise assessed as important for the region's development. Within Aid Area B, the grant is only available for newly established firms. Maximum aid awards are SEK 198 000 for every new man-year (1 650 hours) within Aid Area A and SEK 120 000 within Aid Area B.

**Transport grant.** The transport grant aims at compensating for the extra costs incurred due to long distances from markets in the four most northern regions of Sweden (Norrbotten, Västerbotten, Jämtland, and Västernorrland) and the processing of raw materials. It covers transport costs of goods delivered by rail, road or sea for a distance of at least 401 km. In 2007, a number of changes were introduced: a reduction of award levels for most municipalities (rates varying between 10% and 45% *versus* between 15% and 45% in 2000-06); removal of previous weight restrictions on consignments (100 kg for coastal areas and 20 kg for mainland); availability of a transport grant for firms with costs below SEK 25 000 per calendar year; volume restriction for sawn wood products (28 000 m<sup>3</sup> per production place and calendar year); maximum award of SEK 15 million per production place and calendar year.

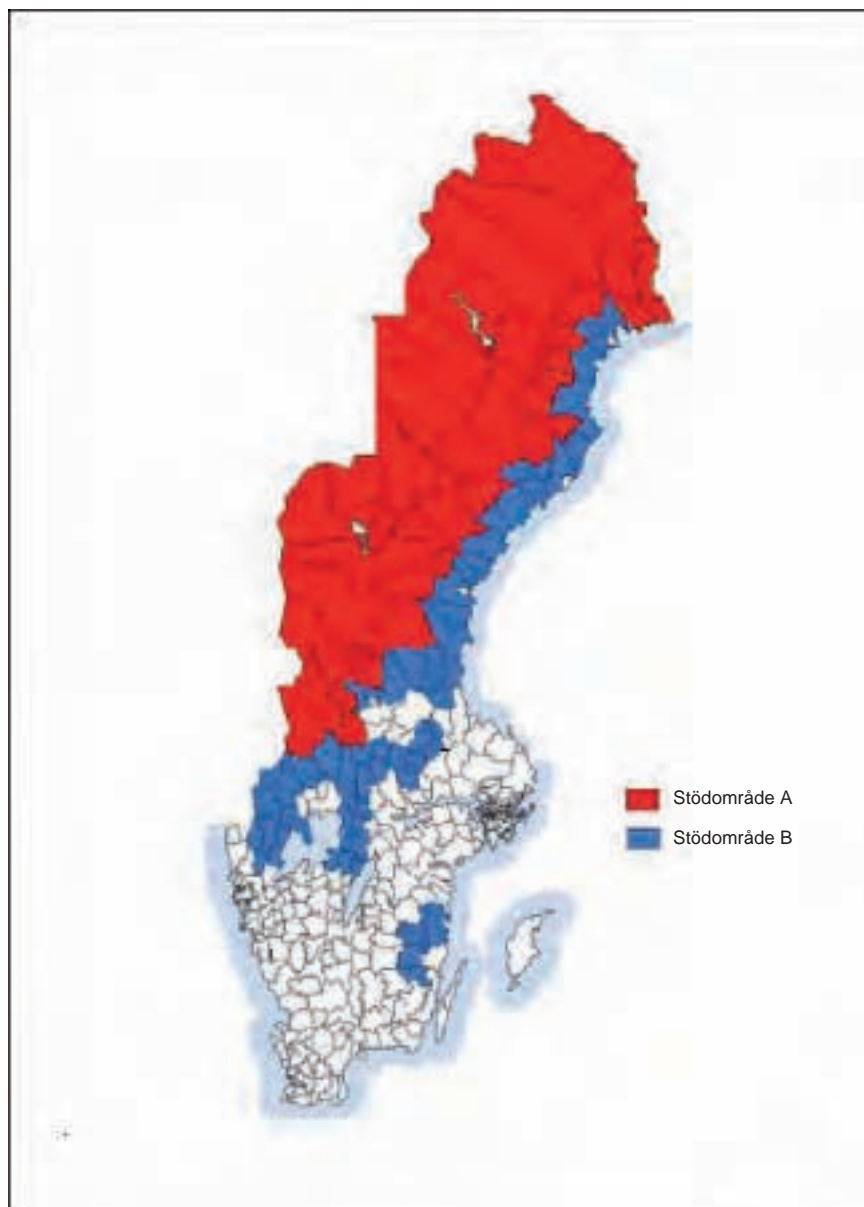
**Reduction of social security contributions.** In addition to the regional incentives discussed above, another important form of support within Aid Area A concerns the reduction of employers' social security contributions. This is set to continue until 2010, although with specific restrictions. Following approval by the European Commission on 11 December 2007, the reduction will apply to SMEs within certain service sectors located in Aid Area A. The Commission concluded that the positive effects of the measure in tackling problems related to tax evasion and undeclared work outweighed the potential distortion of competition. The scheme cuts labour costs by reducing employer social security contributions by 10 percentage points (the social security contributions normally amount to approximately 31% of total salaries and benefits). The maximum reduction is SEK 7 100 per month, and SEK 85 200 per year for the self-employed with employees. Municipalities, state authorities, or the farming, fisheries and transport sectors are not eligible for this form of support. The total budget of the scheme is estimated at SEK 600 million a year.

**Seed financing.** Seed financing is another form of support which is not restricted to the eligible aid areas. Seed financing can be awarded for the development of products with growth and commercial potential. Funding is available for SMEs during the start-up phase, but also for independent entrepreneurs, innovators or researchers. Regional seed funding can be given in the form of a guaranteed or conditional loan, up to a maximum of 50% of the total project costs. County Administrative Boards can transform some regional aid funding into seed financing.

Source: Adapted from EoRPA Paper 08/2, p. 55-59.



Figure 2.4. **Map of regional aid areas in Sweden, 2007-13**



Source: EoRPA Paper 08/2, p. 57.

## 2.2. Strengthening regional innovation systems

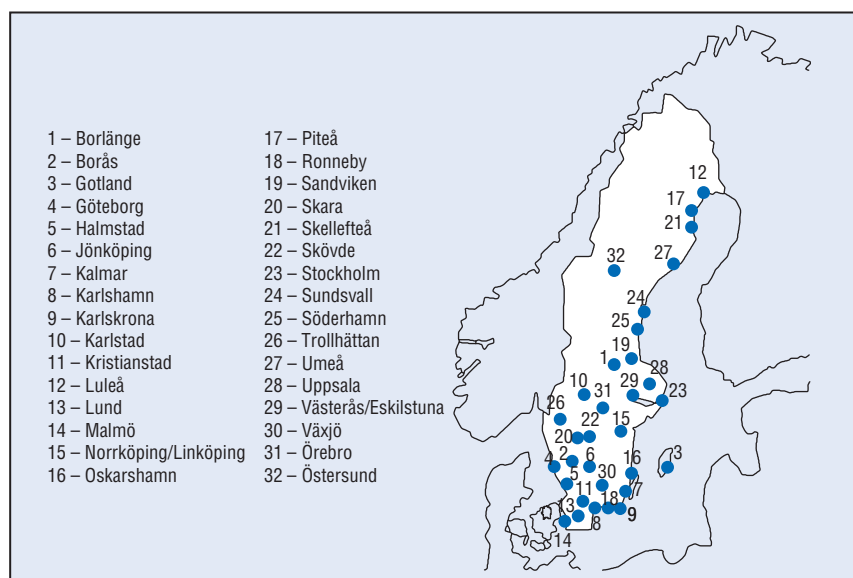
### **An increasing regional dimension in research and innovation policy**

Sweden's excellent innovation performance has so far relied on a generally robust system of production and use of knowledge. The system's main strengths have been well documented. They include: a high level of R&D investment; a highly skilled population; an attractive market for qualified R&D investment; a well-developed university system; strong scientific output measured in terms of scientific publications and international patenting; widespread use of modern ICT; and a qualified public sector demand for innovation (OECD, 2005).

Sweden is one of the OECD countries in which the "regionalisation" of industrial policy and economic development policy has already yielded promising results. After bolstering a technology-based, R&D-intensive industrial policy, which has resulted in the creation of competitive science parks, technology incubators and specialised research institutes usually close to strong regional industries and key to the development of regional clusters (Figures 2.5 and 2.6), Sweden has progressively adopted a set of measures geared towards promoting innovation in a broader sense at the regional level.

With the evolution of European regional policy, Sweden was very active in the late 1990s in a number of EU programmes which supported the development of regional innovation systems. The former state agency NUTEK

Figure 2.5. **Science parks and technology incubators in Sweden**



Source: Swedish Incubators & Science Parks ([www.sisp.se](http://www.sisp.se)) and Invest in Sweden Agency.

Figure 2.6. **Examples of specialised research centres and institutes in Sweden: materials sciences**



Source: Advantage Sweden, 2009/2010 edition, Invest in Sweden Agency ([www.isa.se/materialsscience](http://www.isa.se/materialsscience)).

(which became Tillväxtverket in April 2009) encouraged regions to come together and apply for funding under the Regional Innovation and Technology Transfer Strategy (RITTS) programme. Northern Sweden obtained funding to develop a series of pilot projects under the Regional Innovation Strategies+ (RIS+) programme. Norrbotten also piloted the first ever cross-border regional innovation strategy, the “Northern Europe RIS+” project, in which Norrbotten and three neighbouring Finnish counties developed a common vision to enhance cross-border regional innovation capacity.

A few regional innovation systems in Sweden are currently the source of some of the best practices in OECD countries. Västra Götaland is particularly noteworthy. The second largest region in Sweden after Stockholm, and one of two pilot regions with a directly elected regional government since 1999, Västra Götaland has become a closely integrated functional region based on a tightly

knit social fabric which has facilitated the development of knowledge networks and platforms among local universities, research bodies, businesses, and regional authorities (e.g. Open Arena Lindholmen). Some other regions that do not have the same level of decision-making powers and resources, such as Värmland, have also achieved significant results in terms of innovation capacity and developed dynamic regional clusters based on regional partnerships. While the model of the pilot regions is not necessarily replicable as such in all Swedish regions, it has underlined the significant positive outcomes to be obtained from the combination of knowledge networks and regional empowerment to build strong regional innovation systems (see Chapter 3 for detailed analysis).

Among OECD countries, Sweden has been a leader in implementing national programmes to promote regional innovation. In line with the Visanu programme (2002-04) and NUTEK's (Tillväxtverket from 2009) Regional Cluster Programme<sup>1</sup> (2005-10, Table 2.3), the VINNVÄXT programme stands out as a particularly sharply targeted initiative<sup>2</sup> (Table 2.4). Its aim is to develop internationally competitive research and innovation environments based on specific regional strengths by funding needs-driven R&D and strengthening

**Table 2.3. National programmes to promote regional innovation in Sweden**

	Visanu	Regional Cluster programme	VINNVÄXT
Time frame	2002-05	2005-10	Since 2001 (three calls carried out in 2003, 2004, and 2008)
Authorities in charge	Jointly managed by NUTEK, VINNOVA, and Invest in Sweden Agency (ISA)	Tillväxtverket	VINNOVA
Budget	EUR 7.5 million for three years	EUR 7.5 million for six years	
Projects selected	30 clusters	12 clusters (by May 2009)	Total of 12 projects (3 selected in 2003, 5 selected in 2004, 4 selected in 2008)
Focus	To encourage linkages across sectors and clusters	To enhance international competitiveness of mature clusters	To promote already established or promising regional strengths
Selection process	Selection by dialogue	Selection by dialogue	Open competitive process
Policy instruments	Process management, joint business development activities (commercial co-operation, education and competence development, development of new products and processes, networking, analysis and lobbying)	Market-related support, development of business plans or competitive analysis, participation in EU programmes and development of methods and knowledge	Triple helix participation required (firms, R&D, government) Selected projects receive up to EUR 1 million a year Process support

Source: Adapted from OECD (2007), *OECD Reviews of Regional Innovation: Competitive Regional Clusters*, Chapter 18, Sweden, pp. 295-311.

Table 2.4. **Projects selected by the VINNVÄXT programme**

Topic	Region	Description
ProcessIT Innovations ( <a href="http://www.processitinnovations.se">www.processitinnovations.se</a> )	Luleå/Umeå	Developing new services and products in mining, steel, paper and pulp and manufacturing industries based on ICT. Involves processing and manufacturing industries, the universities of Umeå and Luleå, and ICT companies in Västerbotten and Norrbotten.
Biomedical Development ( <a href="http://www.goteborgbio.se">www.goteborgbio.se</a> )	Western Sweden	Converting cutting-edge innovation into practical applications in biomaterials, cellular therapy, and cardiovascular and metabolic diseases.
Triple Steelix ( <a href="http://www.triplesteelix.se">www.triplesteelix.se</a> )	Bergslagen	Increasing expertise in steel materials, steel processing, nanotechnology, industrial IT, the environment and energy efficiency. Involves major companies such as Sandvik, Outokumpu and SSAB.
Fiber Optic Valley ( <a href="http://www.fiberopticvalley.com">www.fiberopticvalley.com</a> )	Hudiksvall	Developing and testing products and services based on fiber optics. Offering a test bed with contracted test pilots, qualified evaluators, research, training, business models, behavioural analysis, statistical models and an advanced fiber laboratory.
Hälsans Nya Verktyg (New Tools for Health) ( <a href="http://www.halsansnyaverktyg.se">www.halsansnyaverktyg.se</a> )	Östergötland	Developing individually adapted solutions in distributed care, personal care and sports. Involves some 60 companies, the municipalities in the county, the county council, the regional association Östsam, NGOs, Linköping University and research companies.
Uppsala BIO ( <a href="http://www.uppsalabio.com">www.uppsalabio.com</a> )	Uppsala	Promoting the growth of diagnostics, tools for biotechnological research and pharmaceuticals. Involves the local biotechnology industry, the university and the public sector.
Robotdalen (Robot Valley) ( <a href="http://www.robotdalen.se">www.robotdalen.se</a> )	Mälardalen	Fostering research, development and manufacture of industrial, field, and medical robotics. Mobilising major companies such as ABB, Atlas Copco and Volvo.
Food Innovation at Interfaces ( <a href="http://www.innovationigransland.se">www.innovationigransland.se</a> )	Skåne	Increasing the return on investments and value generation in the foodstuffs industry ( <i>e.g.</i> food for schools and hospitals), based on interdisciplinary and cross-border research.
Biorefinery of the Future ( <a href="http://www.processum.se">www.processum.se</a> )	Örnsköldsvik-Umeå	Developing new bio-based green products, chemicals and fuels as well as new energy solutions from industrial process streams based on forest raw materials and energy crops.
Peak of Tech Adventure ( <a href="http://www.peakoftechadventure.se">www.peakoftechadventure.se</a> )	Åre-Östersund	Promoting R&D in winter sports, tourism and outdoor pursuits. Involves two international competence centres for the tourism industry (ETOUR) and winter sports (Swedish Winter Sports Research Centre).
Smart Textiles ( <a href="http://www.smarttextiles.se">www.smarttextiles.se</a> )	Sjuhärad	Designing, developing and producing next-generation textile products ( <i>e.g.</i> greenhouse fabrics, wound care products and sound-insulating textiles) by joining different competences ( <i>e.g.</i> textile materials, electronics and medicine).
Printed Electronics Arena ( <a href="http://www.printedelectronicsarena.com">www.printedelectronicsarena.com</a> )	Norrköping/Linköping	Commercialising and exploiting printed electronics ( <i>e.g.</i> displays and sensors for packaging and security industries).

Source: Adapted from VINNOVA ([www.vinnova.se/vinnvaxt](http://www.vinnova.se/vinnvaxt)).

cutting-edge competence<sup>3</sup> (Figure 2.7). In a number of regions, the VINNVÄXT programme contributed to further developing the regions' own work on cluster and innovation system development. Compared with cluster programmes in other OECD countries, the VINNVÄXT programme has successfully combined the following modalities:

- An explicit focus on exploiting *specific regional comparative advantages*, by going beyond high-technology industries to encompass a variety of regional assets. In 2001, substantial preliminary work included: the implementation of five pilot projects with different orientations and different regional preconditions (biotechnology in Uppsala; IT/service consulting in Karlstad; collaboration among subcontractors in Jönköping; Innovation City in Halmstad; SISU – collaboration between industry, society and the university – in Luleå/northern Finland); studies of similar programmes in other countries (e.g. REGINN programme in Norway, Innoregio, Bioregio and EXIST in Germany; cluster policies adopted in France and the UK); preparatory seminars; and the identification of key factors for regional growth, based on experience in Sweden and abroad.

Figure 2.7. **Map of projects selected by the VINNVÄXT programme**



Source: VINNOVA.

- A *cross-sectoral perspective*, which encourages cross-fertilisation among activities. First, the support addresses *the development of the identified innovation system*. This includes: the funding of process management development support; future-oriented processes (looking forward 10-20 years) and technological scenarios (5-10 years); analyses and the drawing up of strategies to lift the innovation system to an international level; the commissioning of research and expertise in the fields of learning, network organisation and leadership; the development of preconditions for learning and innovation. Second, it addresses *the funding of needs-driven research within the identified growth field*. The research takes place through collaboration between colleges/universities (possibly institutes) and companies. Once the system has been developed and the funding needs established, it is expected that the regions will assume responsibility for most funding of the development of the system, so that the major part of VINNOVA's funds can be devoted to needs-driven R&D.
- A *triple helix collaboration model*, which fosters soft capital and building trust among partners, and an *open and transparent competition process*. Applications are reviewed by a group of experts inside and outside VINNOVA. Interviews are conducted by the VINNVÄXT programme management. Final selection is made by a steering group representing research, industry and government.
- A *long-term horizon*, which is conducive to a more stable and progressive vision, and a *co-funding requirement*. Selected projects receive up to SEK 10 million a year for a period of ten years. All the funding provided by VINNVÄXT requires at least 50% regional co-funding, for a total budget of SEK 20 million or more a year. The funding is allocated for periods of 3.5 years at a time but is intended to continue for ten years. Winners must submit a status report every third year to demonstrate that the funds are being used for the intended purpose and that the work is progressing.
- A *focus on process support* rather than single cash injections. Since the autumn of 2003, VINNVÄXT training courses help to develop cross-border, interdisciplinary learning on regional development processes, innovation systems in regions and knowledge-driven clusters. A process manager network also offers a forum for knowledge development and the dissemination of information and research. The members of the network are process managers, consultants, researchers and others. The aim is to identify questions that are important to people who work in processes of this type, find answers and provide feedback. Examples of areas that have already been identified include the development of networks, indicators of success, and how to communicate ideas within a regional innovation system. In connection with network meetings, VINNVÄXT's programme management offers those who intend to submit applications the



opportunity to discuss their projects separately, and the possibility to take part in seminars/workshops that relate directly to the drawing up of an application. On behalf of VINNVÄXT, the Dahmén Institute has also produced a process management handbook that provides support for the development of regional innovation systems.

Evaluations indicate that the VINNVÄXT programme was very successful in terms of stimulating the long-term accrual of strong regional innovation systems by providing partners with a common task and a tangible outcome. Although it was also suggested that the bottom-up process restricted the strategic steering VINNOVA would be able to provide at the national level, the VINNVÄXT programme remains a highly successful model for using strategic science and innovation investments to strengthen regional partnerships and improve the commercial and application focus of universities. The experience from such programmes also provides inputs for further development of cross-border innovation strategies such as the Baltic Sea Region flagship project for research and innovation, transnational clusters and innovative SME networks, which is scheduled to be launched in early 2010 under the leadership of Sweden with six key components (world class research and innovation, transnational cluster collaboration, innovative SME networks, capacity building, FDI and branding, programme management and knowledge development).

Further progress in Swedish innovation policy is likely to be determined by the implementation of the new Bill on research and innovation, which the Swedish government presented in October 2008. Along with an increase of public funding of R&D by SEK 5 billion over 2009-12 (twice as much as in the previous period), key reforms include: the introduction of a competitive process to allocate resources for research to universities; long-term funding for strategic research areas (primarily in medicine, climate, and technology); the creation of innovation offices; and the strengthening of industrial research institutes (Box 2.3). The new Bill seeks to consolidate the piecemeal reforms of the last 20 years by encouraging universities to explore research fields that present more obvious strategic benefits and by providing more direct funding to support staff and students who wish to exploit their inventions as entrepreneurs. The Bill also pointed out that the dialogue should be developed further between national authorities and regional actors concerning strategic work on research and innovation issues at the regional level.

While it will take some time to measure the regional consequences of the new Bill, proposals for greater concentration and more strategic allocation of research resources underline the need to find synergies between national efficiency and regional equity objectives. European innovation policy has long recognised the risk of “picking the winners”, namely that strategic technology policies tend to concentrate resources on already successful research facilities. In the most recent EU Seventh Framework programme, which has



### Box 2.3. **Key changes introduced by the new Bill on research and innovation (2008)**

#### **Competitive allocation of resources to universities**

A system of competitive grants to spur the development of research of international excellence will be introduced in parallel to the previous system of direct government grants. As in previous years, part of the funding of university research will be allocated as direct government grants according to the number of students. From 2009, quality-based funding will be introduced to supplement the direct grants. The universities will have to compete for these resources. The government will use indicators of the universities' ability to attract external funding and quality criteria, such as the rate of publications and citations. The indicators will be based on data from the three most recent years and given equal weight in the calculation process. In order to minimise the risk that certain areas of science have a disadvantage or an advantage in the process, the various disciplines will be weighted (Humanities and Social Science: 2; Natural Science: 1.5; Medicine and Technology: 1; other factors: 1.1).

#### **Support to strategic research areas**

From 2009 to 2012, additional resources will be invested in a number of strategic research areas of special importance to society and the business sector (primarily medicine, climate and technology). Specifically, this means an increase of SEK 1.8 billion for Sweden's higher education institutions (HEIs). The additional resources will be distributed among 24 strategic research areas. Three criteria were used in prioritising the strategic areas: research with the prerequisites to be of the highest international quality in the long term; research able to contribute to fulfilling major needs and solving important problems in society; research in areas that have a connection to the Swedish business sector.

During the spring of 2009, the Swedish Research Council (*Vetenskapsrådet*), the Swedish Council for Working Life and Social Research (FAS), the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas), the Swedish Energy Agency (*Energimyndigheten*), and the Swedish Agency for Innovation Systems (VINNOVA) managed the call for, and review of, grant applications from Sweden's HEIs in all of the strategic research areas announced by the government. A first call for grants covering 20 of the strategic areas was launched in mid-January 2009.

Applications for these grants should involve one or more Swedish HEIs. Each HEI can be the main applicant for only one grant application per strategic area. The main applicant bears overall responsibility for constructing the initiative. The HEI may also be involved with specified parts of one or more other applications in the same area. Collaborating research institutes can

### **Box 2.3. Key changes introduced by the new Bill on research and innovation (2008) (cont.)**

also be financed from the grants. Researchers may be involved in several applications. The HEIs chosen to receive such grants will receive this funding as an increase in their basic budget appropriation. The increase in funds received by an HEI is coupled with the institution's mission to develop research that is of the highest international standard. The mission should be clearly profiled and able to be developed from work already in progress. It should be possible for the strategic research area to become one of the most important elements of the HEI's profile. Striving for scientific excellence should be the foundation of all proposed initiatives.

Every year, the responsible funding agency will follow up the implementation of the proposal and its conformity with the intention of the application. The work will be evaluated after five years. This can lead to a redistribution of the funding among the grant holders in the respective strategic research area. The evaluation will be based on the fundamental goals of the strategic research areas.

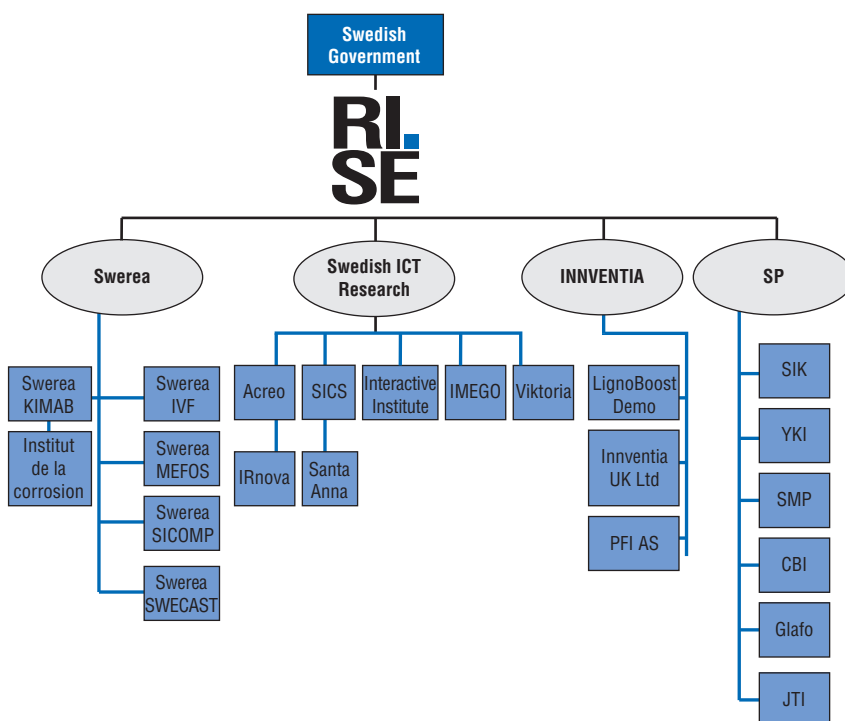
#### **Creation of innovation offices**

To support the commercialisation of research, a number of innovation offices will be established adjacent to seven of Sweden's large universities: Uppsala University; Lund University; Umeå University; Linköping University; Karolinska institutet (Stockholm); Royal Institute of Technology – KTH (Stockholm); Chalmers University of Technology (Göteborg). These offices will provide advice in areas such as patenting, licensing and contract research. A prerequisite for support should be that the receiving university will also use results from other education institutions.

#### **Support to industrial research institutes**

From 2009 to 2012, the strategic core funding of industrial research institutes will be increased. The funding will be used both to strengthen the institutes' co-operation with industry and HEIs and to promote their participation in international R&D programmes, for example within the EU. IRECO, the holding company that currently manages the state's shares in several institutes (see Figure 2.8 below), will become a new holding company with a stronger mandate. Other institutes, including the SP Technical Research Institute of Sweden, will be transferred to the new holding company.

mostly benefited the largest Swedish regions with a strong higher education base (Table 2.5), there is a risk that national and European research funds might combine to funnel the flows of these funds to a relatively limited number of institutions. The government is now seeking new ways to improve

Figure 2.8. **Organisation of Swedish research institutes and holding companies**

Source: RISE Holding.

the interplay between the Seventh Framework programme and the Structural Funds programmes. If “scientific competition” is to have a meaningful impact other than to reward past success, the government may wish to consider ways to ensure that the less successful actors in the first round are well-positioned to compete for investments in subsequent rounds.

Experience with innovation policy in other OECD countries suggests that managing change so as to avoid disruption can help focus on long-term strategic goals. Focus on consolidating policies despite directional shifts was a key factor in Flanders, Belgium, where regional innovation policy has assumed a variety of forms but has remained stable enough to support a coherent learning culture (Box 2.4). Another example from the north of England (Box 2.5 and Figure 2.9) underlines the importance of making regional actors more explicitly aware of the influence that needs to be exerted nationally, and ensuring that broad regional policy helps link national strategic investments with regional strategies.

Table 2.5. **Swedish regions in the EU Seventh Framework Programme (FP7)**

County	Participants (in different projects)	Co-ordinators	EUR
Stockholm	326	58	123 800 256
Västra Götaland	165	20	63 089 721
Skåne	85	15	36 703 566
Uppsala	75	14	26 389 333
Östergötland	30	4	9 436 223
Norrbottn	22	1	5 034 844
Västerbotten	16	2	3 561 737
Västmanland	9	3	2 809 446
Örebro	9		2 029 907
Dalarna	5		978 598
Västernorrland	5		1 290 634
Värmland	4		1 204 414
Blekinge	4		981 233
Jönköping	5		356 427
Gävleborg	3		1 441 706
Halland	1		Confidential
Jämtland	1		Confidential
Kronoberg	2		258 059
Södermanland	3		140 296
Kalmar	5		833 374
<b>TOTAL</b>	<b>775</b>	<b>117</b>	<b>280 435 594</b>

Note: Data as of February 25th, 2009.

Source: VINNOVA.

By capitalising on its achievements in identifying and supporting specific regional comparative advantages, Sweden has an opportunity to create further employment opportunities by fostering regional spillovers. As the current economic crisis tends to accelerate industrial restructuring (similar to what Sweden experienced with the textile, shipyard, and automotive industries in the 1970s and 1990s), social tensions and swelling redundancy numbers could provide a temptation for the government to cushion regional pockets of mass unemployment with sectoral subsidies. If Sweden is to join other OECD countries in using the crisis as an opportunity to build a stronger, cleaner and fairer economy, rather than as an excuse to delay structural reforms (OECD Strategic Response to the Financial and Economic Crisis, 2009), it needs to maintain a consistent focus on long-term strategic priorities. Sweden needs to maintain specialised niches of excellence in knowledge-intensive activities to counterbalance relatively high labour costs on the global market.

At the same time, increasing fiscal pressures are calling for efforts to reform the equalisation system and to turn geographic constraints into comparative advantages rather than passively compensate for them in the

### **Box 2.4. Creating a coherent learning culture around innovation policy: The example of Flanders, Belgium**

As a small, open economy with relatively few governmental competencies, the region of Flanders has been seeking to reinvigorate its industrial base and stimulate high-technology development despite scarce resources. Cluster policy has thus been used to try to encourage actors to collaborate effectively. There was a risk of politicisation if policy changes were associated with particular parties, politicians or cabinets. Moreover, substantial forward progress might have been undermined if previous ideas were systematically rejected in favour of new ones. Flanders has managed to avoid this, and one of the earliest innovation agencies, the Inter-University Micro-Electronics Centre (IMEC), is now one of the flagship institutions for the Flemish innovation system.

There have been three main waves in Flemish innovation policy; in each, the balance of power between public and private sector actors has shifted slightly. The first generation (1984-89) was a classic science push policy, with investment in IMEC as well as a micro-electronics manufacturing facility (MITEC) and a biotechnology institute. MITEC was later sold off and the biotechnology institute was rolled into the VIB (Flanders Interuniversity Institute for Biotechnology) institute, created in 1995. The second generation (1989-99) emphasised networking by universities, research centres and business; the Flemish Agency for the Promotion of Innovation (IWT) was created to channel funding to self-organising clusters. The third generation of policy (2000-present) brings these bottom-up networks and national innovation institutions (IMEC, VIB) under more centralised control, channelling funding through priority areas (e.g. environmental innovation), into co-operative innovation networks and ensuring the provision of sufficient resources to aspirant entrepreneurs.

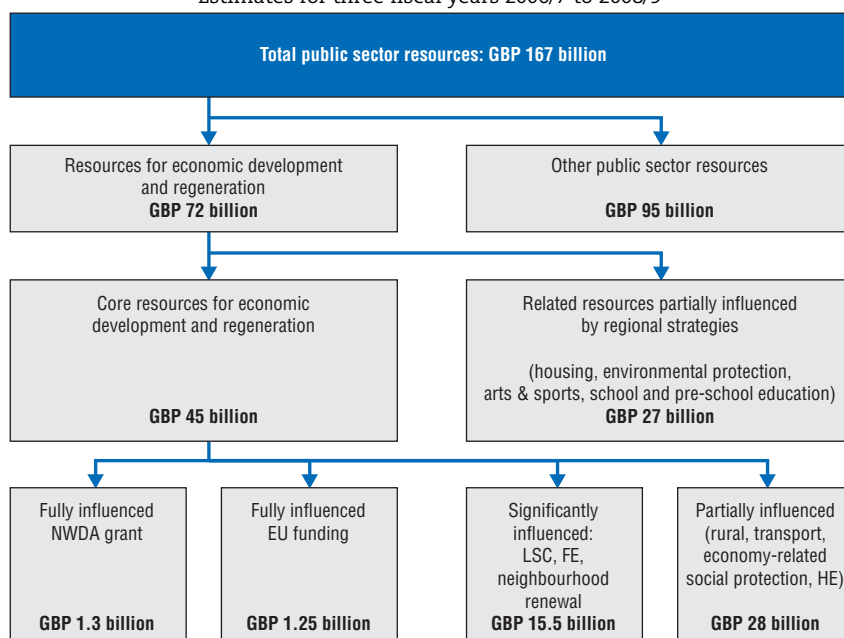
At each stage, agency reconfiguration has been based on consolidation rather than reinvention. Failures have been quickly eliminated (MITEC) or radical changes of direction introduced (VIB). However, the starting point has been a recognition of the social and knowledge capital embodied in institutions and the fact that capital provides a starting point for further interventions. The bottom-up second generation micro-clusters lacked critical mass and strategic focus, and therefore they were realigned around strategic missions compatible with the overall goals of the government of the day. The Institute for Innovation by Science and Technology (IWT) has been a key focus for ensuring the satisfactory alignment of national (regional) governmental goals with the capacities of smaller-scale innovation networks, and has facilitated the constructive evolution (and where necessary removal) of elements of the Flemish regional innovation system. The IWT has been able to pioneer new approaches to evaluating networks and to apply these more generally to build an innovative culture both in the business sector and the Flemish public sector.

### Box 2.5. Integrating regional funding: the case of the North West of England, UK

The United Kingdom has been experimenting with devolution since 1998, although it is only outside England – in Scotland, Wales and Northern Ireland – that established political institutions are able to take responsibility for regional funding decisions. In England, outside of London (which has an elected Mayor), there are eight regional development agencies which take a strategic lead in stimulating regional development. Their role is to create strategies that best implement national policy decisions in their particular region and to influence European funds and those of other governmental departments. The Northwest has attempted to better understand the wider strategic scope of its activities by mapping the wider flows of public resources that shape its environment for stimulating economic development. In 2006, the Northwest Development Agency (NWDA) had a direct three-year expenditure of GBP 1.3 billion with a further GBP 0.25 billion of European funds. This formed a tiny share of the GBP 45 billion of public expenditure on economic regeneration. This mapping exercise made clear the challenge for the regional development agency: to exercise strategic influence over a large number of public bodies making direct investments with relatively limited public legitimacy (Figure 2.9 below).

Figure 2.9. **Example of integrating regional funding flows  
in the North West of England, UK**

Estimates for three fiscal years 2006/7 to 2008/9



Source: OECD (2008c).

long term. In this context, two main avenues for policy intervention can be considered: i) better exploiting regional skills; and ii) exploring regional opportunities for green growth.

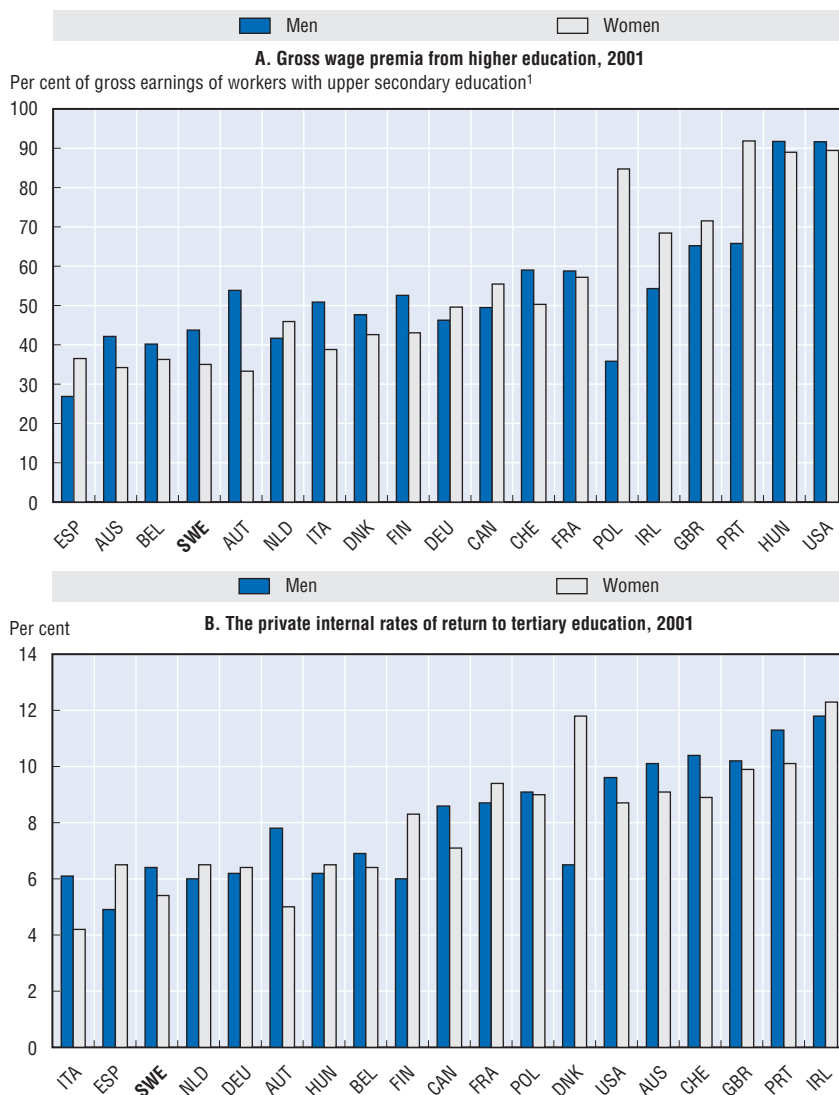
### **Better exploiting regional skills**

Against the backdrop of further potential flows of labour-intensive jobs towards low-cost countries, the threat of unemployment shifting from temporary to permanent status in many Swedish regions has prompted a recent policy debate about policy mechanisms to “enlarge regional labour markets” as a way to accelerate the matching of labour supply and demand. Considering this proposal in the light of a long-term strategy to increase the income-earning capacity of all individual workers in Sweden (as opposed to propping up a few uncompetitive firms for an indefinite period of time), policymakers could focus on two complementary approaches: making the regional labour force more *employable* and more *entrepreneurial*.

### **Making the regional labour force more employable**

The varying intensity of labour market challenges affecting Swedish regions argues for a closely tailored policy response. In particular, there is a regional divide – mostly between large metropolitan regions and the rest of the country – on the following issues: i) high youth unemployment; ii) strong dependency on benefits; and iii) the integration of immigrants in the labour market. While all three issues result from the complex interaction of factors within the overall national policy framework, possible policy responses include significant scope for more effective collaboration among national and regional actors.

**i) Improving the role of regional universities in tackling youth unemployment.** Addressing youth unemployment challenges in Sweden calls for a broad approach touching upon the education system as well as labour market institutions, taxes and benefits (OECD *Economic Survey of Sweden*, 2008). Concerning the education system, and more particularly the higher education system, wage premia for workers with higher education in Sweden are among the lowest in the OECD area, and private internal rates of return to tertiary education are also the lowest, while the cost of education relative to available individual funding is also among the lowest (Figure 2.10). This reflects a policy that gives Swedish students strong incentives to start and complete higher education late, owing to a combination of free tuition and generous government grants for students’ living costs. Despite a relatively high level of local business involvement in schooling compared with other OECD countries (Figures 2.11 and 2.12), improving school-to-job transition remains a concern in Sweden.

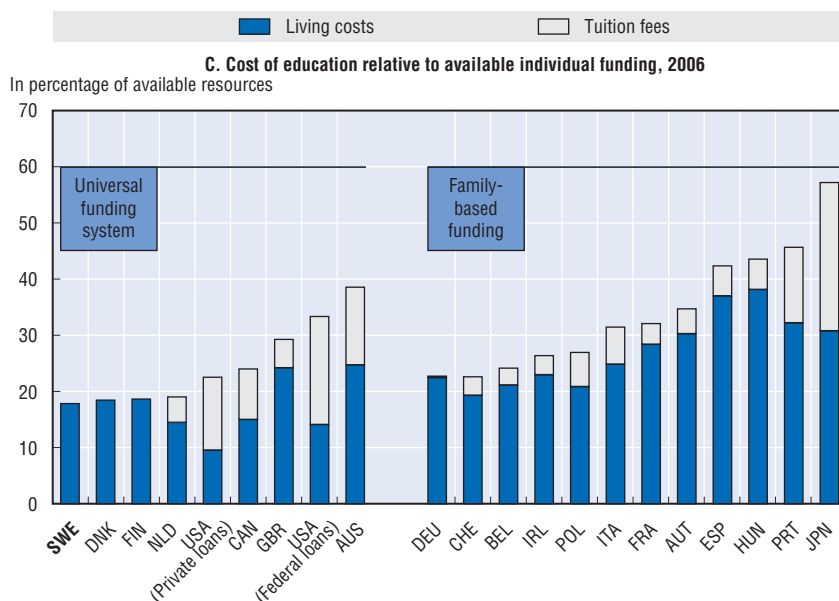
Figure 2.10. **Wage premia, internal rates of return and living costs in Sweden and other OECD countries**

1. The figure shows how much the gross earnings of persons with tertiary education exceed the gross earnings of persons with upper secondary education.

Source: OECD (2008), *Economic Survey of Sweden*, Figure 4.8, p.104, OECD Publishing, Paris.



