#### **Executive Summary**

The crisis has underscored the need to find a more balanced model of growth

In the wake of the global economic crisis, policy makers are keenly aware of the need for innovative policy and governance "toolkits" to generate new sources of growth, while enhancing social inclusion and environmental sustainability, as expressed in the OECD's stronger, cleaner and fairer agenda or the EU 2020 goals of a smart, inclusive and sustainable economy. Traditionally, policy debates have tended to focus on trade-offs between these three objectives, often overlooking potential synergies and interdependencies between them. Today, there is a growing awareness of the need to pursue these three objectives in a more balanced and complementary way.

This Outlook argues that a well designed framework for regional policy offers a sizeable opportunity to reconcile policy trade-offs and identify potential complementarities among these three objectives. This is because such complementarities are likely to be most evident – and manageable – where they occur, in specific places. A policy approach that takes account of specific assets that are by definition located in a particular place and seeks to co-ordinate the various sectoral policies affecting that place is more likely to achieve coherent, multi-sector policy outcomes than one relying on economy-wide policies that are "spatially blind" (though not always spatially neutral).

The overriding aim of this first OECD Regional Outlook is thus to present evidence-based and policy-oriented insights into how this new, more balanced development paradigm might be realised. Part I presents an overview of recent work on the relationship between regional and aggregate performance. It examines some of the long-term forces shaping regional development, such as migration and ageing, the impact of the crisis on regional labour markets and the finances of sub-national government. It then analyses policy responses to the crisis at the regional level in two critical domains – the efficient governance of public expenditures, especially public investment, at the sub-national level and policies to generate employment growth.

Part II offers a more focused treatment of two of the key long-term challenges facing OECD regions: policies to enhance the effectiveness of regional innovation systems and the potential role of green growth.

In order to reflect the considerable diversity of views that exists with respect to economic geography and regional policy, Part III presents a Policy Forum, comprised of a set of short contributions from various experts concerning the degree to which economic and social policy should be "spatially blind" or "place-based". Finally, Part IV provides detailed country-by-country information on regional performance and regional policy institutions.

One of the key themes that runs through the analysis presented here, particularly in Parts I and II, concerns the importance of getting multi-level governance right. Governance issues loom large in the discussion of every major challenge. This is no accident. Successful regional development depends not just on policy coherence at any one moment but on creating institutions and governance arrangements that make it easier to sustain policy coherence over time, allowing actors to evaluate and revise policy packages in a timely fashion as conditions change.

# All types of regions can contribute to national growth

The evidence suggests that high sustainable growth can be achieved in different ways; there is no unique recipe for success. The data show that both high-income and lagging regions can grow faster or slower than average. While predominantly urban regions generally exhibit higher levels of productivity and GDP per capita, they do not enjoy any advantage in terms of growth performance. Indeed, although predominantly rural regions are disproportionately represented among the slowest-growing regions in the OECD, they are also over-represented among the fastest-growing: "rural" is by no means synonymous with "decline". Opportunities for growth exist in all types of regions.

Regional growth performance is shaped by such factors as amenities, accessibility, size, demographics, industry specialisation and agglomeration effects. Significantly, the principal growth drivers are not exogenous, like location or natural resource endowments. Rather, they can be affected by public policies. These drivers are human capital, infrastructure, innovation activity, scale and agglomeration effects, and, to a lesser extent, accessibility. These factors complement each other in different ways and this is where location and geography matters. The performance of a region will thus depend to a great extent on how well it manages to exploit and mobilise its own assets and resources. This in turn will determine the extent to which the region contributes to national performance.

