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Promoting Growth in All Regions

Lessons from across the OECD

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Summary

Why should governments be concerned with the performance of less developed regions rather than focusing only on a few main regions as engines of growth? Less developed regions are often seen as a drag on national performance, rather than as potential assets to be exploited. In the past, most policies aimed at supporting such regions sought to “prop them up” through fiscal transfers and subsidies, an approach that yielded very poor results. However, a new OECD report, *Promoting Growth in All Regions*, provides fresh analysis that shows how relatively backward regions can in fact be potentially important sources of growth, but that a very different approach is needed to tap that potential.

Using a combination of statistical analysis and 23 case studies of specific regions across the OECD area, the report finds that:

- *Less developed regions make a vital contribution to national growth.* During 1995-2007, such regions accounted for 43% of aggregate OECD growth.
- *Predominantly rural regions have, on average, enjoyed faster growth* than intermediate or predominantly urban regions. Concentration (of population or economic activity) is neither necessary nor sufficient for success.
- *Broader-based growth brings other benefits* to countries in terms of equity, resiliency and fiscal health.
- *The barriers to growth regions must overcome vary widely.* Successful performance therefore requires more than “one-size-fits-all” economy-wide policies: a place-based approach is sometimes needed.
- *For all types of regions, human capital appears to be critical*, though its relative importance varies according to the level of development. Overall, reducing the proportion of people in a region with very low skills seems to matter more than increasing the share with very high skill levels.
- *It is important to think in terms of policy packages rather than individual measures*, because individual policy interventions can have unintended and undesirable effects if undertaken in isolation.
- *Policy synergies are key.* Those poorer regions that are successfully converging towards national average income levels have adopted strategies to improve policy settings in a number of related domains in a co-ordinated way.



Where does growth happen?

Economic activity tends to be highly concentrated in specific places

The distribution of contributions to growth has important implications for policy

Promoting growth in all regions makes good economic sense

Patterns of regional growth are not uniform

Economists and policy-makers alike have long known that national economies, like the world economy as a whole, tend to be “lumpy”. Rather than being evenly spread across space, both people and economic activity have a tendency to concentrate. This concentration process is often self-reinforcing, as it both reflects economic development processes and reinforces them. Concentration of activity often helps to stimulate further growth, as the productive potential of individuals and firms is enhanced by proximity to one another. Such agglomeration economies, as they are known, reflect the cumulative effect of the economies of scale, labour market pooling, forward and backward linkages, network effects, knowledge spill-overs and other internal and external economies that firms may be able to exploit when activity is geographically concentrated. They are among the major reasons why cities tend to be characterised by higher levels of productivity and income than less densely populated places.

This lumpiness is apparent if one examines the contributions to aggregate growth of different regions over time. Whether one looks at individual countries, the OECD areas or the entire world economy, one finds that a handful of regions (the big “hubs”) account for a disproportionate share of aggregate growth – typically, around 4% of regions generate about one-third of total growth. The rest collectively account for the bulk of growth but do not contribute much individually (Figure 1).

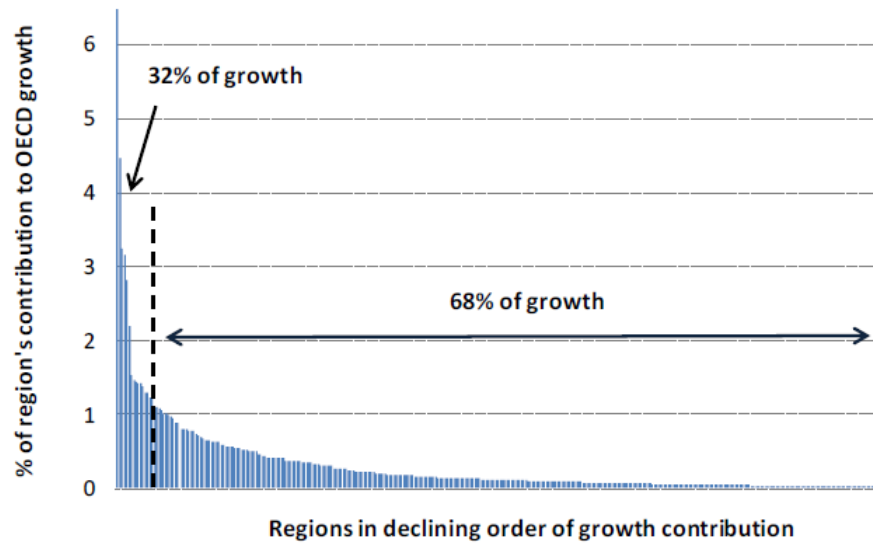
This tendency of growth contributions to conform to such a skewed distribution is more than a curious statistical regularity. It has a number of significant implications. It means, *inter alia*, that:

- Policy-makers are right to be concerned about the performance of the big regional hubs. These are major drivers of growth. If they falter, the impact on aggregate performance will be significant.
- Nevertheless, the bulk of aggregate growth occurs *outside* the hubs. An exclusive focus on the big hubs neglects the potential impact of policies that helped the great mass of regions to improve their growth performance.
- The notion of an “average region” is statistically all but meaningless, since there is no concentration around average values in the distribution. Moreover, it is meaningless for *policy*, because the growth challenges that the leading regions face are different from those confronting the rest.
- There is low-hanging fruit in the “fat tail”. Although the big drivers of growth are mainly large urban areas, as one would expect, there are many big urban regions to the right of the distribution – large cities that make little or no contribution to aggregate growth. Generating strong growth in such places could have a palpable impact on national performance.

While the first of these conclusions is widely accepted, it is the second that forms the point of departure for this report: as will be seen, when policy-makers focus on the leading regions – often seen as the engines of growth – to the neglect of poorer, less advanced areas, they miss a crucial opportunity to improve aggregate performance. Contrary to long and widely held beliefs, *regional policy is not merely a compensatory social policy: it is – or can be – a growth promoting element of a structural policy package.*



Figure 1. Contributions to growth by OECD TL2 Region, 1995–2007



Source: OECD Regional Database (Territorial Level 2 regions).

Strong growth is possible in all types of regions

The good news is not only that the performance of second-tier regions matters but that it is often very good. An analysis of regional growth performance over the dozen years prior to the crisis (1995-2007) produces some results that will surprise those whose attention remains fixed exclusively on the big hubs:

Less developed regions are often important drivers of growth...

- *Less developed regions make a vital contribution to national growth.* Regions with average GDP per capita below 75% of the national average accounted for 43% of aggregate growth across the OECD during the period in question. In ten OECD countries, such regions accounted for over half of national growth. Rather than being a form of compensatory social policy, efforts to promote growth in poorer regions can form an important part of a growth-oriented economic strategy.

...as are predominantly rural regions

- Across the OECD area, *predominantly rural regions have, on average, enjoyed faster growth* than intermediate or urban regions (Table 1). The widespread view that rural is all but synonymous with decline is not supported by the facts. A corollary to this finding is that more densely populated regions do not necessarily grow faster. Concentration (of population or economic activity) is neither necessary nor sufficient for success.
- *Predominantly rural regions are also characterised by greater heterogeneity in performance.* Predominantly rural regions are disproportionately represented among both the best and worst performers in terms of growth. Overall, they simply exhibit greater variation in performance, suggesting that rural development does pose specific challenges. If these challenges are overcome, rural regions can flourish; if not, they may fall behind rapidly. The reasons for this wide variation are not clear – such variation in growth performance can be seen in both remote rural regions and in those close to major cities.