Figure 2.10. **Wage premia, internal rates of return and living costs in Sweden and other OECD countries (cont.)**



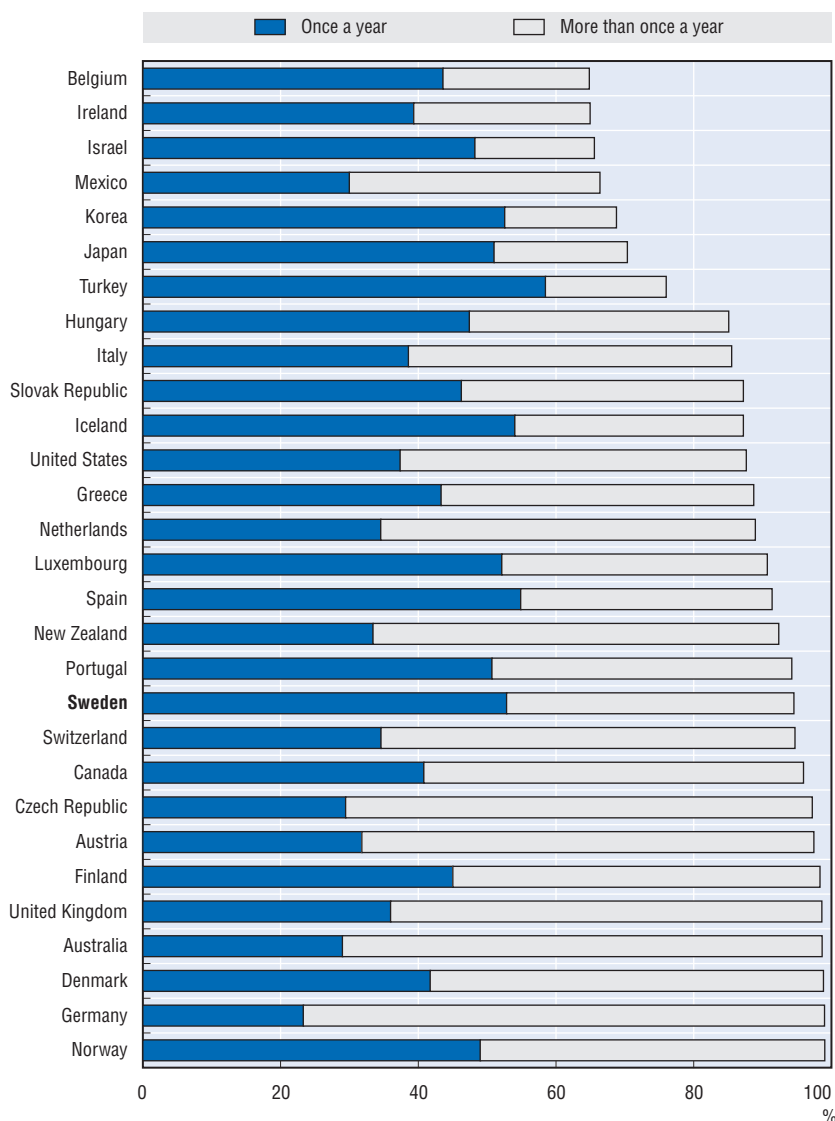
Source: OECD (2008), *Economic Survey of Sweden*, Figure 4.8, p. 104, OECD Publishing, Paris.

Part of the solution to help reduce youth unemployment lies in clarifying the role of universities in stimulating competitive regional innovation systems. The university decentralisation policy of the 1980s saw universities as key actors in efforts to retain and attract students and highly skilled employees in remote regions. Now that the policy agenda focuses on building endogenous growth capacity in all regions, universities can play a crucial role by moving beyond curiosity-driven scientific research in collaboration with large R&D-intensive industrial groups towards more needs-driven research and support to innovation in knowledge-intensive SMEs and start-ups. In this respect, increasing priority needs to be given to speeding up students' entry into the labour market with jobs that best match their qualifications and promote the regional economy, by giving universities more freedom and resources to develop their own strengths.

**ii) Enhancing incentives for workers to join the labour market.** Reforms of the education system cannot be isolated from labour market measures and benefits at the national and regional levels. Labour market policies in Sweden were reshuffled in 2007, notably with the introduction of a Job and Development Guarantee and a specific Job Guarantee for Youth, and a decrease in part-time unemployment benefits to 75 days. Measures were taken to limit the duration of sickness benefits and ensure earlier rehabilitation, as well as to

**Figure 2.11. Local business involvement in schools:  
job fairs, lectures and visits**

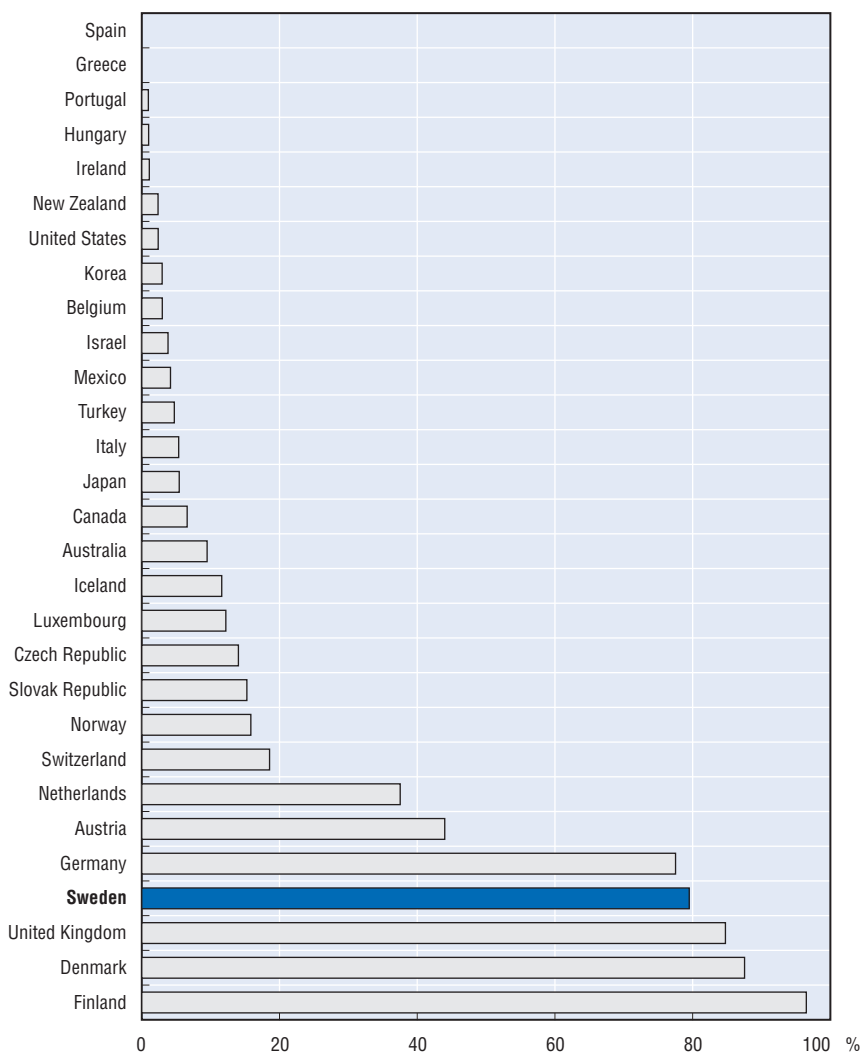
Percentage of 15-year-old students in schools in which the principal reported students had the opportunity to participate in job fairs, lectures (at school) by business or industry representatives and visits to local businesses and industries as part of their normal schooling, 2006



Source: OECD (2008), *Review of Vocational Education and Training in Sweden*, with data from OECD PISA 2007 Database, Figure B.2.

**Figure 2.12. Local business involvement in schools: training**

Percentage of 15-year-old students in schools in which the principal reported that more than half of students from the school received some training in local businesses as part of school activities during the school year, 2006



Source: OECD (2008), *Review of Vocational Education and Training in Sweden*, with data from OECD PISA 2007 Database, Figure B.3.

better monitor the use of disability benefits. Many OECD countries, including Norway and Denmark, are trying to better integrate active labour market policy instruments and benefits, as well as other sorts of benefits. Given the pivotal role of Swedish county authorities in sickness and disability policy (Box 2.6),

better co-ordination between central government agencies, county authorities and municipalities administering active labour market policy instruments and different sorts of benefits could help avoid fragmentation of service delivery

### **Box 2.6. The regional dimension of Swedish sickness and disability policy**

Occupational health services were funded and administered collectively by the unions and employers' confederations until 1993, until the latter terminated the arrangement. Since then, it has been the responsibility of individual employers to fund the purchase of occupational health services. Large numbers of small firms were left unable to afford suitable coverage. To address the problem of underfunding, around SEK 1.6 billion has been provisioned in the government's budget and discussions are presently under way between government authorities and occupational health service providers.

County authorities in Sweden employ the vast majority of general practitioners (GPs) and are responsible for medical rehabilitation. The government is looking to enhance capacity for medical rehabilitation by increasing resources to county councils over 2008-10. Around SEK 1.8 billion have been budgeted for counties to provide evidence-based medical rehabilitation. County councils can provide rehabilitation either through the health services they administer directly or by purchasing services from private providers. It is envisaged that the purchase of services will stimulate the growth of a private provider market so that, over time, counties will have sufficient service capacity to offer a medical rehabilitation guarantee.

In addition to providing clearer responsibilities and incentives for GPs, it may be prudent to consider better incentives for county authorities as well. Delays in signing agreements with county authorities to provide pre-employment services to support the new system mean that urgently needed services are inadequately developed. Medical rehabilitation agreements with the counties should be signed quickly and the idea of a medical rehabilitation guarantee pursued. A similar national healthcare guarantee commits counties to offering treatment within 90 days of a treatment decision. It was also suggested that introducing a sickness benefit co-payment by county councils could encourage county authorities to reduce sick leave in their area. Reduced sickness absence levels would automatically translate into savings for the county. Financial incentives might also encourage county-level compliance with the sick leave guidelines. The recent Danish benchmarking tool, *Jobsindsats.dk*, a continuously updated Internet portal which allows local, regional and national authorities to compare practices on a local level on a wide range of indicators, could be taken as a good practice and adapted to the specific circumstances and needs of Swedish counties.

Source: Adapted from OECD (2009), *Sickness, Disability and Work: Breaking the Barriers – The Case of Sweden*, OECD Publishing, Paris.

and ensure a more transparent grasp of how many citizens receive which package of active services and benefits.

**iii) Improving the integration of immigrants in the labour market.** A third area in which more effective collaboration between national and regional actors could help better exploit the skills of the regional labour force is the integration of immigrants in the labour market. As in many OECD countries, the concentration of immigrants in the largest metropolitan regions of Sweden has raised challenges in terms of co-ordinating national and municipal actions for labour market integration, social assistance and housing among others (Box 2.7). Special vocational counselling is currently being tested on a provisional basis in Göteborg, Skellefteå and Karlskrona to facilitate the settlement or resettlement of immigrants in areas where their professional experience is most required. The pilot programme was launched in April 2009 and does not have a large number of participants yet,

### **Box 2.7. The regional dimension of the integration of immigrants in the labour market**

To avoid a large concentration of immigrants in the three metropolitan regions (Stockholm, Göteborg, Skåne), public authorities implemented a placement policy in 1985 which assigned newly arrived refugees and asylum seekers to specific municipalities throughout the country. As the number of newcomers increased and housing became a limiting factor, immigrants tended to be placed in municipalities with available housing, with less attention paid to the characteristics of the local labour market. The migrants were free to move if they found housing elsewhere but were required to participate in an 18-month introduction programme in the municipality in which they were originally placed and received social assistance. The dispersal policy was later abandoned in the face of large increases in the number of asylum seekers. From 1994, municipalities have been encouraged to grant individuals participating in an introduction programme an “introduction allowance” rather than social assistance. The objective is to emphasise the exceptional nature of the allowance granted during the early stage of the migrants’ stay in Sweden. The amount of the introduction allowance varies widely across municipalities (between EUR 350 and EUR 800 per person per month). Some municipalities grant the same amount as regular social assistance whereas others use the level of the minimum wage. Currently, about 60 municipalities use the introduction allowance and two-thirds of refugees reside in such municipalities. Most metropolitan municipalities have chosen to introduce an allowance that is higher than normal social assistance and is means-tested. The municipality also decides whether the allowance can be combined with income from work without being reduced.

### **Box 2.7. The regional dimension of the integration of immigrants in the labour market (cont.)**

In 1998, the Swedish Integration Board was established and took over responsibility for the integration of newly arrived immigrants. The Integration Board was responsible for disbursing the introduction allowance to municipalities and issuing general guidelines on integration, while implementation and responsibility for newly arrived immigrants was in the hands of the municipalities. However, the Swedish Integration Board was abolished in 2007.

Since 2000, a number of programmes were introduced at the national level to improve immigrants' integration into the labour market. Currently, the Public Employment Service works on strengthening personnel at job centres in regions where the number of jobseekers of foreign origin is large or where local or regional labour market conditions are difficult. While no specific labour market measures are targeted at immigrants *per se*, labour board staff can address the problems of unemployed immigrants.

Source: Adapted from OECD (2007), *Jobs for Immigrants: Labour Market Integration in Australia, Denmark, Germany and Sweden*, OECD Publishing, Paris.

but the Institute for Labour Market Policy Evaluation (IFAU) has been assigned the task to evaluate the outcome at a later stage. While recent national measures<sup>4</sup> such as the subsidised “Step-in jobs” for newly arrived immigrants and the introduction of a language bonus seek to reduce labour market exclusion, continuous collaboration among national, regional and municipal authorities will be necessary to increase the chances of using the potential of the immigrant labour force in the regional economy. In particular, the role of county authorities may need to be strengthened, as was done for the transfer of handling asylum applications to county administrative boards in 2007.

### ***Making the regional labour force more entrepreneurial***

The policy challenge of stimulating what is sometimes assessed as an “innovative but not entrepreneurial” labour force in Sweden can have a substantial impact on regional development. Sweden is the birthplace of a number of high profile multinational groups such as Ericsson, Volvo and H&M. Swedish-born entrepreneurs have recently founded phenomenally successful businesses, such as the free commuter newspaper Metro (started with one free newspaper in Stockholm in 1995, Metro International now publishes some 70 editions in around 100 major cities in the world for an audience of more than 20 million daily readers) and the free peer-to-peer Internet phone company Skype (founded in 2003 and acquired by eBay in 2005, it is now

available in 28 languages and had more than 309 million registered users as of early 2008). Despite such high profile examples, Sweden's overall rates of entrepreneurship (in terms of business births, deaths and growth rates) remain low by international standards (OECD, 2005). Although entrepreneurial force (measured by the annual number of start-ups) tends to be stronger in large metropolitan regions, other regions also present an important potential in this respect (the annual growth rate of start-ups is higher in rural regions; see Figure 1.36 in Chapter 1). Besides the set of national measures to promote entrepreneurship and business support (Box 2.8), almost all Regional Development Programmes (RUPs) include initiatives directed towards entrepreneurship and small business development. Many municipalities have also developed measures such as Jobs & Society (Nyföretagarcentrum), projects targeting young people such as Snilleblixtarna, Finn-upp, Ungt Företagande, and Transfer among others.

### Box 2.8. National measures for entrepreneurship and business support in Sweden

- Entrepreneurship

- ❖ ALMI Företagspartner AB (51% owned by the state and 49% owned by county councils/regions), with its 19 regional subsidiaries, provides finance, gives advice, arranges contacts and works with consultants to support entrepreneurship. In order to increase the number of female entrepreneurs, ALMI is running or collaborating on a number of targeted programmes including networking, management skills, and coaching. To encourage entrepreneurship among ethnic minorities, ALMI has also co-operated with the Swedish Association of Ethnic Entrepreneurs (IFS) to integrate their financing and business development services.
- ❖ Together with the Swedish Companies Registration Office and the Swedish Tax Agency, Tillväxtverket (Swedish Agency for Economic and Regional Growth) runs "verksam.se", a website offering information and practical tools for starting a business, and the "Start-Up Line", a free phone service which gives information on how to start a business. There are also special awards, such as the annual "Global Award for Entrepreneurship Research" (EUR 100 000) and the "FSF-Tillväxtverket Award for Young Entrepreneurship Researchers" (SEK 50 000). The "Venture Cup" is co-financed by VINNOVA, Tillväxtverket, the Swedish Energy Agency, the Industrial Development Fund, the Innovation Bridge (Innovationsbron) and representatives from the industrial sector, and an important part of promotion activities are conducted by agencies not financed by the state, such as the Federation of Private Enterprises (Företagarna) and the Confederation of Swedish Enterprise (Svenskt Näringsliv). The latter also elects the "Entrepreneur of the Year", who then represents Sweden in an international competition.

### Box 2.8. National measures for entrepreneurship and business support in Sweden (cont.)

- ❖ Tillväxtverket runs three programmes for women entrepreneurship: since 2008, more than 800 Government ambassadors for women entrepreneurship (with a yearly budget of about SEK 3.5 million) are serving as role models and share their experiences in schools and various networks or associations; the national programme promoting women entrepreneurship has been running since 2007 with a budget of SEK 100 million per year; the national programme for developing resource centres for women (running since 2005) distributes half of its budget in the form of operating aid to 16 regional and 90 local resource centres and uses the other half to finance projects with the common objective of improving opportunities for women to take part in activities leading to regional growth.
- Business support
  - ❖ In 2005, VINNOVA launched Research & Grow (*Forska & Vax*), which focuses on R&D in SMEs in all sectors. The programme currently has an annual budget of SEK 100 million. A pilot initiative was recently launched to financially support SMEs to engage in new markets and to establish R&D co-operation outside Sweden.
  - ❖ Tillväxtverket runs a series of programmes that offer funding opportunities for businesses, particularly in the fields of sustainable development and international collaboration. DemoMiljö programme (since 2007) provides grants for the development of environmental solutions in the areas of sustainable urban development and renewable energy outside Sweden (grants between SEK 500 000 and SEK 3 million for authorities, municipalities or businesses for the implementation of demonstration projects; grants up to SEK 300 000 to cover the cost of pilot studies during the project development stage, only available to SMEs). In 2007, SEK 32.5 million were awarded to 25 Co-operative Development Centres in the form of operating aid. Environmentally Driven Markets (2008-13) provides financial support to SMEs which are part of a network or cluster, or for projects which aim to increase the knowledge of business actors regarding the development of environmentally oriented businesses (maximum funding of SEK 2 million per project). The Product Development in Small Businesses programme (since 2005) has provided grants (between SEK 100 000 and SEK 500 000) under the condition that businesses cover at least half of the investment costs themselves. StartSyd och StartÖst (since 2007) offers loans (between SEK 100 000 and SEK 750 000) to stimulate long-term sustainable business co-operation between Swedish SMEs and private companies in specific partner countries in Africa, South America, Asia and the Western Balkans. The Sweden-Norway Business Co-operation programme is expected to award approximately SEK 50 million between 2005 and 2010.

Enhancing communication on regional success stories could help build an entrepreneurial culture and confidence in regional strengths. Some regions have tried to turn regional structural handicaps into comparative advantages.



For example, the north of Sweden has experienced the boom of an automotive winter testing cluster, which was later supported by the national government (Box 2.9). Similar initiatives could be encouraged in other regions and municipalities through targeted action not only to facilitate access to finance

### Box 2.9. Automotive winter testing cluster in the north of Sweden

**Rationale.** The performance of cars is increasingly dependent on the complex electronic systems used not only for safety but also for comfort, performance and informatics. Automotive winter testing allows for real time simulations of cars in motion. Sweden presents the advantage of being closer to the big European manufacturers than Canada or Russia. It also offers a larger infrastructure system (*e.g.* road system) and social life in the nearby towns for the workers.

**Initial idea.** The idea of testing car facilities in the north of Sweden emerged in early 1973, when three local aviation pilots (David Sundström, Per-Axel Andersson and Per Dahlberg) made a winter runway by clearing the snow from part of Lake Hornavan. Representatives of Opel in Germany who were staying at the local hotel had the idea to use the ice runway to test brakes. Word of the unusually grim winter, good service and suitable test conditions spread fast. In the 1980s, more companies moved their test facilities to Arjeplog, and it was soon recognised as the world's leading winter test centre.

**Development of the activity.** In the northern area around four municipalities – Arjeplog, Arvidsjaur, Älvsbyn and Jokkmokk, just south of the Arctic Circle where the temperature can plunge to  $-40^{\circ}\text{C}$ , the latest in cutting-edge automotive technology is tested on remote roads and frozen lakes marked out by circular ice tracks or 500 km endurance drives. Automotive giants such as BMW, Bosch, Rolls Royce, Mercedes, Opel, Fiat, Porsche, Hyundai, Ferrari, Haldex, Mando and GKN test new models and new equipment and components in the area.

**Impact on the regional economy.** The population of some towns almost doubles each testing season with the arrival of engineers and technicians from around the world. This industry has created local jobs and trade for local shops, restaurants and hotels. Many locals have also found jobs as test drivers and maintenance crew for all the tracks that are built throughout the community. For example, more than 1 000 people from the car testing industry work at Arjeplog today, and the industry's investment amounts to EUR 54 million.

**Governance.** The government now provides promotion, support and the necessary infrastructure. Local universities such as Luleå University of Technology (LTU) play an important role. For example, the Center for Automotive System Technologies and Testing (CASTT) at Luleå University of Technology supports projects on remote vehicle dynamics (exploring remote technologies such as fleet management solutions and steering robots) and friction under winter road conditions (equipment and methods for testing the friction coefficient of tires on ice, snow and slush; casting techniques to measure the ice topography of winter road surfaces with high resolution).

and to support business development, but also to improve entrepreneurial awareness and entrepreneurial culture right from early school years and to facilitate transfers of knowledge from regional universities. This calls for closer collaboration between national, regional and municipal actors. Current national measures for entrepreneurship and business support in Sweden could be further integrated into a comprehensive development strategy encompassing various policy fields, as was done in Denmark for example (Box 2.10). Partnerships with local economic development organisations can

### Box 2.10. **Entrepreneurship policy in Denmark**

Entrepreneurship has traditionally been high on the policy agenda in Denmark. During the last six years, the Ministry of Economic and Business Affairs launched five action plans to strengthen the business environment for entrepreneurship. This attention to entrepreneurship was recently reinforced by the **Globalisation Strategy**, which sets out different policies for safeguarding Denmark's position in the global economy. The 350 initiatives of this strategy envisage major reforms, among others in education, R&D and entrepreneurship, as well as substantial improvements in the (framework) conditions for growth and productivity. As a result, entrepreneurship policy has become more integrated with other policy domains that have a major impact on the determinants of entrepreneurship and performance. In this context, the integration of entrepreneurship and innovation policies merits particular attention.

In order to achieve its ambitious goals, the government foresees that the **budget** for the Globalisation Strategy will rise from EUR 46.6 million in 2007 to EUR 66.6 million in 2010. It is difficult to calculate exactly the total budget for entrepreneurship policies since these are typically spread over different ministries. The post "Business development" in the government budget, which covers most of the entrepreneurship policies, grew almost by 75% between 2006 and 2008 because of new funds attributed to the Globalisation Strategy. While not all of these initiatives and resources are exclusively reserved for entrepreneurship policies, the budget for entrepreneurship has certainly increased significantly.

In addition to increasing the budget for entrepreneurship, the Globalisation Strategy introduces a clear specialisation in entrepreneurship policies by focusing on **growth entrepreneurs** and especially high-growth start-ups. International comparisons have shown that Denmark has a smaller number of fast growing start-ups and that they contribute strongly to aggregate growth. Implementation of the strategy depends directly on the identification of these growth entrepreneurs. This is not easy to do in advance. The yearly contracts between the national government and the five Regional Centres of Growth explicitly stipulate deliverables in terms of growth entrepreneurs, on the basis of *ex post* criteria, however. Hence in addition to a sufficiently large supply of start-ups, there is a clear need for adequate expertise and experience in screening firms for access to the specialised advice and counselling of the Centres of Growth; in addition, arrangements have been made to refer entrepreneurs with growth potential by other organisations.

**Box 2.10. Entrepreneurship policy in Denmark (cont.)**

While it is too early to evaluate the economic impacts of the Globalisation Strategy, it is clear that its **comprehensiveness** and explicit inclusion of different policy domains and their mutual interdependencies are major assets for the effectiveness of government policy. Another important advantage of the Globalisation Strategy is its **open, international orientation**. A small country like Denmark has a lot to gain in an increasingly global economy, but it needs to formulate and implement appropriate measures to benefit fully from globalisation.

*Source:* Adapted from OECD (2008), *OECD Entrepreneurship Review of Denmark*, OECD Publishing, Paris.

also play a key role in increasing local capacity to reach economic potential, as shown by the example of Canada (Box 2.11). A key challenge in Sweden remains the availability of venture capital, in particular for early stage high-growth firms. Special emphasis needs to be placed on the development of regional venture capital funds.

**Box 2.11. Supporting SME development in rural communities in Canada**

The federal government of Canada has recognised that in order to build communities, one must be present in those communities and work at the grassroots level. Atlantic Canada Opportunities Agency (ACOA, the federal regional development agency in the four easternmost provinces in Canada) has 36 points of contact, including regional offices and district offices located throughout Atlantic Canada, which is considered the most rural part in the country. ACOA aims to help businesses to be more successful in order to help create a strong economic climate at the community level across the area. The collaborative effort with community-based economic development organisations, combined with ACOA investments in rural SMEs, has demonstrated positive results.

ACOA supports community-based economic development organisations, including 41 Community Business Development Corporations (CBDCs) and 52 Regional Economic Development Organisations (REDOs). CBDCs enhance business and economic opportunities in Atlantic Canada's rural communities, through the direct provision of investment capital and business counseling to small and medium sized businesses. REDOs, often funded in partnership with provincial and local governments, play a leadership role in strategic community development planning project development. These two organisations provide outreach capacity for the federal government and its partners for economic planning (REDOs) and specific support to SMEs (CBDCs).

### Box 2.11. **Supporting SME development in rural communities in Canada (cont.)**

**Regional Economic Development Organisations (REDOs)** are focused on such areas as strategic community planning, partnership and cluster development, but also assist local entrepreneurs in the development of their business plan. REDOs are incorporated, non-profit entities with representation from municipalities, the private sector on volunteer Boards of Directors. The intent is for the REDO to play a leadership role at the local level where buy-in and “ownership” are important factors to mobilising assets. The model used in the province of Nova Scotia where each level of government provides one-third of funding is considered a best practice. The federal, provincial and municipal sharing of funding for REDOs’ operating costs varies from province to province. REDOs access additional sources of funding through various other government and non-government sources for specific projects that are identified in their strategic plans.

**Community Business Development Corporations (CBDCs)** are independent organisations, covering all the rural communities in the Atlantic provinces, and managed by volunteer boards of directors. The national Community Futures program (CF) is administered by ACOA in Atlantic Canada to support the operating costs of the CBDCs, and to augment the investment capital available to these organisations for business financing. Funding levels vary, depending on the size of the CBDC. In addition to their operating funds, CBDCs also have investment/capital funds. CBDCs use investment capital to provide financing to businesses in their region through loans, equity investments or loan guarantees. The Atlantic Canada Community Business Investment Fund (ACCBIF) was created in September 2000 to provide for investment fund allocations. When CBDCs have surplus investment funds on hand, they invest these resources in the fund, making them available for use in other communities. CBDCs with a shortage of investments can borrow capital from ACCBIF. The ACCBIF is managed by the Atlantic Association of CBDCs, and is valued at over CAD 25 million.

## **Exploring regional opportunities for green growth**

### ***Optimising the potential of renewable energy***

The exploitation of renewable energy in Sweden could be a further stimulus to regional innovation. In Europe, Sweden already stands out in terms of the reductions of greenhouse gas emissions required by the Kyoto Protocol. It cut emissions by 9% between 1990 and 2006 and introduced a carbon tax as early as 1991. Increasing energy efficiency and the use of

renewable energy are currently highlighted in regional development projects. Swedish regions are being assisted by both Swedish and European initiatives to exploit their renewable energy potential in biofuels (Box 2.12) and wind power (Figure 2.13 and Box 2.13). Participation in cross-border projects such as the Bioenergy Technology Transfer Network could be further encouraged (Figure 2.14 and Box 2.13).

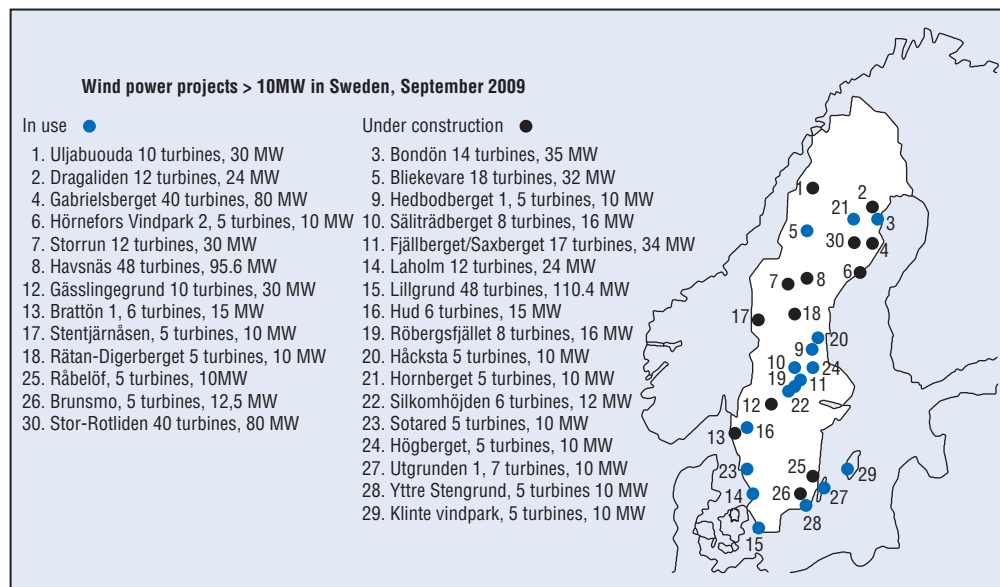
**Box 2.12. Transport fuel from forest biomass: The BioDME project in Piteå (Norrbotten County)**

*Rationale.* Already used today as an aerosol propellant, di-methyl ether (DME) has the potential to become a competitive renewable alternative to fossil fuels. DME is a multi-source and multi-purpose fuel; it is considered a highly efficient source of energy, it is non-toxic and environmentally friendly, and has low exhaust emissions, reduced noise externalities, and minimal climate impact. DME can be obtained from direct gasification of biomass.

*Scope of project.* The BioDME project is a consortium involving Chemrec (Stockholm-headquartered group specialised in black liquor gasification), the Volvo Group, and other partners (Delphi Diesel Systems; Energy Technology Centre (ETC); Haldor Topsøe; PREEM Petroleum; Total). It aims at producing environmentally optimised synthetic biofuel from lignocellulosic biomass at industrial scale. The project started in 2008 and aims to build the world's first BioDME plant by 2010. A field test to demonstrate and verify DME technology in real applications will run from 2010 to 2012 with a fleet of 14 Volvo trucks in ordinary customer operation, in order to check technical standards, commercial possibilities and engine compatibilities. The project is co-financed by the consortium partners, the EU's Seventh Framework Programme (FP7), and the Swedish Energy Agency, and has a total estimated cost of EUR 28 million.

*Source:* Mission materials from Solanders Science Park.

While support for forestry and wind-based energy can open up promising business opportunities for Swedish regions, the long-term impact will depend on how policymakers help spread and embed the benefits of the growing industries into the regional economy while avoiding the risk of lock-in that hinders future technology options. Managing a transition to new technologies entails uncertainty and calls for a new balance between consumer and producer benefits, as well as consensus about how these will be distributed territorially. In order to maintain Sweden's current leadership in promoting a low-carbon, high-growth economy based on regional potential, it will be important to avoid the crowding out of private investment and to ensure that

Figure 2.13. **Wind power potential in Sweden**

Source: Swedish Wind Energy, materials from Invest in Sweden Agency 2009.

### Box 2.13. **Wind power project in the Norrbotten County**

**Project.** The Swedish government has set a planning frame for wind power of 30 TWh by 2020 (which corresponds to energy to 1.5 million homes with a consumption of 20 000 kWh); in 2008, Swedish wind power production was 2 TWh. The 30 TWh is to be broken down into 20 TWh land based wind power and 10 TWh offshore. The Markbygden wind power project comprises 1 101 wind turbines, with a total height of approximately 200 metres and a windmill diameter of approximately 82-126 metres. It represents a total investment of EUR 6 billion and is owned by Svevind and Enercon.

**Potential impact on regional economy.** The expected impact of the project on the regional economy includes the creation of around 1 000 jobs during the intensive part of the construction, about 220 jobs for the Tower factory (concrete) and electricity installation in Piteå harbour, and about 250 jobs for operation and maintenance. It is also hoped that manufacturing of rotor blades, generators and steel towers will be located in Piteå. Further spillover effects are expected in terms of enhancing co-operation with SMEs in the region and stimulating the service and tourism activities.

Source: Solanders Science Park and the municipality of Piteå.

Figure 2.14. **Regions participating to the Bioenergy Technology Transfer Network (BTN)**



Source: European Commission, DG Regio.

strong national commitment works hand in hand with regional actors. Current efforts to overcome the crisis are offering a momentous opportunity to rethink how national and regional actors can work jointly on regionally based projects that serve national strategic objectives, as Canada's federal government has done with the introduction of new support for green recovery (Box 2.15).



### Box 2.14. **Bioenergy Technology Transfer Network (BTN)**

**Context.** Biofuel production and use support both the mitigation of climate change and the creation of new businesses for rural areas. The EU has set a goal of doubling the share of renewable energy sources by 2010 from the 1998 level. Europe's bioenergy sector has traditionally operated mostly on the local or regional level. Today, the challenging target set for the increase of bioenergy use makes the promotion and mobilisation of best available practices and technologies necessary at European level. This requires international networking and close co-operation between private companies and public authorities. Current research and development in bioenergy has resulted in reliable technologies. However, these new technologies are not implemented widely enough and efficient end-user services are missing. Few strategic measures have been developed to promote sustainable use of the bioenergy potential through spatial planning.

**Project.** The Bioenergy Technology Transfer Network (BTN) project was established in 2002 to create an exemplary model for meeting this challenge. Led by the Jyväskylä University of Applied Sciences, Bioenergy Development Centre in Finland, the BTN assembled six other partners from five countries: the Jyväskylä Science Park (Finland), ZAB (Zukunfts Agentur Brandenburg GmbH, Germany), CEBra (Centre for Energy Technology Brandenburg GmbH, Germany), Luua Metsanduskool (the Luua College of Forestry, Estonia), Energidalen i Sollefteå AB (Energy Valley in Sollefteå Ltd., Sweden) and Energigården (Energy Farm, Norway). The BTN project worked on applied R&D in the fields of biofuel production, refining and combustion. Another important part of the project was the training of operators, including entrepreneurs, new biofuel users, decision makers and advisers. The project's main outputs include regional bioenergy strategies and development plans, international bioenergy training programme packages, and a network of regional Bioenergy Development Centres (BDC-Network). International seminars have been organised. The resources, production and use of bioenergy in partner regions have been analysed and bottlenecks in the chain of bioenergy use have been identified. As a result of close collaboration between Jyväskylä Polytechnic (Finland) and Energy Farm (Norway), a one-year training programme on wood energy (WFE) started in September 2004 with students from three European countries. Learning materials created by the BTN partners have been exchanged in order to improve local and national bioenergy training. A training and information package, "Bioenergy Route – Leading Know-How in Central Finland", has been published.

**Results.** Bioenergy markets have grown and the preparation of regional bioenergy strategies has increased understanding of spatial planning procedures in partner regions. Pilot and development actions have resulted in more



**Box 2.14. Bioenergy Technology Transfer Network (BTN) (cont.)**

efficient fuel and heat production methods and technology (for example, technology transfer of the forest chip boiler from Germany to Norway and the transfer of chipping technology from Finland to Norway). An innovative multiple-use mobile dryer for wood and agro fuels has been developed. The Finnish Regional Bioenergy Development Centre was opened in May 2003. Since then, it has integrated R&D components. CEBra GmbH established the BDC Brandenburg ("Wood Energy Centre Eberswalde") in August 2005. The BDC is located on the premises of the Brandenburg Forestry Authority at the wood campus of the University of Applied Sciences Eberswalde. In Norway, a national Bioenergy Demonstration Centre, the Energy Farm, has been improved with more demonstration activities and further theoretical training programmes. The Bioenergy Technology Transfer Network has led to the three-year BioReg Hadeland project, which aims at developing the Hadeland region into an outstanding (national) bioenergy region focused on bioenergy in practice.

Source: European Commission, DG Regio.

**Box 2.15. National support for recovery from the crisis and green growth at the regional scale in Canada**

Designed to complement existing federal funding programmes, the Government of Canada's Community Adjustment Fund (CAF), one of two stimulus funding envelopes announced in early 2009 and delivered by RDAs, supports communities with fewer than 250 000 inhabitants with projects such as: forestry (economic diversification initiatives, trail infrastructure, silviculture activities, etc.); mining (demonstration of new mining technologies, remediation and rehabilitation of abandoned mine sites, etc.); fisheries (support for marketing and promotion of fish products, initiatives to improve market access, etc.); agriculture (infrastructure development aimed at enhancing agricultural production, development of value-added opportunities in agri-food production, etc.); manufacturing (investments in machinery or equipment, remediation or repurposing of closed facilities, assistance related to the launch of new products lines or the development and implementation of process improvements, etc.). Activities that support "green" strategies and technologies are eligible, including ecological restoration, protection of habitat, use of new environmental processes and alternative energy sources.

**Box 2.15. National support for recovery from the crisis and green growth at the regional scale in Canada (cont.)**

Another measure is the creation of the Green Infrastructure Fund, a new national government five-year investment of CAD 1 billion in sustainable infrastructure that will contribute to improving the quality of the environment. The programme is managed and administered by Infrastructure Canada, a federal department with national responsibility. Federal funding will typically be shared as follows: 50% for provincial/territorial assets; 33% for local government and non-profit private sector assets; 25% for profit/private-sector assets. The focus is on new infrastructure or material rehabilitation of existing infrastructure. Eligible categories include: green energy generation infrastructure; green energy transmission infrastructure; carbon transmission and storage; wastewater infrastructure; and solid waste management infrastructure. Eligible recipients are provinces, territories, local or regional governments, public sector bodies, and private sector entities, either alone or in partnership with a province, territory or local or regional government.

### ***Strengthening the rural economy***

Developing a diversified and sustainable rural economy is a crucial component of effective regional development in Sweden. Although almost all of Sweden is classified as predominantly rural or intermediate in the OECD Regional Typology, rural Sweden is far from a homogeneous reality. While rural and urban areas are sometimes economically closely linked as in Skåne, other parts of Sweden are very sparsely populated and have much weaker links with urban economies (see the detailed analysis of regional specialisation in Chapter 1). An effective rural development policy needs to build on local and regional conditions in a bottom-up approach within the overall strategy for regional development.

Initiatives to develop rural tourism need to valorise region-specific assets. While Sweden devotes a larger share of funds under the Rural Development Programme 2007-13 to Axis 2 programmes for the environment and landscapes compared with other EU countries (Table 2.6), programmes geared towards the diversification of the rural economy also offer increasing opportunities. In particular, some rural regions have further opportunities for development in terms of agro-tourism, eco-tourism, hunting and fishing leisure activities, cycling and cultural tourism, for example linked with indigenous populations such as the Sami community.<sup>5</sup> Several private initiatives have demonstrated the ample potential to leverage a typical regional assets such as moose (Box 2.16) and the combination of hydraulic

**Table 2.6. Indicative budget for the rural development programme by axis, 2007-13**

Unit: thousand EUR

	EU funds	National funds	Total	%
Axis 1 – Competitiveness of agriculture and forestry	334 486	306 931	641 417	17
Axis 2 – Environment and landscape	1 264 112	1 366 648	2 630 760	66
Axis 3 – Economic diversification and quality of life	189 470	197 103	386 573	14
Axis 4 – LEADER approach	105 548	158 324	263 872	
Technical assistance	59 444	59 445	118 889	3
Total	1 953 060	2 088 451	4 041 511	100

Source: Ministry of Agriculture.

### **Box 2.16. Example of rural tourism in the north of Sweden: The Moose Garden (Östersund, Jämtland County)**

Moose hunting is widespread in Sweden, with almost 100 000 captures every year between September and December. The moose population totals just over half a million and reproduces rapidly. Moose meat is renowned as being particularly tasty with little fat, and is highly appreciated fresh or smoked, grilled, cured, in meatballs and in stews.

The Moose Garden was established in 1995 by Sune Häggmark, a top level civil servant in the municipality of Östersund, who first rescued two young moose abandoned during a shooting expedition and later developed a successful moose business. Today, the Moose Garden attracts 45 000 visitors a year who come to see the herd of 15 moose accommodated in approximately 15 hectares of meadow.

The Moose Garden offers two kinds of products. First, it is one of the very rare places in the world where moose milk is produced. Thicker than cow milk and slightly less white in colour, moose milk is low in calories and rich in proteins. Visitors can taste it raw or in the form of homemade delicacies such as moose cheese, moose milkshake (mixed with forest berries and ice), and moose waffles. Second, the Moose Garden produces 100% natural paper made from moose droppings. Because moose are browsers (eating leaves from bush tops) instead of grazers, the droppings contain no bacteria and are pure cellulose, a completely recyclable and biodegradable raw material. Once mixed and sundried, the paper is printed into replica bank notes, business cards, postcards, diplomas or menus.

The Moose Garden has attracted substantial international media attention, and has been approached by the governments of Tanzania and Russia to work on developing similar projects in these countries.

Source: Adapted with information from the Moose Garden's website [www.moosegarden.com](http://www.moosegarden.com).

resources and polar climate (the globally renowned Ice Hotel, entirely made of ice and rebuilt every year, Box 2.17). A factor of success in designing adequate support will be to effectively differentiate the tourism offer from that of countries with similar geographical endowment such as Norway, Finland and Russia (although capitalising on the common brand value of Lapland), and this will require close strategic collaboration with the local and regional

**Box 2.17. A globally successful tourism initiative  
in a peripheral Swedish region: the Ice Hotel  
(Jukkasjärvi, Norrbotten County)**

*Initial idea.* The company Jukkas (currently ICEHOTEL) has been operating since the 1970s in the Swedish Lapland, 200 km north of the Arctic Circle. For many years, the company focused on the summer season and the outdoor experiences offered by midnight sun. During the dark winter, the river was frozen and the people of the small village of Jukkasjärvi went into hibernation. By the end of the 1980s, it was decided to turn things around. Instead of viewing the dark and cold winter as a disadvantage, the unique arctic elements were regarded an asset. Inspired by the work of visiting Japanese ice artists, the village invited the French artist Jannot Derid to have the opening of his exhibition in 1990 in a specially built igloo on the frozen Torne River. The 60 m<sup>2</sup> building, named Arctic Hall, attracted many visitors to the area. One night, a group of foreign guests, equipped with reindeer hides and sleeping bags, decided to use the cylindrical shaped igloo as an accommodation. The unique sensation of sleeping in an igloo gave birth to the concept of ICEHOTEL.