# A differentiated approach is needed to unlock the growth potential of different regions

Therefore, from a national policy perspective, it is not simply regional growth rates that matter – where growth occurs is also critical. Large and fast-growing regions will make the greatest contribution to aggregate growth, while small regions with low rates will have the least impact. The distribution of individual regions' contributions to national or OECD growth is highly concentrated, with a small number of relatively large, dynamic regions (the big "hubs") accounting for a disproportionate share of aggregate growth. The rest account for very little individually, but their combined contribution is very large and plays a fundamental role in overall performance. The contribution of 335 OECD regions over the period 1995-2007 follows an approximate one-third two-thirds rule: while big regional hubs (around 4% of the total number of regions) contribute close to one-third of aggregate growth in the OECD area, two-thirds come from the remaining regions. Moreover, contributions to aggregate growth have become increasingly skewed over time: the contribution of the few big hubs has increased, as has the cumulated contribution of the many regions in the "tail" of the distribution. The relative weight of the regions in between has declined somewhat. The same holds true for employment creation and destruction,

which tends to be highly concentrated in a small number of places. While such a distribution might be expected, given the heterogeneity of OECD regions in terms of size, actual outcomes reflect the impact of regional dynamism as well as size: growth contributions are only imperfectly correlated with regions' populations.

This skewed distribution of growth contributions, which can be observed at various scales within and across countries, is more than a curious statistical regularity. It has a number of implications:

- Policy-makers are right to be concerned about the performance of the big regional hubs
  that are their main drivers of growth. If they falter, the impact on aggregate performance
  will be significant.
- However, most growth occurs outside the hubs. Indeed, many of the fastest-growing
  regions are second-tier cities and intermediate regions. Policies that helped the great
  mass of regions in the tail of the distribution to improve their performance could have a
  potentially very large impact on growth.
- The notion of an "average region" is effectively meaningless. It is statistically useless, because there is no concentration around average values in the distribution. More importantly, it is meaningless in policy terms, because analysis of the determinants of growth at the regional level suggests that the constraints on growth that confront the leading regions are different to those confronting the rest.
- Although most of the big growth drivers are, unsurprisingly, large urban areas, there are
  many big cities that make little or no contribution to aggregate growth. Generating
  strong growth in such places could, in view of their size, have a palpable impact on
  national performance.

Ageing and migration are major trends affecting regional performance

A region's capacity to innovate, its resilience to shocks and the efficiency with which it delivers services all relate to the stock and quality of human capital embodied in its workforce. In fact, it is hard to imagine a region engaging in a sustained path of technological upgrading without an abundant supply of skilled labour. All regions face three key phenomena that contribute to continuous change in their relative endowments of human capital: population ageing that is pervasive in all OECD countries but affects regions differently, interregional labour mobility, which serves as an adjustment and a redistribution mechanism for human capital across regions, and international migration that is becoming both a major challenge and a great opportunity for regions. These three sources of population change are highly interlinked. In particular, existing differences in the age composition of regions are greatly reinforced by selective labour mobility and foreign immigration.

Migration produces individual benefits, as it allows people to select the places where they can express their full potential as workers and enjoy a higher quality of life. It also fills local demand shortages and provides a relief mechanism for regions with high unemployment. However, because migrants tend to be self-selecting, it can also reduce quantity and quality of the human capital base of home regions. Migration movements are generally concentrated in specific age ranges, and there is evidence of distinct propensities to migrate according to levels of education and sectors of employment. A natural outcome of

such a pattern is that more attractive regions see their endowments of productive labour increase, while fragile regions can fall further behind, as their populations become gradually older and less educated. The erosion of the region's human capital may then become self-reinforcing, as promising individuals leave because they see that the departure of others with high human capital reduces the opportunities available locally.

### Regions play a key role in the integration of migrants

Debates over international migration tend to be driven from the national perspective, despite the evidence that migrants tend to concentrate in specific geographic areas. Successful immigration and migrant integration policies must recognise the highly differentiated spatial effects of the international mobility of labour. The skills and demographic composition of immigrant populations generally vary more across space than those of the native-born population. This heterogeneous distribution of immigrant "types" across the national territory produces spatially differentiated effects on the age, sex, language, and educational composition of local populations and workforces. Regional differences in the distribution of highly skilled foreign-born individuals, for example, are particularly marked in Mexico, the United States, Spain, Canada and Germany. Information at the regional level on the skill composition of migrants is particularly important to better inform the heated policy debate over the effects of immigration on local labour markets.