Table 1. Initial GDP per capita and annual average growth rates in GDP per capita

OECD TL3 regions, 1995-2007

Type of OECD region	n	GDP per capita in PPP		
		Growth (1995-2007)	Initial level (1995)	% of OECD average
Predominantly urban	233	1.93%	22,568	124%
Predominantly rural close to city	199	2.33%	14,324	79%
Predominantly rural remote	123	2.24%	16,234	89%
Intermediate	295	1.83%	17,855	98%
Total	850	2.06%	18,172	100%

Source: OECD Regional Database.

Why does broad-based growth matter?

Less concentrated growth may reduce vulnerability to shocks

Broad-based growth is also likely to be good for equity...

...and for public finances

Regional policy should form part of a growth-oriented structural policy package

Broad-based growth offers economic and social benefits

It is clear from the foregoing that broad-based growth can be – and often is – good for aggregate growth. Yet that is not the only reason policy-makers might be concerned with the performance of lagging and peripheral regions. Broader-based growth can generate other benefits in terms of resiliency, equity and fiscal health:

- Broader-based growth is likely to render economies less vulnerable to external shocks, since sector-specific shocks are likely to be geographically concentrated as well. Broader-based growth is likely, other things being equal, to be associated with greater diversity of activity and thus lower risk.
- “Catch-up” growth in poorer regions reduces the likelihood that individuals’ life chances are seriously damaged by where they happen to be born or where they live. As noted above, economic geography is lumpy; policy-makers cannot create an economic “flat earth”, and they should not try. People and firms are mobile and there is no point trying to freeze production or settlement patterns in place. Neither, however, should policy-makers neglect the fact that large inter-regional disparities do raise issues in terms of equity of access to services and access to economic opportunity.
- Chronically under-performing regions can impose substantial costs on national budgets in a number of ways. First, and most obviously, missed growth opportunities also imply lower tax revenues. Secondly, ensuring adequate public service provision in declining areas can become increasingly expensive. Finally, if the decline is not arrested, political pressures may well lead to expensive policies aimed at sustaining communities and maintaining living standards in such places. Over time, this can lead to conflict, as richer regions grow tired of paying for such support.

To put the matter simply, *when less developed regions’ growth potential is not tapped, they are likely to become social problems*. There is a strong case for the proposition that regional policy should be approached as an element of growth-oriented economic policy, rather than a compensatory social policy instrument. The corollary is that if regional policy is *not* pursued in the interests of broad-based growth, it is likely to *become*, of necessity, a form of redistributive social policy. And since development tends to be path-dependent, the longer such policies remain in place, the harder it will be to overcome their legacies. The departure from the region of firms and of the most promising elements of the workforce – particularly younger and higher-skilled workers – will reinforce its relative backwardness, while dependence on external transfer will erode governance capacities and foster a culture of dependence.

Why do some regions grow faster than others?

Urbanisation is associated with higher levels of output but not necessarily faster growth

The differences between fast- and slow-growing regions vary across different levels of development

For purposes of analysis, the study divides OECD regions into three groups, based on levels of GDP at the start of the period under study (i.e., in 1995). “less developed regions” are defined as those with *per capita* GDP at or below 75% of the national average that year; “leading regions” are those with above-average levels of GDP *per capita*; and “intermediate regions” are those in between – that is, those between 75 and 100% of the national average level of GDP *per capita*. Each of these three groups is then divided into two sub-groups based on growth performance over the period in question – those that were losing ground (growth below the national average) and those that were growing at the national average rate or better.

The first step in the analysis was simply to *benchmark* the sub-groups of regions against these variables. The results are shown in Table 2. Comparisons across the three broad categories confirm a number of well known regularities. For example, levels of income and productivity *per capita* tend to be higher in more densely populated places, as do educational attainment rates and indicators of innovation activity. However, more densely populated regions do not enjoy any obvious advantage in terms of performance: over 70% of regions in the *least* advanced group (in terms of income levels) recorded above-average growth rates. This suggests some forces of convergence are at work.