*Project.* Today, ICEHOTEL is world famous for its unique concept and works of art. It is situated on the shores of the Torne River in the village of Jukkasjärvi. Covered with a meter thick ice layer at winter time, the Torne River is the source of all the art, architecture and design of the Ice Hotel. The Ice Hotel is built anew every year, with a new design, new suites and a new reception. About 10 000 tons of ice and 30 000 tons of snow are needed every year. The hotel can host over 100 guests, and every bedroom is unique. Covering more than 30 000 square feet, the Ice Hotel includes the hotel itself, an ice sauna, an ice chapel, an ice art exhibition hall, a cinema, and the “Absolut Ice Bar”.

*Economic impact.* The Ice Hotel employs about 175 people, and receives a total of around 45 000 daytime visitors and 30 000 night guests a year. It has a turnover of SEK 120 million. Each year, hundreds of tons of ice are exported to every corner of the world for attractions such as the Absolut Ice Bars in Stockholm, Milan, London and Tokyo.

Source: More information available on the Ice Hotel's website [www.icehotel.com](http://www.icehotel.com).

tourism sector to combine effectively different functions within a joint regional tourism offer.

The diversification of the Swedish rural economy needs to be better integrated with the search for creative solutions in public service delivery and business development. The vicious cycle pressures faced by rural regions are not new, but will certainly be exacerbated by the twin impacts of the financial crisis and falling local tax bases. In view of demographic ageing, some Swedish regions have taken useful initiatives in the field of tele-education (e.g. regional association of Laponian municipalities in Pajala, Kiruna, Gällivare and Jokkmokk) and tele-medicine (e.g. the e-health project in Norrbotten, presented in Chapter 3). The presence of a substantial elderly population could be further exploited as a local “silver economy” market, generating employment opportunities related to housing and furniture solutions designed specifically for elderly residents, specialised medical services and pharmacies, as well as lifelong learning facilities and leisure activities, for example. However, the potentially high cost of e-service facilities and educational investment in rural regions underscores the need to implement a mix of mutually reinforcing investment choices for the long term rather than isolated sectoral decisions for the short term, which further underlines the need to integrate policies for rural development and regional development.

Key factors of success for the preservation and renewal of sparsely populated regions are clearly linked with the quality of local and regional leadership and partnerships, which varies across the country but can achieve remarkable results as shown in the example of Kiruna (Box 2.18). In view of

#### **Box 2.18. The transformation of a mining city: Kiruna (Norrbotten County)**

After an iron ore deposit was discovered on the Kiirunavaara Mountain during the mid-1880s, the town of Kiruna grew with the establishment of the mining company LKAB (Luossavaara-Kiirunavaara AB) in 1890, and the inauguration of the Ofoten railway (also called the Ore Line, which links Luleå via Gällivare and Kiruna to Narvik in Norway) in 1903. In the early years, mining took place in open pits. Nowadays, the ore is mined nearly one kilometre below surface level. The ore body in Kiruna is about 4 km long and extends to an estimated depth of 2 km. Nearly 1 billion tons of iron has been mined so far. At current production volumes, ore reserves accessible via the present main haulage level will ensure production until about 2015. A higher production rate would require a more rapid rate of vertical mining. The extent of the ore body is such that future mining will affect part of the city of Kiruna due to the fissuring of the ground.

**Box 2.18. The transformation of a mining city:  
Kiruna (Norrbotten County) (cont.)**

It was therefore decided to move the city 4 km away. Some buildings will be torn down and replaced. Others will be dismantled stone by stone and reassembled in a new landscape. And some, like the church, once voted Sweden's most beautiful building, will be lifted whole and transported slowly down roads as yet unbuilt. To move Kiruna will take years, but plans for the new railway are well advanced and the electricity grid to power the new city is already in place. This huge project will entail the relocation of roads, railways, electricity, sewage pipes, housing, churches, hospitals, city halls, schools, kindergartens and city centres. The state-owned mining company will pay most of the costs, which are still unknown but expected to be high. However, there is resistance from some of the first inhabitants, such as the indigenous Sami People. For more than 2 000 years, they have herded reindeer and they say the transformation of Kiruna will cut deep into their grazing lands and the migration paths of their animals.

At the same time, Kiruna has developed a variety of new identities, including the Winter City (with the Snow Festival and an annual film festival called the Arctic Light Film Festival), and most importantly the Space City. Kiruna hosts Spaceport Sweden ([www.ssc.se](http://www.ssc.se)) which will offer space flights for tourists from Kiruna in a couple of years. Spaceport Sweden is a co-operative venture between Esrange Space Center (which launches sounding rockets and high-altitude research balloons, works as the test facility for new aerospace systems, and is the world's busiest civil ground station for satellites). It is owned by the Swedish Space Corporation, Icehotel, Kiruna Airport (owned by the LFV Group) and Kiruna's business development company, Progressum. The aim of Spaceport Sweden is to make Kiruna Europe's first and most obvious place for personal suborbital spaceflight. It is also expected to boost the regional economy. For example, tourists will be able to spend nights in the nearby Ice Hotel and enjoy the unique experience of commercial space flights (for around USD 200 000). However, a few issues still need to be resolved. For example, the Swedish Civil Aviation Authority requires all aircrafts with wings to be certified, and a US arms trafficking law, the International Traffic in Arms Regulation (ITAR), may prevent Space Ship Two's US-designed rocket engines from being serviced at a facility outside the United States.

building a resilient rural economy, the capacity of rural regions to proactively adapt the content of higher education to their own specific needs rather than conventional attempts of knowledge transfer is fundamental (*e.g.* the regional association of the municipalities of Haparanda, Kalix, Övertorneå and Övertorneå has pursued research projects in close collaboration with local entrepreneurs, the Technical University of Luleå and the Swedish Agricultural University in Umeå in fields such as food processing, tourism, IT and timber industry). It

will be increasingly crucial for rural regions to exploit existing national measures for SME development and entrepreneurship, as well as programmes to improve access to commercial and public services (including a budget of SEK 30 million targeted to the preservation and expansion of commercial services in rural areas, focusing primarily on fuel supply).

## 2.3. Linking infrastructure investment with regional development priorities

### *Integrating transport investment into coherent regional strategic planning*

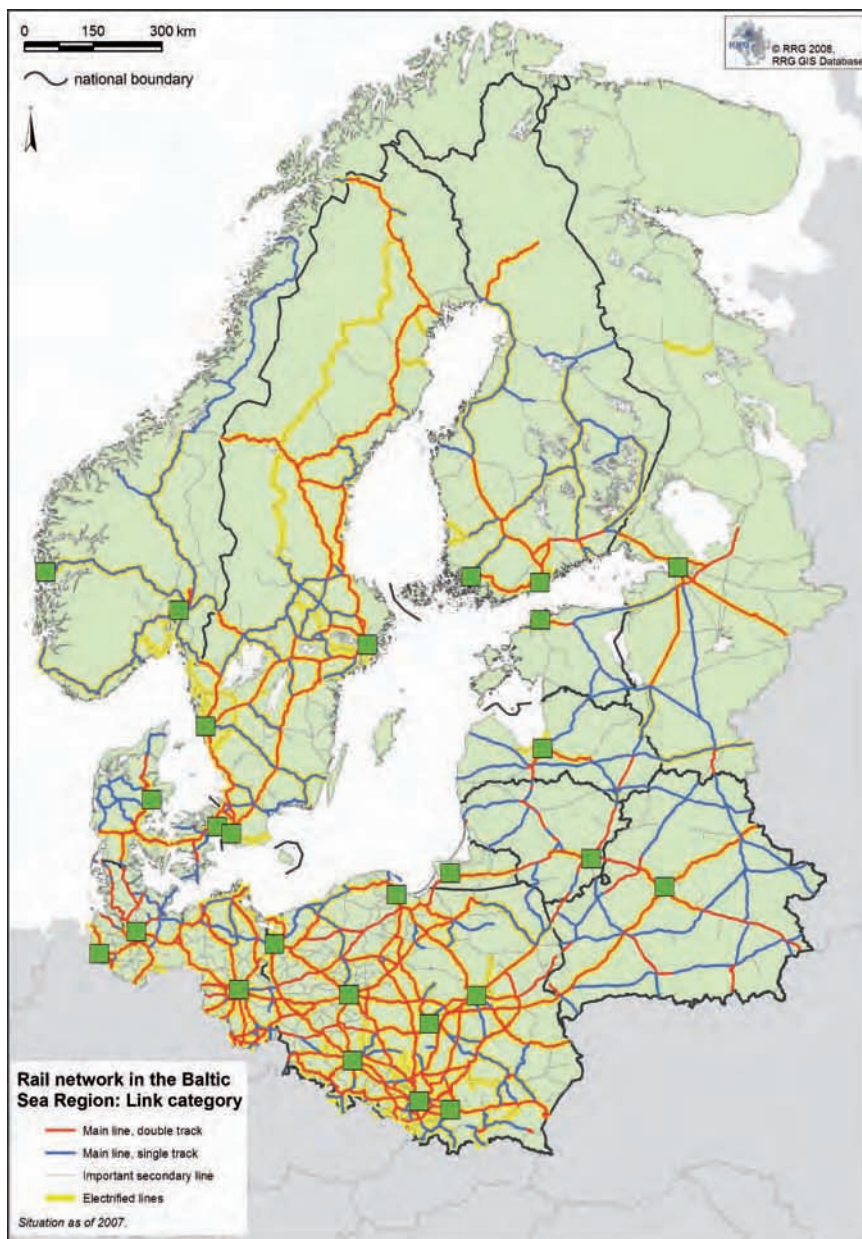
Capturing cross-sectoral synergies at the regional scale is particularly relevant for infrastructure investment in Sweden. The traditional struggle of Swedish transport policy to compensate for long distances from international markets and a harsh climate contrasts with relatively low levels of infrastructure stock. Compared with OECD TL2 regions, all Swedish regions except two (Sydsverige and Stockholm) have poorer accessibility to international markets, and all Swedish TL2 regions except one (Östra Mellansverige) have lower motorway density (see Chapter 1). International air accessibility has improved over the past years and relatively fast connections link the capital to many regional centres and support commuting flows in the south thanks to a number of key projects in recent years (Figure 2.15). However, intra-regional connections remain weak in parts of the north. This may reinforce these regions' dependence on private vehicles and increase the vulnerability of their economic base to oil price shocks.

The government's action to support recovery from the crisis may create new momentum for more effective infrastructure investment. As in many OECD countries, the fiscal stimulus plan announced by Sweden devotes a significant share of funds to infrastructure, albeit less than to science, R&D and innovation (Table 2.7). Expenditure on infrastructure is often expected to promote regional development by enhancing accessibility and may appear as a major element of the government's strategy to enlarge regional labour markets. Because infrastructure investment tends to involve large-scale, usually irreversible projects, it is crucial to ensure that existing stocks are used most efficiently before investing in new capacity, and that new investment is cost-effective, conducive to quality services for consumers, and socially appropriate (OECD, 2008). This is particularly true in a country like Sweden where concerns about long distances and strong regional disparities in population density have consistently maintained accessibility issues at the top of the policy agenda.

In Sweden as elsewhere, infrastructure policy needs to be closely integrated with other sectoral policies as part of a coherent regional development strategy. Econometric evidence from OECD regions suggests that infrastructure alone has little impact on regional growth unless it is associated



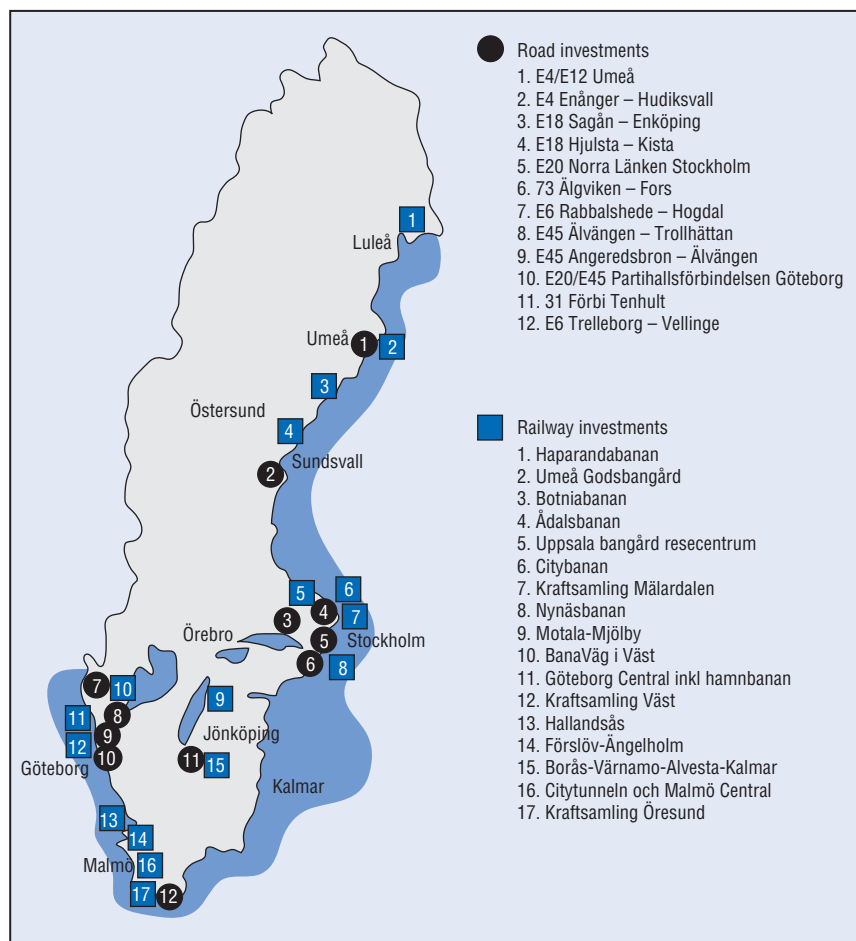
Figure 2.15. **Railway network in Sweden and the Baltic Sea Region**



Source: Schmitt, P., Dubois, A. (ed. (2008), *Exploring the Baltic Sea Region – On Territorial Capital and Spatial Integration*, Nordregio Report 2008:3.



Figure 2.16. **Major transport investment projects (over 300 million SEK) in Sweden**



Source: National Road Administration and National Rail Administration.

with human capital and innovation (see the regional growth model explained in Chapter 1). In practice, several OECD countries have seen the risk of well-intentioned infrastructure projects eventually generate “leakages rather than linkages” as new transport connections facilitated more brain drain than they attracted new workers because mono-sectoral policies failed to enhance the overall business and living environment. The lack of anticipation and monitoring of cross-sectoral interaction is likely to result in conflicts among policies at the regional scale, which convey contradictory signals to economic agents, waste scarce resources and dilute the overall impact of the policy mix. For example, expanding the motorway network in the hopes of enlarging regional labour

Table 2.7. **Financial weight of long-term investment in selected OECD countries' stimulus packages**

	Infrastructure	Science, R&D and innovation	Education	Green technology
Australia	AUD 9.7 billion	AUD 2.9 billion	AUD 15.7-17 billion	AUD 5.7 billion
% of 2008 GDP	0.82%	0.25%	Up to 1.4%	0.48%
Canada	CAD 20.3 billion	CAD 800 million	1.9 billion	CAD 2.8 billion
% of 2008 GDP	1.27%	0.05%	0.12%	0.18%
Finland	EUR 910 million	EUR 25 million <sup>1</sup>	EUR 30 million	EUR 38 million
% of 2008 GDP	0.48%	0.01%	0.02%	0.02%
France	EUR 4.7 billion	EUR 46 million <sup>2</sup>	EUR 731 million	EUR 30 million
% of 2008 GDP	0.24%	0.00%	0.04%	0.00%
Germany <sup>3</sup>	EUR 11.5 billion <sup>4</sup>	EUR 1.4 billion	EUR 14.5 billion <sup>5</sup>	EUR 5.7 billion
% of 2008 GDP	0.5%	0.1%	0.6%	0.2%
Korea	KRW 50 trillion (USD 36 billion) of green investments (5.14% of GDP) distributed over these categories; detailed breakdown not yet available			
Norway	NOK 3.8 billion	NOK 170 million <sup>2</sup>	NOK 270 million	NOK 1.6 billion
% of 2008 GDP	0.16%	0.01%	0.01%	0.06%
<b>Sweden</b>	<b>SEK 11 billion</b>	<b>SEK 9 billion</b>	<b>SEK 500 million</b>	<b>SEK 2 billion</b>
% of 2008 GDP	0.27%	0.29%	0.016%	0.06%
Poland	PLN 91.3 billion	PLN 16.8 billion	n.a.	PLN 2.5 billion
% of 2008 GDP	0.072%	0.013%	n.a.	0.002%
Portugal	EUR 50 million	EUR 224 million	EUR 682 million <sup>6</sup>	EUR 260 million
% of 2008 GDP	0.03%	0.13%	0.41%	0.16%
USA	USD 100 billion	USD 16 billion <sup>7</sup>	USD 83 billion	USD 59 billion
% of 2008 GDP	0.70%	0.11%	0.58%	0.41%

1. Finland has high public R&D support outside of its stimulus package and has pledged to maintain it.
2. The R&D figures for France, Norway and Portugal do not include their R&D tax credit payments carried forward.
3. In Germany, some expenditures remain to be determined at the sub-federal level.
4. This figure contains EUR 0.3 billion additional funding for a programme for modernising insulation of buildings and roughly EUR 0.8 billion for energy-use modernisation of federal buildings.
5. This figure contains EUR 8.6 billion of investments in energy-efficient school and other education-related buildings.
6. In Portugal EUR 500 million for the modernisation of schools is only included in "Education".
7. The US federal government does not have separate R&D budgets as federal funds are distributed to several different agencies and departments. This makes it difficult to estimate R&D investments under the American Recovery and Reinvestment Act. The American Association for the Advancement of Science (AAAS) provides an estimate of USD 21.5 billion of federal R&D funding, i.e. around 2.7% of total public spending in the Act (for details, see [www.aaas.org/spp/rd/stim09c.htm](http://www.aaas.org/spp/rd/stim09c.htm)).

Source: OECD (2009), *Policy Responses to the Economic Crisis: Stimulus Packages, Innovation and Long-term Growth*, DSTI/IND/STP/ICCP(2009)1/ADD/FINAL, 11 May 2009.

markets requires taking precautions to avoid increasing private vehicle use and pollution at the expense of sustainable development objectives. Systematic use of cost-benefit analysis, taking dynamic regional effects into account, and strategic environmental analysis could help better inform and prioritise investment decisions.

In particular, closer collaboration among relevant authorities at all levels would help better understand potential interactions between transport, housing and spatial planning policy (Table 2.8). Currently, transport policy seems to be moving towards more strategic oversight of national infrastructure investment frameworks and more autonomy for regional stakeholders, while housing (traditionally considered a social right in the Swedish welfare model) remains a national policy concern and largely relies on municipal housing companies with little evidence of co-ordination at the regional scale, potentially a sign of lack of regional strategic planning:

- **Transport:** The Ministry of Enterprise, Energy and Communications has only around 50 employees working directly on transport and infrastructure issues, and traffic agencies (e.g. the National Road Administration and the National Rail Administration) play an active role in translating the government's policies into practical action. The government intends to reform the planning process as of 2010 in order to design national and regional infrastructure plans and to give a larger role to regional actors. Within a new planning method introduced in 2008, nine regional system analyses were carried out and regions were asked to establish their own priorities in terms of objectives and modes of transport. Based on these analyses, a national system analysis was carried out to define national priorities. Consultations were carried out to promote open dialogue among traffic agencies, counties and municipalities. Proposals for 2010-21 were presented to the government in autumn 2009. The government will then decide on the measures to be included in the national plan and will approve the financial frameworks for the regional infrastructure plans in the first quarter of 2010. In spring 2009, a government report – which reviewed working methods in the Swedish transport sector as well as climate and environmental issues, demands for the growth of transport systems, congestion in metropolitan areas and regional development, co-operation between different modes of transport – proposed the creation of a new joint traffic agency to develop and manage infrastructure from a holistic perspective. The government's plans to introduce a new agency in 2010<sup>6</sup> could be an interesting step towards more effective integration of infrastructure policies in Sweden.
- **Housing:** The National Board of Housing, Building and Planning (*Boverket*) collaborates with municipalities, which through municipal housing companies rent housing to the general public in their municipality. Rents are set by agreement with local tenants' unions based on historic cost (taking into account the age composition of the housing stock). In light of the regional imbalances between the largest metropolitan areas with housing shortages and regions with decreasing population and housing surpluses, a number of proposals are being discussed. Since 2006, the central government has been

Table 2.8. **Overview of transport policy, housing policy, and spatial planning in Sweden**

	Transport	Housing	Spatial planning/land use
Authority in charge at national level	Ministry of Energy, Enterprise and Communications.  Traffic agencies (e.g. National Road Administration and the National Rail Administration).	National Board of Housing, Building and Planning (Boverket).	No single authority in charge at national level: Ministry of Environment; National Board of Housing, Building and Planning (Boverket); National Land Survey; National Environment Protection Board; Central Office on National Antiquities; Swedish National Road Administration; Swedish National Board for Industrial and Technical Development.
Authority in charge at regional or municipal level	Regional governments in the two pilot regions.  In other counties: municipalities and county councils (with varying degrees of involvement for the latter: e.g. the Stockholm County Council has more responsibilities than others in public transport).	Municipalities (through municipal housing companies) and County Administrative Boards.	Municipalities within a county council may choose to design regional spatial plans, which are not binding. Through special legislation, the regional planning office within the Stockholm County Council has been assigned the task to co-ordinate the preparation of the new regional development plan for Stockholm (RUFs 2010).
Main objective of policy and territorial dimension	"An economically efficient and sustainable provision of transport services for people and businesses throughout the country" (Transport Bill, March 2009).	"The objective of housing policy is long term well-functioning housing markets where the demand of consumers meet a supply of housing that corresponds to the needs of housing consumers" (source: Riksdagen).	"Ensuring that ecological, economic, cultural and social aspects are taken into account in planning." "The focus of planning is increasingly turning to regional development and to sustainable urban development by introducing new planning methods" (source: Boverket website <a href="http://www.boverket.se/Om-Boverket/About-Boverket/">www.boverket.se/Om-Boverket/About-Boverket/</a> ).
Recent reforms and projects	(See Figure 2.16.)	Legislation to allow owner-occupied apartments via new construction, starting from May 2009 (and proposal to allow conversion of existing properties).  Rents for newly constructed dwellings are exempted from the review process (which tied private-sector rents to those set in the public municipal housing companies).  Replacement of national real estate tax by municipal government charge (fixed amount) in 2008.	The ongoing regional reform would give regional bodies/ county councils stronger responsibilities for regional planning, following the model of the two pilot regions.

Table 2.8. **Overview of transport policy, housing policy, and spatial planning in Sweden (cont.)**

	Transport	Housing	Spatial planning/land use
Main challenges	<p>Develop a long-term sustainable transport system that is efficient and climate-friendly.</p> <p>Make cost-effective investments to improve accessibility and regional development.</p> <p>Limited use of public-private partnerships (the Arlanda line is the only project financed by a PPP), instead a move towards co-financing with local and regional municipalities, industry, etc.</p> <p>Support effective cross-border collaboration.</p>	<p>Lack of competition in construction sector: Sweden has the highest level of construction costs among European countries.</p> <p>New construction is distributed fairly equally across regions rather than taking regionally diverging demand into account.</p> <p>Long planning process.</p> <p>Lack of incentives for municipalities to issue new land for construction.</p> <p>Co-ordination of subsidies for student housing with broader policy to solve youth unemployment and promote regional innovation.</p>	<p>In most counties: lack of regional strategic planning to exploit synergies within and among functional areas, in particular urban-rural linkages.</p>

gradually phasing out earlier subsidies to construction and rent regulations and this process is expected to be concluded in 2010. The regional impact of recent reforms in the housing market remains to be seen, especially with the introduction of the municipal government charge in lieu of the real estate tax (resulting in a net reduction of taxation on housing) and the 2005 reform of the municipal tax equalisation scheme to take structural cost differences into account (see Chapter 3 for a more detailed discussion).

- **Regional strategic planning:** In principle, municipalities have a “municipal planning monopoly”, i.e. they have primary responsibility for the use of land and water within their jurisdiction. However, they must comply with the legal framework and policy objectives set by the national government in a series of comprehensive plans. Municipalities within county councils may together design regional spatial plans, but these are not binding. The regional planning office of the Stockholm County Council (RTK) represents a special case since it has been assigned the task to co-ordinate the preparation of a new regional development plan for Stockholm (RUFs 2010), a specific variation of the RUP in the metropolitan region of Stockholm.

### ***Tapping the potential of cross-border collaboration***

Sweden would benefit from further cross-border connections in regions with opportunities for stronger interaction and building of critical mass. The long tradition of Nordic regional co-operation reflected institutionally in the

### Box 2.19. **Spatial planning and networks as a co-ordination mechanism in Austria**

In the federal structure of Austria, responsibilities for regional policy and spatial planning are distributed between the federal government, the *Länder* and municipalities. Since the Austrian Constitution hardly provides for formal co-ordination procedures, the Federal Chancellery has developed informal mechanisms with the notion that co-operation does not happen by itself, at least not to a sufficient degree, and that it needs “people and bodies to manage it, to specifically address potential participants, to bring co-operation partners together, to introduce innovative ideas and to accompany co-operation projects on an advisory basis”.

Upon the initiative of the Federal Chancellery and the *Länder*, the Austrian Conference on Spatial Planning (ÖROK) was set up in 1971 as a common platform of spatial planning co-ordination involving all federal ministries, the *Länder* and the umbrella associations of municipalities and social partners. Today, the ÖROK operates as a central network interface for regional policies and the EU’s Structural Funds programmes in Austria. Both the elaboration and the follow-up process of Austria’s National Strategic Reference Framework take place within the ÖROK.

The executive body at the political level, under the chairmanship of the Federal Chancellor, includes all the federal ministers and state governors, together with the presidents of the Austrian Union of Towns and the Austrian Union of Communities and with the presidents of the social and economic partners participating as advisors. All decisions are made on a consensus basis. A Commission of Deputies as well as several thematic committees and working groups have been set up at the administrative level to accomplish ÖROK’s tasks and projects, which are in general focused on issues of joint interest of the ÖROK partners. They are formed by the Senior Officials of the territorial authorities, and the social and economic partners. One of ÖROK’s principal tasks is to publish the “Austrian Spatial Development Concept” which is revised generally every ten years.

As one result of ÖROK’s work, the “ÖROK Scenario 2030” was presented in 2009 as the result of extensive research conducted by an external team of experts under the direction of the ÖROK working group. It identified trends, challenges and strategic opportunities and developed a series of spatial development scenarios for Austria up to 2030. This work provides a tool to raise awareness of future regional challenges and present needs for action, and is intended to serve as a basis for further work by ÖROK on a new Austrian Spatial Development Concept, as well as for the sectoral and spatial development schemes of the *Länder*, cities and municipalities.

**Box 2.19. Spatial planning and networks  
as a co-ordination mechanism in Austria (cont.)**

At the same time, the Federal Chancellery and the *Länder* have been experimenting with various approaches to project development, consulting and networking at the regional and local levels. In particular since Austria's accession to the EU in 1995, "Regional Management" procedures were established in most regions eligible for EU Structural Funds. The objective is to improve co-operation on the development and implementation of regional strategies. Regional Management is organised in the framework of regional development associations with municipalities as main members, but most of financial resources come from the *Länder* and are co-financed by EU Structural Funds in some cases. Regional Management units operate on a cross-sectoral basis, and co-operate with LEADER action groups and Territorial Employment Pacts for example. A joint umbrella association, "Regional Management Austria" (RM-Austria) was established in 2001 as a network to help exchanges of experiences between the 25 Regional Management units, improve the qualifications of regional managers and further develop the cross-sectoral consulting approach.

creation of the Nordic Council of Ministers in 1971 for example, was reinforced by the accession of Sweden and Finland to the EU in 1995 and important funding from INTERREG programmes. Border committees were set up to further support functional and strategic integration (e.g. Nordkalotträdet, Mittnordenkomiteen, and Tornedalsrådet between Norway, Sweden and Finland; Bothnian Arc, Skärgårdssamarbejdet, and Kvarkenrådet between Sweden and Finland; ARKO, Hedmark-Dalarna, and Østfold-Bohuslän/Dalsland between Sweden and Norway). Two examples among others have offered particular evidence of cross-border integration benefits to be further pursued:

- **Haparanda-Tornio.** The two cities of Haparanda (Sweden) and Tornio (Finland) have an economic profile based on the steel industry and trade. They have developed an extensive set of co-operation projects ranging from culture and education (e.g. a common bilingual language school and a Euro upper secondary school) to numerous agreements for joint public services (e.g. fire and rescue services, common sewage treatment plant). A new city centre "On the Border" was jointly planned and constructed between 1995 and 2005, with extensive collaboration between the road administrations and land survey offices of both countries.
- **Öresund.** The construction of the Öresund bridge between Malmö (Sweden) and Copenhagen (Denmark) was one of the first priority projects funded under the Trans-European Network (TEN-T) programme, and was completed in

2000. The objective was to achieve a more integrated labour market with a greater critical mass and to develop stronger cross-border clusters in knowledge-intensive industries (pharmaceuticals, food processing, software, design and environment technologies, ICT, biotechnology). Although it was hoped that the considerable reduction in journey times would generate significant interaction, such change in the beginning was at first slower than anticipated in terms of car traffic, although commuting (especially by train) has increased significantly during recent years. The latest spur to the development of the Öresund science region is the successful proposal for the European Spallation Source (ESS). This high-energy laboratory will be located in Lund and will provide the most advanced research infrastructure of its kind in the world to European scientists. The ESS project could be used as a means to stimulate deeper research collaboration across the Öresund strait.

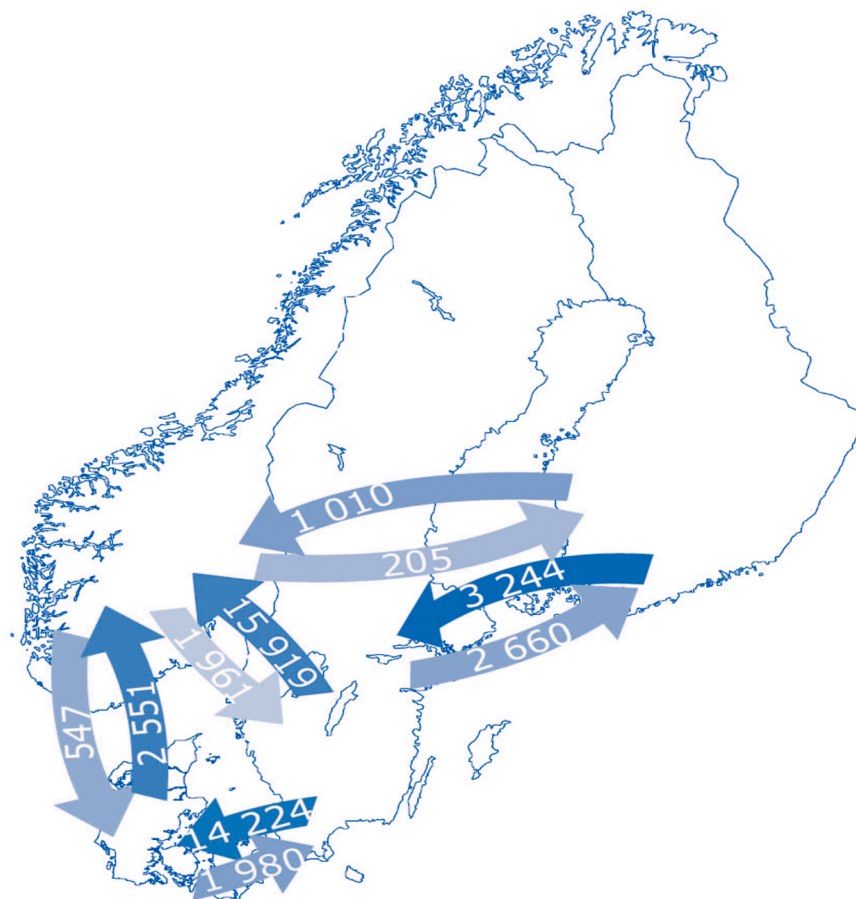
At the same time, there are specific limitations to cross-border interaction and the presence of infrastructure does not automatically change the way people regard a border. Obstacles to cross-border integration are, among other factors, linked with labour market regulations, immigrant regulations, tax regulations as well as currency fluctuations. It is therefore important to temper expectations that transport investments will generate immediate and high-profile regional economic development benefits.

Further potential to enlarge functional regions can arise from co-operative structures in the EU Baltic Sea Region. Since the enlargement of the EU in 2004, the Baltic Sea region encompasses most of the countries bordering the Baltic Sea. The EU strategy for the Baltic Sea region is based on four pillars: environment, economic development, accessibility, and security. The strategy is supported by the European Commission and the European Council and is to a large extent dependent on substantial funding through EU programmes already in place<sup>7</sup> (Table 2.9). In particular, the Nordic Triangle project, a TEN-T priority project, will seek to strengthen links between the Nordic capitals, including Oslo, with Norway financing its own investment programme. The project is also expected to help in increase the connectivity of the EU with Russia, as well as links to Denmark, the Netherlands and Germany through the Öresund connection.

A very innovative Swedish initiative called the “Green Corridors” could play a key role in integrating transport policy and environmental policy with a more coherent sustainable regional development strategy in the long term. At the European level, greener transport policy is now under development in the Freight Action Plan, the ITS Action Plan and the Commission’s Green Paper on TEN-T. Green Corridors are multi-modal trans-national transport corridors to facilitate connectivity between regions and reduce the environmental impact of those interactions. The corridors are characterised by: sustainable logistics



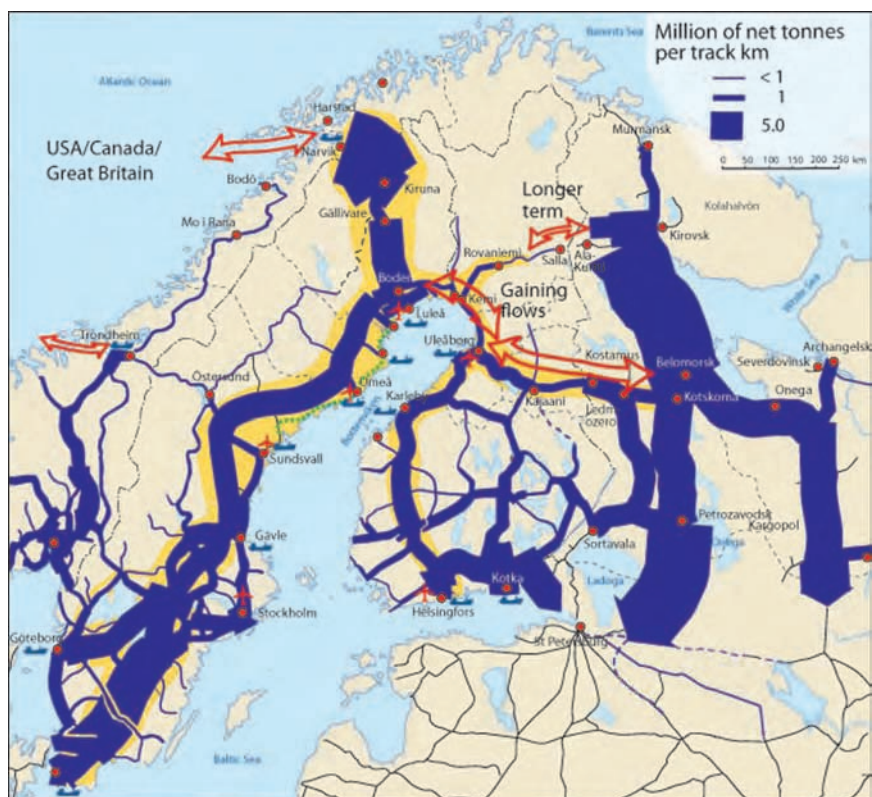
Figure 2.17. **Number of cross-border commuters between Norway, Sweden and Finland, 2006**



Source: Statistics Sweden.

solutions; integrated logistics concepts with utilisation of co-modality; a harmonised system of rules; national/international goods traffic on long transport stretches; effective and strategically placed transshipment points and infrastructure; a platform for development and demonstration of innovative logistics solutions. During the Swedish EU Presidency, Sweden has promoted the demonstration of efficient transport solutions by joining forces to upgrade ongoing transport efforts; to promote the development of Green Corridors in EU transport policy; and to establish international partnerships that can lead to Green Corridors to and from the Nordic region. An example is a Green Corridor linking Göteborg to Zeebrugge through Denmark, Germany and the Netherlands, allowing the transport of containers between the ports without

Figure 2.18. **Freight transport in northern Europe**



Source: ÅF INFRAPLAN, Transport Policy Platform for the Region of Norrbotten 2007.

Table 2.9. **Example of EU funding for the Baltic Sea Region**

Programmed expenditures for 2007-13 under the European Regional Development Fund (ERDF) and the Cohesion Fund for the Convergence and Competitiveness and Employment programmes in the Baltic Sea Region in fields linked to accessibility and attractiveness

Information society	EUR 1.4 billion
Transport, including:	EUR 23.1 billion
– Motorways (TEN-T)	EUR 8.4 billion
– Railways (TEN-T)	EUR 4.7 billion
– National roads	EUR 2.8 billion
– Motorways (non TEN-T)	EUR 2.1 billion
– Other (including regional and local roads, airports, urban transport and ports)	EUR 5.1 billion
Energy	EUR 2.6 billion
TOTAL	EUR 27.1 billion

Source: Baltic Sea Strategy Action Plan, [http://ec.europa.eu/regional\\_policy/sources/docoffic/official/communic/baltic/action2009.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/official/communic/baltic/action2009.pdf).

using road networks. Such projects, and their local and regional nodes, can become significant drivers of regional technological and societal innovation processes and help to create place-specific innovation capacity and contribute to raising the competitiveness of all Swedish regions over the long term.

## Conclusion

Sweden is well-positioned to remain one of the highest income and best performing countries in the OECD area. At the same time, its economy is facing a deeper contraction than during the domestic banking crisis of the early 1990s and unemployment is projected to exceed 11% in 2010 (*OECD Economic Outlook* No. 85, June 2009). It is therefore important to recognise that shrinking fiscal space and scarce public resources will increasingly require the Swedish government to adopt cost-effective policies and to leverage private investment. In a country historically both attached to homogeneity (social consensus regarding equal access to public services) and characterised by a heterogeneous regional reality (one of the highest levels of regional concentration in the OECD area and a wide range of regional specialisation patterns as described in Chapter 1), the overarching policy issue will be how inputs in physical and human capital reinforce each other over the long term in order to achieve maximum levels of outputs in a variety of regional labour markets.

More relevant than assessing whether regional policy is shifting towards growth objectives or whether various sectoral policies are becoming more regionalised, two clear priorities are to maintain a competitive edge in high-end niche industries and to encourage sustainable development. Sweden's pioneering experience and its further progress over the next few years are expected to make a significant contribution to the collective knowledge base for two cross-cutting priorities within the OECD: innovation and green growth. Further efforts to facilitate the commercialisation of research in closer collaboration with regional universities, to foster rural entrepreneurship and to use infrastructure efficiently in building critical mass will be crucial. Ongoing governance reforms could help better exploit the accumulated knowledge of public and private actors at all levels in policy design and implementation (see Chapter 3).

## Notes

1. Evaluations have suggested that the Regional Cluster Programme has been successful in helping firms taking part in the cluster initiatives to widen their markets, develop new products and processes, and build closer relationships with other firms, public bodies and the academia. A majority of firms, especially SMEs, have stressed the importance of network co-operation, seminars and workshops, while larger firms emphasised the importance of joint R&D activities. Cluster

initiatives are heavily dependent on public funding that often has a temporary, short-term and uncertain character. Evaluations have recommended that the Regional Cluster Programme should consider the following issues in the future: increased efforts directed towards regional decision makers and organisations; process support and method development supporting sustainable development; starting general discussions about long-term commitment and funding; prolonging the Regional Cluster Programme to approximately 10 years; and increased marketing of the Regional Cluster Programme to promote cluster initiatives as a tool for regional development.