Regional and municipal governments have significant responsibilities in the management of migration and thus can greatly contribute to the successful integration of migrants. They provide labour market training, deliver immigrant settlement programmes, enact legislation governing regulated professions, and provide language services for children and youth through the education system. They help with social and economic integration (job searching and matching), fund anti-discrimination and cultural diversity programmes, provide referrals to social, health, cultural, education and counselling services for newcomers. The effectiveness of these policy efforts is still under-monitored and understudied; yet these are key to successful integration – itself a potentially key driver for regions to enhance their performance and sustain their own and their country's growth and competitiveness. Some countries, such as Canada and Italy, have begun experimenting with initiatives designed to adjust national immigration policy to regional needs, but it remains highly centralised in most.

The regional dimension is critical to employment creation efforts in the wake of the crisis

Altogether, the OECD unemployment rate rose from a low of 5.8% in late 2007 to 8.8% in the fourth quarter of 2009, equivalent to a transition of more than 18 million workers into unemployment. In many countries, the rise in joblessness was highly concentrated in specific regions: in Spain, for example, the increase in regional unemployment rates varied from less than two percentage points to more than nineteen. Even in countries where the cyclical component of unemployment abates relatively quickly, structural unemployment will continue to be concentrated in certain geographic areas. Consequently, long-term recovery and fiscal consolidation strategies will require national and regional policies tailored to meet regional and local needs rather than one-size-fits-all approaches.

The communities that are recovering the quickest are those that have a labour force that is adaptable to external shocks. Cities are particularly well placed in this respect, given that they are less vulnerable to collapse in any single sector, like construction. Cities also attract highly skilled people, who are more likely to be able to adapt to new economic opportunities as they arise. However, all localities can work towards making their labour forces more flexible and adaptable. This requires a dual approach in terms of policy. First, it is critical to ensure that workers have a good stock of higher-level generic skills and, second, flexible systems of training are needed to enable people to learn more specialist skills throughout their working lives. Public sector actors also need to concentrate on the quality of jobs available in the labour market. At the same time, in order to build more sustainable local economies, local employment agencies need to work with employers to ensure that they make full use of the talents and skills available locally. By improving both productivity and skills levels, employers will maximise the utilisation of the local pool of talent and improve job opportunities, enhancing the competitiveness of the local economy.

Such policies are most likely to be successful if pursued on a decentralised basis, since information about local conditions is likely to be particularly important to their effectiveness: programmes concerned with improving matching, on labour-markets, training and/or subsidies to employers, in particular, are likely to be better designed at the regional or local level (or at least, with substantial scope for adaptation to particular places). Local labour market and workforce development actors can benefit significantly from the opportunity to "learn by doing" through horizontal engagement with public and private actors in other policy areas. Co-ordinating labour market policy with economic development beyond the fulfilment of short-term business requires an understanding of both regional and global conditions and an ability to help firms avoid future bottlenecks, skills gaps and deficiencies, and to improve productivity.

Better governance of public investment is a priority across all levels of government

As the post-crisis fiscal stimulus adopted in most OECD countries gives way to consolidation, public investment is coming under pressure. Nearly half of OECD countries plan to scale back public investment in their consolidation plans. Yet public investment, if well managed, represents a potentially important growth-enhancing form of public expenditure. Confronted with the challenge of supporting growth in such a tight fiscal environment, national and sub-national governments face the imperative of "doing better with less" when it comes to investment. Better governance has become a priority and a pre-condition for making better use of scarcer fiscal resources. Sub-national governments have a critical role to play here.

The crisis has brought to the fore multi-level governance challenges that are inherent to decentralised political systems, including: i) the **fiscal challenge**, or the difficulty of co-financing investment; ii) the **capacity challenge**, linked to inadequate resources, staffing or processes for rapid, efficient and transparent implementation of investment funding; iii) the **policy challenge**, or the difficulty of exploiting synergies across different sectors and policy fields; and iv) the **administrative challenge**, or the fragmentation of investment projects at the local level. These different types of challenges affect the implementation of investment schemes differently depending on regional circumstances,

and can lead to unintended consequences, ultimately potentially undermining the impact of the plans.

Given these challenges, multi-level governance instruments are among the few remaining tools to implement growth policies effectively. In particular, this requires achieving more complementarity between different types of investments (e.g. infrastructure, innovation and human capital). An approach to public investment, that takes little account of regional specificities or information emanating from regional actors is unlikely to be successful.