Table 2. Average value of main determinants of growth at the regional level for 6 groups, 2007

Benchmarking performance of OECD TL2 regions to national standards, 1995-2007

Growth factor	Indicator	Below 75% of average GDP per capita		75-100% of average GDP per capita		Above average GDP per capita	
		Growing above av.	Growing below av.	Growing above av.	Growing below av.	Growing above av.	Growing below av.
Productivity	GDP per employee, constant prices, PPP	31,612	29,728	55,832	50,728	72,551	59,824
Infrastructure	Motorway density	0.15	0.13	0.26	0.18	0.19	0.24
Human capital	Primary educational attainment (% of LF)	42%	46%	26%	22%	25%	29%
	Tertiary attainment (% of LF)	21%	19%	26%	25%	31%	26%
	PISA score mathematics	443	405	476	487	484	478
	PISA score reading	459	436	482	485	490	465
Labour market	Employment rate	57%	55%	71%	68%	71%	66%
	Unemployment rate	9%	8%	5%	7%	5%	6%
	Long-term unemployment rate	4%	5%	2%	2%	2%	2%
	Youth unemployment rate	21%	22%	13%	16%	12%	15%
	Participation rate	62%	60%	73%	72%	74%	69%
Innovation	Patent applications per million	20	16	91	74	158	82
	Co-invention within region	124	90	673	536	2932	1256
	Co-inventions within ctry	105	71	294	261	759	466
	Co-inventions foreign	16	53	126	112	314	206
	Total R&D expenditure as % of GDP	1.06%	1.03%	1.50%	1.41%	2.21%	1.51%
	Business R&D expenditure as % of GDP	0.35%	0.42%	0.90%	0.86%	1.35%	1.00%
	Government R&D expenditure as % of GDP	0.33%	0.22%	0.23%	0.20%	0.42%	0.16%
	High-tech manufacturing (% of employment)	3.3%	4.8%	5.2%	6.1%	5.3%	6.4%
	Knowledge-Intensive Services (% employment)	22.5%	28.2%	33.3%	32.8%	36.7%	32.2%
Agglomeration and connectivity	Population density	17.51	18.38	19.40	18.63	29.47	23.41
	GDP density	1.10	0.99	4.29	3.38	29.14	24.19
	Degree of openness to co-patenting	14	15	40	40	65	44
	Clustering coefficient in a network	0.034	0.038	0.089	0.093	0.123	0.084
	Centrality in a network	0.001	0.001	0.002	0.002	0.007	0.005

Source: OECD Regional Database.



By contrast, the proportion of fast-growing regions is smallest in the intermediate group (37%) which suggests that converging regions may be confronted with particular challenges as they move closer to the frontier. It is striking that leading regions were about as likely as not to grow at above-average rates (the split was 49/51), a fact that points to the limits of convergence.

Nevertheless, the more interesting observations are those that emerge from the benchmarking the two subgroups within each of the three main groups – in essence, benchmarking the faster- and slower-growing regions at each level of development against one another. A comparison of indicators between more and less dynamic regions at each of the three levels of development suggests the following:

Fast-growing less developed regions tend to have higher levels of human capital

- **Less developed regions** with above-average growth appear to have (relative to their under-performing peers) somewhat higher *productivity*, higher *density of GDP* (but not population), slightly higher *infrastructure density* and better *human capital*, as reflected in the PISA scores. These scores suggest that the quality of education in such regions may be higher, implying that the differences in attainments shown in the table may understate the real gap in human capital endowments. The difference between population and GDP density is striking and underlines the fact that there is more to economic agglomeration economies than just packing people together. Perhaps surprisingly, faster-growing regions tend to have slightly higher unemployment, perhaps because they tend to attract labour or because growth is associated with structural changes that leave some segments of the labour force struggling to adjust. These hypotheses would at least be consistent with the observation that participation and employment rates are higher in such regions, and both long-term and youth unemployment are slightly lower. Finally, regions in the growing sub-group report rather higher patenting and co-invention activity, even though R&D expenditure is much the same for the two sub-groups. The numbers, though, are small, even when adjusted for population.