2. In 2009, the Regional Cluster Programme and the VINNVÄXT programme initiated a pilot initiative for collaboration. The work began with a SWOT analysis to understand their international competitiveness and how they complemented each other. Learning points so far have pointed to the importance of a bottom-up perspective, complementary resources, an engaged leadership in both cluster processes, trust, and the importance of education for renewal.
3. There is a strategic and operational co-operation between the Regional Cluster Programme and the VINNVÄXT programme. For example, weekly common meetings are scheduled. The programme manager of the VINNVÄXT programme is a member of the steering committee of the Regional Cluster Programme. Some common analysis has also been carried out in order to broaden the empirical data.
4. The government has also proposed to regulate responsibilities for immigrants integration within a new single law, which could be considered to come into force on 1st December 2010. Key elements in the proposed reform are the following: the Public Employment Service would take over the responsibility for co-ordinating the introduction of new immigrants on the labour market to ensure the work-first principle; the PES together with the new immigrant shall draw up a customised introduction plan up to 24 months, based on an assessment of the individual's education, work experience and other relevant credentials; a uniform individual public grant would be introduced in order to entitle new immigrants who participate actively in the customised introduction plan to the same amount of financial assistance regardless of where in the country the individual chooses to settle; new service providers will help and guide the new immigrants.
5. It is estimated that there are between 15 000 and 20 000 Sami living in Sweden. Reindeer herding has become their main source of trade. Reindeer herding in Sweden is now divided into 51 Sami communities, from Karesuando in the north to Idre in the south. Each Sami community has an east-west geographical grazing area (50 to 200 km in length) divided into summer, spring, autumn and winter grazing lands. There are about 900 active reindeer herders, and approximately 3 000 people who can exercise special Sami resource rights. It is estimated that there are approximately 300 000 reindeer in Swedish territory.
6. Based on "Planning Infrastructure in Sweden", Ministry of Enterprise, Energy and Communications, [www.ud.se/sb/d/11941/a/125741](http://www.ud.se/sb/d/11941/a/125741).
7. Several important projects are financed by the Trans-European Transport Network (TEN-T) Programme and other Community programmes, such as: the 7th Research Framework Programme; the LIFE programme; the European Territorial Co-operation programmes (under the European Regional Development Fund); the European Neighbourhood and Partnership Instrument Cross-border Co-operation programmes (ENPI CBC); the European Agricultural Fund for Rural Development (EAFRD); the European Fisheries Fund (EFF); and

the Competitiveness and Innovation Programme, as well as national, regional and local policies. The European Investment Bank (EIB) also provides lending or co-financing.

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## Chapter 3

### **Reconsidering Multi-level Governance Arrangements for more Effective Regional Development**

*Whether Sweden can still achieve growth and equity objectives in the future will largely depend on its capacity to set in motion a virtuous circle based on synergies among sectoral policies at the regional scale. This calls for a collaborative process of policy design and implementation involving all levels of government. Sweden's multi level governance system has sometimes been compared to an "hourglass", as it combines a highly decentralised system for the provision of welfare services with a relatively centralised system for strategic planning and regional development. In addition to external and structural constraints, institutional challenges can hamper the effective implementation of regional development policy objectives. This chapter is divided in two sections. The first section assesses the key strengths and challenges of Swedish governance arrangements for achieving its twin objectives of sustained territorial equity and enhanced regional growth. The second section seeks responses to challenges for bridging co ordination gaps across policies at the regional level, further empowering regional actors for regional growth policy and enhancing cost effective local public services.*

## Introduction

The focus of regional policy in Sweden like in many OECD countries has moved from income redistribution, aiding the poorest regions, to regional development, enhancing economic performance and growth prospects in all regions, including the most advanced. This “paradigm shift” in policy objectives remains to be fully translated in policy instruments. However, this does not mean that Sweden has chosen the competitiveness objective to the detriment of equity objectives, which are at the heart of the Swedish social contract. The key challenge for regional development in Sweden is to make the territorial equity objective sustainable in the long term, while enhancing the room of manoeuvre for regional actors to develop growth strategies that build on local competitive advantages, focusing for example on innovation and green growth opportunities. External and structural constraints such as the global crisis and an ageing population make this twin-fold objective challenging.

In addition to external and structural constraints, institutional challenges can hamper the effective implementation of regional development policy objectives. Multi-level governance can be broadly defined as vertical and horizontal governance arrangements across levels of government which encompass private actors and civil society. Sweden’s multi-level governance is sometimes compared to an “hourglass” (McCallion, 2007), as it combines a highly decentralised system for the provision of welfare services with a relatively centralised system for strategic planning and regional development. However, the Swedish “hourglass” system has changed since the late 1990s, in particular with the innovative experience of pilot regions, the introduction of regional co-ordination bodies (*Kommunala samverkansorgan*) and improved co-ordination of regional development at the central government level.

Although gradual changes have taken place over the past decade, the current governance framework for regional development leaves policy co-ordination gaps at the regional (county) level, as well as across levels of government. Improved regional growth strategies require greater devolution of regional development competencies to county councils, enhanced co-ordination among the different types of regional programmes and improved co-ordination of structural policies at the county level (by county administrative boards). Relying on the positive experience from pilot regions; a recent clarification from the national government calls for making the pilot



region model permanent and for allowing a bottom-up approach for county councils in all Swedish counties to receive competencies for regional growth policy. Such reforms need to be accompanied by improved tools of co-ordination across levels of government and renewed approaches to enhance cost-effective approaches to local public service delivery particularly in rural areas. The impact of the crisis and the ageing population make it more critical to develop innovative local public services and diversify sources of local revenues.

This chapter has two sections. The first section assesses the key strengths and challenges of Swedish governance arrangements for achieving its twin objectives of sustained territorial equity and enhanced regional growth. The second section seeks responses to challenges for bridging co-ordination gaps at the regional level, pursuing the regional reforms and enhancing cost-effective local public services.

### 3.1. Swedish governance arrangements for regional development: strengths and challenges

This section identifies the key strengths and challenges of Swedish governance arrangements for regional development. It starts with an analysis of the high degree of decentralisation for welfare services combined with ambitious equalisation (equity dimension). It then discusses the relatively centralised system of policy making for regional development and recent changes to implement the new regional growth policy and to enhance the involvement of local governments in regional development. Finally, it explores remaining gaps in co-ordination at the county level and across levels of government which could have a detrimental effect on the implementation of regional policy.

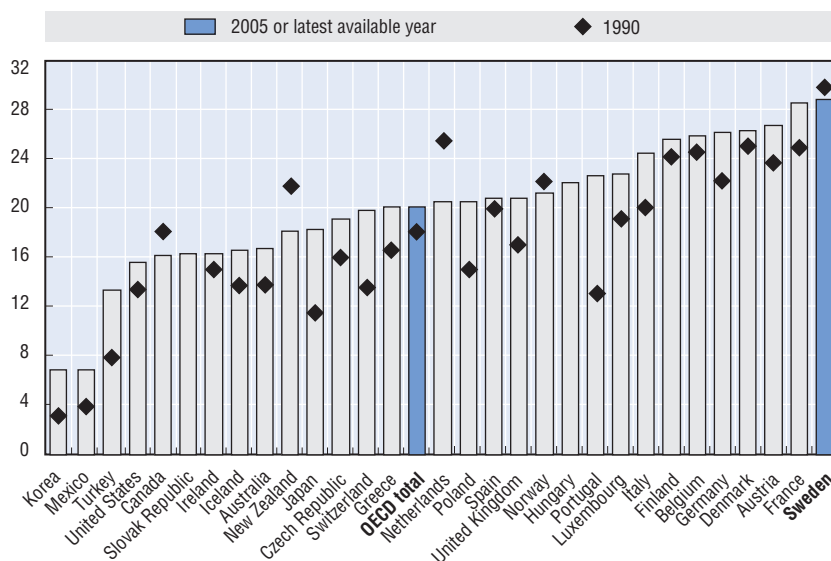
#### ***High degree of decentralisation for welfare services combined with ambitious equalisation***

##### ***Ambitious welfare state, with constant adjustments***

Sweden has experienced sustained growth levels since the crisis of the 1990s up to the recent economic downturn (Chapter 1); and maintained a strong focus on equity objectives through a very ambitious welfare system, largely delivered by local governments. Sweden has the highest level of public social expenditures (as a share of GDP) in the OECD area (Figure 3.1). Territorial solidarity is a cornerstone of the Swedish social contract, which enjoys a broad national consensus. Sweden shares many characteristics of its social model with its Nordic neighbours. The model is based on comprehensive social benefits and publicly provided social services, as well as large investments in education and research and development (R&D) which are financed by taxes.

Figure 3.1. **Public social expenditures in Sweden (2005)**

As a percentage of GDP



Source: OECD, Factbook 2009.

Sweden has one of the highest tax levels among OECD countries. Labour market policies provide relatively low employment protection and high unemployment protection, coupled with high income-support benefits. Equity objectives complement efficiency and growth objectives in a virtuous circle (Box 3.1). Financing the ambitious welfare state is increasingly challenging, however, in a context of ageing population and rising health and elderly care costs, to which is added the impact of the crisis.

The percentage of people over 65 year old in Sweden is among the highest in OECD countries (18% as opposed to 14.6% for the OECD as a whole in 2009), although prospects for the next decades are relatively better than in some other OECD countries: 23.7% of Sweden's population will be over 65 in 2050 (compared to an OECD average of 25.7%). Thanks to the pension reform of the late 1990s, Sweden is better prepared for ageing than most OECD countries. However, the challenges of ageing are also linked to the rising costs of health care and, most importantly, elderly care (the largest single component of municipal expenditures). Over 70% of the services provided by municipalities depend on the size and age structure of the population. Elderly care and care of the disabled are important tasks of municipalities and account for almost 30% of local governments' budgets (SALAR, 2009).<sup>1</sup> In 20 years, the work of 50% of the local labour force may be the care of the elderly in northern municipalities.

### Box 3.1. **Complementary efficiency and equity objectives**

Policies aimed at equity may appear to work against policies aimed at efficiency. In practice, however, various elements indicate the need to reconsider this trade-off:

*Increasing returns of adoption* (positive externalities associated with growing number of users) are a characteristic of knowledge economies. Network technologies are a case in point. It is also true for education since the larger the number of diploma holders (wherever they study), the better the national ability to adopt new knowledge and innovate. It may also be true for health: the greater the number of people receiving treatment the better it may be for the whole population. Thus public spending on equity can create efficiency.

*Decreasing returns of investment* means that excessive concentration of public spending will encounter limits to the capacity to produce additional results. In the case of US health policy, 15% of GDP is concentrated on 60% of people. An additional dollar spent on the same people will not improve the policy results. Once the 60% are treated the impact on the other 40% is limited, and average life expectancy is relatively poor. In France's higher education, a large amount of public spending goes to the grandes écoles, which have very few students, and relatively little to universities, which have very many; consequently, average results are bad. Again, more equity in public spending can create efficiency, whereas efficiency for only some groups will not lead to the efficiency of the whole nation.

A *dynamic perspective* means that the efficiency/competitiveness of some regional economies at time "t" might create wealth that could be redistributed at time "t+n". Thus, efficiency in public spending (either by limiting the cost of public policy, for the same results, or by improving its outcomes) could create an opportunity (resources) for equity. Greater efficiency (in terms of job creation, etc.) can also affect demand for public services (education, health, etc.) and thus the implementation of equity programmes. Some may also consider that the dynamic perspective supports the idea that certain equity conditions must be met if a place is to become competitive. In that sense equity at time "t" conditions efficiency at time "t+n".

Source: Various sources, including OECD (2009a).

The global crisis also raises new challenges, as local governments are faced with reduced tax revenues and increased social expenditures. Although Sweden entered the crisis with a fiscal surplus and strong financial results and with greater room to manoeuvre than many OECD countries, the budget situation has deteriorated as a result of the crisis. Output is projected to fall sharply in 2009 before recovering gradually in 2010, with an unemployment

rate exceeding 11% (Chapters 1 and 2). In the short term, local governments are the most directly affected, with a combined decrease in tax revenues (in fixed prices) and an increase of recipients of social benefits (owing to the increase in unemployment).

To address these long-term challenges, Sweden has strengths which are linked to its national policy-making “culture”. In particular, Sweden ranks among the highest in terms of trust in government, transparency and consensus building. The high level of citizens’ and private actors’ trust in their government is remarkable. Trust in government, although a rather “qualitative” category not easy to measure, is a key criterion when it comes to effective policy implementation and capacity to undertake reforms. Trust is highly correlated with the degree of transparency in policy making. Sweden ranks second out of 133 countries on the transparency index in the 2009-10 *Global Competitiveness Report*. It is also in second place for the overall quality of its public institutions. In many respects, culture and values in the public administration matter as much as institutions and processes. The values of transparency, dialogue, and consensus building, which are shared across the Swedish public administration, are crucial for the effectiveness of public policies and their acceptance by citizens.

Sweden has shown in past decades a strong capacity to adjust its welfare state system and it has been at the forefront of developments in public management and macroeconomic policy. Following the banking crisis of the early 1990s, Sweden carried out a series of reforms (pensions, reforms in the health and education sectors, reorganisation of agencies) to improve the sustainability of the welfare state model and the efficiency of public services. The crisis also led to a series of major operations to streamline the national government, especially the agencies. They were prompted by the need to make deep cuts in public expenditures and public employment. Sweden also developed a strong focus on performance monitoring as well as multi-annual budgeting. During this period, organisational policy, including for support services, was in a state of permanent flux (OECD, 2009). Only in the last few years does certain stability seem to have been achieved, although changes are still taking place, notably in the area of regional development, as will be seen below.

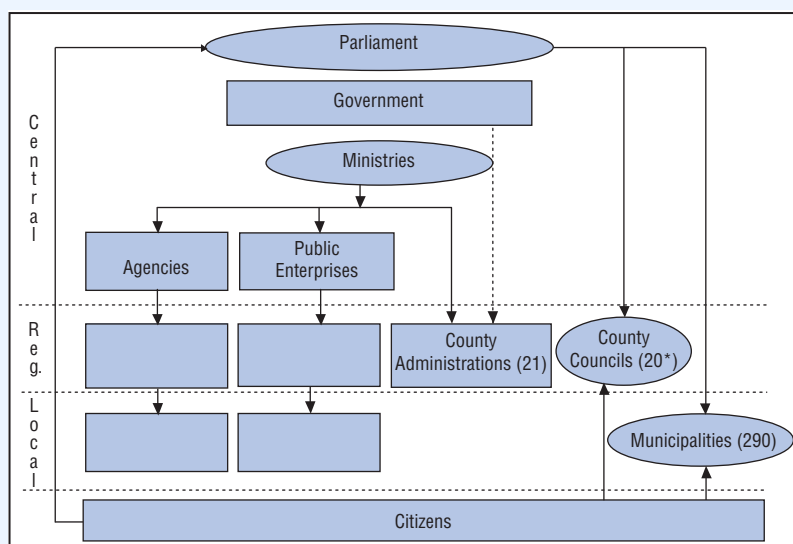
Sweden’s efforts to introduce most changes gradually can be characterised as “agile government”. It is widely accepted that reforms take time and require in-depth consultation and study to achieve consensus (OECD, 2009d). One explanation why reforms have been sustained and successful in spite of their incremental character may be that they are in harmony with Swedish values and perceptions (Rexed, 2000). Once a step has been taken and proven to be successful, it quickly becomes an established part of the administrative culture and structure. However, reforms also run the risk of disturbing established networks and thus require clear roadmaps and

objectives; these are sometimes lacking, as in the case of regional reforms. This will be examined in greater depth in the following sections.

### Box 3.2. The Swedish government system

In Sweden, there is the long tradition of separating policy making from policy execution. The national government concentrates strategic functions while agencies focus on policy execution and monitoring. The Swedish administrative model is characterised by a high degree of delegation of responsibilities to the agencies. The government defines the agencies' tasks, sets their goals, appropriates funds and stipulates feedback requirements. The national government is composed of twelve ministries. These offices and ministries collectively form the Chancery, which employs a total of about 4 500 staff. The ministries direct over 400 largely autonomous or semi-independent agencies, which in turn employ about 250 000 civil servants. There are annual appropriations with performance directions for each agency. Government agencies have considerable autonomy: an OECD study in 1998 concluded that managers in Sweden enjoy probably the highest degree of flexibility in managing their organisations among OECD countries.

#### The Swedish government system



\* There are actually only 20 county councils even though Sweden have 21 counties. The reason for this mismatch is that the island of Gotland is a county, but only consists of one municipality. Therefore, The Gotland Municipality is also a county council.

Source: Based on information from Local Team (2008-09).

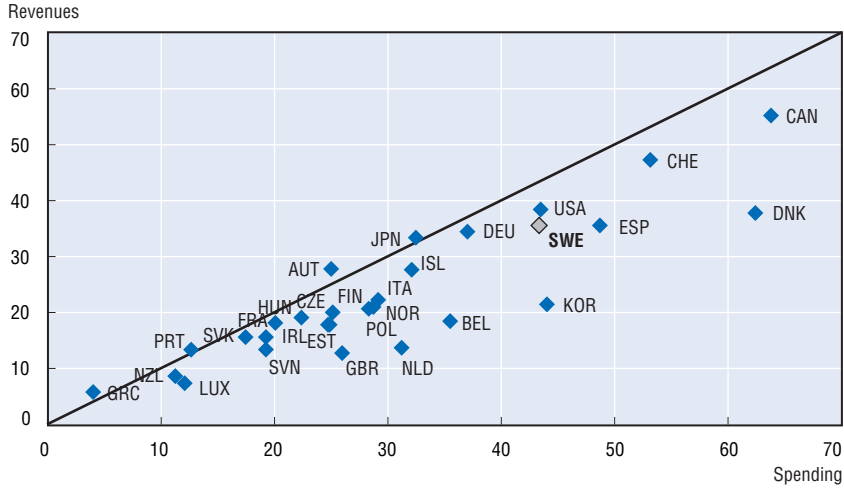
### *Decentralised welfare and extensive fiscal autonomy at the local level*

Responsibilities for welfare are almost entirely decentralised to county councils and municipalities. The responsibility for public welfare services means that Sweden has a large local public sector, relative to both the total public sector and the total economy. In 2008 local government accounted for 23% of GDP in terms of expenditure and 25% in terms of employment (1 million people).<sup>2</sup> The Swedish local public sector is similar in size to that of Denmark, but larger than Norway's. Sub-national expenditures in Sweden amount to close to 45% of total governmental expenditures (Figure 3.2); this is one of the highest figures among OECD countries. Only Canada, Denmark, Spain and the United States have a higher degree of sub-national expenditures, three of which are federal countries.

- **Sweden's 290 municipalities** (*kommuner*) have many far-reaching responsibilities for basic and secondary education, kindergarten, elderly care, social services, communications, environmental protection, fire department, public libraries, water and sewage, waste management, civil defence, public housing<sup>3</sup> and physical infrastructure. On a voluntary basis municipalities may also provide or subsidise leisure activities, sports and culture, technical assistance, energy supply, and promote tourism. To a certain extent they may promote and subsidise business development. Public transport is a joint responsibility of the municipalities and the counties.
- **The 20 county councils** (*landsting*) are run by directly elected assemblies and are mostly responsible for health services (80% of a county council's budget is spent on health care). They may also engage in promoting culture, education and tourism. The responsibility for regional and local public transport is shared by the municipalities and the county councils (but accounts for less than 6% of county councils' budgets).

Swedish local governments have extensive financial autonomy compared to most OECD countries. Taxation is the major source of financing and accounts for close to 75% of revenues, one of the highest shares in OECD countries (Figure 3.4). Both municipalities and counties have a constitutional right to levy taxes in order to finance their activities. Local governments cannot define their tax base on their own, but they have the right to set their tax rates. The local tax is a flat tax on residents' income. The tax is assessed on all earned income, including income from employment, pensions and parental allowances. Sweden used to have the highest tax-to-GDP ratio in the OECD, but it is now starting to edge down the list (OECD, 2008a). About 80% of taxpayers only pay income tax at the local level, as the national government's income tax is only applied to above middle-class income levels. In 2005 the average tax rate was 31.6% for municipal and county governments combined, among the highest in the OECD area. Although Swedish local governments

Figure 3.2. **Share of sub-national government in general government revenues and expenditure 2006**

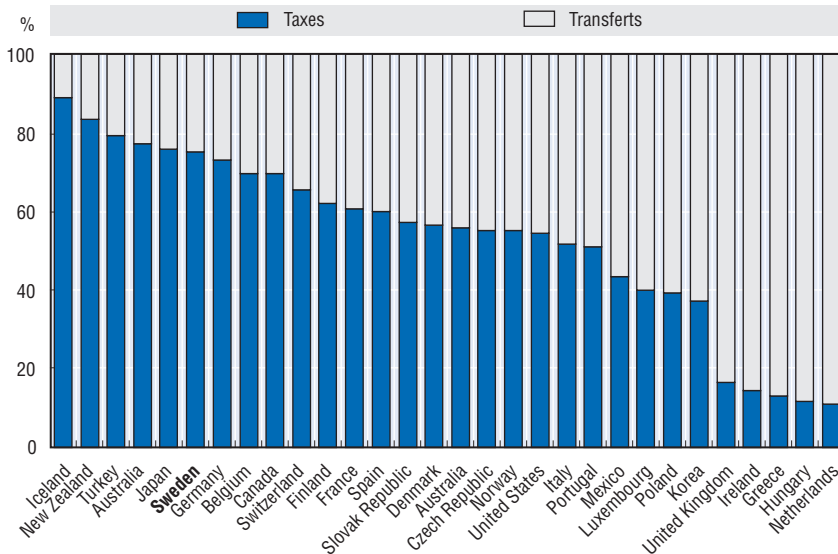


Note: Or latest available year: 2005 for Korea, New Zealand and Poland.

The share of sub-national revenues is expressed as a percentage of total government mainland revenues.

Source: OECD, National Accounts Database (2008).

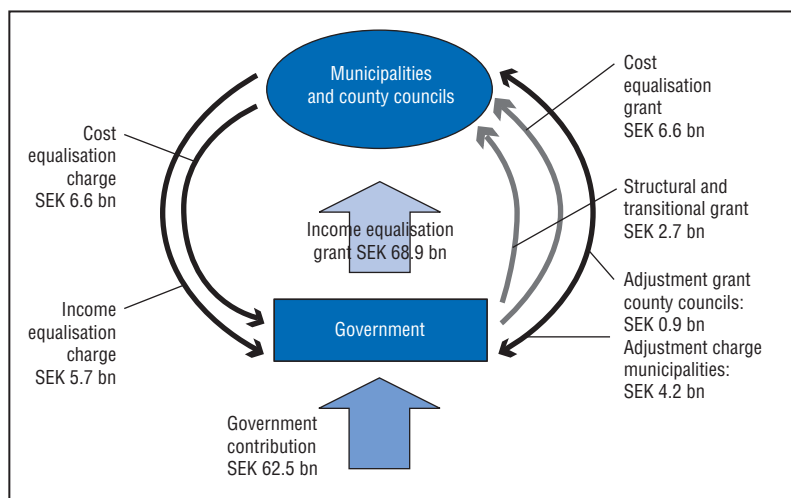
Figure 3.3. **Composition of sub-national government revenue in OECD countries, 2006**



Source: OECD, National Accounts, Revenue Statistics, IMF, Government Financial Statistics, national sources, Fiscal Network Database.

Figure 3.4. **Local government financial equalisation (since the 2005 reform)**

Calculations for 2008, SEK billions



Source: SALAR and Ministry of Finance, Local government Financial equalisation; copyright: SALAR and Ministry of Finance (2008).

have extensive financial autonomy to deliver welfare services, these are social services which are delivered on the basis of nationally set standards and regulations; which limit the margin of manoeuvre of local governments.

Local taxes are supplemented by grants from the national government, which make up about 25% of total revenues, a much lower figure than in most OECD countries. In the past decade, the focus has been more on general grants than on earmarked grants (Hermansson, 2009; Box 3.3). Sub-national authorities receive three types of grants: an equalisation grant for municipalities and county councils, a grant for pharmaceutical benefits for county councils, and several targeted grants to municipalities. The equalisation policy is further analysed in the following section. In addition to these three types of grants, sub-national authorities also receive a VAT refund from the national government (DEXIA, 2009). Other revenue comes mainly from fees charged for services provided, such as child, elderly and health care. Charges are set freely by the municipality/county council but should not exceed the actual cost of the service provided (DEXIA, 2009).<sup>4</sup> They are more important for municipalities (10% of their revenue in 2005) than for counties (6%).

### ***Territorial equity through equalisation***

Swedish decentralisation system combines a high degree of fiscal autonomy with an ambitious equalisation system that virtually eliminates all



### Box 3.3. General grants vs. earmarked grants in Sweden

Following a reform of the intergovernmental grant system in the early 1990s, conditional grants declined in financial significance.<sup>1</sup> Between 2003 and 2007 grants increased by SEK 32 billion (+34%), mainly owing to an increase in general grants following the new local government equalisation system set in place in 2005 (see below) which has heavily influenced the policy mix between specific and general grants. Some grants for specific purposes were abolished and used instead to finance the new equalisation grant (Hermansson, 2009). In 2003 general grants accounted for 7% of local government income. By 2007 the proportion had grown to 10%, compared to 8% for conditional grants.<sup>2</sup> However, it should be noted that if minimum standards of certain types of public services are mandated, as is in the case of health care, education and welfare programmes, the dividing line between general grants and earmarked grants becomes quite blurred (Kim, 2009) (see notes 1 and 2).

1. In monetary terms, 75 % of the specific grants were allocated within the areas of education, social services and health care (in 2006). These areas form the nucleus of local governments.
2. In 2008 the general grant for municipalities was reduced by SEK 12 billion in order to neutralise the financial impact of a real estate tax reform, which allowed municipalities to raise fees on real estate in place of the previous state tax on real estate. This induced a decline in the total sum of transfers to local governments

Source: (2000-08) Swedish Ministry of Finance.

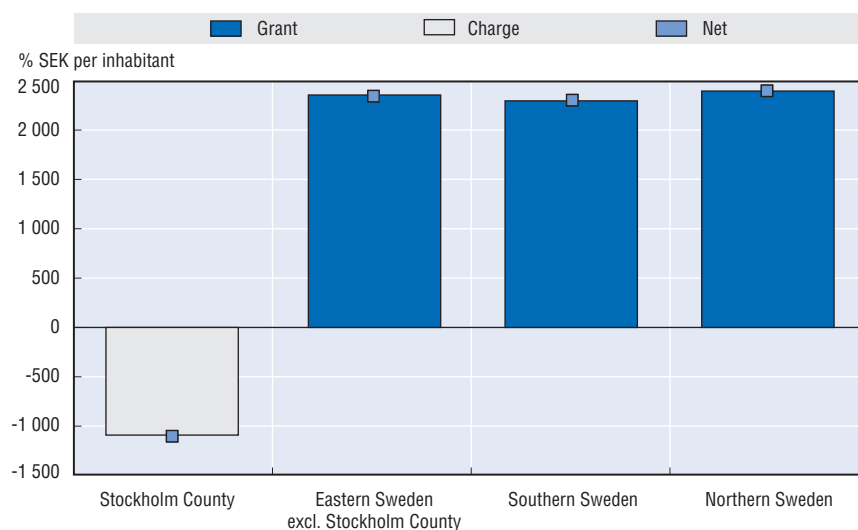
revenue disparities among municipalities and counties. It redistributes revenue from wealthier to poor municipalities. The goal of the current equalisation system is to put all county councils and municipalities on a similar financial footing in order to deliver equal levels of services to inhabitants regardless of the locality's tax base or structural conditions. Equal access to public services throughout the territory is at the heart of the Swedish social contract and is expressed both in legislation – *The Government Act and the Social Services Act* – and in the establishment in 1998 of a national standard for services such as public assistance.

Sweden's fiscal equalisation system changed in 2005 from a horizontal transfer system to a predominantly vertical transfer system. Prior to the 2005 reform, the equalisation grant and the general grant were separate, but after the reform, the two grants have been fused. The Swedish equalisation system can be characterised as having full cost equalisation and almost full income equalisation (Annex 3.A1). Income equalisation represents the largest part of the equalisation system and is mainly financed by the national government (vertical equalisation model; 90% of resources). Cost equalisation has a horizontal base: municipalities with a calculated structural per capita cost above the national average receive a grant, while those with costs below the national average pay a fee to the national government. The central government is the

main responsible for setting and updating the set of criteria and the weights of the different factors, going in the cost equalisation formula.<sup>5</sup>

The conversion of the Swedish grant regime from horizontal to mainly vertical transfers in 2005 substantially decreased the number of municipalities facing equalisation charges and slightly reduced the rate at which additional local fiscal resources are taxed away. In 2009, only 11 municipalities (most of them suburban municipalities in greater Stockholm) and one county council<sup>6</sup> (Stockholm County) faced an equalisation charge under the income equalisation programme, compared to 54 municipalities before the reform. On a per capita basis, sparsely populated municipalities receive the largest income equalisation grants. As in other OECD countries (except the Netherlands), the smallest grants go to large cities and to suburban municipalities of Stockholm. The national government funds distributed in the scheme are themselves taxed out of local areas, so the system retains large regional redistribution effects.

Figure 3.5. **Outcome of income equalisation for county councils in 2008**  
SEK/inhabitant per part of the country group, weighted average



Source: SALAR and Ministry of Finance, Local government Financial equalisation; copyright: SALAR and Ministry of Finance (2008).

The Swedish equalisation system is considered efficient in terms of reducing disparities. Structural conditions vary greatly among localities and parts of the country. Sparsely populated and rural localities of northern Sweden have much higher costs of service delivery than localities in southern Sweden due to long distances and geographical constraints. Without equalisation, sparsely populated localities would have difficulty providing

basic services such as elderly care unless they imposed a very high municipal tax (SALAR, 2008).<sup>7</sup> The equalisation policy, combined with the transfer mechanisms in terms of social security and universal health care, has helped Sweden contain income and territorial disparities, and plays a role in the fact that Sweden has lower regional disparities than most OECD countries (Chapter 1). The relatively equal regional income distribution implies that the cost of moving to a almost complete equality in municipal fiscal conditions is low. In 2004, equalisation expenditures in Sweden totalled 2.61% of GDP. This was slightly above the OECD average of 2.26%, and below the expenditures for other OECD countries such as Japan (4.04% of GDP), Finland (3.79%), Austria (3.77%), and Denmark (2.81%) (Bloechliger and Charbit, 2008).

### *Challenges for local finances*

**i) Strong impact of the crisis on pro-cyclical income source of local governments.** A first challenge is linked to the fact that access to a single local tax, namely the income tax, increases local governments' exposure to economic cycles, as is evident in the current global downturn. The income tax is a pro-cyclical source of income. Sub-central personal income taxes are more prone to the downturn than indirect taxes. This makes Swedish local governments more exposed to a decrease of tax revenues than many OECD countries. The municipalities use accrual accounting thereby the slow growth in tax base is already affecting municipalities. The effect on sub-national finances in 2010 and 2011 could be significant, especially for counties – as municipalities with surpluses in recent years are better placed to meet the challenges of the crisis.<sup>8</sup> So far, SALAR estimates that there will be a decrease of the tax base for sub-national governments (in constant prices) by 1% both in 2009 and in 2010 (SALAR, 2009).

Swedish local governments have a limited margin of manoeuvre to deal with the crisis as the Local Government Act states that municipalities and county councils are to have balanced budgets.<sup>9</sup> Sub-national governments have limited fiscal options for dealing with the crisis: either balance their budgets by reducing expenses (cutting jobs and investments) or increasing revenues (raising taxes), or they try to implement counter-cyclical policies, thereby exposing themselves to a higher debt burden. The room for significant increases in tax rates seems limited, given the already high rates of taxation in Sweden. This makes it all the more important for municipalities and county councils to intensify their efforts to improve efficiency, rationalise their services (SALAR, 2009), but also to better exploit local assets to enhance regional growth.

Sweden has adopted several measures to attenuate the impact of the crisis for sub-national governments, like many other OECD countries (Box 3.4). The government presented these proposals in the 2009 Spring Fiscal Policy Bill and the 2010 Budget Bill. The support is expected to enable local authorities to

secure the provision of fundamental welfare services when their financial situation is deteriorating as well as prevent pro-cyclical local policy which could deepen the general economic downturn.

- In the 2009 Spring Fiscal Policy Bill, the government proposed to give a temporary grant of SEK 7 billion to local authorities (municipalities and county councils) in 2009. These funds are intended to be delivered in December 2009 and used in 2010. The government expects the temporary cyclical support of SEK 7 billion in 2009 to prevent over 9 000 local public employees from losing their jobs (SALAR, 2009).
- In the 2010 Budget Bill, the government proposed a temporary increase in central government grants to local governments of SEK 10 billion for 2010 in order to moderate the fall in local employment and mitigate the effects of the economic crisis.
- For 2011 and 2012 the government proposes that local authorities receive an additional government grant of SEK 5 billion each year compared to the level of central government grants in 2009.

#### **Box 3.4. Examples of measures to support OECD sub-national governments in facing the crisis**

Like Sweden, most OECD countries have introduced discretionary, transitory measures to help sub-national governments. These include a wide variety of instruments, ranging from general purpose and earmarked grants to incentive mechanisms and regulatory measures, among others. In a context of falling tax revenues, an exceptional increase in general purpose grants can be used to stabilise sub-national revenues. Yet, from the information available, this instrument is not yet widely used.

Increases in grants in OECD countries consist mainly of earmarked grants, and these are distributed quite evenly between current and capital expenditures (OECD, 2009). Earmarked grant increases are mainly used to finance capital expenditures, although some countries also use them to finance current expenditures. Increasing earmarked grants to sub-national governments for capital investment is the most direct and frequently used way to support public investment.

Spain for instance created a “State Fund for Local Governments”, which will distribute EUR 8 billion (or 0.7% of GDP) to local councils (on the basis of population) to finance investment for urban planning projects, to be completed in the first quarter of 2010. Eligible projects must be within local councils’ remit, and be completely new (i.e. not included in the council’s 2009 budget) and must have a budget of less than EUR 5 million.

### Box 3.4. **Examples of measures to support OECD sub-national governments in facing the crisis** (cont.)

Finland is thinking about giving general purpose grants to help sub-national governments' finances, on the condition that they commit to a long-term strategy of moderation of general cost increases, and in particular, restraint of wage increases.

Other actions mainly concern revenue measures such as accelerating the roll-out of already agreed projects or facilitating borrowing. Accelerating the implementation of already decided projects allows swift reaction to the crisis, as the studies and procedures necessary to create new investment projects have already been undertaken. Many countries (Canada, France, Spain, etc.) have simplified procedures for approving and disbursing funds in order to speed project start-up and have provided liquidity to the private sector. Some national governments also help sub-national governments by facilitating their borrowing. This can be achieved either by providing loans (sometimes subsidised) or by explicitly guaranteeing sub-national loans.

Another measure taken by some national governments is to reallocate taxes, for instance by increasing the share of taxes that goes to sub-national governments. This is the case in Finland, where the corporate tax apportionments to local authorities will be temporarily increased by ten percentage points from 22% to 32% for 2009-11. Finally, national governments can increase sub-national governments' room for manoeuvre by temporarily waiving budget balance rules and allowing borrowing to finance operating expenses (in exchange for accelerating payments to businesses and suppliers). In Spain, a new law allows municipalities to borrow to finance their 2008 operating deficit, including payments due to suppliers. Local authorities then have one month to settle their outstanding debts with suppliers.

*Source: OECD (2009), Sub-national dimension and policy responses to the Crisis.*

Sweden is confronted to the challenge of maintaining a double dividend effect of public expenditures measures adopted to respond to the crisis, like other OECD countries. Sweden has to focus on short term expenditures to support employment (which includes local public employment in Sweden which gathers 25% of total employment). At the same time, it needs to keep a long term focus on productive investments – which can have positive effects on long-term growth. Sweden is the only OECD country in which increases in general purpose grants to support sub-national governments in the crisis are larger than increases in earmarked grants. There is a risk that the focus will be mainly on short-term

expenditures to allow municipalities and county councils to finance operating expenditures rather than capital expenditures. Greater use of earmarked grants, as in most OECD countries, could help focus on public investment (Box 3.6). The crisis raises additional questions for Swedish local finances, such as the need for sunset clauses for temporary grants or the need to revise the balanced budget rule. In the 2010 Budget Bill the government announced that the issue of increased stability for local government revenue over the business cycle will be examined.

**ii) Little diversification of the tax base and impact on business development.**

A second challenge for local finances is linked to the fact that local authorities can be reluctant to develop regional infrastructure, as there is neither a local business tax nor a local property tax in Sweden. Contrary to many OECD countries, the real estate tax is levied by the national government – and was recently reformed.<sup>10</sup> Sweden's lack of a municipal real estate tax is unusual. Such a tax could strengthen incentives to parcel out land sites, even if the tax base is integrated to some extent with the equalisation scheme (OECD, 2002). In addition, the lack of a balanced tax base risks weakening incentives to attract businesses and to invest in infrastructure. The local tax system may also have a detrimental effect on the equity-competitiveness trade-off. For example, in Stockholm some local leaders asked for the destruction of the Bromma airport in order to build an apartment complex of 6 000 units (OECD, 2006a).

**iii) Equalisation versus active development policies.** A third local finance challenge is linked to the impact of equalisation policy on regional development, which is twofold. On the one hand, equalisation contributes to equity, through more balanced territorial distribution of public services, in particular health and education, which are crucial components of regional growth. On the other hand, they may create disincentives to economic development (OECD, 2008; Wurzel, 2003). Because municipalities are fiscally compensated for slow growth or for a decline in their fiscal capacity, poorer localities may have less incentive to increase the tax base through economic development initiatives. The same may happen in rich localities: as sub-national governments are fiscally “punished” for having a high tax base, they may be disinclined to engage in activities that lead to an increase in the tax base. The new view on regional development in Sweden, like in all OECD countries which have adopted the same “paradigm shift”, requires equalisation policy be complemented by active regional policies aimed at productivity increases in sectors such as research and education, as equalisation policy will always remain a passive fiscal policy, with no explicit growth strategy behind it (OECD, 2008).

Stockholm's region (Sweden's most dynamic economic area) is the main contributor to equalisation. Due to the potential disincentive effect of equalisation, there is a risk that it will affect the agglomeration's competitiveness in the longer term (OECD, 2006a). So far, the equalisation system does not seem to have had a demonstrably negative aggregate effect on the competitiveness of Stockholm region,<sup>11</sup> which has remained a magnet for youth migration and the fastest growing region in Sweden, and among the fastest in the OECD (Chapter 1). Additionally, the introduction in 2008 of wage levels as a cost factor of the equalisation system has mitigated the extent of interregional transfers from Stockholm to the rest of the country (Chernick, 2009). Overall, fiscal disincentives seem to have been overcome in the 2000s by the general advantages of economic growth and agglomeration economies.<sup>12</sup> Although the disincentive effect seems to have been limited so far in the Stockholm region, the inherent disincentives relating to economic growth will be more strongly felt in an economic slowdown and as the cost of public services rises.

In the longer term, the continuing commitment to a high degree of equalisation combined with a trend towards centralised financing of equalisation implies a strong claim on national fiscal resources, which may become more difficult to sustain when facing challenges with a strong territorial dimension, such as ageing and integration of immigrants:

- Because the ageing of the population is uneven across municipalities and regions, this will have consequences for the equalisation system.<sup>13</sup> Rising costs for elderly care will mostly affect sparsely populated areas in the north of the country. There will be a negative effect on the tax base because the share of the population that is employed will be reduced. As young people tend to migrate from northern Sweden towards the largest cities in the south, direct age-related charges are likely to be less severe in the counties of Stockholm and Uppsala (Chapter 1). Yet, to the extent that demographic developments put further pressure on the equalisation system, they will also put pressure on finances in Stockholm because of a greater equalisation contribution. The effects of income and cost equalisation imply that a larger share of grants will be channelled towards municipalities and county councils in northern and central Sweden at the expense of municipalities and counties in other parts of the country.
- Another key trend with a spatial dimension is linked to the rise in immigration since 2000, as immigrants mostly settle in metropolitan areas such as Stockholm, Göteborg, and Malmö (Chapter 1). Challenges relating to the integration of immigrants in the labour market are important, as rates of unemployment are double those of native born Swedes (OECD, 2006a) and have fiscal implications for municipalities in terms of financing unemployment protection. Given the importance of immigration as a

source of population growth and a counterbalance to the ageing of the Swedish population, it is critically important that immigrants be better integrated into the Swedish economy (Chapter 2) and that the equalisation formula takes into account the need to better integrate immigrants in the Swedish labour market.

The national government has set up a Committee to review the equalisation system in 2007 to find out if there are any growth deterring factors in the system (Box 3.5). The Committee is to make concrete proposals to deal with these challenges by the end of 2011.<sup>14</sup>

### **Box 3.5. Parliamentary committee to review the equalisation system (2007-11)**

In the spring budget bill of 2007 the government announced that they were going to set up a committee in order to review the system. The government established a special parliamentary committee composed of 11 politicians and 11 experts from the Ministry of Finance (4); the Ministry of Enterprise, Energy and Communications (1); the Ministry of Health and Social Affairs (1); the Ministry of Education (1); SALAR (2); Statistics Sweden (1); the Swedish Agency for Public Management (1).

The committee will focus on alternative methods of income equalisation. It will also determine if any factors in the current system limit economic growth in municipalities, and will identify new incentives for growth to be included in the system. In addition, the committee will also focus on how to:

- simplify cost equalisation and increase stability;
- handle tax transfers between counties and municipalities;
- evaluate the changes made in 2008;
- determine if the structural grant should be changed or be phased out
- how citizens living in Sweden and working abroad affect the system
- include some earmarked grants in the general grant
- investigate the impact of the local real estate tax
- handle mergers between municipalities/county councils,
- handle changes in the system due to other reforms within the sector
- handle transitional grants due to the changes made in the system.

The final report is due to be presented 30 April 2011. No reports will be presented before that date.

Source: Local Team (2009).