Drawing on the experience of the crisis, it is possible to identify a common set of guidelines for multi-level governance of public investment. These good practices include combining investments in physical infrastructure with the provision of soft infrastructure (e.g. skills development); improving the co-ordination and implementation of investment strategies across levels of government, using policy conditionality in transfer agreements or partnerships between levels of government to achieve common objectives; enhancing horizontal co-ordination within functional regions; building transparent management processes; bridging information gaps across public actors; and enhancing data and performance indicator availability through robust risk management.

The financial constraints that sub-national governments are facing today will have consequences on regional development policy over the long term. First, reduced access to financial markets and the need to cut expenditure as part of consolidation plans will affect public investment. Second, when deciding which programmes to cut, the determination to sustain consumption in the short term may take priority over long-term investment strategies.

The performance of regional innovation systems is more important than ever

Evidence shows the critical role of innovation as a durable source of regional growth. The effects of innovation-related investments are longer lasting than those in physical infrastructure. Moreover, past experience suggests that innovation success is often critical in helping heavily indebted economies "grow out" of their debt burdens without resort to default – a key concern for policy in the current fiscal environment. And different forms of innovation investment are needed for different regions, depending on their growth patterns. The OECD Innovation Strategy has highlighted a number of trends with respect to innovation that determine different roles for regions. Globalisation is reshaping the innovation process worldwide, with a dual effect on regions. On the one hand, it increases the need to identify possible sources of growth from within the region, as well as retaining firms and skilled talent. On the other hand, it creates opportunities for organising research and production across borders, favouring the mobility of talent and increasing the opportunities for international collaboration.

Different forms of innovation are concentrated in different OECD regions. There exist hot spots where knowledge and research are generated, as well as regions that have firms effective at transforming existing knowledge into new products and services. While the top regions on most innovation indicators are typically large and densely urbanised, there are many exceptions – such as Central Denmark, which has a leading position in wind energy. Moreover, regional positions shift over time and vary by technology, especially as technological capabilities spread across more regions. Regions may add value by investing in non-technological innovations, talent and creativity. Regional governments can play a

significant role in supporting a creative business and cultural environment that attracts skilled talent, including the "creative class", and favours innovation. Non-technological innovation can boost productivity in firms through improvements to organisational and marketing methods. Different regional innovation profiles therefore imply different patterns for growth; indeed, multiple types of regional innovation systems co-exist within the same country.

Some OECD members are increasingly incorporating the regional dimension in science, technology and innovation policies. For example, several Asian countries and Mexico define regional responsibilities with a science and technology law, and in several European countries, other laws give the sub-national level innovation-related competences. Others highlight the ways that different levels of government can work more effectively together. And many seek to use shared STI plans or other instruments to promote greater coherence and alignment of spending across levels of government, particularly for countries like Austria and Canada, where the regional level has more autonomy to spend its own funds. This increased focus on the regional dimension is supported by the evolving nature in innovation policy approaches that further highlight the role for regions. Indeed, governments are recognising that, beyond economic growth, innovation policy can address social and environmental goals as well. Public funds for innovation and research are increasingly oriented towards finding solutions to policy challenges such as environmental sustainability, ageing, or health care. In such areas, regional authorities have both the room and the mandate to act; for example, in local green public procurement and regulations, as well as in service delivery for the elderly. Furthermore, sub-national governments in the OECD are responsible, on average, for two-thirds of a country's public investment. They therefore have a vital role to play in the greening of that investment and the use of public procurement to spur innovation.

Regions face strategic choices when deciding how to boost their innovation-driven growth: they can build innovation capabilities around current advantages, support socio-economic transformation, and/or create a regional knowledge-base. All require a "smart" mix of policy instruments, along with a corresponding mix of tools for effective public action and bringing private actors into the policy process. Ultimately, innovation generation is neither linear nor predetermined. Historical accidents, human genius, and long-term concerted action all play a role in determining regional development paths. Nevertheless, regional governments are well placed to identify opportunities for innovation-driven growth and mobilise people as well as public and private resources to achieve these goals.

Urban policy must form a core element of any "green growth" strategy...