Faster-growing intermediate regions are characterised by better infrastructure, connectivity and innovation

- **Intermediate regions** with above-average growth also have higher *productivity*, higher *density of both GDP and population* (though the latter difference is far greater), and greater *infrastructure density*, which may also find reflection in the fact that the fast-growers are characterised by significantly greater accessibility to markets even though the region's degree of connectivity to global networks is about the same for both sub-groups. The growing group is associated with better *labour market outcomes*. The faster-growing regions in this group are also engaged in more *innovative activities*, including more patenting in relative (intensity) and absolute terms, more co-patenting, more conventions (within the region and the country, and with foreign actors), despite the fact that total R&D expenditures are only slightly higher. Surprisingly, the slower-growing regions are characterised by better average values on most human capital variables, which suggests that other factors are somehow impeding effective deployment of their talent pools.

The largest disparities between more and less successful leading regions concern innovative activities

- The most striking feature of the third group is that faster-growing **leading regions** score far better than their under-performing peers on virtually all *innovation-related indicators*, and the gaps between growing and under-performing subgroups are larger than in the other two groups. However, the faster-growing regions have somewhat lower employment in high-tech manufacturing, albeit far higher employment in knowledge-intensive services. In



Infrastructure density matters less in leading regions

In addition, the growing advanced regions are more productive, have much higher *density of GDP* and somewhat higher density of population (but not infrastructure) and better *labour market outcomes*. The rather lower density of infrastructure in such regions may point to diminishing returns to infrastructure investment. They also have a smaller share of the workforce with very low *educational attainments*. Finally growing regions are more open to inter-regional technological collaborations, are better connected within a highly connected cluster of nodes and are more central in the global inter-regional innovation network.

In sum, the differences between fast- and slow-growing regions vary significantly across levels of development. Among the less developed regions, those growing faster than the national average appear to have more infrastructure, better human capital and higher density of activity relative to the under-performing group. As regions move into higher levels of development, infrastructure investment becomes relatively more significant, as does labour-force activation. Finally, among regions close to the productivity frontier, it is innovative activity – not only through public R&D expenditures but also through private R&D spending and patenting activity – that stands out. Among advanced regions, those growing faster also appear to have fewer individuals with very low levels of human capital and higher levels of labour-force activation. It is noteworthy that the faster-growing regions in each group are more productive, implying that factors favouring convergence within groups are weak.

Statistical analysis confirms many of the results of the benchmarking exercise

A regression analysis of the determinants of growth in *less developed regions*, involving both pooled and panel specifications of a number of models point to the following major conclusions:

- Lower-income regions within the group tend to grow faster, other things being equal, implying that there is a process of *income convergence* within this group. However, the forces of convergence do not appear to be strong.
- *Human capital* has a positive impact on growth. Strikingly, it appears that the most important effects are observed at the bottom of the skill distribution: the negative impact of a large share of the workforce with very low skills appears to be a more important factor than the positive impact of a large share with tertiary qualifications. This result has important policy implications.
- *Population density* is not associated with higher growth, reinforcing the impression created by the benchmarking exercise that there is more to generating agglomeration economies than simply putting large numbers of people in close proximity to one another.
- Regions with low employment rates can generate growth by increasing *labour-force participation*.

Addressing the problems of low-skilled workers may matter more than increasing tertiary attainment rates in less developed regions

As regions move to higher levels of development new growth dynamics emerge. For *intermediate regions*, the regression exercise generates the following key results:

Human capital and labour-market performance seem to matter most for intermediate regions

- *Human capital* – measured in terms of both the absence of workers with no more than primary attainment in the labour force and the presence of workers with tertiary attainment – has a positive



Human capital stands out as the key factor for leading regions

impact on growth.

- *Mobilisation* of the labour force brings growth in intermediate regions.
- Some *innovation*-related indicators appear to have an impact on growth in certain models, but the results are not stable.