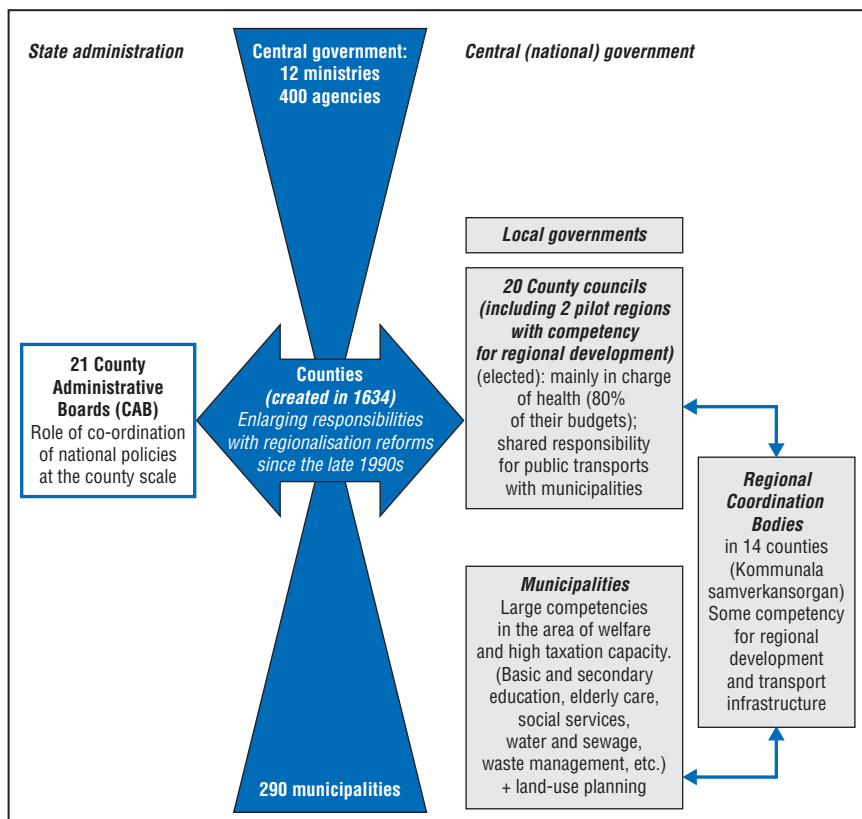
## **A relatively centralised system for regional development**

### **County councils little involved in regional development**

Although Sweden is one of the most decentralised OECD countries in terms of public expenditures for welfare services, it remains relatively centralised for strategic planning and regional development. The Swedish model has often been characterised as an “hourglass” (Popescu, 2006; MacMillan, (2007), in which the national government and the municipal level hold the majority of powers, while the intermediary/regional level is relatively weak (Figure 3.6). The Swedish hourglass has been changing since the late 1990s with the pilot regions and the regional co-ordination bodies (Chapter 2 and below), as well as the new policy instruments (such as regional development programmes). However, the key characteristics of the hourglass remain valid for Sweden, as the overall budget for regional development in county councils (and regional co-operation bodies) is limited; and regional development programmes remain broad strategies and lack enforcement capacity.

The intermediate/regional level of county councils is weak in terms of decision making for spatial planning/regional development and mainly focuses on health care issues. The Swedish Constitution only mentions 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. The 20 county councils are primarily responsible for a large part of Sweden’s health care. Over 81% of a county’s budget is spent on health care in order to implement nationally set standards (2007 data, Figure 3.4). If pharmaceuticals are included, 90% of the budget is spent in the health-related area. County councils share responsibility for public transport with municipalities, but only 5% of the budget is spent on public transport. County councils receive very little earmarked state transfers and can raise their own taxes. Health standards are quite strict, and county councils have little freedom to decide on the level and type of services they provide and on how they spend their budget.

Overall, county councils are little involved in regional development, economic development or spatial planning. Regional development represents only 3% of counties’ expenditures and has traditionally been the responsibility of the county administrative board (*länsstyrelse*), which are state agencies at the county level. However, in two-thirds of Swedish counties, various solutions have been found for transferring this responsibility from national to regional authorities. These include two “pilot regions” and regional co-ordination bodies (*Kommunala samverkansorgan*) in 14 counties. Sweden is thus rather heterogeneous in terms of regional development competencies. Regionalisation reforms are discussed in the following paragraphs.

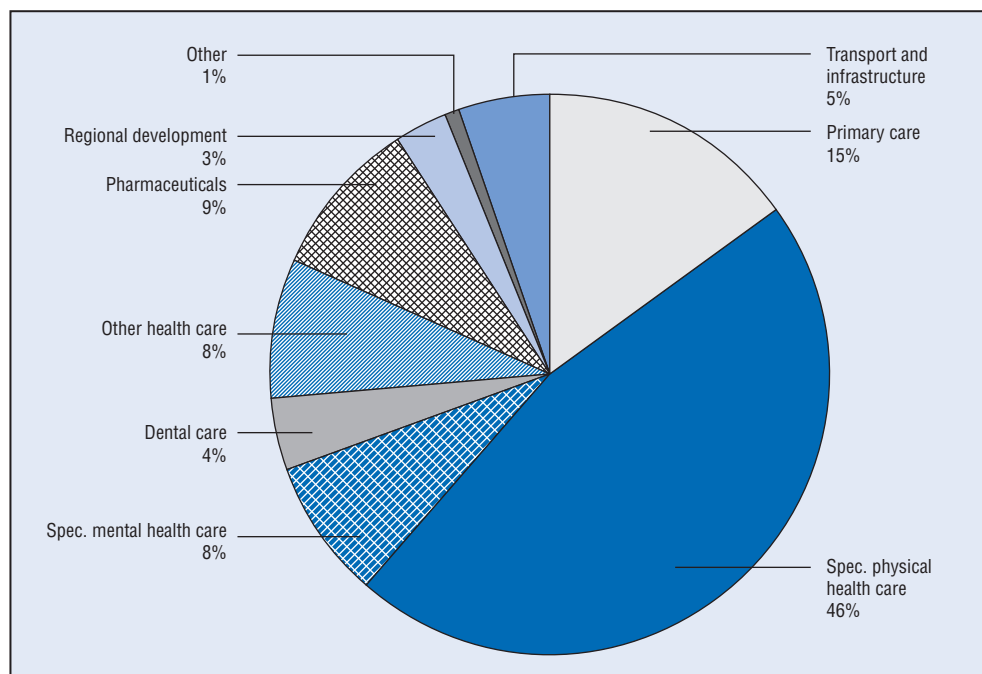
Figure 3.6. **The Swedish changing hourglass system**

Source: Authors' sources, relying on SALAR, DEXIA, Popescu (2006) and MacMillion (2007).

In addition to the county councils, the 21 county administrative boards are state agencies under the national government. The boards have responsibility for the co-ordination and implementation of national policies in all counties. They play a central role in delivering cross-sectoral analysis and public sector supervision to the government, as they have the responsibility of safeguarding the rule of law in every instance (*tillsynsuppgifter*). They also have some responsibilities for regional development. In five counties, they are still in charge of the design and implementation of regional development programmes (RUPs).

The central government has the stronger say in terms of prioritisation of public investment. It is responsible for the allocation of almost half of public investment; in contrast, national governments in many other OECD countries are responsible for less than 30% of public investment (Figure 3.8). A

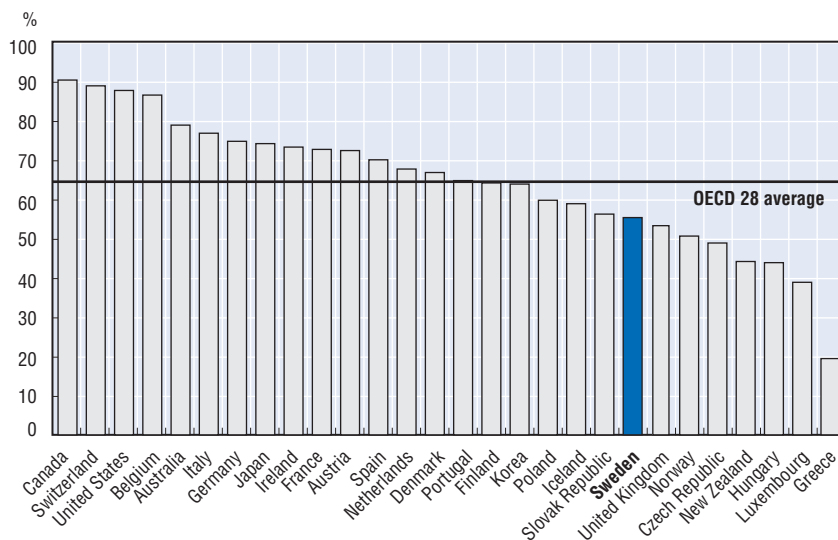
Figure 3.7. **Breakdown of county councils' costs for activities in 2007, ca. SEK 219 billion**



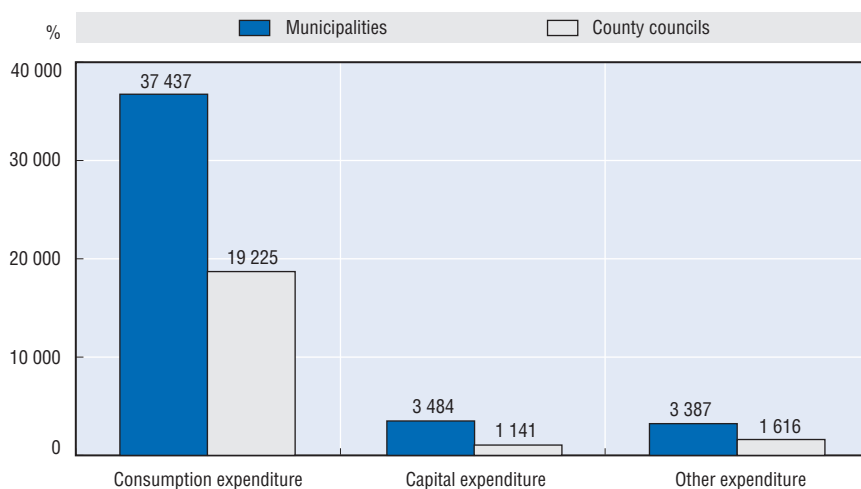
Source: SALAR, *The Economy Report*, May 2009 (p. 19).

centralised framework for public investment has both advantages and drawbacks. It may allow for more efficient decision making, but it may also limit the degree to which local governments are able to match investment priorities with local needs. Swedish sub-national expenditure is mainly consumption-related (85.5%); capital expenditure is only 7% of the total (2006). The share of capital spending by local governments is among the lowest in the EU (DEXIA, 2008). Capital expenditures are particularly low at the county level, representing only 5.2% of total expenditure. Municipalities are the main sub-national government investors: their capital expenditures represent 75% of total sub-national investment.

However, the issue of the centralisation of investment needs to take more qualitative elements into account. A critical cultural dimension that is worth highlighting, as it affects regional policy, is the balance between “partnership” and “leadership” in policy making. Sweden has a culture of extensive formal and informal consultation and involvement of stakeholders in policy design and implementation, for example through systematic dialogue. It has more of a networking logic than a purely

Figure 3.8. **Share of sub-national governments in general government capital expenditure, 2007**

Source: OECD Stats (2007).

Figure 3.9. **Sub-national government expenditure in Sweden, 2005**

Source: DEXIA (2008).

hierarchical logic. This is true in all areas of policy making, and in relations with social partners and private actors. Dialogue between public and private actors, although not always formalised, is probably more systematic in

Sweden than in most OECD countries. This close public-private co-operation helps to strengthen social capital, a key element for the implementation of effective regional development policies. The policy-making process is also inclusive when it comes to relations across levels of government. Even in fields of clearly national competence, little in the way of policy is completely imposed “top-down”. In particular, in the field of regional growth policy (and also in areas of innovation policy), ministries and national agencies behave more as catalysts, facilitators, co-ordinators, etc. than as hierarchical imposers of policy.

### ***Strengths and challenges of gradual regionalisation***

Although the Swedish system remains very much an “hourglass”, pressures to change the system have increased since the mid-1990s, particularly with the entry of Sweden into the European Union in 1995 and the new direction of Swedish regional policy (Chapter 2). Sweden’s decentralisation has been a largely bottom-up process, as the national government has not imposed a single model on the counties. The Swedish strategy can be understood as a kind of laboratory federalism, the underlying idea of which is that decentralised policy making leads to more innovation in governance. A bottom-up strategy is uncommon in OECD countries, as most local government reforms have been imposed by the national government. Since the late 1990s, Sweden has developed different regionalisation options in different regions, i.e. decentralisation has been pursued in an asymmetric manner. There have been three “waves” of regionalisation reforms (Figure 3.10):

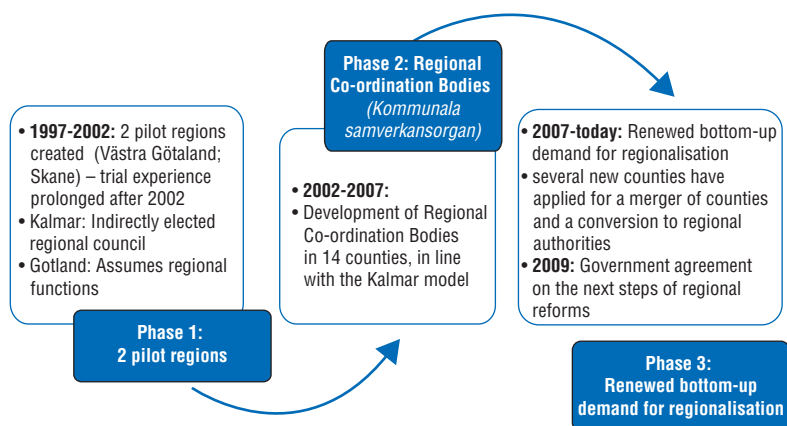
- The first took place from 1997/98 to 2002, with the creation of “pilot regions” in Västra Götaland (three counties including the City of Göteborg) and Skåne (with Malmö as its main centre). In these regions, directly elected regional councils have taken over responsibility for regional development from the county administrative boards.<sup>15</sup> Directly elected regional bodies also have responsibility for former tasks of the county councils (mainly health care).<sup>16</sup> This phase has been described as a trial of limited duration and scope. However, because of strong regional support, the regional pilot project was prolonged for Skåne and Västra Götaland after 2002. Two other regions experimented with different institutional changes: one region – Kalmar – experimented with an indirectly elected regional council and in another, Gotland, the municipality assumes regional functions.
- The second wave (2002-07) was less ambitious in scope. The national government no longer pushed for the creation of pilot regions with a full set of competencies for regional development. Instead, a Parliamentary Act of 2002 made it possible for counties, if all local municipalities agreed, to form regional co-ordination bodies, in line with the Kalmar model, which is an

association composed of all of a county's municipalities. The county council may be a member. To date, 14 regional co-ordination bodies have been formed, and in 13 of these the county council has chosen to participate. The regional co-ordination bodies are indirectly elected and funded by a member fee. They are also partially funded by the national government for the tasks taken over from the county administrative boards. They are responsible for co-ordinating regional development work and deciding upon certain government envelopes for regional development and infrastructure planning, such as roads and the broadband network. The members of the regional co-ordination bodies can also decide that the council should focus on other issues, such as public transport, cultural institutions, tourism, business development and international co-operation.

- The third wave, since 2007, with recent developments in 2009, can be described as a renewed bottom-up demand for regionalisation. It started with the publication of the recommendation for the future of the regional level by the Committee on Public Sector Responsibilities in February 2007, which was commissioned to analyse the system of public administration and determine whether changes would be required to better address long-term challenges such as ageing (Box 3.6). Relying on the positive assessments of the two pilot regions, the Committee argued for the extension of the pilot region model, the merger of current counties and the creation of six to nine enlarged regions. The reform was not applied as such, but bottom-up demand for regionalisation was stimulated. Since 2008, seven counties have applied for a merger of counties and a conversion to

#### **Box 3.6. The Committee on Public Sector Responsibilities (2003-07)**

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, and to determine whether changes are needed in the division of responsibilities and in governance arrangements in order to meet the challenges public-sector services will face in the future. The Committee was composed of members of parliament and other representatives of parliamentary political parties. In addition, high-level experts from national government offices and from SALAR participated in the work of the committee. One of the committee's main aims has been to examine the relation between the national government and government agencies and the division of responsibilities among the national government, the county councils and the municipalities.

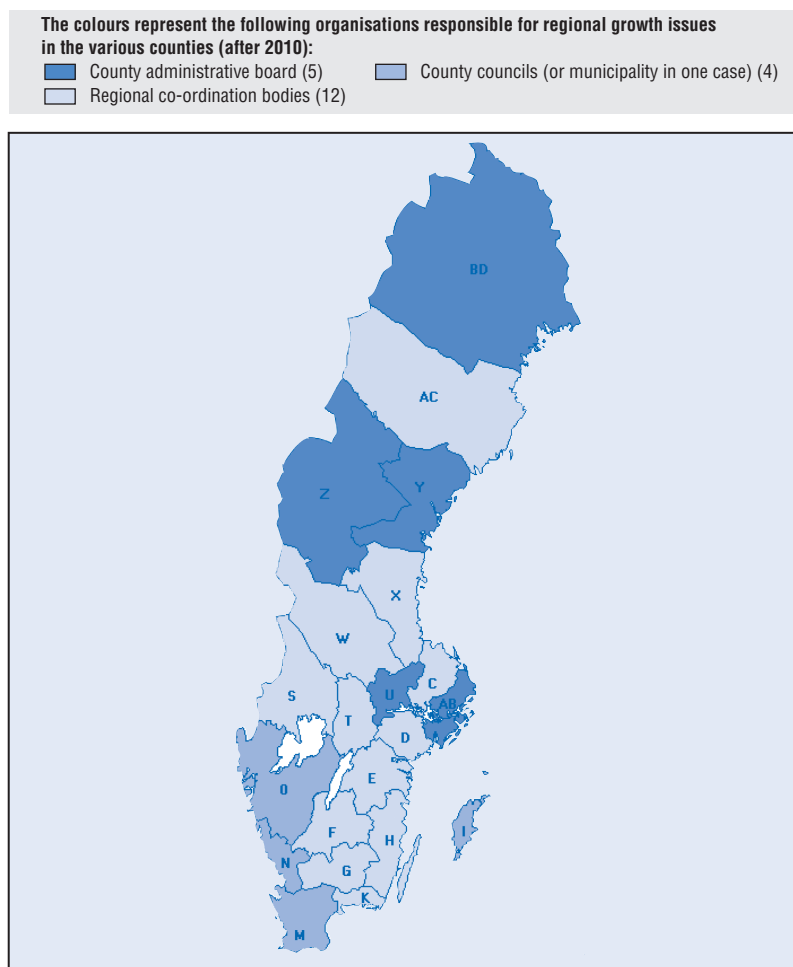
Figure 3.10. **Three phases of regionalisation reform**

Source: Authors' sources, based on *Background Report* (2009).

regional authorities,<sup>17</sup> and the government is currently examining their requests. Besides, the government reached a consensus in 2009 on the need to pursue the regional reforms: pilot regions will be made permanent and the demand from Halland and Gotland has been validated. Most importantly, the government supports the extension of the pilot region model to all Swedish regions wishing to do so. This will be examined in more detail in Section 3.2.

The result of the Swedish bottom-up process is a very heterogeneous administrative map of regional development responsibilities, with three types of regions (Map 3.1). By 2011, there will probably<sup>18</sup> be three county councils in charge of regional development, twelve counties with regional co-ordination bodies indirectly elected, one municipality (Gotland) and five counties in which the county administrative boards (national administration at the regional level) remain in charge of regional growth strategy (Norrbotten, Västernorrland, Jämtland, Västmanland and Stockholm).

One clear advantage of bottom-up regionalisation is that it allows a smooth decentralisation process on a learning-by-doing basis, with the right to experiment and to learn from the results. Various external assessments have been conducted since the late 1990s on the two pilot regions, and the outcome appears to be positive. However, their achievements are difficult to measure quantitatively, and lessons from Västra Götaland and Skåne, two metropolitan areas with almost a third of the total Swedish municipalities,<sup>19</sup> cannot necessarily be extrapolated to all Swedish regions. The Congress of Local and Regional Authorities of the Council of Europe also highlighted a few elements of assessment in its local and regional report on Sweden of June 2005. It stresses notably the fact that

Figure 3.11. **Types of region after 2010**

Source: Ministry of Enterprise, Energy and Communications (2009).

“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”.<sup>20</sup> In its 2007 Report, the Committee on Public Sector Responsibilities relies very much on the example of Skåne and Västra Götaland to support its arguments in favour of stronger regionalisation. According to Peterson, the pilot regions entailed that the municipalities have intensified their involvement in regional political questions (Peterson, 2005). Among the various positive achievements that are frequently quoted, the following are worth mentioning (Table 3.1):



Table 3.1. **Elements of assessment of pilot regions**

Positive achievements of pilot regions	Challenges for pilot regions
<ul style="list-style-type: none"> <li>• Regional strategies have been more proactive, Skåne and Västra Götaland have put more financial resources into the regional development system; and co-operation by municipalities and county council has been strong.</li> <li>• Regional political leadership has enhanced the sense of responsibility for developing the region as a whole and has helped to enhance cross-sectoral co-operation across all types of policy areas (SALAR).</li> <li>• Regional transport systems are considered to have improved, particularly in Skåne (reduced congestion costs).</li> <li>• Long-term strategic planning has improved. The involvement of regional bodies in regional and national planning of the road and rail networks has increased.</li> <li>• Cross-border relations have improved in Skåne: the proximity to Copenhagen and the new Öresund bridge linking Malmö to Copenhagen have given a new impetus to strengthening cross-border links with Denmark and the wider Baltic region. Skåne, together with neighbouring regions around the southern Baltic Rim, participates in several partly EU-financed transport projects. Among them are Baltic+ and Baltic Gateway.</li> </ul>	<ul style="list-style-type: none"> <li>• Although various assessments have been conducted, there is very little information on the opinion of citizens – both within the pilot regions and in other Swedish counties – or even if and how the public was consulted, polled, involved in the project or had clear knowledge of this administrative but also democratic experiment. A poll from the SOM-Institute in 2008 indicates that 90% of interviewees in Västra Götaland have a good opinion on the way regional authorities handle its work, but the same survey indicates that 70% of interviewees do not have any opinion (as several answers were possible).</li> <li>• Pilot regions are asking for an extension of their competencies in certain areas, such as labour market issues, rural development and higher education. They consider for instance that the dual governance framework for regional development (competency of the regional body) and rural development (competency of the county administrative boards) is sub-optimal (Skåne region).</li> </ul>

Source: Various sources, including SALAR, OECD (2006), Council of Europe (2005).

Gradual regional reforms are a way to help build consensus across levels of government. With the trial and error process, it has been easier for municipalities and county councils to adopt new working methods and objectives and to try to do the most with their enhanced autonomy. The regional pilot project is considered to have strengthened relations between the regional level and municipalities, according to SALAR, as municipalities are deeply involved in the elaboration of the regional development programme (infrastructure, planning, etc.). Ten years after the launch of the so called “experiment”, support to make the institutional changes permanent (after 2010) has been strong in both regions. The fact that experiences in Skåne and Västra Götaland are broadly considered successes can encourage other counties to follow in their wake. Seven counties have recently applied to merge (see above), which is a clear sign of “reform spillover” based on these positive experiments. Interestingly, SALAR highlights the mutually supportive role of pilot regions and regional co-ordination bodies, as the latter have also strongly supported the ambitions of pilot regions to become permanent.

Gradual reforms are also a way to build national government support regarding the advantages of regional reforms. They may point to different options for different regions with potentially different needs and capacities.

The ten-year experiment has been a way to reassure the national government of the benefits of such reform. In 2009, the government finally decided to proceed with the necessary steps needed to make the governance arrangements in Skåne and Västra Götaland permanent after 2010. It has also validated the demand of two counties – Halland and Gotland – to take over regional development responsibilities from the county administrative boards. Finally, a recent agreement in 2009 at the government level has clarified its position on the longer-term objective by stating that the model of pilot regions can be extended throughout Sweden in the medium term (Section 3.2), i.e. county councils can be responsible for regional development issues and possibly cultural matters. Other proposals on transfers of power from central government to the regions are not being considered.

Although innovative bottom-up approaches to decentralisation have advantages, they also present risks. Indeed, without strong leadership from the national government to try to maintain the coherence of territorial reform, there is a risk of creating a complex and heterogeneous system in which accountability mechanisms are unclear and the credibility of the regional level limited. Besides, it is difficult for citizens to have a clear view of changes occurring at the regional level. It is very likely that the general public has little if any knowledge of these changes, possibly even of their very existence, and regional actors may feel trapped in the middle of a reform process with no clear understanding of the timeline of future changes. The current situation, in which three different types of regions exist, is sometimes referred to by external observers as a “regional mess” (McCallion and Tallberg, 2008). This has encouraged the 2007 Committee on Public Sector Responsibilities to argue for the creation of new regions in Sweden, a subject to be examined in Section 3.2.

### ***Improved co-ordination on territorial development at central government level***

The Swedish governance arrangements for regional development have also evolved with some changes in the cross-sectoral co-ordination of regional development policy at the national level. A key challenge is linked to the co-ordination across structural policies with a territorial dimension, both at the national government level, and at the regional level. This is not specific to Sweden, as in all OECD countries, a large number of ministries and government agencies are involved in regional policy compared to other policy areas, which is cross-sectoral by nature. However, this is amplified in Sweden by the fact that around 400 agencies are in charge of policy execution and monitoring, at all levels of government.<sup>21</sup> The large number of actors involved can be illustrated by the fact that since 2007, 20 national authorities with a role

in stimulating regional growth report on their contributions to the implementation of priorities in the NSRF on a yearly basis (EoRPA, 2008).

Several Swedish studies highlight the fact that, in relation to other European countries, Sweden has comparatively weak co-ordination among policy areas and authorities (Swedish Agency for Public Management, 2008; ITPS, 2008), due to the high number of agencies involved in the policy implementation. Co-ordinating problems are acknowledged both at central government level (Inquiry on steering of agencies, Styrtredning, 2007)<sup>22</sup> and across levels of government (2007 Committee on Public Sector Responsibilities, 2006).<sup>23</sup> Co-ordination challenges have been highlighted also in more sector-specific studies, such as that carried out by the Swedish Institute for Transport and Communications Analysis (SIKA), which notes that there is a need to improve co-ordination, not only within the sectors of transport and communications, but also with other policy areas (EoRPA, 2008).

Besides, in the field of regional policy itself, the governance of the broad variety of regional development programmes (regional operational programmes co-funded with EU funds, regional structural funds programmes, VINNVÄXT programmes, rural development programmes, specific aid programmes: see Chapter 2) is dispersed and fragmented among many national authorities, with little participation by county councils in their design or implementation. Moreover, “historical” administrative arrangements between the ministries and their agencies (annual quasi-contractual arrangements and reporting obligations) probably no longer reflect the complexity of the reality of multi-level and cross-sectoral governance, and it is widely acknowledged that there is room to increase synergies between the work of the agencies and the ministries.<sup>24</sup>

Although challenges remain important, a significant effort has been made to enhance co-ordination at the national level since the new regional growth policy was established. The National Strategic Reference Framework (NSRF) for the use of EU funds for 2007-13, has proven to be much more than the basis for implementing the Structural Funds programme, like in many EU countries. It has been the basis for dialogue and co-ordination on regional development issues at the national level and introduced ways to further co-ordinate domestic regional policy, labour market policy, sectoral policies such as transport and communication, and the European Cohesion Policy (EoRPA, 2008). In Sweden, the design and implementation of the NSRF has led to improved co-ordination among levels of government, with private actors and across sectors, in particular through the following initiatives:

- A national forum on regional competitiveness, entrepreneurship and employment was set up to create a formal setting for the discussions that took place in the preparation of the NSRF. The forum serves as a platform

for ongoing political dialogue among national and regional representatives, for which the NSRF and the Regional Development Programmes were the starting points. This form of co-operation is also expected to facilitate Swedish discussions with the European Commission. The forum has met nine times since 2007 and the debates have focused on the issues related to the priorities of the NSRF, such as regional enlargement, regional innovation systems, cross-border integration as well as the future cohesion policy, local and regional ownership of the Lisbon strategy, and rural development issues. So far, the forum seems well appreciated by the national and regional representatives.

- *Thematic groups* of agencies for regional competitiveness, entrepreneurship and employment were set up between 2007-09 to facilitate sectoral co-ordination among agencies. Three thematic groups have been set up on the basis of the priorities of the Swedish NSRF (Innovation and renewal, Skills supply and improved labour supply, and Accessibility Strategic cross-border co-operation has been a horizontal priority in all three groups). The thematic groups have contributed to the work of co-ordination and cooperation between national agencies and between agencies and regional actors. They have also been used as a resource for discussions at the national forum (EoRPA Report, 2008).

Reorganisation of national agencies involved in regional development has also taken place in 2009. Three agencies – the Swedish Agency for Economic and Regional Growth (NUTEK), the Swedish National Rural Development Agency and the Swedish Institute for Growth Policy Studies – have been merged into two, the Swedish Agency for Economic and Regional Growth (Tillväxtverket) and the Swedish Agency for Growth Policy Analysis (Tillväxtanalys).<sup>25</sup> Considering the importance of these agencies for regional development, the merge is likely to have a profound impact on the way regional policy is carried out by the national government.

There are several objectives for the merger of agencies involved in regional growth policy: i) develop a clearer government structure and reduce overlaps across agencies; ii) ensure greater cross-sectoral collaboration across policies, in particular between the regional and rural development policies; iii) enhance the focus on growth in the various territorial policies; iv) clarify the mandate of the different agencies with a greater focus on evaluation from the Swedish Agency for Growth Policy Analysis (Tillväxtanalys). It is too early to assess the outcome of the reorganisation, as the new agencies were created on 1 April 2009. These changes can be positive, provided they do not disrupt established networks and undermine their delivery of services. It seems that so far, the new agencies are maintaining and building on an active co-operation.

Other organisational changes are taking place in areas linked to regional development, such as infrastructure and transport. Sweden is currently moving towards a system where there is more strategic oversight of national infrastructure investment frameworks (Chapter 2). The government is reforming the planning process to design more integrated regional infrastructure plans, in which counties have a stronger say. The government also plans to set up a new traffic agency in 2010 to better co-ordinate infrastructure, environmental and regional development policies. This approach will help to ensure that transport policies are based on regional priorities and set in line with other national priorities, including larger regions and more inter-regional interaction, and that there is more consideration given to inter-regional flows.

In addition, co-ordination with the rural strategy has improved at the national level. In the past few years Sweden has made significant progress at the national level towards adopting a cross-sectoral approach to rural policy (Box 3.7) with a strong focus on growth assets in rural areas (Chapter 2). The government's intention is to incorporate a rural perspective into all policy areas to a greater extent than before and to create added value by ensuring collaboration among different areas (Rural Development Strategy, 2009). Some governance changes have been introduced to support this policy objective, in particular: i) merging of agencies: part of the remit of the two new agencies is rural issues in regional growth policy and industrial policy. In addition to the merge, the Agency for Economic and Regional Growth has also taken over the responsibility of developing strategies for provision of local and commercial services in sparsely populated and rural areas from the Swedish Consumer Agency.; ii) state secretaries at the Ministry of Enterprise, Energy and Communications and the Ministry of Agriculture will head a working group focusing on initiatives for rural development and support for other ministries in their work on rural-oriented issues; and iii) greater Nordic co-operation on rural issues is planned as part of the work of the Nordic Council of Ministers. A working group for rural development has been set up, led by the Swedish government offices.

Sweden has been moving in the direction of rural proofing at the national level, which is a way to ensure that the impacts of a policy on rural areas are considered well in advance of policy implementation and requires wider cross sectoral co-ordination. However, the approach to rural development has in its first steps a rather top-down approach and local governments – including county councils – play a very limited role, in terms of policy design, co-ordination or implementation.<sup>26</sup> This raises co-ordination challenges between the regional and rural development strategies – challenges already important in Sweden like in other EU countries due to the separate European policies on cohesion and agriculture (and the related financial instruments – ERDF and

### Box 3.7. National co-ordination of Sweden's rural development strategy, 2007-13

The responsible ministry is the Ministry of Agriculture. The national authority in charge of implementation is the Swedish Board of Agriculture. The role of the Swedish Rural Network<sup>1</sup> is to reinforce the implementation of the Swedish Rural Development Programme 2007-13. Other important authorities have included the Swedish National Rural Development Agency (until 1 April 2009), which was responsible for the LEADER+ programme (phased out), for monitoring of rural and remote areas, and for achieving greater cross-sectoral co-ordination). In addition, the Swedish Institute for Food and Agricultural Economics (SLI) was a government agency commissioned to carry out advanced economic analysis in the fields of agriculture, food and fishing, and rural development (it was closed at the end of 2008). From January 2009 onwards, the Swedish University of Agricultural Sciences and Lund University are to provide expert economic analyses in the Ministry of Agriculture's areas of responsibility, including rural development. The Swedish Agency for Economic and Regional Growth deals with local economic development and the social economy. Several other institutions and perhaps other stakeholders such as the Swedish Popular Movement's Council and the Royal Swedish Academy of Agriculture and Forestry are also involved.

The rural issue – like the regional one – has been much debated in Sweden over the past few years. The committee appointed by the government in 2004 to discuss the future of rural policy concluded that rural development policy required a bottom-up approach as well as a holistic perspective and cross-sectoral co-ordination. Since 2006, the government has worked to develop a new strategy for rural development, which was finalised in early 2009. The elaboration of the strategy took the form of a wide-ranging process of co-ordination involving most government ministries. The rural development policy aims to boost rural enterprises in an environmentally and resource-efficient manner. It is being implemented largely through initiatives under the Rural Development Programme for Sweden 2007-13, which is co-financed by the European Agricultural Fund for Rural Development (EAFRD). Other dimensions of rural development policies are also contained in the Regional Development Programme: the European Union's Structural Funds programmes and the EU's Operational Programme for the Swedish Fisheries Sector.<sup>2</sup>

1. [www.landsbygdsnatverket.se/inenglish.4.677019f111ab5ecc5be80004860.html](http://www.landsbygdsnatverket.se/inenglish.4.677019f111ab5ecc5be80004860.html).

2. The Rural Development Programme for Sweden 2007-13 is the prime instrument for strengthening the development potential of rural areas. It will distribute approximately SEK 35 billion in public funding plus some SEK 15 billion in private funding. A further SEK 700 million in public funding may be made available from 2010 to meet future challenges. The Operational Programme for the Swedish Fisheries Sector will represent approximately SEK 980 million in public funding.

Source: National Rural Development Strategy (2009).

### Box 3.8. Integrated governance approaches to rural development in OECD countries

Experience in OECD countries indicates that a body chaired by a single sector (in the rural area, agriculture) may have difficulty pursuing multi-sectoral objectives and may hinder full involvement by other ministries in a national rural strategy.

Canada's "rural lens" aims to ensure that rural priorities are taken into consideration in the development of government policy and that there is policy coherence over rural objectives across ministries. The Community Futures Programme promotes bottom-up economic development in rural areas.

Finland's multi-year Rural Policy Programme also seeks to draw attention to the specific needs of rural areas. "Broad" policies proactively integrate these needs into central government decision making in different sectors. "Narrow" policies specifically target rural areas.

Germany developed the "REGIONEN AKTIV" programme to address inadequacies in existing agricultural and other sectoral policy approaches. A number of small model areas (Regionen) were selected and local partnerships established to improve the focus of public policy for the region.

In the United Kingdom, DEFRA (Department for Environment, Food, and Rural Affairs) was created in June 2001 to broaden the focus of rural policy and to eliminate policy "silos" by gathering under one department several rural functions. The Rural Strategy, published in 2004, reinforced the change to a more broadly based and locally focused rural policy. Several recent initiatives, including Rural Pathfinders and Local Strategic Partnerships (LSPs), are piloting some of these changes.

The Netherlands' "Agenda for a Vital Countryside" published in 2004, introduced important changes in the Dutch approach to rural development. While this document details the national policy targets and budgets for the countryside, regional and local authorities translate these policies into action and integrate them into local and regional development plans.

Source: OECD (2006).

EAFRD. Enhanced co-ordination between regional and rural development strategies would require a better integration of rural development in the regional development work carried out at the regional level.

### Co-ordination gaps in the governance of regional development

Although the Swedish "hourglass" system has changed since the late 1990s, in particular with the innovative experience of pilot regions and improved co-ordination of regional development at the "top", the current governance

framework for regional development leaves significant policy co-ordination gaps at the regional (county) level, as well as across levels of government. The limited responsibilities of county councils for regional development, combined with the relatively small size of counties in some parts of the country, limit their ability to implement growth strategies targeted to local needs (*decentralisation issue*). In addition, policy synergies seem to be insufficiently exploited by the national administration at sub-national level (*deconcentration issue*). The main challenges are examined in the following paragraphs. It should be emphasised that in most cases, they do not concern pilot regions.

### Box 3.9. Municipal co-operation in Sweden

Co-operation by municipalities and by county councils is a long tradition in Sweden.

Since 1919 municipalities and counties have had the opportunity to form local federations to improve the cost efficiency of service delivery. A local federation is a legal entity, i.e. a special local authority, to which members can transfer the management of local government concerns. All areas of local competence, including the exercise of legal powers, can be transferred to a local federation. Local federations have a decision-making body whose members are elected by the assemblies of the federation members.

Since 1996 co-operation by municipalities and by county councils can also be handled through a common committee. As for a local federation, all areas of competence can be transferred to a common committee. However, a common committee is not a legal entity. It is part of the organisation of one of the municipalities engaged in the co-operation. A municipal enterprise, however, cannot exercise legal power. The establishment of a municipal enterprise does not necessarily involve several local authorities. A municipal enterprise can also be set up to handle specific activities for a single municipality or county council.

There are currently 95 local federations and 70 common committees which handle a wide range of activities. The most usual activities are rescue services (37), education (23), and environment/building (14), which account for 45% of the horizontal co-operation organised through local federations or common committees.

There are few local federations and common committees compared to the number of municipal enterprises, which number over 1 800. Although this includes enterprises serving a single municipality or a single county council, it is likely that the municipal enterprise is the main organisational means of handling horizontal co-operation. More than 70% of municipal enterprises operate in housing, real estate, energy or other infrastructure.

Source: DEXIA (2008).



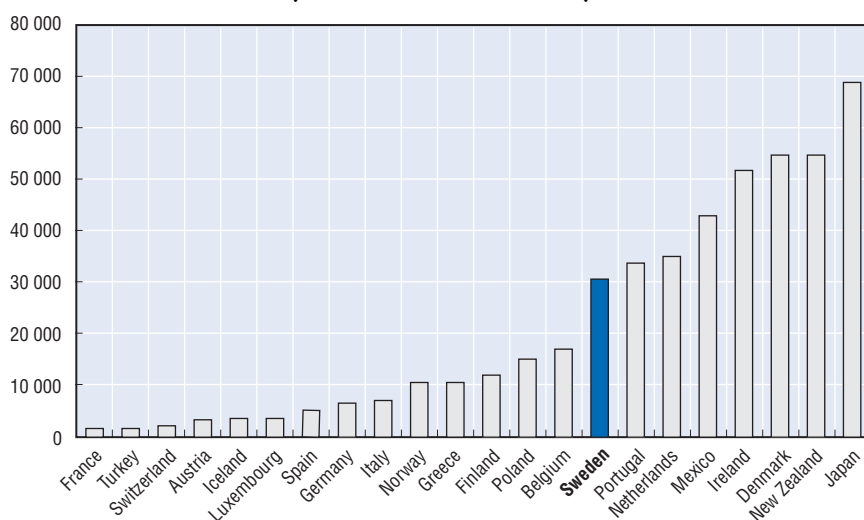
### ***Inter-municipal co-operation is not sufficient to tackle regional growth challenges***

Sweden has been particularly active in supporting inter-municipal co-operation for public service provision (through local federations and common committees in particular, see Box 3.11) and the amalgamation of municipalities. The number of municipal governments dropped in 1952 from 2 498 to 1 337, and then to 278 between 1962 and 1974. There are today 290 municipalities in Sweden. Swedish municipalities are thus relatively large by OECD standards (Figure 3.8). Sweden's income-based tax system (on the local and regional levels) affects inter-communal (regional) co-operation in terms of balancing "competition" and "co-operation" among neighbouring municipalities.

Following the economic crisis of the 1990s, inter-municipal collaboration has increased, both in number and in scope. Declining tax incomes for municipalities had forced them to look out for new solutions. Some municipalities turned from rather closed and independent units to some kind of network organisations<sup>27</sup> (Westholm, 2005). In smaller municipalities, collaboration has mainly occurred in services linked to education, social services or emergency services; while proximity based services such as elderly care are more rarely a subject for collaboration (SALAR, 2009).

A number of issues linked to regional growth – such as spatial planning, public transports, labour market and innovation policies, require in many

**Figure 3.12. Average size of municipalities in selected OECD countries (thousands of inhabitants)**



Source: OECD (2009a).

cases a broader focus than that of the municipality. In principle, regional co-ordination bodies would be an effective way to tackle common regional growth challenges. As explained in Section 3.2, regional co-ordination bodies were created in 14 counties to enhance inter-municipal co-operation on regional development issues. The approach is clearly inter-municipal and has the advantage of broad representation and clear implication of all municipalities of a county.

However, regional co-ordination bodies lack a clear mandate, accountability mechanisms and sufficient resources to be fully effective. Regional co-ordination bodies have a weaker legal status and considerably fewer national government resources at their disposal than the local authorities (SALAR, 2009). In addition, a single municipality can block the formation of such councils, and a county council can choose not to participate, thereby limiting their credibility. It is not clear whether regional co-ordination bodies are in a position to harmonise the positions of their members and to deal with other partners (state agencies but also, very importantly, businesses, NGOs and others). Regional co-ordination bodies lack the arbitration capacity and enforcement tools to make regional strategies fully operational. In addition, from a democratic point of view, the creation of a second county-level council makes the administrative structure and operation less transparent for citizens. Ultimately, it may reduce voter control, which is particularly tricky in Sweden, with one of the highest levels of local taxes in the OECD area.