Over half the world's population lives in cities today, and this is expected to rise to as much as two-thirds by 2050. By 2020, there will be nearly 500 cities of more than a million people, including several "megacities" with populations exceeding 20 million. The interactions between the economy and the environment are highly visible at the metropolitan scale. Urban form matters: the lower the urban density, the more energy is consumed for electricity and transportation and greenhouse gas emissions emitted. Moreover, attractiveness is a key factor of city growth performance and can be hampered by a poor environment. Because green growth is about synergies between environmental and economic policies, an urban policy package is more likely to deliver green growth than a

sector-based economy-wide approach only. Cities must therefore be at the heart of the transition to a green economy.

A policy framework for an Urban Green Growth Agenda covers a wide range of different interactive elements. First, policies to support economic growth are needed. These include efforts to improve the skills of the urban workforce, promote innovation, and improve or expand local infrastructure necessary to sustain growth. Second, greening challenges and opportunities, for example examining public procurement practices or behaviour by institutions and the general public in the city, come in a wide variety of forms that are either being proposed or are already in use in cities around the world. Third, different types of policy instruments are needed to act on these challenges and opportunities and promote urban greening (e.g. rulemaking authority and regulatory oversight, public financial tools, adopting green procurement rules and encouraging recycling, composting and other changes in the urban public's behaviour, and information and advocacy). Each of these elements raises the underlying issue of policy mandate or jurisdiction. Green growth policies clearly involve efforts by both national and sub-national stakeholders, because no single tier of government controls the entire "toolkit" to implement a comprehensive green growth policy on its own.

#### ... but rural areas can also make a key contribution

Many OECD governments see the renewable energy supply-chain as a promising sector for the creation of valuable and stable jobs, particularly in rural areas, since exploitation of major renewable energy sources is space-intensive and thus likely to develop primarily in these areas. The deployment of renewable energy is therefore increasingly seen as a key development opportunity for rural regions and a way for governments to give substance to "green growth" rhetoric. However, economic and workforce development opportunities are often constrained in rural areas by limited infrastructure and/or limited availability of the necessary competences to deal with new sectors or new technology. Addressing these challenges and tapping rural regions' endowment of renewable sources of energy will require improved learning capacity and the accumulation of competences in rural areas.

Rural areas that have accumulated competences and can support a multidimensional learning process are likely to benefit most from the deployment of renewable energy. This happens when investment is focused on economic activities compatible with the renewable energy supply-chain, and when the region features a diffused propensity for learning, which usually underpins self-employment and entrepreneurship. The legacy of past economic specialisation can create opportunities for such development. For instance, a given region can be specialised in the production of electricity from conventional sources and take advantage of this specialisation to develop renewables.

The supposed conflict between "place-based", as opposed to "people-centred" policies, is overblown

The OECD's Territorial Development Policy Committee was the first forum to articulate a shift in paradigm operating within national governments in their approach to regional development. From the traditional sector-specific approach focusing on short-term

subsidies to support employment in lagging regions, most member states have over the last decade begun to address regional economic performance by taking a more holistic, multi-sector approach that seeks to identify and harness local strengths and assets as a means to encourage growth and development in their regions. In other words, governments have begun to focus more on the local and regional "eco-systems" that can generate growth, which requires a multi-sector, whole-of-government approach, along with networked, multi-level governance arrangements to align objectives across different levels of government.

While there are few defenders of "old-style" regional subsidies, there remains considerable scepticism in some quarters about the OECD's new regional paradigm and, indeed, about the role of regional policy in delivering socio-economic progress. Some argue that policies should target people, rather than places, and that this implies a far greater reliance on spatially blind instruments. The Policy Forum presented in Part III of this Outlook therefore focuses on the issue of which of a place-based or a place-blind development model works best to spur growth in regions. It includes contributions from both supporters and sceptics of the new regional paradigm, reflecting a belief that, in the end, open debate and attention to evidence are central to the search for better policies. Ultimately, though, the issue is not either/or: all policies, whether place-based or spatially blind, should aim to be people-centred. The question is rather to develop a deeper understanding of what policy mixes work in what circumstances. This Outlook aims to contribute to that understanding.