The most robust regression results for *leading regions* suggest that:

- *Conditional convergence* is weaker among leading regions than among intermediate regions. This is not surprising, as Table 2 above suggests that agglomeration economies play a larger role in leading regions, and agglomeration economies tend to work *against* convergence. The logic of agglomeration would lead one to expect *divergence* of regional performance over time, with the leading regions pulling further ahead. So the results for this group reflect the contradictory impact of the forces of convergence and agglomeration.
- In the most advanced regions, *infrastructure density* is not a key factor. That is what one would expect if infrastructure investment exhibited diminishing returns. Advanced regions would tend, on the whole, to have good connective infrastructure already.
- *Human capital* has a positive impact on growth. Again, it is the share of individuals with very low skills that is significant in every model, suggesting the degree to which large groups of unskilled or low-skilled workers can act as a drag on growth.

Innovation variables were significant in most models but their performance changed considerably from one model to another.

The challenges posed by the presence of large populations of low-skilled individuals are common to all types of regions

In sum, the regression results are broadly, albeit not perfectly, consistent with the results obtained in the benchmarking exercise.

- They reinforce the conclusion that the main factors supporting or constraining growth vary considerably among regions at different levels of development.
- The regression results also underscore *the importance of human capital for all types of regions*, though it is striking that the presence of large numbers of people with little human capital appears to weigh more on the results than the number with tertiary qualifications. Addressing the plight of the low-skilled may matter more for growth than policies aimed at expanding higher education.
- Evidence of the importance of *innovation-related activities* is far less clear-cut in the regression results than it appeared to be in the benchmarking. Innovation variables were significant in many models but changes in model specification often affected their performance, making it hard to assert robust conclusions. The relationship between innovation and growth is complex and depends on a number of other factors, some of which are discussed in Box 1 below.



Box 1. The innovation puzzle

The regression results provide little support for a link between innovative activities and regional growth. This may seem a somewhat surprising finding, in view of the extensive evidence that exists concerning the importance of innovation for growth. Not only technological, but also organisational, financial and institutional innovations have been shown to be important for long-run growth.

There are a number of factors that may account for this apparent paradox:

- The indicators employed cover forms of innovation activity that are oriented towards cutting-edge, science-based innovation, which is typically concentrated in advanced urban centres.¹ Thus, it is hardly surprising that innovation-related variables are significant (when they are significant at all) only in the regressions for leading regions. This is consistent with the view that research and technological innovation should matter more as regions approach the productivity frontier. For regions further from the frontier, a strategy of technology absorption/adoption rather than innovation – *i.e.* borrowing and employing technologies from more advanced regions – may make more sense.
- The indicators used here are unlikely to capture a great deal of innovation activity in less dense regions (especially predominantly rural ones), where innovations are more likely to involve incremental changes to production processes and local adaptations of established technologies than patentable inventions, new products and the like.
- The kinds of cutting-edge innovation these variables do tap into need not generate growth *where the R&D takes place or the patents are generated*. Innovative activities generate positive spill-overs – that is one of the major reasons for promoting them. Faster diffusion of innovations is likely to be good for aggregate growth but also to spread the impact of innovation over a wider area. This is true even at national level, and it is likely to be even more apparent at the level of regions. Thus, there is no necessary contradiction between the fact that innovation is both (1) important for growth and (2) a decidedly place-based activity and the recognition that we do not find a clear link between local innovation and local growth.
- Closely linked to the above is the recognition that innovation and entrepreneurship are linked. A lack of entrepreneurs to make the market breakthroughs happen will greatly reduce the productivity and other gains that a given place can expect from its innovative activities.

The foregoing considerations point to the need for great care in the design of both “Smart Specialisation” strategies and innovation performance indicators for the great majority of regions. Promoting “softer” forms of innovation is likely to matter more, but such innovations are even harder to anticipate, let alone measure, than those of the science/technology variety. The importance of public innovation funding for specific regions is also open to question. This is not to deny the importance of innovation in the broadest sense of the term for all types of regions. However, given limited resources, the issue confronting policy-makers is what share of public spending it makes sense to devote to the research sector in different kinds of regions. Policies to promote human capital formation and entrepreneurship, for example, may do more to foster new activities and productivity growth than comparable investments in the R&D sector in many regions.