### ***Sub-optimal size of counties?***

Although the number of municipalities has been drastically reduced in Sweden, the number of counties (21) is almost the same as in 1634.<sup>28</sup> The counties are relatively small by OECD standards and all are smaller in terms of population than the OECD average for TL3 regions (Chapter 1). The current functional labour markets do not correspond to county limits. As explained in Chapter 1, there are fewer but larger functional regions in 2005 than in 1970 (Statistics Sweden counted 82 local labour market regions in 2006, compared to 187 in the 1970s; NUTEK counted 72). This is due to the increase in economic concentration in Sweden over the past decades. The small size of counties raises issues of competitiveness and regional growth, as territorial fragmentation can jeopardise the implementation of major investment projects that are supposed to encourage growth when each local authority can only define a partial strategy (OECD, 2006).

The widening of labour market regions calls for greater horizontal cross-sectoral co-operation by local governments and improved spatial planning taking into account functional areas. The mismatch between administrative and functional regions is not a specifically Swedish issue and is a challenge in

all OECD countries. Indeed, there is a natural mismatch between functional areas, which constantly evolve temporally and spatially, and administrative areas, which are set by constitutions and laws and are much more rigid. The importance of the mismatch varies considerably from one region to another. It usually presents a greater challenge in metropolitan areas than in rural areas. Co-operation within functional labour markets does not occur automatically, and public intervention is often needed to remedy market failures. 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 municipality or the county and call for improved horizontal collaboration across municipalities and counties.

The small size of counties also creates challenges in terms of equity and efficient public service delivery. There is a long standing debate in Sweden on the appropriate size of counties for efficient health service delivery, which is their main devolved competence. County councils own and run most hospitals and spend more than 80% of their budget on health care. Some analysts argue that many of today's counties are too small to cope with the complexity of health care provision and their number should be reduced (Eklund, 2007; Svegfors, 2007). This was also the official proposal of the Committee on Public Sector Responsibilities in 2007 (see Section 3.2). There are two distinct aspects to this debate: the size of the political units (counties) and the size of individual hospitals or clinics. It is difficult to say what the optimal size of a hospital or medical region should be, but the Health and Welfare Board considers that an emergency hospital needs a catchment area of at least 80 000 to 90 000 inhabitants. One in three emergency hospitals is still under this minimum safe size (Box 3.10). Insufficient co-ordination among counties also affects efficiency because of duplication (OECD, 2005, *OECD Economic Survey of Sweden*).

### ***Policy synergies little exploited at the regional level***

One of the key challenges identified by the Committee on Public Sector Responsibilities relates to the fact that cross-sectoral co-ordination of policies at the county level is limited. However, policy synergies are needed at the regional level to optimise their impact – a kind of multiplier effect (OECD Ministerial Report, 2009). This is particularly true for sectoral policies with strong local externalities – such as transports, innovation or higher education. The impact of infrastructure policy for example is likely to be higher at the regional level, when combined with policies to develop human capital and innovation, rather than in isolation (Chapter 2, and OECD, 2009). In Sweden, several factors limit the potential synergies across structural policies at the regional level: i) the first is the fact that territorialisation of policies differs from sector to sector; ii) the second is linked to the limited enforcement

### Box 3.10. Administrative reform and the provision of health care in Sweden

The main responsibility for health care lies with the 20 county councils, which own and run most hospitals and are responsible for the delivery of primary and hospital care, including public health and preventive care. The counties are relatively small, with a median population of 275 000. Only three have more than 500 000 residents. They usually form several healthcare districts, each of which is run by an elected board. They are also grouped loosely into six medical care regions which are designed to improve co-operation for highly specialised care, research and training. Each region has a population of 1-2 million and includes at least one university hospital. Long-term psychiatric care and care of the elderly and the disabled are the responsibility of the 289 local authorities (municipalities).

Throughout the 1970s and 1980s health spending was much higher than in almost any other country but it is now in line with the level expected given the country's GDP per capita. However, health spending is expected to rise by more than the OECD average over coming decades, at a time when local government revenues are under increasing strain. Despite many strengths (the high quality of the health system; a flexible and innovative system by international standards) the health system faces challenges, among them to improve the co-ordination and reduce the fragmentation of the different parts of the system.

It is unclear whether the current degree of territorial administration of the health system is appropriate for a modern medical system in which "seamless" care, greater use of expensive technologies and enhanced European integration will play increasing roles.

Dealing with these problems would be easier with fewer counties because larger political units would probably be better able to rationalise resources, for instance, by increasing the amount of specialisation among their hospitals (and, in some cases, closing them). There is little co-operation when it comes to "ordinary" treatment and day-to-day administrative matters. Other problems caused by the current fragmentation of the health system include: waste through duplication (such as 21 pharmaceutical boards); greater difficulty in reallocating resources (progress in shifting resources away from inpatient care in hospitals and towards outpatient and primary care is slower than the government would like); instability in funding (revenues of small counties are more volatile); and greater difficulty in reducing regional variations in quality and medical practice. These challenges have prompted a national debate on the rationale for the territorial organisation of the health system.

Source: OECD (2005), *OECD Economic Surveys: Sweden*, OECD Publishing, Paris.

capacity of counties; iii) the third is the limited enforcement capacity of regional development programmes (RUPs).

**i) Territorialisation of policies differs from sector to sector.** The overlapping of administrative borders of central government agencies and state-owned companies do not necessarily follow county limits. It is to some extent logical that these differences exist, as many agencies try to provide services at an optimal scale that differs per public service. Examples of the different scales of territorialisation of policies are most obvious for infrastructure policy (although the government's recent discussions about creating a new joint traffic agency in 2010 might help better integrate infrastructure policies in the future – see Chapter 2). The Rail Administration, for example, is organised into five regional units with little if anything to do with the current 21 counties. It only consults with the counties in the final stage of development of its plans and these can only be marginally rearranged on the basis of the counties' opinions (OECD, 2006a). The same is true of 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.

However, co-ordination is required to facilitate economies of scale and exploit synergies across policies. In 1989, the county administrative boards were made responsible for co-ordinating the activities of sectoral state agencies at the regional level. However, this extended mandate has not been easy to implement (OECD, 2006a), as the formal status of national sectoral agencies has not changed, so that agency staff in local offices still report directly to the national government, rather than the county administrative board. In many cases, the influence of the manager of the agency may be stronger and their link to the government and its ministers closer than that of the governor. Besides, the role of national agencies at the local level is often ambiguous and overlapping (SOU, 2007).

**ii) Limited enforcement capacity of counties.** Counties lack co-ordination and enforcement capacity, in particular for spatial planning. As highlighted in Chapter 2, municipalities have extensive planning authority, often referred to as a “planning monopoly” (*planmonopolet*). At the county level, the county administrative board (CAB) has a special task monitoring of the handling of national interests in municipal planning.<sup>29</sup> Although counties are encouraged to develop spatial planning that encompasses physical and socioeconomic developments, the requirement for considering a regional plan when preparing a municipal plan is rather lax. The county plan is not binding for municipalities, and any change in land use must be based on a municipal plan (OECD, 2006a). This creates an important challenge for the overall planning of large functional areas. Moreover, heavy regulations make the land use

planning process a very slow administrative procedure, with detrimental effects on the housing market and labour mobility (OECD, 2007) (Box 3.11).

The recent changes in the planning process for infrastructure and transport (Chapter 2) promote a stronger role to regional actors to identify their priorities, in co-ordination with national actors, which is a positive step. The regions are called upon to prioritise action in both regional and national networks. Regional actors (county council, regional co-ordination bodies, county administrative boards) are supposed to establish their priorities for infrastructure development, for example to support enlarged labour markets. The prioritisation is made on a consensual basis, and no regional authority has a final arbitration capacity. The Swedish regions and traffic agencies are supposed to present proposals for action in autumn 2009 and the Government will decide on these proposals at the end of 2009 or beginning of 2010.<sup>30</sup>

### Box 3.11. Land use planning in Sweden

All municipalities must have a current comprehensive plan that covers the entire municipality. The Municipal comprehensive plan is not legally binding but is meant to form the basis of decisions on the use of land and water areas. The comprehensive plan must be considered by the municipal council at least once during each term of office (4 years). The Detailed development plan is the legally binding instrument. It is the most important instrument for implementing the intentions of the comprehensive plan. It divides obligations and rights between the municipality and the land owners. It provides a strong protection of the rights accorded by the plans to land owners during an implementation period that can vary between five and 15 years. Special area regulations are more simple planning instruments that are also binding and are primarily used outside built-up areas to ensure agreement with the comprehensive plan in certain respects.

For the planning of matters concerning several municipalities the legislation appropriates the instrument of Regional plan. The municipalities concerned can make a joint demand to the Government that a regional planning body should be appointed. From then, planning in a municipality that is a member of the regional planning body must agree with the regional planning pursued by the that body. Currently, regional planning only exists in the Stockholm and Göteborg areas. Environmental impact assessments (EIA) also constitute an important instrument in municipal planning. They are compulsory in several contexts and also have to form part of the basis for the detailed development plans.

Source: BSR INTERREG III B project. "Promoting Spatial Development by Creating COMMON MINDscapes", Planning System of Sweden: [http://commin.org/upload/Sweden/SE\\_Planning\\_System\\_in\\_English.pdf](http://commin.org/upload/Sweden/SE_Planning_System_in_English.pdf).

Although the reform is clearly positive, there may be a need to enhance the arbitration capacity of one authority, as consensus may not always be easily reached at the regional scale.

**iii) Limited co-ordination role and enforcement capacity of RUPs.** Regional development programmes (RUPs<sup>31</sup>) play a limited role in the cross-sectoral co-ordination of policy areas, mostly because they lack enforcement mechanisms across levels of government.<sup>32</sup> However, in pilot regions, the RUPs seem to have achieved greater coherence across public and private actors for implementation and have proven to be stronger co-ordination tools than in other regions.

### **Box 3.12. Regional Development Programmes (RUP) and the Regional Growth Programmes (RTP)**

The Regional Development Programmes (RUP) and the Regional Growth Programmes (RTP) have been the main instruments of the Swedish regional policy since 2001 focusing on regional competitiveness (Chapter 2). They are elaborated at the county level either by the County Administrative Boards or by the Regional Co-ordination bodies when they exist and the new regional self governments (in Skåne and Västra Götaland). The timeframes for both types of programmes vary – RUP 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. Operational programmes for different areas are linked under the RUP.

Source: Answers to the OECD questionnaire (2009) from Local Team.

RUPs are broad strategies rather than operational tools and lack enforcement capacity. From 2008 and onwards, the RUP is the main document in terms of guiding the work around regional development at the regional level. They are intended to act as “umbrella programmes” under which a variety of existing programmes are brought together into a single coherent strategy. They provide useful tools for regional actors in the sense that they indicate priorities for investment and have proven to be useful tools to mobilise with the impact of the crisis on Swedish regions. The national government is providing a few guidelines in the design of RUPs and the NSRF provides guidance concerning the content. Tillväxtverket is supposed to assess how the work with regional growth strategies is working and to spread good examples of successful methods.

However, one challenge comes from the fact that RUPs are broad umbrella strategies, largely driven by the NSRF in their content; and that they

lack enforcement tools. RUPs are not “contracts” as defined by the OECD (OECD, 2007i), nor really “programmes” with an operational dimension as they are not attached to a single budget. Besides, the timeline across RUPs varies significantly across counties, and is not linked to the timeline of the NSRF (2007-13). For example, Dalarnas’ RUP is valid until 2016 and Västmanlands’ RUP until 2020. The RUPs’ recommendations must be endorsed by the municipalities, but municipalities do it on a voluntary basis.

Concerning Regional growth programmes (RTPs); they play a limited role at the county level as they remain voluntary and largely driven by central government objectives. RTPs are subsidiary programmes based on regional development programmes (RUPs), financed by the public and private sectors, and voluntary (Chapter 2). In 2009, 13 out of the 21 Swedish counties were working with an RTP within the framework of the broader RUP. Regional growth programmes face the typical problem of (small scale) multi-objective instruments: they are supposed to provide regional co-ordination bodies (or county administrative boards) with an instrument of their own (which suggests that they have flexibility for adapting it to regional needs), but they should also justify this type of policy by demonstrating its concrete results to the national government, hence focusing on central government priorities. This may partly explain why regional differentiation in investment priorities across RTPs is rather limited and that RTPs may not address each region’s specific development opportunities (NUTEK, 2007).

### ***“Regional co-ordinators” as a response to the economic crisis***

In order to strengthen co-ordination at the regional scale, Sweden appointed “regional coordinators” in early 2008 in Norrbotten and Gävleborg, and then extended it to all counties when the crisis hit Sweden in fall 2008. The aim is to facilitate and strengthen the co-ordination of local, regional and national actors, policies and resources, at a scale that was considered by national policy-makers crucial to deal with the crisis. The regional co-ordinators are the county governors and the political leaders of the county councils or regional cooperation bodies. Their task is to co-ordinate initiatives and measures in response to the crisis, report regularly to the government on their county’s situation and identify the need for government intervention. To some extent, the crisis contributes to reveal the need for appropriate coordination mechanisms at the regional scale to implement growth strategies. The work initiated by the regional coordinators has also shown that established regional partnerships and long-term strategies have been crucial to speed up decision making at a time of crisis.

The global crisis has also highlighted the need for better co-ordination on regional development issues at the national level. A national co-ordinating group of state secretaries has been formed to facilitate closer contact between



the government and the regional co-ordinators. Its task is to receive the regional co-ordinators' proposals for government action and to facilitate co-ordination at the national level.

## **Conclusion**

Sweden has consistently proven strong capacity to adapt its governance structures and local welfare system to new challenges over the past decades, and has developed innovative approaches to regionalisation, with asymmetric decentralisation and pilot regions. Although significant progress has been made to better involve local governments in the regional growth agenda, co-ordination gaps across levels of government and national agencies in the governance of regional development remain important. Sweden needs to further enhance the capacity of regional actors to be more involved in active growth strategies, to better compete on the global scene with other regions. The need for appropriate regional co-ordination has made itself felt more acutely as a result of the global crisis. The following section seeks responses to challenges for improving the implementation of regional policy, and the sustainability of the Swedish local welfare system.

## **3.2. Seeking appropriate responses to regional development challenges**

The second section explores various policy options for improving the implementation of regional development policy objectives, i.e. enhanced regional growth and sustained equity. It starts with the regionalisation debate, which has been much discussed in Sweden in recent years, and the need to pursue regional reforms, which has recently received greater attention from the national government. It then analyses corollary reforms, i.e. the need to enhance actors' capacity to design and implement appropriate regional strategies, in close co-ordination with private actors and national authorities. Finally, it addresses the need to complement territorial reforms with innovative and cost-effective service delivery approaches, and to make further adjustments in the local finance system.

### ***Bridging co-ordination gaps at the regional level: Pursuing the reforms***

#### ***A developing consensus on three priorities for regional reforms***

The various options for regional reform in Sweden are a political and societal choice, rather than a strictly economic one. Regional reforms have been implemented in a number of OECD countries in the past two decades, and many options have been developed (Box 3.13 and Annex 3.A2). OECD experience indicates that there is no "one size fits all" solution for regional reform. Several unquantifiable parameters need to be taken into account, and pros and cons need to be carefully judged by national, regional and local

**Box 3.13. Experience of OECD countries for regional reforms**

Many options exist in terms of regional reform and countries' choices are very much determined by their institutional/administrative context. OECD countries have developed a number of governance tools to adjust administrative regions with functional ones, from "soft" co-operation tools such as common discussion platforms, to agencies with specific co-ordination mandates in certain policy fields (such as transport), to creation of new administrative regions. The last of these has been particularly important in EU countries, partly owing to the rules for allocation of structural funds, which are based on statistically defined NUTS 2 regional levels. The regionalisation debate in Sweden and the creation of the two pilot regions in the late 1990s should be analysed in this context. It should be noted that few countries have succeeded in creating new layers of government through the merger of existing administrative units. Denmark and the Czech Republic are among the few recent examples. France, Italy, Poland created new regions without suppressing lower administrative units (departments or provinces). (cf. Annex 3.A2 for more detail on countries' experience).

Source: Own material (2009).

authorities. To design regional reform, it is important to adopt a "whole of government" approach, as interdependencies among the various governance elements are significant. Keeping this in mind, three priorities are particularly important for Sweden: i) the first is the need to enhance the room of manoeuvre for regional actors to develop growth strategies that build on local competitive advantages; ii) the second is the need to improve co-ordination with the national administration at the county/regional level; iii) the third relates to the importance of taking into account various needs for regions. The 2009 government decision on the next steps of regional reforms reflects these priorities, as explained in the following paragraphs.

**i) Extending the pilot region model.** Various arguments call for greater empowerment of county councils in terms of regional development responsibilities, if this is accompanied by improved co-ordination tools across levels of government. They are summarised in Table 3.2. After a decade of "experimentation" and "learning by doing", the pilot region model appears to be an effective solution, as the results of experimentation are clearly positive. Designing regional growth strategies targeting local competitive advantages requires a clarification of the responsibilities of county councils, as well as increased resources and improved co-ordination with national agencies. The 2007 Committee on Public Sector Responsibilities has supported the extension of the pilot region model to all Swedish regions. In its conclusions, the

Committee suggested replacing county councils by six to nine larger regions with directly elected regional assemblies with responsibility for health care and regional development, following the model developed in Skåne and Västra Götaland (Box 3.14 and Annex 3.A3). Although regional reform has to leave some room for potentially asymmetric decentralisation, the directions proposed by the Committee respond well to some of the key governance challenges discussed above, from both the equity and efficiency points of view.

Although the national government has mixed views over the reform, the support to the regional reform at the municipal and county level is high (Box 3.14) – which is rather unusual when compared to other OECD countries, in which there are often important diverging views across local governments

#### **Box 3.14. Conclusions of the 2007 Committee on Public Sector Responsibilities**

The committee published its final report in February 2007. It observed that responsibilities for regional development were spread over too many actors, making co-ordination very difficult, and that the division of tasks varied significantly among regions. In addition, it argued that the current division of regions was ill-suited to effective regional development. Based on these observations, the Committee called for a broader, more inter-sectoral regional development mandate. This would include the creation of new, directly elected regional authorities (*Regionkommun*), who would take over responsibility for regional development as well as for health and medical care. The county councils would be replaced by these directly elected regional authorities following the model of Västra Götaland.

Criteria for enlarging the regions (merging counties) would mostly be linked to functional labour market regions, and regions would have a population of between 1 million and 2 million inhabitants, with at least one university and one regional hospital. Regions would gain new competencies for regional development, such as the design and implementation of regional development programmes, the management of EU funding, the co-ordination of rural development (Table 3.2). As a corollary, the Committee suggested that national government supervisory activities should be consolidated in the county administrative boards, and that only supervision requiring highly specialised expertise should be performed by separate supervisory agencies. The Committee did not draw a new regional map but expected that the criteria they presented would result in a division into between six and nine counties and regional authorities. Finally, within this new structure, the responsibilities of the county administrative boards would be reorganised and focus on national government co-ordination, supervision and other advisory duties, as well as on follow-up, evaluation and cross-sectoral knowledge building.

### Box 3.14. **Conclusions of the 2007 Committee on Public Sector Responsibilities** (cont.)

The conclusions of the Committee on Public Sector Responsibilities have gained broad support among public officials in Sweden. The process is an example of consensus-building, as it was carried out through a comprehensive and in-depth analysis, with the support of different sectors of Swedish society, including SALAR and the main regional and local actors. In all, there were five years of in-depth consultation and discussions throughout the country involving thousands of people. Broad agreement was achieved on the analysis and the way forward. The Committee's report has been circulated for comment and opinions have been received from 543 consultation bodies (government agencies, county councils, municipalities, SALAR, regional co-operation councils, etc.). The overall response from the consultation was very positive, especially from representatives of the local and regional levels but also from government agencies, as well as private actors and industry.

Source: Summary: Conclusions of the Committee Report (SOU 2007:10).

on the design of reforms. This is probably linked to the large consultation process that was conducted by the Committee, and to the way Sweden has built regional reforms, i.e. on an “experimental” basis in the first phase. A mediator was appointed by the government to promote discussion across the country on the regional reforms and to look after national interests in this process. His report delivered in May 2008 confirms that 90% of respondents in public hearings supported the proposal for new and larger regions, including close to 100% of the municipalities, and a willingness to continue the process was reported for almost all counties. Stockholm County Council is the main exception (Björklund, 2008). However, a weakness in the consultation process is that citizens seem to have been little involved and there is little insight regarding citizens' support to regional reform in Sweden today.

Although regional reform has gained broad support in Sweden – especially across local governments – the reform promoted by the 2007 Committee (i.e. a limited number of regions, to be created by 2010) has not taken place as such. The timeline has been delayed, as support for regional reforms has been somewhat mixed at the national level. However, bottom-up demand for regionalisation has remained strong and has compensated for the relatively weak leadership at the national level in the 2000s. As explained in Section 3.2, seven counties have recently submitted proposals for mergers.

The national government has in early 2009 made an impulse to clarify further steps in regional reforms. This is an important step, as in essence, the national government has made a choice among the different regionalisation

Table 3.2. **Main objectives of the Swedish regionalisation reform**

Broad policy objective	Governance and management objectives	Solve current challenges	Counterarguments
Make economies of scale in public service provision	Improved efficiency of health system provision Economies of scale in labour market services, public transport, infrastructure Internalisation of spillovers, better quality public service provision Improved co-ordination between counties and municipalities, better co-ordination of hospital and social care	Fragmentation of responsibilities for public service delivery in many policy areas (infrastructure, transport, health care, housing, etc.) Many of today's counties are too small to cope with the increased future complexity of health care provision	Risk of creating clumsy constructions Optimal size debate: very hard to identify an optimal size for efficient public service delivery Efficiency-related counterarguments, presented by those who believe that smaller units may be more efficient and less bureaucratic, since they have better local knowledge, can choose measures more adapted to the needs of their clients, and are better able to adjust service provision to variations in local demand The expansion of administrative units can also bring challenges, especially in remote areas with large distances, complicating the provision of public goods and services. Besides, economies of scale do not apply in the case of "proximity public services".
Enhance competitiveness and regional growth	Bigger regions would have higher critical mass, more resources to implement effective regional development strategies, the ability to foster intra-regional co-ordination and to implement more integrated territorial planning Need for increased co-operation: to respond to the widening functional labour market region trend Need for improved spatial planning at the regional scale Need for improved synergies across sectoral policies (e.g. infrastructure, innovation, higher education, housing, labour market) Better access to local knowledge, remedy to asymmetries of information Better target regional comparative advantages through access to local knowledge For public goods with strong local/regional externalities – related to regional development such as innovation, labour market policy as spatial planning and public transports – it makes sense for the regional government to have more responsibility for reasons of proximity or local knowledge and a better match of policies with functional areas.	Co-ordination gap at the county level, across national administration at the local level, local governments and national agencies (see Section 3.3) Little involvement of county councils in the design of regional strategies Weak enforcement capacity of county policies, due to large competencies of municipalities (including for land use) Co-ordination challenges across levels of government (design of regional programmes, etc.)	Local labour markets are sometimes smaller than individual municipalities, co-ordination challenges could be addressed by inter-municipal co-ordination arrangements in some cases Risk of insufficient transfer of resources and lack of regional capacities to conduct appropriate strategic planning in remote regions

Table 3.2. **Main objectives of the Swedish regionalisation reform (cont.)**

Broad policy objective	Governance and management objectives	Solve current challenges	Counterarguments
	For others national governments may be in the best position, for reasons of scale or capacity, to provide services efficiently. <sup>1</sup>		
Co-operate with European regions and better compete on the global scene	Participate more actively in growing co-operation with other regions in Europe and the world; this requires a regional level with a clear mandate Swedish counties are too small to be competitive in a globalised economy	Small size of Swedish counties in OECD perspective Sub-optimal governance system for the management of EU funding: NUTS 2 level is promoted by the European Commission for the implementation of structural funds. In Sweden, NUTS 2 level is a statistical division (8 regions)	The literature and case studies abound with arguments for and against a relation between size of population and territory and economic growth
Enhance local democracy	Enhanced local democracy and transparency in decision making through direct election of regional bodies  Enhanced involvement of citizens in policy making	Limits of inter-municipal co-operation: horizontal co-operation comes at the cost of a less transparent decision-making process, as regional co-operation councils are indirectly elected, thus reducing voter control and transparency of the decision-making process	No evidence of citizens' support to regionalisation reforms due to the lack of consultation and the fact that counties are very old territorial units, with a strong identity

1. In particular, there is a recent trend in OECD countries such as Denmark, Germany and Norway to recentralise health care provision. This option was also discussed in Sweden. The proposal was that health care might be reorganised, with primary care entrusted to municipalities and specialised care brought closer to research facilities. This would mean the recentralisation of specialised health care. But Swedish regional reform does not move in that direction, although some options have been discussed.

Source: Own material and various reports including Committee on Public Sector Responsibilities (2007), Nordregio, Malin Stegmann McCallion & Pontus Tallberg, 2008.

options that were developed since the late 1990s in Sweden. In its decision, the government clearly supports the principle of extending the pilot region model to all Swedish counties wishing to follow the way. The government consensus on the next steps of the regional reforms includes four components (Box 3.15): i) pilot regions made permanent and demand from Halland and Gotland validated; ii) extension of the pilot region model to all counties; iii) agreement concluded on the methodology to deal with application for mergers of counties; iv) inquiry set up to review the regional level of central government administration.

By this decision, the national government is confirming the direction followed since the late 1990s, i.e. that regionalisation has to emerge in a bottom-up manner rather than to be imposed in a top-down way – which is specific about Swedish regionalisation reforms. The major difference with the previous years is that the government has clarified the “roadmap” for future regional reforms and the methodology to follow (Box 3.16). In essence, the government acknowledges that it will not have objection for other counties to adopt the same competencies as pilot regions, i.e. that county councils will be

### Box 3.15. Next steps on the agenda for regional reforms: Four key points

Statement from the Prime Minister; the Minister for Enterprise and Energy, Deputy Prime Minister; the Minister for Education; and the Minister for Health and Social Affairs (Dagens Nyheter, 28 January 2009).

- First, in any future regions, the divisions of power between central government and the regions will, in principle, follow the present arrangements in Västra Götaland and Skåne, i.e. a responsibility for regional development and a possible responsibility for cultural matters. Other proposals on transfers of power from central government to the regions are not being considered. Sweden will have three political decision-making levels with a right of taxation: central government, regional authorities and municipalities.
- Second, the pilot regional authorities in Skåne and Västra Götaland will be made permanent. Besides, the applications for conversions to regional authorities received from Halland and Gotland will be granted.
- Third, an agreement was made on the way to deal with the application received from Norrbotten, Västerbotten, Västernorrland, Jämtland and the Municipalities of Sundsvall and Ånge. This application will be referred to the Legal, Financial and Administrative Services Agency (Kammarkollegiet). Other applications will be dealt with in the same way.
- Fourth, it is equally important to clarify the co-ordination between national agencies at the regional level and across levels of government. An organising inquiry has been to review the regional level of central government administration (see above).

Source: Statement from Fredrik Reinfeldt, Prime Minister; Maud Olofsson, Minister for Enterprise and Energy, Deputy Prime Minister; Jan Björklund, Minister for Education; Göran Hägglund, Minister for Health and Social Affairs (Article, Dagens Nyheter, 28 January 2009).

fully in charge of regional development matters. Anyway, the demand has to come from counties themselves and no institutional change will be imposed by the government. Besides, the question of competencies (for regional development) and size of counties (mergers) has been distinguished, as a specific process to deal with requests of amalgamations has been put in place (Box 3.15). The 2009 decision goes in the right direction as it clarifies the next steps of regional reforms. One challenge that remains to be addressed is the question of how to better co-ordinate at the regional level (by county councils) programmes linked to EU funds and rural development.

**ii) Improving state co-ordination at the regional level.** The second key priority is to accompany the decentralisation of regional development

competencies with better state co-ordination at the regional level (i.e. de-concentration). Deconcentration reforms (with sub-national representatives not elected but appointed by and accountable to the national government) should be carefully distinguished from decentralised reforms (where local leadership is elected by local citizens). However, there is a rationale in some cases for conducting both reforms simultaneously. As explained earlier, many sectoral policies – which are not decentralised to elected actors – need improved co-ordination at the regional scale, among county administrative boards, national agencies as well as local governments – to reduce overlaps across policies and exploit synergies. Several countries (France, Poland, UK among others) have conducted decentralisation and deconcentration reforms hand in hand, as there are complementary objectives between the two policies. In Sweden, more efficient devolution requires better clarification of the role of governors as the main co-ordinators of national policies at the county (regional) level.

The 2007 Committee suggested that national government supervisory activities should be consolidated in the county administrative boards and that only supervision requiring highly specialised expertise should be performed by separate supervisory agencies. The Committee also believed that county administrative boards should be reorganised into a considerably smaller number of authorities, as this would make it easier to take advantage of administrative economies of scale, and to create scope for broader and more in-depth expertise in different areas. In September 2007, another report “Consolidation of county administrative board activities” was presented to the government. The report proposes consolidating activities in over 20 fields under seven county administrative boards. Based partly on the Committee’s criteria for a new geographical division of regions, the report considered that seven county areas, each consisting of several counties, should be the starting point for such a consolidation.

In its 2009 decision to further support regional reforms, the national government has clearly highlighted that enhanced competencies for regional development for county councils has to go hand in hand with improved co-ordination of central government agencies at the regional level, as both reforms are interlinked. The government has appointed a Committee which has, among other tasks, to make proposals on how the structure of central government regional administration can be made clearer, more co-ordinated and more appropriate. Its conclusions should be known by December 2012 (see Box 3.16).

**iii) Taking into account the regions’ various needs.** The third priority is to take into account the regions’ various needs, as there is no “one size fits all” governance solution for all regions with different structural conditions. Demographic, economic or territorial differences across regions matter and



### Box 3.16. **Objectives of the 2009 inquiry (2009-12) and the overall regional reforms**

An Inquiry has been appointed to conduct a review of central government regional administration. The Inquiry is to produce proposals on how the structure of central government regional administration can be made clearer, more co-ordinated and more appropriate.

The need for a review has been raised in connection with, for example, the initiatives taken to change county council boundaries. The Government wishes to stress how important it is that such changes proceed from local and regional level. At the same time, it is important to gain an overall view of the structure of central government regional administration and possible changes to the county councils.

The national government wants to ensure that future positions have a well-considered basis. Alongside this review, the Government has submitted applications from a number of county councils to alter existing boundaries to the Legal, Financial and Administrative Services Agency for examination. In order to make changes to county council boundaries possible, the Inquiry is to present a proposal for an act on reorganisation delegates for county councils. The Inquiry is also to present proposals on any consequent changes to various statutes that the review and any amalgamations of counties or county councils might entail.

The Inquiry is to: i) Submit proposals concerning changes to county boundaries in those cases where changes to county council boundaries may be considered; ii) conduct a review of national government agencies at the regional level (including CABs); iii) submit proposals for legislation on reorganisation delegates for county councils, the possibilities for county councils and municipalities to contribute financially to other municipalities or county councils when preparing for amalgamations of county councils, and what consequent amendments to acts and ordinances changes to the boundaries of counties and county councils may necessitate; iv) report and, where necessary, submit proposals on possible consequent changes to the system of local government financial equalisation.

Main objectives of the review of state co-ordination at the regional level:

*Look at how the role of the county administrative board as regional co-ordinator for national government supervision can be developed.* Proposals are to take account of ongoing changes in the national government administration. For the county administrative boards, such changes could involve the consolidation of certain activities in a small number of county administrative boards.

### Box 3.16. Objectives of the 2009 inquiry (2009-12) and the overall regional reforms (cont.)

*Co-ordination with regional bodies:* Review the possibility of increasing the co-ordination of certain national government activities with county councils. This applies both to cases in which county council boundaries remain unchanged and those in which new boundaries are being considered.

*County boundaries:* The inquiry is to propose the form changes in the county boundaries should take and how they should be implemented in cases where changes might be considered. The inquiry is to propose names for the counties that might be formed, as well as county capitals.

*Citizen perspective:* Proposals are to incorporate a customer perspective, i.e. national government agencies should have sufficient local presence or knowledge to ensure that citizens, municipalities, county councils and companies are offered good service. Furthermore, proposals are to be made to bolster the conditions for growth and reduce sectorisation.

*Fiscal issues:* Submit proposals on possible consequent changes to the system of local government financial equalisation.

*Local politics issues:* Submit proposals for legislation on reorganisation delegates for county councils,

*Submit proposals on the organisational form of the county administrative boards in the counties concerned.* Changes in the organisation of the county administrative boards are to be reported using an overall organisational plan including the areas of activity affected, the distribution of resources and a timetable for implementation.

*Source:* TOR (2009), Committee terms of reference, Review of central government regional administration, etc. Decision at a government meeting on 16 June 2009.

have to be taken into consideration to design an optimal governance framework at the regional level. Sweden has developed innovative governance approaches with the two pilot regions (which are among the most urbanised regions in Sweden), and such an asymmetric approach is increasingly adopted for various reasons in France, Italy, Spain and the United Kingdom. In many cases, specific governance tools are developed for metropolitan areas. There can also be other reasons for asymmetric decentralisation, such as the need to take account of various territorial, political or cultural situations. For example, Finland, France and Portugal have specific arrangements for the governance of islands. The Council of Europe also acknowledges this principle: “the same levels of local and regional administration need not exist everywhere in the state; competences of local and regional authorities of the same level may differ”.<sup>33</sup>

The asymmetry principle also applies to the questions of the size of regions and the mergers of counties. The question of size should be treated with caution. Bigger regions do not necessarily lead to higher regional growth. Analysis shows that in sparsely populated northern areas, the labour market has not widened appreciably and distances are huge (Chapter 1), so creating a large administrative region may not be the best choice. In any case, just as competencies may vary across regions, the size of regions does not necessarily have to be standardised in terms of population. Small regions (in this respect) can coexist with large ones. The 2009 government decision to pursue the regional reforms goes in that direction, as the Prime minister has insisted that “in some parts of the country, large regions may very well be the best path to take, while other parts may be best served by other solutions” (Statement by the Prime minister, January 2009). The population criterion is important, but it may be tempered by criteria such as the size of counties, access to markets, etc. In-depth cost-benefit analysis is needed prior to a merger, and a broad set of criteria must be taken into account, including questions linked to regional identity. For example, in northern counties, the fact that two counties are part of the Lapland macro-region may be an argument for a merger (to promote tourism and cross-border co-operation for example); but this should be balanced against the costs of creating a very big region, one that would in fact be larger than Australian states.

### ***The case of the Stockholm-Mälär region***

Contrary to some other regions, there is a clear *economic* rationale for merging counties in the Stockholm-Mälär region, to better match the borders of the administrative region with the functional region, which covers five counties, all closely interrelated and interconnected on a functional basis (Chapter 1). However, it is difficult to achieve a perfect match between functional and administrative boundaries, simply because functional areas evolve temporally and spatially. Besides, merging counties is not only a matter of “economic rationale”, and political considerations clearly play a major role.

If merging counties may be a too sensitive political reform, there is room of manoeuvre to improve co-ordination across the five counties in the Stockholm-Mälär region. So far, Stockholm’s economic performance has remained very good, with the fastest annual average growth rate in GDP per capita (3.6%) over 1995-2005, and signs of diseconomies of scale are not yet visible (Chapter 1). Although its economic performance is impressive, the high degree of fragmentation of local authorities within the functional area and the lack of co-ordination in some cases are obstacles to effective strategic planning at the metropolitan level. For example, Chapter 1 highlighted that there appears to be room to improve linkages between Stockholm and Södermanland. Sustaining enhanced concentration of the population in the

Stockholm region (Chapter 1) requires governance adjustments at the metropolitan scale.

Various positive governance initiatives have been taken within the Stockholm-Mälars area; but the functional region still lacks governance mechanisms with strong decision-making capacity which allows them to arbitrate and to develop an efficient long-term planning strategy. The Stockholm county council in particular has developed innovative governance tools, such as ambitious development plans, with forward looking horizons up to 2050. At the “macro-regional” scale, initiatives have been taken to promote horizontal co-ordination within the functional region, such as the creation of the council for the Stockholm Mälars Region (*Mälardalsrådet*), an informal non-profit organisation to facilitate the voluntary exchange of information and networking among the different jurisdictions. However, it remains weak in terms of enforcement capacity and decision-making (OECD, 2006a).

The OECD *Metropolitan Review of Stockholm* recommended in 2006 a hybrid solution to improve the governance of the Stockholm-Mälars region. On the one hand, the functional labour market of Stockholm could be represented by a directly elected regional body, following the Skåne and Västra Götaland model, and by a merging of the two county councils Uppsala and Stockholm, with possible adaptations to reflect the specifics of this metropolitan region. On the other hand, it suggested that a lighter form of metropolitan governance could be established for the Stockholm Mälars region, on the basis of the existing *Mälardalsrådet*, with a mandate to co-ordinate efforts for a common and shared vision of economic development and infrastructure planning. Many OECD metropolitan areas such as London, Madrid, Paris and Seoul have implemented or are in the process of implementing reforms to improve governance tools at the metropolitan/functional level, often with a strong hand from the national government.

Since 2006, the governance of the Stockholm Mälars region has changed little (see Box 3.17). Unlike the two other metropolitan areas, Göteborg and Malmö, which are part of the pilot regions, Governance changes in the Stockholm functional region are difficult to introduce. Stockholm county council is reluctant to merge with neighbouring counties. Any reform in this area would have to consider the impact of merging of county councils on equalisation. Uppsala’s request to merge with Dalarna and Gävleborg to form a region has to be analysed in terms of the impact on the governance of the broader functional Stockholm Mälars region.

### ***Making regional reform happen***

The challenge for Sweden is to find a balance between a *bottom-up* process of reform, which has strong advantages in terms of consensus-building, and

### **Box 3.17. Governance of the Stockholm Mälars region: Update since the OECD 2006 Review**

Although the national government is now supporting the extension of the pilot region model to other parts of Sweden, there has been no major change in governance in the Stockholm Mälars region since 2006. No major initiatives have been taken, but a rather lively discussion and debate continues to take place on the matter. Other counties have been forming alliances and have applied to establish a new region, but no such initiatives have emerged from Stockholm and neighbouring counties. The Stockholm region has not been able to reach a consensus on the best way forward. In the meantime Uppsala has formed an alliance with Dalarna and Gävleborg and has applied to form a region.

As an example of the practical and informal co-operation that takes place within the broader Stockholm region, the rather ambitious process of formulating a new regional development plan for Stockholm has been taking place in the past few years (the RUFSS 2010, Regional Development for Stockholm). The work has been co-ordinated by the Office of Regional Planning of the Stockholm County Council. The process has included hearings and dialogue with a large range of local and regional actors both within Stockholm county and in the broader Stockholm Mälars Region.

Another example is the development of a vision for the future Stockholm region, looking ahead to 2030. The Vision Stockholm 2030 project involved the City of Stockholm as well as many different actors in Stockholm county. The project aimed at a long-term, co-ordinated vision for sustainable development and a prosperous Stockholm. RUFSS 2010 has a planning horizon of 2030 and even 2050 for spatial planning issues concerning East Central Sweden, which contains the counties of Stockholm, Uppsala, Södermanland, Västmanland, Örebro, Gävleborg and Östergötland. The planning bodies of these counties have taken part in the making of the spatial vision for 2050 and have expressed the need to further develop a truly united planning process in the coming years.

The Council for the Stockholm-Mälars region, Mälardalsrådet, still serves as a political platform for the greater Stockholm region, focussing on transport planning, the regions international competitiveness and more recently on the knowledge region. Since 2006 relationships and networking also with players from the business and academic sector have been intensified. The council also serves as a co-ordination body of joint efforts such as the long-term co-ordinated transport planning project *En bättre sats*, which was initiated in 2004. The work is proceeding and now looks ahead to the national transport plan 2010-21. In January 2008, each county was obliged to make a system analysis and offer suggestions for the county's transport and communication priorities. The counties in the Stockholm Mälars region decided to make a common system analysis and invited the county of Gotland to participate. Today, Mälardalsrådet has 56 municipalities and five county councils as members. The municipalities of Linköping, Norrköping, Karlstad and Gävle are associate members.

*Source: Background Report, Sweden (2009).*

*central leadership* in the process, to avoid constantly delaying the reform process. Maintaining incremental reform over an extended period requires consistent leadership to clarify medium-term objectives and set priorities. Although the reform remains bottom-up driven, central leadership will have a stronger role to play in the process in the coming months, with the examination of the merger of counties; and the reforms of central administration at the regional scale. So far, the timeline of reforms remains pretty open, as the calendar will also be determined by the conclusions of the recently appointed inquiry to review the national administration at the regional scale, which will not be available before December 2012 a rather distant horizon, considering its close links with the regional reforms. For mergers of counties, the national government insists on the need to avoid fast-tracking changes and to analyse the pros and the cons in each case very carefully (Box 3.16).

Lessons from OECD experience indicate that the creation of new regions takes time and is politically very sensitive. Territorial reforms also oblige policy makers to face the problem of “reforming the reformer”, since the public administration must, in effect, design and implement its own reform, imposing measures on itself that many officials, such as those who combine a local mandate with a national one, may dislike (OECD, 2009). There are very few examples of “radical” regional reform, in which new administrative layers are created in a short time. Denmark, and to a lesser extent Poland, might be among the few examples. In Italy, regional reforms went on from the early 1970s to 2001. In France they were discussed in the late 1960s, implemented in the 1980s, reformed in 2003 and further reforms are currently being discussed. In Portugal and the United Kingdom, attempts have been made to create elected regional bodies, but reforms have failed to take place following a referendum to consult citizens (Table 3.3 and Annex 3.A2).

For the implementation of the territorial reform, OECD experience offers the following broad recommendations:

- *Leadership* is critical. Virtually all assessments of the political economy of reform point to the importance of strong leadership. Many also point to the importance of government cohesion in support of the reform: if the government is not united around a reform proposal, it will send mixed messages, and opponents will exploit its divisions; defeat is usually the result. Cohesion appears to matter more than factors such as the strength or unity of opposition parties or the government's parliamentary strength (OECD, 2009d).
- *Clear roadmap*. It is important for the government to develop a clear roadmap with a path of change/calendar for reform. Leaving regional actors in a situation of uncertainty is detrimental to relations across levels of

Table 3.3. **Examples of regionalisation reforms across OECD countries**

Type of regionalisation reforms	Country
Consolidation of existing elected regions	France (1986; 2000s) Italy (1990s) Spain (1990s-2000s)
Newly created regional levels (elected)	Poland (1999) Czech Republic (in 2000) Slovak Republic (in 2002). Denmark (2007) Sweden (pilot experience in 2 regions since 1997)
Newly de-concentrated regional level	Ireland (1994) United Kingdom (in 1998 and 1999) Greece (1987) The Netherlands (city regions)
Attempts to create new <u>elected</u> regional level (under discussion)	Hungary: transformation of the seven existing statistical planning regions into local governments Slovenia, with the creation of a second local public tier Chile (ongoing reform to create a directly elected regional council) Sweden (2007 Committee on Public Sector Reform) United Kingdom: transformation of the eight regional development agencies into elected regional assemblies has been discussed for a long time
Failed attempts to create elected regional level (citizens voted no to the referendum)	Portugal (1999) United Kingdom (2004)

government and sends mixed signals to citizens, for whom the reform path is totally unclear.

- **Set priorities.** Regional reforms have many dimensions, and these do not all have the same degree of priority. It is important for the government to define the most pressing needs and priorities.
- **Clearly identify winners and losers of regional reform** in each case, and provide compensation to losers, either financial incentives or greater autonomy in certain policy fields. For example, in Switzerland's equalisation reform, winners and losers were clearly identified and the latter compensated with enhanced autonomy in certain fields. Financial incentives may be needed to balance the impact of amalgamation of county councils on equalisation.
- **Maintain flexibility in implementation.** Regionalisation is an evolving process. It is not a policy outcome in itself but a governance tool to improve outcomes. The system has to remain flexible and the boundaries of regions can always evolve if they are considered less than optimal. In France, two decades after regions were set up, there is some debate about further merging several regions and moving from 22 regions to 16.
- **Follow-up implementation.** Capacity for reform also implies the capacity not only to launch the reform, but to follow up its implementation and provide

regular assessments. This may imply entities in charge of monitoring implementation or indicators to monitor the progress of reforms.

- *Focus on communication on the outcomes of the reform.* In the case of regional reform, which is generally not of great importance to citizens (Swedish voters are more concerned about unemployment and education for their children), support has to be gained through clear indications and evidence of improvements in service delivery and the impact on regional competitiveness. Communication should focus in particular on the positive lessons from Västra Götaland and Skåne.
- *Exploit windows of opportunity, such as the current crisis.* The crisis has both revealed co-ordination gaps (the need to create “regional co-ordinators”) and an opportunity to accelerate changes in regional development policy, both at county and national levels. The momentum should be used to take the next steps towards regional reform.

### **Further strengthening regional governance and enhancing public-private co-operation**

Moving towards more proactive bottom-up regional policy in Sweden requires more than designing a new territorial administrative structure and setting up new regions. Equally important is capacity building at the local and regional level, so that public actors and a broad variety of stakeholders – private actors, SMEs, universities, NGOs, citizens – are able to co-operate to design regional and local development strategies that draw on untapped regional resources. This is particularly critical at present, when it is important to enhance the effect of fiscal stimulus packages. Although Sweden has better developed public-private co-operation than some other OECD countries, there is room for improvement in certain regional governance areas, especially if Swedish regions gain new competencies for regional development over the next few years. This section therefore focuses on the need for counties/regions to further strengthen regional governance and involve private actors in policy-making; and the need to reconsider certain multi-level governance arrangements to improve the effectiveness of regional strategies.

### **Trust in public institutions: A key determinant of public-private co-operation**

Among Sweden’s strengths are a very transparent policy-making process and a high level of trust in public authorities, characteristics which facilitate public-private co-operation. They play a key role in the successful implementation of innovation programmes such as the VINNVÄXT programme, which is based on a “triple helix” model of collaboration by public and private actors and universities (see Chapter 2). They also play a major role



in building social capital (interaction among actors). For example, although northern regions may be disadvantaged because of low agglomeration economies and long distances to markets, they have strong social capital; public and private actors co-operate relatively easily because they know – and trust – each other. Such social capital limits the cost of co-operation and was reported as a key factor in Norrbotten's ability to become a globally competitive niche. For their part, urban regions such as Västra Götaland have a very tight fabric of social capital at the local/regional level.<sup>34</sup>

Although the degree of public-private co-operation on regional policy or any other policy is difficult to assess quantitatively, the contribution of private actors to the financing of regional programmes or the level of absorption of EU funding can serve as indicators. For example, the implementation of co-financed EU projects at the local level has helped to increase private actors' participation in regional policy. In 2008, the average of private financing in regional projects was 9% of the total (SEK 466 127 000). Moreover, firms contribute SEK 4.3 billion (20%) to the structural funds programmes. A further sign of good public-private collaboration is the high level of absorption of EU structural funds. At the end of 2006, Sweden ranked third, having absorbed 76% of the EU funding for the 2000-06 period, above the EU15 average of 68% (DEXIA, 2008). Considering the key role played by public-private collaboration at the local level for absorbing the funds, this helps to explain Sweden's good performance in the area.

### ***The role of counties/regions in stimulating public-private co-operation***

While private actors are clearly involved in the financing of regional policy, their role in designing regional strategies appears more limited, although progress has been made with the implementation of the regional growth policy. Former NUTEK, now Tillväxtverket, has played a role in stimulating co-operation with private actors in the design of regional development and growth programmes (RUPs and RTPs), which encourage counties to establish regional partnerships that include private stakeholders. However, the participation of private companies in the design of programmes remains limited (Tillväxtverket, 2008). This is partly due to lack of time and resources and the fact that they do not see the benefits for themselves of participating. Regional leaders have a critical role in ensuring enhanced public-private co-operation on the design of a regional strategy/vision for regional growth (current RUPs), based on regional comparative advantages.

Positive lessons from pilot regions to stimulate public-private co-operation indicate that regional elected actors have a key role to play. For example, Västra Götaland has established five platforms for co-operation with stakeholders from industry, academia and municipalities to design a common vision for the region, entitled "The Good Life" (see Box 3.18). When stakeholders are mobilised behind an agreed strategy, they are more likely to co-operate when called upon.

**Box 3.18. Västra Götaland's innovation and R&D strategy**

The focus of Västra Götaland's Innovation and R&D strategy is the stimulation of entrepreneurship and the development of start-ups and SMEs as well as research-based clusters. The region and stakeholders from industry, academia and municipalities have established five so-called "platforms". They are a vital means of putting this strategy to work to realise the region's vision, "The Good Life", and they set the prerequisites for partnerships business, universities, institutes and public stakeholders on both strategic and operational levels. The platforms are located in the four regional nodes: Göteborg (2), Trollhättan/Vänersborg (1), Skövde (1) and Borås (1) and are also important hubs in the regional innovation system.

These platforms build on tradition and renewal. Borås (Espira) builds on the textile history of the Borås area and combines this with close co-operation with the local university college and local private actors in the area of "smart textiles". Similarly, Sahlgrenska Science Park works closely with the University of Göteborg, the Sahlgrenska hospital and Chalmers in the area of life science. Lindholmen co-operates with Chalmers, research institutes and the automotive and ICT industry as does Innovatum (located in the Trollhättan/Vänersborg area). Innovatum has a strong focus on media and film production. Gothia Science Park concentrates on information technology and serious gaming and has links to agriculture, farms and related industries through its co-operation with SLU (Swedish University of Agricultural Sciences). Gothia also works closely with the university college in Skövde. Gothia won the European Enterprise Award 2009.

These platforms place Västra Götaland on the European research map as a region that is innovative, entrepreneurial and "thinks outside the box". For example, Innovatum supported business and academia participation in the Joint Technology Initiative Clean Sky, and Lindholmen Science Park facilitates test and demonstration initiatives related to sustainable transport within FP7.

Source: Region Västra Götaland, 2009.

A good example is the reaction of the Västra Götaland region when General Motors announced in 2004 that production of medium-sized cars would take place in existing plants in either Germany or Sweden. The fact that lead actors were already co-operating allowed the region to reorient its investment strategy towards building intellectual infrastructure and sophisticated R&D programmes as a rapid and visible response to this potential crisis (Visanu, 2005, in OECD, 2007).

Overall, county councils need to become more involved in regional innovation policy, which is now mainly shaped by national agencies,

municipalities, firms and universities/research centres. There are few examples of the involvement of counties authorities in the VINNVÄXT programme. Due to its critical mass, the region is an appropriate level for developing innovation strategies and an “enabling framework” for regional innovation, hence the European Commission’s focus on regions in this respect. To optimise the growth potential of each region requires tools that encourage public institutions and local stakeholders (private actors, SMEs, universities, NGOs, etc.) to work together on the prioritisation of public investment. The key is to maintain a focus on regional comparative advantages rather than target fashionable objectives, such as creative industries or biotechnology. To better involve the regional level in regional innovation policy, national agencies could support counties’/regions’ development of their own “regional innovation strategy” and encourage an outward focus and links with the situation in other regions. France recently developed a toolkit to help regions work out their innovation strategies (see Box 3.19).

**Box 3.19. Regional innovation strategies:  
Toolkit for French regional authorities, 2007**

When applying for structural funds, French regions prepare documents on their development strategies and forward them to the EU Commission. Brussels often considered that such papers lacked coherence and that the policy analysis could be more robust. The French government therefore decided in 2007 to create a guide that would help regions to assess their strengths and weaknesses and would also improve the decision-making process. The guide was completed in November 2007 after discussion and consultation with several pilot regions. It has now been communicated to all regions.

The guide provides an overview of the main factors determining regional growth in modern economies. It describes the overall components of the innovation system and indicates a number of regional indicators to calculate as well as benchmarks to consider. It provides methodological keys for establishing a regional strategy based on the diagnosis. Priorities are selected according to a number of criteria. Programmes are monitored through the use of appropriate indicators and references.

Source: [www.diact.gouv.fr/](http://www.diact.gouv.fr/).

County councils/regional coordination bodies also need to have a greater role in fostering inclusive regional strategic planning. Here again, the example of pilot regions is important, as they consider that their spatial planning processes have improved and resulted, among others, in improved public transport systems. Pilot regions have developed strategic planning around a regional vision and growth programme, infrastructure planning and the EU

Cohesion Policy. Counties/regions could encourage municipalities to co-operate on the design of integrated spatial plans, as was done in Skåne and Västra Götaland. The issue is not to make regional plans binding but to be able to prepare them in a more inclusive way, to design better planning strategies on the basis of stakeholder's more comprehensive knowledge, and to ensure the greater legitimacy of county spatial plans. Regional strategic plans should be better connected with sectoral and local plans. They should also adopt a cross-border perspective to better exploit functional linkages across areas and policy synergies.<sup>35</sup> Improved land use planning may also require removing some obstacles to public-private co-operation.

### ***Implementing strategies: Removing obstacles to public-private co-operation***

Swedish local governments have made a particular effort in the past few years to remove obstacles to public-private co-operation. According to a survey by NUTEK, in 2003, 71% of the municipalities were developing programmes aimed at improving or simplifying the permitting process for business (OECD, 2007e). However, challenges remain, linked to the fact that Swedish municipalities are not yet part of Better Regulation processes (OECD, 2007e). Although this is beginning to change, the process of integrating this level of government into Better Regulation needs to be formalised and accelerated (OECD, 2009). Areas in which administration simplification could be improved at the local level are procurement and land planning. Land planning in Sweden is slow; which contributes to increase the rigidity of the housing market (see Chapter 2 and Box 3.20). Private developers should for example be allowed to go to court to challenge a negative municipal decision and municipalities could process cases more rapidly (OECD, 2007 OECD 2007g, OECD 2008a).

Public/private partnerships (PPPs) could also facilitate collaboration between public and private actors. PPPs are rarely used at the regional and national level, but Stockholm has been an innovator at the municipal level (a good example is the Arlanda express train that links the airport to the city centre, and which is the only example of PPP in transport investment so far in Sweden). For roads PPPs are not used. The concerns are that the cost of capital is high (the government can borrow at lower rates) and that long-term contracts remove part of the potential for annual budget prioritisation. Currently only a few regions are willing to use PPPs; an example is the construction of a hospital in the Stockholm region (Karolinska). At the national level there seems to be increasing interest in PPPs. The government recently instructed Banverket, the Swedish Road Administration and the Transport Research Institute, to study the legal, financial and technical prerequisites for PPPs in the road and rail sectors.<sup>36</sup> Although PPPs should not be considered a “magic tool” and should be used with caution, they sometimes

### Box 3.20. Challenges for municipal land-planning processes in Sweden

Land planning processes are slow because of counties' and municipalities' complex administrative mechanisms. As a large majority of new apartment construction requires changing the local development plan before building can commence, the role of municipalities is central (*Konkurrensverket*, 2006). Prior to granting a building licence, the municipality must establish a general plan (designating residential, commercial and industrial areas) and a detailed plan (defining the type of building). The process of developing or changing a detailed plan can be long and tedious. In addition, appealing detailed building plans can take up to 3.5 years. This makes a swift response to changes in demand quite difficult (McKinsey, 2006). The county administrative board can be called upon to challenge a negative municipal decision. This raises the broader issue of a potential conflict of interest for county administrative boards as they act both as a court of appeals and as representatives of the national government.

The slow land-planning process, heavy regulations, and the fact that municipalities have few incentives to issue more land (see Section 3.1) are among the reasons for Sweden's rigid housing market (OECD, ECO/WKP(2007)37 2007), which also limits overall labour mobility.<sup>1</sup> Moreover, Swedish housing prices are diverging, with metropolitan areas registering the strongest increases and rural areas (apart from the seaside) falling somewhat behind. The metropolitan areas of Stockholm, Malmö and Göteborg have all had slightly fewer building permits relative to house price increases when compared to other parts of the country. One reason why some urban (and high income) municipalities provide fewer permits may be that current residents fear that further construction could dampen the prices of the existing housing stock (Finansdepartement, 2003, in OECD/ECO 2007).

1. Exceptionally high costs of construction in Sweden (OECD, 2007) have slowed residential investment for most of the last decade, [www.oilis.oecd.org/olis/2007doc.nsf/LinkTo/NT00004292/\\$FILE/JT03232591.PDF](http://www.oilis.oecd.org/olis/2007doc.nsf/LinkTo/NT00004292/$FILE/JT03232591.PDF).

Source: ECO/WKP (2007; OECD (2007e), *Regulatory Review of Sweden*, OECD Publishing, Paris.

provide interesting options for long-term investments, especially in infrastructure (Box 3.21). They can also provide interesting financial solutions for coping with the fiscal challenges created by the crisis.

### **Enforcing strategies: Reconsider multi-level governance arrangements**

#### **i) A stronger “contractual” dimension to regional development programmes.**

With county councils gaining new competencies for regional development, means of co-ordination across levels of government could be reconsidered in order to remedy gaps in regional policy co-ordination between national and

**Box 3.21. The case for PPP for sub-national investment**

P/PPs are contractual agreements between a public agency and a private firm. Through these agreements, the public and private sectors share their skills and assets to deliver a service or facility for the general public. In addition to the sharing of resources, each party shares in the potential risks and rewards. From the public sector's point of view, there are two major attractions. First, P/PPs enable an authority to lever additional finance without recourse to fiscal means. Second, the costs and risks of projects are split between the public and private sectors. Third, they tap into expertise and economies of scale available in the private sector which are rarely exploited by public policy. The key issue in assessing the use of P/PPs is whether they increase efficiency and effectiveness.

*At the same time there are certain risks, which call for appropriate safeguards to protect the public interest.* In particular, there are likely to be asymmetries of information and of commitment between the different parties. It is important to take into account more “inclusive” P/PPs, to which various local stakeholders of the development projects, profit and non-profit, may contribute. Private partners need to participate at as early a stage as possible, so that they can suggest initial infrastructure development plans or alternative plans. On the other hand, early participation of the private sector may create transparency and accountability problems. Plans proposed by firms may concentrate on their own returns rather than on the region's overall socioeconomic benefits. It is therefore important for policy makers to ensure procedures to enhance projects' positive externalities without sacrificing private innovations. The public sector should set a priority list of infrastructure projects and undertake feasibility studies for each project before deciding whether the project should have private participation.

*A cost-benefit comparison of P/PPs versus traditional procurement needs to be rigorously conducted, and P/PPs should be subjected to at least the same scrutiny as traditional expenditures in the budget process.* Local public authorities need guidance and, as far as possible, standardised processes for selecting and operating P/PPs. This concerns not only compliance with competition regulations but also the steps to follow to identify the best partner, evaluate the effectiveness of the P/PP option, and the ability to negotiate the contract and diffuse information to other local jurisdictions.

Source: OECD (2009a).

regional actors. As regional development programmes (RUPs) are the main strategic tools for regions (regional growth programmes are not mandatory), a greater role could be devolved to these programmes, to give them stronger enforcement tools, and clarify the financial framework in which they are

operating. At present, the timeline of the various RUPs is different, which makes cross-learning across regions and overall evaluation at the national level difficult. The timeline and functioning of RUPs could be standardised across Swedish counties. Besides, the timeline could be aligned with the timeline of EU programmes in the next financial period (2014-20), to ensure greater co-ordination with the EU cohesion policy.

The enhanced role devolved to regional development programmes could be inspired from the functioning of state-region contracts in other OECD countries (France, Italy, Spain, see Box 3.22). A “contract” is the bilateral agreement between national and sub-national governments concerning their mutual obligations, i.e. assignment of powers of decision, distribution of contributions (including financial commitments), and contract enforcement mechanisms (OECD, 2007i). Contracts facilitate territorial cross-sectoral co-operation at both national and local levels and enhance the accountability of regional actors, to address agreed targets and support capacity building at the local level. Contracts are tools for dialogue, experimenting and clarifying responsibilities and thus for learning, in a multi-year budgeting perspective. The effectiveness of this type of agreement is highly dependent on the enforcement structure and specific clauses regarding violations on the part of one of the parties (OECD, 2007i).

Sweden has already had an experience of regional contracts, with the Regional Growth Agreements in the mid 1990s. There is also some experience of contracts within the policy for urban development, which target specific deprived district areas.<sup>37</sup> In Regional Growth Agreements, economic resources from the structural funds were combined with both regional and local resources as well as national funds from governmental agencies operating on the regional level in order to create a pool of resources available for regional development strategies. The experiment was not pursued in part because regional growth agreements were largely centrally defined and failed to respond to regional needs and requests. At present, RUPs are designed by regions – which is a positive step – but lack standardised enforcement mechanisms across counties.

The functioning of RUPs could be strengthened if it is accompanied by clearer governance mechanisms (i.e. standardised timeline across counties, alignment with structural funds programmes, well-defined pools of resources). A greater role and corresponding resources for RUPs would also help ensure that the focus on health care would not completely absorb the attention and capacity of county councils. The drawbacks of Regional Growth Agreements would be avoided as RUPs are designed by regional actors and not by central agencies. A stronger “contractual” dimension to RUPs would also have the advantage of greater inter-ministerial collaboration in the design of the contracts and counties’/regions’ greater accountability for programme implementation. It would specify the resources allocated to counties for regional development and would require an increase in the specific earmarked grants to counties/regions

### Box 3.22. Example of contracts: France, Italy and Spain

#### **Contrat de Projet État-Région (CPER) in France**

The *Contrat de Plan État-Région* (now *Contrat de Projet État-Régions*) has become a key tool of French regional policy. The CPER became the strategic instrument for regional development policy in 1984, only two years after it was created by the law of 29 July 1982 on planning reform. These contracts have been negotiated with all regions since 1984, for periods of five to seven years (the current contract runs from 2007-13). These are detailed documents that present all the programmes and measures that will be carried out over a given period. The central government and the region co-finance projects defined in them: the most recent contracts may call for contributions from other local governments and from the European structural funds as well. They include a financial appendix specifying each party's financial commitment for the period involved. The CPERs do not necessarily imply budgetary transfers between central and sub national governments; rather, they generally focus on the responsibilities and commitments of each party, while providing a detailed description of the purposes of each measure.

While the first contracts were essentially devoted to infrastructure projects and industrial modernisation, those of the three subsequent generations have addressed a much broader range of questions, including grants for regional innovation and economic development and incentives for territorial initiatives. Since the 1990s, the budget allocated to these contracts has jumped spectacularly by more than 45% for each new generation of contracts. Thus, the amount for the 2000/2006 CPER was triple that allocated in 1984/1989.

Implementation of the contracts requires participation by different agents: the central, regional and local authorities, their representatives, and some intermediation bodies. Nearly 20 ministries participated in the previous generation of CPER (2000-06), and all contributed to varying degrees. The ministries that contributed the most to regional programmes under these contracts were the Ministry of Infrastructure, Transport and Housing, followed by the Ministry of Education and the Ministry of Agriculture.

Co ordination of the various ministries' actions in regions is the responsibility of both the inter-ministerial role of the DIACT (*Délégation Inter-ministérielle à l'Aménagement et la Compétitivité du Territoire*, under the authority of the Prime Ministry) and the "prefect" role of negotiator of the contract (the other party is the president of the regional council) who refers to the variety of ministries who are stakeholders of the contract (with the participation of their deconcentrated services in regions).



**Box 3.22. Example of contracts: France, Italy and Spain (cont.)****Italian contracts for regional development**

Italy's regional development policy has a marked contractual nature. The emphasis on participatory forms of territorial development planning and on recourse to contractual forms of multi-level governance can be considered the outcome of at least three factors: i) the influence of foreign experience; ii) a country-specific need for procedural and decision-making simplification; iii) the strong influence of EU territorial development policies. Indeed, the shift towards instruments of a predominantly contractual nature is part of a process that dates back to the mid-1980s and is partially modelled on foreign experience (in particular, the British "culture of public-private partnership" and the French "State-Regions planning contract" of the early 1980s). This influence, along with the country-specific need for simplification that was at the basis of the first experiences with the "contractualisation" of public programmes notably the institution of the *accordi di programma* (programme agreement) and the *conferenza dei servizi* (service conference), which primarily aimed at overcoming bureaucratic inertia and veto power and thus speeding up the decision process. The choice of contractual instruments as a strategy for co-ordinating development policies involving multiple public and private actors, complex decision making and the unified management of financial resources dates back to the mid-1990s and goes under the name of "negotiated programming" (Law No. 662/1996).

**Contracts for co-operation in Spain**

The logic is to jointly run structural policies: despite the recent strong decentralisation, many policy domains require co-operation. Contracts are a way to manage these interdependencies and the strong antagonisms that characterise the implementation of decentralisation in Spain, towards more co-operative practices. As an illustration, the number of "*convenios de colaboracion*" (contracts for co-operation) signed has increased enormously over time, from only 14 in 1980 to approximately 800 in 2004 (as indicated by the "*Registro Nacional de Convenios*", *Ministerio des Administraciones Publicas*).

Source: OECD (2006), *Territorial Review of France* and OECD (2007i).

for regional development to be used with conditionalities, possibly combined with EU funds. Strengthening the contractual dimension of RUPs would also facilitate the evaluation of regional programmes, as the agreement needs to define how follow-up and evaluation are to be accomplished.

**ii) New co-ordination tools at national government level.** Although it is too early to assess the functioning of new bodies – regional co-ordinators and the

co-ordinating group of state secretaries – created in the wake of the crisis, many positive results have already been reported and the question of how these short-term institutional responses to the crisis could be made more permanent is open. In particular, the national group of state secretaries can facilitate synergies among regional development policies at the national level; this is particularly important in transport, spatial planning, the labour market, higher education and innovation. Given the marked need for co-ordination in Sweden, owing to the large number of sectoral agencies involved in policy making, such initiatives at the national level should be strongly encouraged. Co-ordination and arbitration on regional development policy at the national level is a challenge for all OECD countries, but some options have emerged. The Canadian and UK experiences of “regional ministers” may prove interesting to Sweden, as well as the innovative governance tool developed in the Netherlands to support the development of the capital region – Randstad (see Box 3.23).

### **Box 3.23. Innovative governance approaches to cross-sectoral co-ordination of regional development**

#### **Canada’s regional ministers**

Canada has a system whereby certain ministers also have responsibility as a province’s or a region’s regional ministers. Beyond their specific departmental responsibilities, regional ministers represent the political interests of their respective region in the Cabinet. Regional ministers are designated by the Prime minister and play an important role “in co-ordinating regional or provincial issues with the federal government’s activities”. Departmental ministers are expected to consult with regional ministers on issues pertaining to their portfolio. Regional ministers also have a two-way communication role. In addition to influencing federal spending and programming to take account of regional dimension and concerns, they also communicate the decisions and views of the centre (i.e. the Cabinet) to the regions.

Historically, Canada’s regional minister “system” has had varying degrees of visibility and different supporting structures (regional committees, regional offices, etc.). On issues pertaining to the Province of Quebec the regional minister’s role is that of “Quebec Lieutenant”, and is usually a member of parliament appointed as a senior advisor by the Prime minister. Historically, this is an influential position in Canadian politics, given Quebec’s impact on national politics. Regardless of the nature and prominence of political issues at a given time, the influence of regional ministers, whether implied or explicit, is an effective and integral component of federal policy and programme development and decision making. Regional ministers “exercise a great deal of influence by exploiting the opportunities that often exist in the interstices between various government programs and jurisdictions”.

**Box 3.23. Innovative governance approaches to cross-sectoral co-ordination of regional development (cont.)**

**Regional ministers and government offices in the United Kingdom**

There are government offices in each of the nine English regions. These offices bring together the interests of 11 departments of national government in each region and articulate the needs and interests of the regions back to the national government. The Government Office Network is a key mechanism for ensuring that national policies and programmes meet regional needs and that implementation reflects local conditions. More recently, this capacity has been enhanced through the appointment of nine regional ministers, who combine this role with their departmental ministerial duties. Regional ministers have a greater voice through the Council of Regional Ministers.

**The Netherlands: National co-ordination for the implementation of the Randstad programme**

Following the OECD Metropolitan Review of the Randstad, published in 2007, the Dutch national government decided to produce a Randstad urgency programme, with actions for the short and longer term. Key themes on the Randstad agenda are accessibility, economic dynamism, quality of life and sustainability. The national government's Randstad programme stresses joint responsibility for implementation of the actions. Instead of trying to change government structures, such as creating a Randstad province, it aims at finding governance partnerships that can achieve results. A new way of creating political commitment for implementation proposes responsible "duos" for each project. These duos consist of one national government minister or state secretary and one regional politician. The duos are made responsible for progress on particular projects. Funds have been made available for 33 projects. A minister for the Randstad has been appointed and will hold the 33 duos accountable for progress on their projects.

*Source: Various sources including ACOA (Canada) (2009) and OECD (2007), Metropolitan Review of the Randstad Region.*

**iii) Developing appropriate skills in regions.** Designing and enforcing regional strategies also requires regions to have the skills necessary to manage complex development programmes at the municipal or regional level. Sub-national governments have advantages in terms of local knowledge, but a lack of human and institutional capacities can affect their performance. In most OECD countries, even federal ones, the national government often works to enhance the capacities of sub-national employees through a focus on staff mobility, training and performance management. The right balance is not easy to find: too much involvement will discourage local governments from learning and

diminish incentives for efficiency, and local governments may blame substandard performance on national government actions (OECD, 2008). Yet lack of involvement can undermine the decentralisation process and increase disparities in managerial capacities between rich and poor regions.

In municipalities and regions in northern Sweden, the main challenge is to attract experts and experienced managers. This staff shortage problem will only worsen in the coming years, with the ageing trend. The problem of skills shortages in local public employment in remote areas is also connected to the issues of inter-municipal co-ordination and regionalisation. According to SALAR, horizontal co-operation and larger municipalities make it easier to recruit managers, as job satisfaction also increases. France has also developed a pro-active strategy which plans how to adapt staffing needs to public policy objectives and which takes into account the ageing of the population and of public servants (the GPEEC, introduced in the early 1990s). GPEEC planning is currently being implemented at the regional level, by means of regional conferences which assemble all the actors in the field so as to draw up territorial employment and training plans (OECD, 2007).

Incentives are needed to enhance mobility among regions, reward work in remote regions, or facilitate exchanges of staff for certain periods of time. Canada's "interchange" policy to promote mobility of public sector employees is a good example (Box 3.24). Another way to address employment or skills shortages in peripheral regions is to move national agencies to these areas. Sweden has been active in this field some years ago.<sup>38</sup> Canada has also been active in this field.<sup>39</sup> Finally, given Sweden's cross-border co-operation needs in certain policy fields (such as transport, innovation or environmental policy), it is important to have a "macro-regional" dimension in training programmes. It might be possible to develop joint training programmes in the Baltic Sea region, to take account of complementary needs across the different regions. In a very different context, Australia and New Zealand developed such a joint approach at the Australian New Zealand School of Government (ANZSOG) (see Box 3.26).

### **Enhancing cost-effective local public services**

Territorial reforms are likely to have a positive impact on the efficiency of public service delivery, owing to the potential economies of scope implied in the new territorial organisation and to the focus on growth, which may generate more resources to finance local services. However, this will not suffice to meet the fiscal challenges that local governments will increasingly face in the coming years. Other reforms are needed in the medium term to enhance the cost-effectiveness of local public services, particularly in rural areas.

Sweden has developed many initiatives in this area over the years, following the crisis of the early 1990s and in view of issues linked to an ageing

population. For example, it has made major changes in education, health and care services, notably the voucher system, which allows choice of schools, and the design of user charges in health. Sweden has also been at the forefront in supporting local governments to develop sustainable and “green” services, in the area of transport for example. In many respects, Sweden is a model for OECD countries for its ability to provide cost-effective local services, with a strong focus on anticipating long-term challenges. However, further initiatives will be needed. This section addresses the needs to: i) pool services in rural areas and develop innovative services, with increased opportunities for direct and indirect employment; ii) focus on performance monitoring of local services; and iii) diversify sources of local revenue to address long-term challenges.

A relatively recent trend in service delivery in Sweden, as in a few other OECD countries, is a move towards individualised services, whether these are delivered physically or digitally. That is, the citizen is at the centre and the administration is organised around them instead of the reverse.<sup>40</sup> This is a

#### Box 3.24. Interchange Canada

Interchange Canada is a national programme that involves the temporary assignment of employees from one sector to another, including the federal public service, other levels of government, private-sector organisations, academic institutions and non-profit organisations. These assignments serve to strengthen policies, programmes and services, share expertise and best practices, and encourage employee development in line with strategic organisational needs.

Interchange Canada encourages employee assignments between the federal public service and organisations in other sectors both within Canada and internationally. By taking assignments in a new sector, employees develop personally and professionally and their organisations benefit from new skills, knowledge and approaches. Interchange Canada has the following characteristics:

- Employees are sponsored by their organisation. During the assignment, they work on site with the host organisation but remain employees of the sponsoring organisation. At the end of the assignment, they are expected to return to their sponsor. An assignment can be for a period of up to three years.
- Employees maintain their current pay and benefits, and the sponsoring organisation continues to pay the participant's salary and benefits. Normally, the host organisation reimburses the sponsor for these costs;
- The host pays for initial interview expenses as well as job-related travel and training during the assignment.

**Box 3.24. Interchange Canada (cont.)**

- Possible conflict of interest situations are examined. Participating organisations are responsible for ensuring that there is no possible conflict of interest or that the risk is not significant.

Interchange Canada is open to employees in all groups and at all levels of the federal public service and to employees in business, other levels of government, Crown corporations, unions, academic institutions and non-profit organisations both within Canada and internationally.

Executives participating in the programme promote linkages between the federal government and organisations in the private sector or other levels of government, both within Canada and internationally. Because these leaders influence an organisation at its highest levels, the knowledge, innovation and cultural changes that result from their assignments are long-term and can help enhance stakeholder relationships.

Source: ACOA; the Canada Public Service Agency; the Public Service Commission Advisory Council of Canada.

**Box 3.25. The Australian New Zealand School of Government (ANZSOG)**

The Australian New Zealand School of Government (ANZSOG) is unique for its intergovernmental approach to public sector learning. ANZSOG was established in 2002 through the collaboration of major Australian and New Zealand universities and the Governments of the Australian Commonwealth, States and Territories and of New Zealand. Its focus is on educating public-sector leaders, building new public policy research and management capability, and encouraging public-sector innovation. To promote “learning across jurisdictions”, all students come from the public sector of the participating governments. An interactive learning model creates the opportunity for public-sector managers to compare various approaches being tried by other jurisdictions. As participants come from various departments and agencies, they bring comparative knowledge and experience to ANZSOG’s classrooms. Participants work collaboratively on team projects. This encourages knowledge sharing, relationship building and the creation of lasting networks across governments. The school also has an alumni association which facilitates continued networking and information sharing between participants after they have completed their studies.

Source: OECD (2009e).

challenge in Sweden, given a highly decentralised and delegated administration with each public body targeting a single type of need, whereas citizens frequently have multidimensional needs that call for the simultaneous or at least co-ordinated application of different measures (Rexed, 2000). Although co-ordination problems persist, there are a number of successful local pilot projects and positive initiatives to draw on.

### ***Pooling services in rural areas and focusing on innovative services***

The cost of delivering public services in rural areas with an ageing population in northern Sweden will continue to increase in the coming years. According to SALAR's 2009 Economy Report, municipalities and county councils will have to choose among improving efficiency, reducing services and increasing taxes in the coming years. The 2009 Swedish rural development strategy puts strong emphasis on improving service delivery with a focus on preserving territorial coverage of services. Which services must be provided in rural regions no matter the cost has not been determined, and is a political/social choice rather than a strict economic one. To best combine equity and regional growth objectives, public actors need to facilitate the pooling and rationalisation of services and go beyond the view that "elderly" means less productivity and build instead on this population as an asset (Chapter 2). These two dimensions need to be combined in rural strategies (Box 3.26).

#### **Box 3.26. OECD lessons for rural service delivery strategies**

A modern rural service delivery strategy requires appropriate analytical tools to determine the right mix of services for a given region – essential public goods or competitive public goods. It must consider efficiency/equity tradeoffs and be coherent with the overall regional strategy. It also means mobilising local resources to recalibrate the urban-rural contract. Effective rural service delivery also involves encouraging an approach that is less about spending and more about long-term investments, one that builds on local preferences and resources and boosts confidence in the region. More importantly, rural service delivery calls for an adaptable governance framework that embraces the shifting roles of stakeholders at all levels, improves the capacity of local authorities, facilitates participation, and introduces mechanisms to ensure proper horizontal and vertical co-ordination as well as knowledge and resource pooling.\*

\* [www.oecd.org/dataoecd/14/42/41063088.pdf](http://www.oecd.org/dataoecd/14/42/41063088.pdf).

Source: OECD (2007), Proceedings of Cologne Conference, Germany.

**i) Facilitate the pooling and rationalisation of services.** Co-operation needs will continue to increase for public service provision and the specific needs of rural areas have to be taken into account, most obviously for health care and elderly care, but also for all public services that benefit from economies of scale (e.g. water, sewage, waste disposal, parks, ICTs, etc.) which often requires a broader focus than municipalities. The “traditional” governance tool for achieving economies of scale in service delivery and joint production of services is municipal mergers or co-operation. Many OECD countries have adopted a top-down incentive policy to encourage municipalities to co-operate, and even to amalgamate, to achieve economies of scale in service provision, with mixed outcomes (OECD, 2006) (e.g. Finland, Denmark, Japan).<sup>41</sup>

Sweden has also developed over the past decades active policies for mergers and strong inter-municipal co-operation tools (see Section 3.3), and the margin for further amalgamation is relatively limited. Besides, there is little evidence that merging of smaller municipalities helps smaller, sparsely populated municipalities to reach cost benefits in all services, particularly services where geographic proximity is essential; like homecare for elderly people or childcare. Enhanced co-operation across municipalities needs to be supported,<sup>42</sup> and it is important for the system of financing, in particular the grant system, to be neutral with respect to the organisation of horizontal co-operation. In particular, cost equalisation should not act as a disincentive to exploit economies of scale.

Different types of co-operation between service providers in rural areas have been tested in Sweden for a long time, but in a rather small scale. Sweden may go even further in co-ordination of both public and commercial services and implement this way of pooling services in all sparsely populated areas. In order to use government subsidies in a more holistic perspective and with more local anchorage, the county administrative boards in Swedish regions are co-ordinating regional partnerships to mobilise local and regional players such as local development groups, municipalities and providers of commercial services, to participate in common measures for strengthening existing services and to develop new multi-service solutions. The government emphasise the need for increased co-ordination between different types of services, and will intensify efforts in this area. It would have the advantage of addressing two big challenges in sparsely populated areas: i) improving access to and quality of the public administration’s services by allowing customers to carry out several transactions in one visit; and ii) responding efficiently to public-sector productivity programmes to avoid deterioration of access to public services in remote areas.

Pooling of public services has also been used in OECD countries such as Australia, Canada and Finland. Co-location of services can be built around a family of services (e.g. Australia’s Rural Transaction Centres; the Citizen



Service Office in Finland) (see Box 3.27). Such structures can also host very different public services (post offices, community services, health care and social services) or even co-host services with the private and the voluntary sectors. Experiences from OECD countries have shown good results, but they have also shown that these mechanisms require strong management, expertise and planning to operate effectively.

Rationalising local labour services is particularly critical at a time of rising unemployment. This does not only concern rural areas, but since unemployment rates are highest in the sparsely populated regions of Gävleborg, Norrbotten and Västernorrland (Chapter 1), improved labour services are particularly essential in these regions. Local labour services are currently fragmented among several authorities, and there are problems of co-ordination between national agencies and municipalities. In early 2009, the Public Employment Service, the Swedish Social Insurance Administration and the Swedish Tax Agency established joint local service offices with a view to improving service provision. “New Start Offices” (Nystartskontor) – a service providing individually tailored guidance to new entrepreneurs – were established in 2009 in several places<sup>43</sup> and should be extended in the first quarter 2010 to more than 200 places. In addition, a proposal made by SALAR for a “one-stop shop” for labour market issues is being discussed (One-Door-In for job seekers) (see Box 3.28). The example of Service Canada is interesting in terms of improving the delivery of individualised services, in particular related to employment (Box 3.29).

**ii) Innovative service delivery approaches.** Sweden has increasingly used ICTs to develop innovative service delivery approaches, in particular for remote areas. The 2008 United Nations e-government survey ranked Sweden as the world’s leader in providing web-based services and applications for its citizens and the leading country for e-government. The report notes that Sweden does particularly well at the national government level.<sup>44</sup> At the local government level, the picture is a bit mixed. SALAR plays a key role in promoting e-government tools in municipalities. It runs an e-government project that aims to integrate e-government issues into the regular business development, processes and governing models of its members, and it has helped to develop the e-health strategy. Sweden has made significant progress in e-health services; these help to achieve better service provision, shorter delays and better cost-efficiency. The main idea is to use ICT as a strategic tool in all areas of care to provide safe, accessible health and social care of high quality.

However, space for improvement remains, especially in the use of e-health tools for elderly care in smaller municipalities. To achieve maximum benefit from the National Strategy for eHealth, work must proceed concurrently and be

### Box 3.27. Multi-service points: The experience of Australia and Finland

**Australia's Rural Transaction Centres (RTC)** programme is a government initiative that assists people living in smaller rural towns to gain the same access to basic services as people in larger towns. The objective is to enhance or complement existing government and commercial services and businesses. The programme's focus was on rural communities with populations of less than 3 000. Applicants included local government, community groups, and Chambers of Commerce. The services provided in the RTCs are determined by the communities themselves. Among the most common are: basic private and government transaction services such as personal banking, some business banking, postal services, medicare, phone and facsimile, library services, printing and secretariat services, and tourist information. The government committed up to AUD 70 million over five years to help rural communities establish their own RTC. The programme funded 239 RTCs and the installation of 141 Rural Transaction Centre Electronic Point of Sale facilities. Funding was available until 30 June 2005. A report by the Parliamentary Joint Committee on Corporations and Financial Services in 2004 highlighted the RTC programme's significant progress in restoring essential services to rural and remote communities. The report acknowledged that RTCs can be a means of renewing confidence and promoting local enterprise.

**Finland** has accumulated significant experience in multi-service points since 1993. Currently, there are about 207 citizen service offices in Finland. Their functions differ widely, ranging from handing out forms to providing full service. The citizen service offices deliver services (whether public, private, non-profit or mixed) from a single outlet. They also allow holistic customer service, which is easier to provide at a single point. This system has had a positive impact in terms of improving access to certain services in rural areas, where citizens typically have to travel to service delivery sites. The objective of the citizen service offices system is to offer a single outlet for services that can be managed jointly, i.e. municipal, district court, tax and work administration, National Pension Institute, and other regional and local authorities. The services provided through citizen service offices include reception and handing out of documents, advice concerning the institution of proceedings and processing of matters, and support in the use of electronic services. The aim is to ensure a sufficiently high-quality service network, to increase the productivity of the local service network, and to reduce costs through joint, customer-oriented service and efficient use of information technology.

Source: Australia: Australian Government, Department of Transport and Regional Services. Finland: OECD (2008), *Rural Policy Review of Finland*. OECD, Paris.

co-ordinated among the different actors. All county councils have formally adopted the National Strategy for eHealth and drawn up a joint action plan for its achievement.<sup>45</sup> However, less than half of all municipalities had adopted or applied the eHealth strategy in the autumn of 2008. It is primarily the large municipalities that are clearly moving in this direction. There is a clear connection between a municipality's size and its ability to adopt and integrate eHealth solutions into its operations. Best practices in municipalities and counties need to be promoted, such as those of Norrbotten county (see Box 3.30). In Germany, the AGnES programme works to improve healthcare

### **Box 3.28. Improving local labour market service delivery in Sweden**

#### **“New Start Offices”**

New Start Offices (*Nystartskontor*) – a service providing individually tailored guidance to new entrepreneurs – were established in spring 2009. Special attention is given to individuals who are long-term unemployed or excluded from the labour market. The aim is to bring together public agencies as well as private and non-profit organisations. Reactions so far have been positive, from citizens as well as involved municipalities, private organisations and government agencies. More than 200 offices will be available, [during first quarter 2010] run jointly by the Public Employment Service, the Social Insurance Agency and the National Tax Board Agency. The service can also be accessed on the Internet and possibilities for telephone services are being investigated. An inquiry has been set up to support and expand these offices and other initiatives involving co-operation or integration, *e.g.* with municipalities and voluntary organisations. As a result of the inquiry's interim report, the government has presented proposals to the Riksdag on a simplification of the law that regulates this type of co-operation, the Integrated Services Act.

#### **One-Door-In**

The Board of the Swedish Association of Local Authorities and Regions (SALAR) decided at its meeting in April 2009 to support the principles of One-Door-In for job seekers and further discussions are planned with the government.

One-Door-In would include municipalities' economic assistance office, labour market units and activities related to the reception of refugees, as well as representatives of the national insurance office and the employment agency. A pilot experience may start in the coming months. The basic principles would be: i) all job seekers of working age should have one access point at the local level; ii) a common approach to the service needs to be developed with a stable long-term organisation; iii) services rendered by the

### Box 3.28. Improving local labour market service delivery in Sweden (cont.)

employment agency and the national insurance office should be a available across the whole county; iv) co-ordination needs to be extended to financial aspects as well. A common instrument which is recognised by all parties involved must be developed for assessing employability.

This rationalisation could be beneficial to job seekers, who could deal with a single contact point, and would facilitate the labour market integration of migrant workers. It could also contribute to savings, as it would eliminate some duplication of tasks across agencies.

Source: Answers to the OECD questionnaire (2009), Swedish Local Team.

### Box 3.29. Improving the delivery of individualised services in Canada: The example of Service Canada

Service Canada provides one-stop access to the services of Human Resources and Social Development Canada and a number of other federal departments. It builds on over a decade of work to improve the delivery of service to individual Canadians. The Service Canada delivery network has close to 620 points of service in communities throughout Canada. A national telephone service provides Canadians with information about federal government services and 23 other networked call centres, benefits processing infrastructure and, a range of on-line services are available at [www.servicecanada.gc.ca/en/home.html](http://www.servicecanada.gc.ca/en/home.html).

Its mandate is to work in collaboration with federal departments, other government units and community service providers to offer services and benefits through a single service delivery network. Service Canada's over 620 points of service reach the 95.4% of Canadians who reside within 50 kilometres of a Service Canada point of service.\* A Service Canada Centre (SCC) is a full service office, and an outreach site is service provided in communities by Service Canada employees on a scheduled basis, but not full time (i.e. officials travel to the community one day a week). Community offices are sites managed by third parties and offer only information services on programmes and services; they do not process transactions.

Service Canada can act as receiving agent for Canadian passport applications, deliver employment insurance benefits, and help Canadians find jobs through initiatives such as Job Bank and the Aboriginal Job Centre.

\* Human Resources and Social Development Canada's 2007-08 DPR.

Source: [www.servicecanada.gc.ca/en/home.html](http://www.servicecanada.gc.ca/en/home.html).

delivery in rural areas by encouraging the decreasing number of general physicians to delegate home visits, where appropriate, to qualified community-medicine nurses (OECD, 2007, Cologne). It is important to ensure that innovative service delivery schemes are not just one-time investments but provide opportunities for scale-up. The UK national strategy for building e-government capacity at the sub-national level succeeded in putting all government services on line between 2001 and 2005.<sup>46</sup>

Policies targeting the ageing population should go beyond the view that elderly means decreasing health and less productivity and build instead on this population as an asset. This is linked to the need to make the regional labour force more entrepreneurial, as explained in Chapter 2. For example, the experience of SeniorPolis in Finland is that the elderly population is “a resource,

### Box 3.30. E-Health in Norrbotten County

Norrbotten county offers a practical example of the benefits of e-health in providing more efficient, cost-saving health services. Access to health services in remote, large and sparsely populated regions like Norrbotten involves challenges for both the patients and health care professionals: long distances to get medical attention and high cost per patient (the large share of elderly people in the population means a low per capita tax base and high spending needs). In this regard, Norrbotten has been a pioneer in implementing and getting results from e-health services. Videoconferencing is used in several services: neonatal care; psychiatry; pathology; haematology; physiotherapy; transmission of real time ultrasonographic examinations. It allows for: daily videoconferences between hospital and local psychiatric units; planning of care activities; information on patients needing specialist in-patient treatment. Nurses taking care of old people can perform basic exams, send the results via the Internet and discuss them with a doctor who is far away. This way, the care provided by nurses is much more efficient and the patient is moved to a hospital only when necessary. In addition a remote controlled “robot” has been developed for examining patients suffering from a heart condition. With the robot patients can be examined with the use of video, ultrasound images or a remote controlled stethoscope. Doctors 200 km away can partly monitor their patients. Finally, peripheral countries and municipalities can engage in transborder co-operation in e-health services, as in the Torne Valley between the health care providers of Norrbotten and North Finland. Benefits reported for the county include: better access to health services; fewer visits to the doctor and fewer stays in hospital, savings of time and private and public resources; access to specialist competences throughout the county; and reduction of pollution due to less travelling.

**Box 3.30. E-Health in Norrbotten County (cont.)**

Norrbotten is investing heavily in e-health with the purpose of meeting the needs of citizens, patients, relatives, care personnel, care providers and decision-makers and to benefit the care sector and promote regional development and growth. This includes further development of the existing centre of competence in distance-spanning health and medical care, CDH, into an intensified e-health initiative, and international policy work as well as work with strategic development projects. The further developed centre of competence is to act as a powerful motor in an innovation system for e-health in the region, and to increase competitiveness and growth in Norrbotten through the commercialisation of new products and services within e-health. A clear and early committed business-oriented structure is linked to support this development.

The County Council, municipalities, university and the business sector are mutually dependent in the development of health and medical care. The business sector plays a central role in developing innovations, services and products, together with care providers and the university, and in introducing new processes in health and medical care. Close dialogue between the parties is prerequisite to a well functioning innovation system. Collaboration with care providers enables an inventory of needs and ideas which can be developed to simplify the introduction of innovations, from companies or other organisations, within the framework of the care providers' activities.

The Norrbotten County Commissioner chairs the Assembly of European Regions e-Health Network. The purpose of Norrbotten's involvement is to build strategic alliances and strong networks, to link up with collaboration partners and to secure funding and participation in EU programmes, environmental surveillance, acquire and share skills and to position Norrbotten as a reliable and successful player in eHealth, nationally and internationally.

Norrbotten is a partner and a pilot in Swedish Patients Smart Open Services, sepSOS, in European Patient Smart Open Services, epSOS, as well as in Renewing Health, all major large-scaled projects initiated by the EU-Commission.

Source: Norrbotten County Council; Swedish Strategy for eHealth (2009).

not a burden". In the remote region of Kainuu, the small municipality of Ristijärvi turned its image of "Senior Citizens" village to promote itself as a unique place for senior citizens to live. SeniorPolis is a network that collects, promotes co-operation, combines and integrates activities and operations involving senior citizens. As a small enterprise cluster, it is active in care, real estate, transport, nutrition, entertainment, recreation and travel services.

### **Monitoring the performance of sub-national service delivery**

Monitoring the performance of services delivered by local governments is another key dimension in the search for cost-effective local services. Sweden has a strong tradition of performance monitoring, especially in the health and education sectors. In return for greater flexibility in agency operations, more emphasis has been placed since the 1990s on reporting on performance. This objective is achieved through the production of an annual reports that emphasise reporting and assessment of agency outputs. Performance monitoring is principally conducted at the national level, mainly by national agencies such as the National Board of Health and Welfare (*Socialstyrelsen*) and the Swedish National Agency for Education (*Skolverket*), which follows up the results of pupils in different municipalities. Sweden has increasingly moved to the use of output and outcome indicators in the field of health and education, rather than just inputs (see Annex 3.A4).

Local governments have been more involved in the performance monitoring process since 2003, mainly through the active role played by SALAR and the Council for Local Government Analysis.<sup>47</sup> Since 2006, SALAR has worked towards access to comparable information on quality, results and costs of activities for which municipalities, county councils and regions are responsible. The so called “Open Comparison project” aims to promote comparison and increase transparency, in particular on the cost of services (Box 3.31). The Council for Local Government Analysis is also responsible for a database on the costs, volumes and quality of municipalities’ and county councils’ services. There has been some improvement in the co-ordination of performance monitoring between national agencies and local authorities, in

#### **Box 3.31. SALAR and the Open Comparison project**

The Open Comparison (OC) project aims to encourage comparison and increase transparency.

Within this project networks of five to ten municipalities have been set up. A total of approximately 200 municipalities (out of 290) participate. The networks develop new methods for comparing costs and results in terms of quality in order to work towards concrete operational improvements. Unlike many other networks, the focus is on finding links between cost and quality. Another aim is to present good examples. Thus, new measures of the quality of results will be developed and tested by the networks. These measures can then become regular instruments in performance management. In a longer run the aim is to develop these into national quality indicators. SALAR also has a development project called “Measure to Lead” together with the county council of Jönköping. The aim is to teach how to go from measurement to action.

**Box 3.31. SALAR and the Open Comparison project (cont.)**

An OC is based on indicators of quality, results and costs. They should be relevant and of good quality, be possible to measure at local/regional level, be influenced by the municipality/county council/region; and be evaluated in a way that cannot be contested. On the basis of the outcome a ranking is made.

Comparisons are published with a view to eliciting an informed debate and thus contribute to increased citizen confidence. SALAR has published nine OC reports on health care, medical care, elderly care, comprehensive schools, upper secondary schools as well as security and safety.

Future plans for the OC programme include more and deeper analysis as the supply of outcome measures improves. OC may also be extended to new areas, such as public health, individual and family care, climate, business climate and physical Accessibility to markets. Data availability will play an important role.

*Source:* Background report from Sweden, 2008-09.

particular in the health area. For example, the 2007 report “Open comparisons of the quality and efficiency of health care” was the first to be produced jointly by SALAR and the National Board of Health and Welfare and provides 57 indicators of health care by county.

Although performance monitoring across levels of government has recently made significant progress, certain issues need to be addressed. First of all, many indicator systems currently exist at the national, regional or municipal levels, with little cross-sectoral co-ordination among the various indicator systems across agencies at the national level. In addition, at the local level the system could be extended systematically to all Swedish municipalities and all public services. So far, about one-third of municipalities do not participate in the Open Comparison project. In addition, much of the information collected concerns the health and education sectors – the object of most local expenditure – but little information is collected on other policy areas, such as services for regulatory performance (OECD, 2007); support to entrepreneurship or economic development. The Norwegian KOSTRA system is interesting in this respect (see Box 3.32).

***Adjusting equalisation to new challenges***

The issue of financing local services in the longer term is linked to the sustainability of the equalisation policy. There are several areas of concern in this respect: i) the equalisation system is very complex, despite attempts to clarify the cost-equalisation system; ii) relatively recent challenges such as the



### Box 3.32. **The Performance Indicators System developed in Norway (KOSTRA)**

The Norwegian KOSTRA system is an OECD-area best practice in terms of performance monitoring of local services. It is an electronic reporting system for municipalities and counties. It can publish input and output indicators on local public services and finances and provide online publication of municipal priorities, productivity and needs. KOSTRA integrates information from local government accounts, service statistics and population statistics. It includes indicators of production, service coverage, needs, quality and efficiency. The information is easily accessible via the Internet and facilitates detailed comparison of the performance of local governments. The information is frequently used by the local government themselves and by the media and researchers. Although individual local governments could use KOSTRA more efficiently (e.g. by systematic benchmarking), the system has helped facilitate comparisons of municipalities thereby promoting benchmarking or “bench-learning”.

Source: OECD (2008).

integration of immigrants in the Swedish labour market may need to be better taken into account; and iii) the question of limiting the potential fiscal disincentive effect of equalisation and whether the income equalisation should be made slightly less ambitious remains open.

**i) Enhance transparency of equalisation.** The complexity of the equalisation system may make financing and delivery of services non-transparent and reduce accountability. Even Swedish public officials consider the system difficult to understand. The 2005 fusing of equalisation and general grants (into a vertical system) makes the system, and the amounts actually gained or lost by sub-national governments, less transparent (OECD, 2006a). It obscures the real net contribution of a given municipality or region, making it difficult to see who gains from and who contributes to equalisation and by how much. Income equalisation would be more transparent if it was institutionally or statistically separated from general grants. On the side of cost equalisation, progress has been made on increasing the transparency. The formula has been revised a number of times in order to reduce the number of factors involved and make the results more transparent. This goes in the right direction, as extensive fine-tuning would only make the formula more complex (Chernick, 2009).

**ii) Cost equalisation and new challenges.** Equalisation policy has a role to play in the integration of migrants in the labour market, to complement active

labour market policies as described in Chapter 2. A review of cost loading for the foreign born could be conducted in order to determine whether municipalities with higher concentrations of foreign born are adequately compensated for the extra costs this represents. Education is a particularly important area for such a review. Sweden has a separate grant programme for children with foreign backgrounds. The net amount for this programme was SEK 466 million in 2008. Under this programme 25 municipalities receive a supplement and 265 receive a deduction. In addition, extra structural costs are recognised for compulsory school and pre-school classes, elderly care, and individual and family care. Given the slow rates of absorption of immigrants into the labour market, there is some question as to whether the weighting for foreign born immigrants in the cost formula for education is sufficient.

**iii) Limit the potential fiscal disincentive effect of equalisation.** To limit the potential fiscal disincentive effect of equalisation, a set of phase-ins and lags could be built into the system. Even if the disincentive effect remains limited so far, and has been further attenuated by the 2005 reform and the reduction in the number of municipalities contributing, the net sub-national contributors to the income equalisation system (currently 11 municipalities and one county council), have little to gain in fiscal terms from increases in their tax base above 115% of the national average (110% for county councils). To further attenuate tax disincentives, a set of phase-ins and lags could be built into the system, so that only a portion of the increase in the fiscal base would be taxed initially. While this would reduce the insurance benefits of equalisation, it might lead to enhanced fiscal performance (Chernick, 2009).

The question of whether income equalisation should be slightly less ambitious remains open. To provide more funds for regional development, a slight reduction in the rate of the income equalisation grant could be envisaged, say from 95% to 90% of the national average tax rate, and also in the equalisation charge, say from 85% to 80% of the fiscal base above the threshold level. Moreover, the implicit tax rate on the Stockholm region could be reduced by increasing the cost loading for higher wage costs. The parliamentary committee currently examining the equalisation system and its pitfalls will provide answers to these challenges by 2012.

### ***Diversifying local revenue sources to sustain long-term challenges***

Finally, financing a high level of public services in the longer term may also require diversification of local revenue sources. As explained in Section 3.1, local governments rely on income tax as their main source of revenue and they do not enjoy a local property tax. Property taxes are in fact considered by the OECD to be among the least harmful for growth (after corporate taxes, personal income taxes, and consumption taxes) (OECD, Tax

and Growth, 2007), and there is rationale for having it at the local level (OECD, Fiscal Network, 2007). Reinstating a property tax as a sub-national tax would help smooth out local revenues and facilitate local economic development decisions. Considering the 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 (OECD, 2006a). This would make sub-national revenue sources more stable. The introduction of a local real estate tax akin to the tax levied by local authorities in Denmark would also probably help to set the right incentives for improved land-use planning. However, the design of such a tax is essential: rather than being a property-related charge, it should take land size and value into account, which does not go in the direction of the recent Swedish reforms (Hüfner and Lundsgaard, 2007).

To sustain long-term challenges such as ageing, Sweden may need to consider making more use of certain market tools. Sweden ranks at the top of OECD countries in terms of private provision and contracting out, as highlighted by the 2008 *OECD Economic Survey of Sweden*, but it ranks around the middle for the extent of user choice and competition in local government service provision (OECD, 2008a). The use of internal competition and contracting out of services, most notably in the health area, was considerably extended in the 1990s. Citizens' right to choose schools and primary health care has been established by law. Contracting out is also increasingly used for elderly care services. In certain areas, the elderly can choose whether they want their home help or special housing to be managed by public or private operators. Although market tools should be used with care to avoid potential adverse effects on equity, long-term challenges may call for greater use of certain tools, such as user choice. User fees at the local government level are used moderately compared to other OECD countries (OECD, 2008). There are a number of areas in which further user charges could be considered, in particular for transport. The recent government Bill for infrastructure seeks to supplement public funding with various forms of co-financing, such as user charges and congestion charges. Currently known co-financing for the period covered by the plan (i.e. 2010 to 2021) exceeds SEK 30 billion.<sup>48</sup> Co-financing solutions will be actively sought during action planning.

Local governments have recently developed new fiscal instruments, to better support environmental objectives – and indirectly regional development, through increased focus on public transport. Sweden is one of the few countries with carbon emissions below the level recorded in 1990 (OECD, 2009g). One of the best-known examples is Stockholm's congestion tax, implemented in 2007, which has decreased traffic to and from the city centre by 20%. Combined with many other proactive policies to combat climate change, this has made Stockholm one of the most advanced cities in terms of

climate change policies; it was named European Green Capital 2010.<sup>49</sup> The national government also provides financial support to local governments to manage emissions and to adapt to climate change. Through the KLIMP programme (Sweden's Climate Investment Program), which started in 2003 and will operate until 2012, local governments can apply for national subsidies which can be used to promote local investments to reduce greenhouse gas emissions (OECD, 2009g).

## Conclusion

Enhancing the effectiveness of regional policy requires going beyond the regionalisation debate, and taking into account a whole-of-government approach and the interactions across the different types of reforms conducted. To best combine equity and growth objectives in the longer term for regional development, Sweden needs to enhance the room of manoeuvre for regional actors to develop growth strategies that build on local competitive advantages. Improved regional strategies require greater devolution of regional development competencies to county councils, enhanced co-ordination among the different types of regional programmes and improved co-ordination of structural policies at the county level. Besides, such reforms need to be accompanied by improved tools of co-ordination across levels of government, through a greater role devolved to regional development programmes for example, and matching transfer of responsibilities with adequate financial resources. It implies building capacities for regional actors to design appropriate strategies and strong involvement of private actors. Sustaining a high level of welfare services at the local level will also imply further enhancing cost-effective local public services and adjustments in the local finance system.

To make multi-level governance reforms happen, Sweden has key strengths linked to its inclusive policy-making process, its capacity to introduce innovative governance approaches (such as pilot regions) and high trust among public and private actors. Further adjustments in multi-level governance reforms, combined with strong potential for growth in both urban and rural areas – as highlighted in Chapter 1 – will optimise Sweden's capacity to remain among the best performers of the OECD in the longer term.

## Notes

1. The total cost of elderly care in Sweden in 2005 was SEK 80.3 billion and was mostly financed by municipal taxes and government grants. Only 4% came from patients' charges.
2. Public employees have the same status as private employees, as defined in collective agreements.

3. Municipalities also own several companies (1 416 in 2003), mainly in housing and real estate. The scope of the public enterprise sector is among the broadest in the OECD.
4. Since 2002, ceilings have been introduced on maximum charges for pre-school and elderly care. The ensuing decrease in fee revenue was compensated for by transfers from central government.
5. At present, for municipalities, nine services are included in cost equalisation. For county councils, three services are included. The main factors in the cost formula are work-load factors, particularly those related to the age distribution of the population.
6. The other 19 county councils all receive a grant. The largest grants go 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 Go tland 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) (2006).
7. For two municipalities, one with 82% of the national average fiscal capacity and one with 120%, prior to income equalisation, taxation at the national average rate would in 2008 lead to a gap of more than SEK 14 000 per capita between the poorer and the richer municipality. After equalisation, the difference in taxes, including income equalisation, would be less than SEK 1 000 per inhabitant (Chernick, 2009).
8. In 2008 half of the county councils had a deficit. SALAR's forecast is that, as a group, they will report negative net income of about SEK 1.4 billion in 2009 and financial balance in 2010. However, achieving this will require both tax increases and vigorous action to moderate cost rises, including staff reductions, according to SALAR.
9. The Local Government Act (1992) requires sound financial management. All municipalities and county councils are to state their financial objectives in light of sound financial management. A rule of thumb is that the result should be in the vicinity of 2% of the sum of taxes and general grants from the central government. The Local Government Act also states that municipalities and county councils are to have balanced budgets, that is, revenue is to exceed expenditure. Sound financial management, however, takes precedence over the balanced budget requirement. There is a possibility for municipalities with good financial status to break this rule in case of exceptional reasons. Local government activities will have to become more efficient if sound financial management is to be achieved at a constant tax take.
10. Sweden had a real estate tax until the end of 2006. The reform of 2008 abolished the state housing tax. It was replaced by a municipal fee of SEK 6 000 for one family houses and SEK 1 200 per dwelling in multi-dwelling houses, with the restriction that the fee cannot exceed what the state housing tax would have been under the previous system. The first changes (due to new production of real estate and changed assessed value) will not be felt by municipalities until 2011, as tax assessment of real estate lags by two years.
11. Figures for the last ten years (2000-09), the disincentive effect appears to be limited. Some of the richest municipalities had tax base increases much below the national average (this was the case in Täby, Sollentuna and Lidingö), but they were higher than the average in other net contributors (such as Vaxholm, Nacka and Danderyd).
12. The constituency may accept a fiscal zero-sum game (in which there is an increase of total disposable income, even if additional tax revenue is equalised

away) if firms grow, new residents settle in the jurisdiction, people get jobs, or if the sub-national governments' political support and reputation increases.

13. The increase in the territorial variation of tax bases as a result of ageing will raise the burden of the income equalisation. The cost equalisation is self-financing, and in this case larger grants to northern Sweden will be financed by increased charges for other local authorities.
14. This issue has not really been investigated since 1994 when Professor Lars Söderström wrote the report "Uljämning och kommunala incitament" SOU 1994:144, bilaga 8. In this report he discusses fiscal federalism and the role of municipalities, as a separate object as well their role as a part of the public sector. In the end he concludes that municipalities can be seen as small extremely open economies and that it is not municipalities that have the leading part in order to make the tax base to grow. For instance, if a municipality invests or subsidises the building of a factory within its borders. It is not certain that the benefits of this factory reach the municipality in which it is located. The workers might choose to reside in a neighbouring municipality thus enabling the tax base in the neighbouring municipality to increase; while the municipality where the factory is located is left with the cost.
15. The highest decision-making political organ is the Regional Council with its 149 members in each region who are elected every four years.
16. The health and medical care systems in the municipalities of Göteborg and Malmö, which were not previously under county council control, were incorporated into the newly formed county councils.
17. Since 2008, the following county councils have asked to form a single county council: 1) Norrbotten, Västerbotten and parts of Västernorrland 2) Gävleborg, Dalarna and Uppsala have asked to form one county council 3) the county council of Jämtland together with the municipalities of Ånge and Sundsvall.
18. Considering the regional reforms under way, the picture may also be slightly different.
19. Västra Götaland contains 49 municipalities (or local authorities) and Region Skåne, with the same governance model as Västra Götaland, has 33 municipalities. Normally, a Swedish county has 10-15 municipalities.
20. [www.coe.int/T/E/Cirae/\\_5\\_Texts/3\\_Reports\\_country\\_by\\_country/Part\\_II\\_CG\\_12\\_7\\_Sweden\\_E.pdf?L=E](http://www.coe.int/T/E/Cirae/_5_Texts/3_Reports_country_by_country/Part_II_CG_12_7_Sweden_E.pdf?L=E).
21. For regional policy, three agencies have played a key role: the Swedish Agency for Economic and Regional Growth (NUTEK), the Swedish National Rural Development Agency (Glesbygdsverket), and the Swedish Institute for Growth Policy Studies (Institutet för tillväxtpolitiska studier) (currently merged into two, Tillväxtverket and Tillväxtanalys). For economic development, the Ministry of Enterprise, Energy and Communications has responsibilities through its agencies: Tillväxtverket, Vinnova, ISA, etc. Planning responsibilities for transport infrastructure are shared by 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 (Chapter 2).
22. Betänkande av Styretredningen (2007): Att styra staten – regeringens styrning av sin förvaltning (2007:75). English summary, pp. 313. [www.regeringen.se/content/1/c6/09/15/18/9b69d35c.pdf](http://www.regeringen.se/content/1/c6/09/15/18/9b69d35c.pdf).

23. Slutbetänkande av Ansvarskommittéen (2007). Hållbar samhällsorganisation med utvecklingskraft. SOU 2007:10.
24. In particular, goals that are formulated with an accompanying demand to report results in a policy area structure (vertical) do not, in some areas, reflect the real linkages between different agencies (OECD, 2009, *Performance Budgeting in Sweden*).
25. Most of NUTEK's activity will be transferred to the new agency for sustainable growth and regional competitiveness together with parts of the Swedish National Rural Development Agency. An agency for evaluation and analysis of growth policy will include the current activity of the Swedish Institute for Growth Policy Studies, parts of the Swedish National Rural Development Agency, and possibly also some of NUTEK's activity.
26. This is planned to be introduced in a second step.
27. There might be different reasons for municipalities giving up some of their formal independence – one is to keep (quite a antagonism) independency and local influence over resources. To gain economic benefits, strengthening the competence and knowledge base (i.e. by recruiting experts) within certain service functions, improvements in service-accessibility would be some other examples.
28. However, the organisation of individual counties has greatly changed; since the 1862 reform counties have had an elected council which is independent from the national government.
29. The CAB is also the first appeal instance when a municipal planning decision is appealed by someone entitled to do so; and it can revoke the decision.
30. [www.regeringen.se/sb/d/10434/a/112504](http://www.regeringen.se/sb/d/10434/a/112504).
31. Developed by regional co-ordination bodies, county administrative boards (in five counties) and pilot regions.
32. NUTEK's annual evaluation report of 2007.
33. Recommendation Rec(2004)12 of the Council of Europe's Committee of Ministers to member states on the processes of reform of boundaries and/or structure of local and regional authorities.
34. Business leaders are educated in the same universities (e.g. Chalmers), and such networks are very regionally embedded. The large industrial groups remain in Göteborg mostly because of personal attachments and personal reasons, the scale of the region (not too small, not too big), a good business climate, availability of strong competencies and strong universities.
35. More co-ordinated planning with a macro-regional perspective would be particularly useful for cross-border sections of roads and railways, not least in the future revision of the TEN Guidelines.
36. A working group examined whether PPPs could be more widely used for road and rail. It considered PPPs a logical next step since performance requirement contracts (extended guarantee period) were already in use and performance requirement contracts with complete maintenance and operation responsibility were being tested. It developed criteria to pinpoint projects best suited for PPPs and suggested four specific projects as suitable for PPPs, and another eight that could be procured and operated as PPPs. In June 2007 the Swedish Road Administration proposed an investment plan that followed the group's suggestions.

37. Local Development Agreements target specific deprived district area focusing on measures to improve inclusion of segregated residents in the labour market.
38. For example, parts of Swedish Public Employment Service, the Swedish National Institute of Public Health and the Swedish Environmental protection agency were located to Östersund. National agencies such as The National Safety Board and Swedish Consumer Agency were located to the region Karlstad/Kristinehamn. Swedish National Heritage Board and Swedish Travelling Exhibitions were located to Gotland. Parts of the Swedish public Employment Service and the Social Insurance in Sweden were located to Arvidsjaur. Some of the agencies concerned by this reformed have later been further rationalised or no longer exist.
39. In terms of specific measures or policies to address employment or skills shortages in peripheral regions, Canada can point to various national administrative services that have been moved to regions. Examples include the seven federal tax centres located throughout Canada (St. John's, Newfoundland and Labrador; Summerside, Prince Edward Island; Jonquière, Quebec, Shawinigan, Quebec; Sudbury, Ontario; Winnipeg, Manitoba; and Surrey, British Columbia), Public Works and Government Services Canada's Superannuation, Pension Transition and Client Services Sector located in Shédiac, New Brunswick, and the Royal Canadian Mint's facility in Winnipeg, Manitoba.
40. This is exemplified by an increasing number of countries (e.g. Denmark, Netherlands, and Norway) evaluating, being in the process of implementing, or having implemented "personal Internet pages" which present individualised information and data from different public authorities across the public sector in one place.
41. It is difficult to measure the importance of economies of scale and hence the optimal size of sub-national jurisdictions. As almost all sub-national governments are multi-functional, dealing with education, health care, sewage, utilities, etc. it is unlikely that the same size will be "optimal" for all functions. For municipalities, the evidence indicates that size varies considerably from one country to the next, mostly because of the differences in the distribution of competencies, and over time because of technical progress or new regulation (OECD, 2006). Studies on the optimal size of municipalities were conducted recently in several countries, with some times different methodologies, but with mostly very heterogeneous results. The sizes are as follows: 150 000 inhabitants in Japan, between 10 000 to 50 000 in Canada, from 20 000 to 40 000 in Denmark, between 10 000 and 20 000 in Switzerland, around 10 000 in Norway, and around 5 000 in Spain (OECD, 2006).
42. A more original form of co-operation between municipalities, one which is not common in Sweden, is linked to specialisation. For example, in Switzerland some cantons do not provide certain public services (notably hospital care and university education) but they guarantee their citizens access to these services in other cantons (against financial compensation) (OECD, 2006).
43. The project is run by the Swedish Agency for Economic and Regional Growth, the Swedish Public Employment Service, the Swedish Social Insurance Agency and the Swedish National Tax Board together with the municipalities Stockholm, Göteborg, Malmö, Södertälje, Botkyrka, Landskrona, Strömsund, Vilhelmina and Haparanda.
44. Including county administrative boards. See the example of the programme to provide web-based systems for permits (LITA).



45. Representatives of the Ministry of Health and Social Affairs, the Swedish Association of Local Authorities and Regions (SALAR), the National Board of Health and Welfare, the National Corporation of Swedish Pharmacies and Carelink drew up the National Strategy for eHealth that was adopted in the spring of 2006.
46. The transfer was not only of competence – the provision of e-services – but also of fiscal resources. The funding structure was a flat-rate, grant-based model that rewarded smaller municipalities. Funds were allocated over a five year period, and receipt of funds from year to year depended on the results obtained from the implementation of the e-government services.
47. The Council is an association between the national government and SALAR.
48. [www.regeringen.se/sb/d/10434/a/112504](http://www.regeringen.se/sb/d/10434/a/112504).
49. Stockholm has reduced carbon emissions by 25% per resident since 1990, and the city aims to become fossil-fuel free by 2050.

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## ANNEX 3.A1

### *Main Components and Characteristics of the Swedish Equalisation System*

**Income equalisation** aims at evening out differences in local authorities' tax base. The income equalisation grant is calculated on the basis of the difference between the local authority's own taxable income and a tax equalisation base that corresponds to 115% of the national average tax capacity for municipalities and 110% for county councils. Through income equalisation the national government transfers grants to municipalities with 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 gets and 95% of what a municipality gets from its own local income tax (using the national average tax rate in 2003) and the revenues derived by levying an average tax rate (2003) on a tax base that is 115% of the average per capita income. Municipalities with a tax base bigger than 115% (110% for county councils) 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).

**Cost equalisation** evens out structural differences that can arise for providing services that are mandatory for municipalities and county councils. These differences are of two kinds. One is that the need for local services varies; for example, municipalities with many older residents have greater need of elderly care. The other is that the cost of producing a particular service varies; for example, schools may cost more in sparsely populated municipalities, as teaching may be done in smaller classes and pupils more often need school transport. Cost equalisation covers age structure, ethnicity, socioeconomic conditions and geography. As of 2008, cost equalisation for both municipalities and county councils also takes account of structural differences in wages that affect the cost of operating in different parts of the country. Cost equalisation has a horizontal base: municipalities with a calculated structural per capita cost above the national average receive a grant,

while those with costs below the national average pays a fee to the national government. Therefore, the system is neutral in terms of national government finances, as total grants and charges are equal in size and cancel out.

**Structural grant:** The parts of the pre-2005 cost equalisation system that had to do with regional policy are now included in the present system as a separate structural grant alongside cost equalisation. The structural grant is intended to reinforce municipalities and county councils with a small population and/or labour market problems. It also compensate municipalities and county councils whose revenue loss exceeded a set level due to changes in the equalisation system from 2005.

**Transitional grant:** When the system came into operation in 2005, the revenue of many municipalities and county councils changed. A special transitional grant is payable during 2005–10 to moderate redistributive effects for local authorities whose revenue decreases.

Finally, **an adjustment grant and an adjustment charge** are used to ensure that the government has control over the total cost of the equalisation system and to make financial adjustments for changes of responsibility between the local government sector and the national government.

Source: Swedish Association of Local Authorities, 2008; Chernick, 2009.

## ANNEX 3.A2

*Regionalisation Trends in OECD Countries*

Types of regionalisation	Key characteristics	Country experiences
Creation of a new directly elected regional level Czech Republic, Denmark, France, Italy, Spain, Poland; two Swedish regions since the late 1990s	Clear competencies and accountability mechanisms <i>vis-à-vis</i> citizens	<p>In Italy, regional reforms have taken place in several waves, from the early 1970s to 2000s (“Bassanini” reforms). They are characterised by broad allocation of competencies to regions, with the possibility to design differentiated autonomy for regions with an ordinary statute. In 2001, a constitutional reform markedly widened the competences of the regions, in particular concerning legislative powers, and abolished most state controls</p> <p>In Denmark, a general reform of sub-national authorities was carried out in 2007. The number of municipalities was reduced from 271 to 99. At the same time, five new regions replaced 14 former counties. The main objective of the reform was to produce efficiency gains based on economies of scale and to offer better and more specialised public services. Regions do not have many instruments to encourage municipalities to co-operate in implementing a vision for the region. It remains to be seen whether regions have enough sticks and carrots to encourage municipalities in their region to help implement the regional visions</p> <p>In France, regions were created in 1982 with a specific focus on regional growth issues.</p> <p>In Poland, regions were created in 1999 with the mandate to manage part of the EU funding and to elaborate regional development programmes</p>
Creation of a de-concentrated regional level, not elected Greece, Ireland, Portugal, United Kingdom; Sweden to some extent since 1989	Responsibilities to enhance co-ordination in specific areas across the national government and local authorities	The United Kingdom has developed a mixed option. This hybrid structure is based on a Regional Development Agency (RDA), set up and funded by the national government and overseen by a board of directors from the region and led by the private sector; and a regional Assembly, comprising about 100 people from local government, academic institutions, business and voluntary organisations

Types of regionalisation	Key characteristics	Country experiences
Creation of functional regions, with spatial planning functions Korea	Focuses mainly on spatial planning issues; has not led to the creation of a new layer of government	In Korea, there is a strong regionalisation trend, but it focuses mainly on spatial planning issues and has not led to the creation of a new layer of government. In 2008, the Korean government announced so-called "5 area-wide economic blocs" which divide the whole territory into five sub-economic blocs (except for two regions, the mountainous northeast area and Jeju Island). Each of these regions, with a population of more than 5 million, covers two or three provinces (or provincial cities) which share a similar historic, economic and social context. In order to guide co-operation among provinces in the same bloc, an autonomous regional headquarters, rather than a permanent supra-province body, will be installed in each region. This autonomous organisation will create a regional development plan for each bloc and promote horizontal co-operation among local governments in general.

Source: Own material, 2009.

## ANNEX 3.A3

## *Criteria for Enlarging Regions as Defined by the 2007 Committee*

Criteria for enlarging regions	New set of competencies
<ul style="list-style-type: none"> <li>• A common county and regional authority division that, as a rule, regionally divided sectoral agencies must also follow (as a result regional co-operation councils would disappear)</li> <li>• A standard population size of between 1 million and 2 million inhabitants and only in exceptional circumstances below half a million inhabitants</li> <li>• Every regional authority must have its own regional hospital or, if this is not possible, institutionalised co-operation with a regional authority that does</li> <li>• Every regional authority must have at least one university with significant permanent research resources</li> <li>• The labour market regions, as they are expected to look in 2030, should form the building blocks of the division into county and regional authorities and should not be divided unless very strong reasons exist</li> <li>• Counties and regional authorities should be defined in such a way that the “citizens can feel a sense of belonging”</li> <li>• In some cases, a local referendum may be necessary to determine to which county a particular municipality should belong. However, the final division into counties and regional authorities should be decided by the Parliament and the government.</li> </ul>	<ul style="list-style-type: none"> <li>• To draw up and decide on a regional development programme for the county</li> <li>• To draw up proposals for regional programmes under the EU's cohesion policy and by 2014 take over the task of preparing and deciding on applications for grants from the Structural Funds programmes (by 2014 the structure of programmes should be adapted to regional divisions)</li> <li>• To decide on the use of the regional development appropriation proposed to replace the county appropriation</li> <li>• To lead and co-ordinate the work on regional growth programmes</li> <li>• To co-operate with the county administrative board to ensure that rural policy is integrated with regional development work</li> </ul>

Source: Conclusions of the 2007 Committee on Public Sector Responsibilities.



## ANNEX 3.A4

## Examples of Indicators Used by OECD Countries to Measure Sub-central Service Delivery

	CATEGORY	EXAMPLES	COUNTRY/SYSTEM
CONTEXT	Demographics	• Population, gender, age, marital status, births, deaths	Italy (regional policy)
	Service context	• Irregularities in water distribution • Per capita average expenses for theatre and concerts • Air pollution due to transportation	
INPUTS	Materials	• Municipal nursing home beds	Finland
	Staff	• Number of required staff for the service • Numbers and qualifications of teachers	Turkey/BEPER Finland
	Finances	• Net operating expenditures • Education expenditures • Deflated expenditures and revenues	Norway/KOSTRA Finland Netherlands
	Policy effort	• Capital expenditure by level of government and sector • Preparation and approval of territorial and landscape programming documents	Italy (regional policy)
OUTPUTS	Policy outputs	• Number of inhabitants served • Amount of solid waste collected • Visits to physician, dental care visits • Building permits issued • Number of passports, drivers licenses issued	Turkey/BEPER  Finland Australia Netherlands
	Service coverage	• Per cent of aged inhabitants receiving home services • Per cent of children enrolled in kindergarten • Recipients of social services as per cent of the population	Norway/KOSTRA
	Efficiency	• Government funding per unit of output delivered • Spending efficiency: Achievement of payment level equal to 100% of previous year's financial appropriation • Children 1-5 years in kindergartens per full time equivalent • Number of children per teacher • Cost per user	Australia Italy (regional policy)  Norway/KOSTRA Sweden (education) Sweden (elder care)

	CATEGORY	EXAMPLES	COUNTRY/SYSTEM
OUTCOMES	Policy outcomes	<ul style="list-style-type: none"> <li>• Education transition rates</li> <li>• Response times to structure fires</li> <li>• Improved language skills of immigrants</li> </ul>	Norway/KOSTRA Australia Netherlands
	Effectiveness	<ul style="list-style-type: none"> <li>• Effectiveness of outputs according to characteristics important for the service (<i>e.g.</i> timeliness, affordability)</li> <li>• Disease-specific cost-effectiveness measures</li> <li>• Passengers</li> <li>• Share of completion of students in secondary schools</li> </ul>	Australia Finland (hospitals) Netherlands (transport) Sweden (education)
	Equity	<ul style="list-style-type: none"> <li>• Geographic variation in the use of services</li> <li>• Units per 1 000 members of target group</li> <li>• Recipients of home based care as of share inhabitants in different age groups</li> </ul>	Finland (hospitals) Germany (Berlin) Norway/KOSTRA
	Quality	<ul style="list-style-type: none"> <li>• Number of days taken to provide an individual with needed assistance (<i>e.g.</i> youth)</li> <li>• Number of different caregivers providing elder home care to a single individual</li> </ul>	Netherlands Denmark
	Public opinion	<ul style="list-style-type: none"> <li>• User satisfaction with local services</li> </ul>	Netherlands

Source: OECD (2006c), "Workshop Proceedings: The Efficiency of Sub central Spending" GOV/TDPC/RD(2006)12; 2007 OECD Fiscal Network questionnaire, quoted in "Promoting Performance: Using Indicators to Enhance the Effectiveness of Sub Central Spending", COM/CTPA/ECO/GOV(2007)4.

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# SWEDEN

The Swedish combination of growth and equity objectives reveals a strong regional scope. The three largest regions of the country accounted for 51% of the national population and 57% of the national output in 2005, and contributed to 70% of the national output growth during 1995-2005. At the same time, regional disparities in GDP per capita remain the lowest in the OECD due to Sweden's comprehensive welfare system and ambitious fiscal equalisation system. However, pressure from demographic ageing and the current global economic crisis calls for more cost-effective delivery of public services and stronger efforts to fully exploit regional growth potential.

Sweden has recently renewed focus on promoting development opportunities in all regions and has introduced a gradual regionalisation process with a strong bottom-up approach. Yet challenges remain, particularly concerning knowledge diffusion and urban-rural linkages. Further efforts to achieve critical mass and improve co-ordination can help better address local needs.

Reforms to capture complementarities between growth and equity at the regional level will, in the longer term, reinforce Sweden's capacity to remain among the OECD's best performers. Sweden's inclusive policy-making culture and the high level of trust among public and private actors and citizens are major assets to make reforms happen. This *Review* explores the potential for enhanced innovation and entrepreneurship in both urban and rural areas and provides recommendations to strengthen Sweden's regional development strategies through improved governance mechanisms, both regionally and across levels of government.

The *Territorial Review of Sweden* is integrated into a wider programme of national territorial reviews undertaken by the OECD Territorial Development Policy Committee. The overall aim of the territorial review series is to provide practical policy advice to national governments. The countries previously reviewed have been Canada, Chile, the Czech Republic, Finland, France, Hungary, Italy, Japan, Korea, Luxembourg, Mexico, Norway, Poland, Portugal and Switzerland.

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