1. Since “big science” often benefits both from economies of scale (large fixed capital costs) and from agglomeration economies (interactions among researchers), this concentration is likely to be good for innovation performance.

How can declining regions turn themselves around?

Converging regions adopted co-ordinated changes to both policies and institutions

Successful regions have a great deal in common

The 23 case studies included in *Promoting Growth in All Regions* offer an opportunity to dig more deeply into the policy drivers at work. They examine the role of policies and institutions in the development of regions and identify common success factors and bottlenecks to growth. All 23 regions in the study were characterised by levels of GDP *per capita* below the national average at the start of the period under study (1995); twelve of them enjoyed above-average growth over the ensuing dozen years, converging towards average income levels, while eleven experienced below-average growth, *i.e.*, they were losing ground over the period.

The method employed is a “focused comparison” approach to case-study research. This entails asking the same questions across a substantial number of cases in order to discern similarities among them that suggest possible generalisations. Findings generated in this way do not enjoy the level of formal verification that may be achieved via quantitative analyses of very large data sets. The case studies are thus natural companions to the statistical work, allowing deeper exploration of some of the quantitative findings and their implications.

At least half of the twelve case-study regions that were *successfully converging* with national averages were characterised by the following:

- the deliberate adoption of a “horizontal” approach to regional development focused on better co-ordination of sectoral policies and mobilisation of local assets and resources rather than reliance on external support;
- sound institutions for policy-making and governance;
- infrastructure adequate to ensure both internal and external



**Common bottlenecks
concerned both institutions
and policies**

connectivity; and

- relatively strong human capital endowments.

In addition, five of the twelve possessed strong, open innovation value chains with considerable private-sector involvement and regulatory environments seen as supportive of private-sector development.

Among the eleven case-study regions that were *under-performing* the national average in terms of the growth of GDP per capita, the most common bottlenecks identified were the following:

- weak institutions for policy-making and governance;
- a predominantly sectoral approach to policy, with poor co-ordination across policy domains;
- labour-market fragmentation; and
- low levels of human capital.

**Infrastructure matters – but
less than is commonly
believed**

Four of the case-study regions in this group also suffered from inadequate connective infrastructure, a result that perhaps puts infrastructure in its something like its proper perspective. Clearly, it is a challenge for many poorly performing regions, but it is far from the only (or even the most common) challenge they face. The traditional tendency to see regional development chiefly in terms of infrastructure provision, which is still prevalent in many places, is misguided. Problems with demography and the business environment – particularly as regards innovation and entrepreneurship – were also identified in a significant minority of case-study regions.

An integrated approach to policy is critical

**It is important to think in
terms of policy *packages*
rather than individual
measures: it pays to identify
policy synergies**

The case studies also shed some light on the importance of an *integrated approach to policy* and how different strands of policy can complement – or undercut – each other. For less developed and intermediate regions that were on a convergence trajectory, for example, the most common formula for success appeared to be a simultaneous improvement in horizontal co-ordination of policies, regional institutional capacities, infrastructure provision and human capital development (Table 3). This suggests that there may be strong synergies among these critical pillars.

In around one-third of the sample, a simultaneous improvement in infrastructure, the business environment (particularly when linked to regulatory reform) and “geographic factors” is observed. The last of these, of course, is exogenous, though it serves as a reminder that, in an economic sense, a region’s “location” may improve (or deteriorate) as a result of developments like the formation of NAFTA or the enlargement of the EU. Such events can improve or reduce a region’s access to major markets independently of any changes in connective infrastructure or travel time/costs. Thus, regions enjoying an improvement in their “geographic” conditions were able to reap the benefits of their location by simultaneously improving infrastructure and the business environment.

**The ability to adapt to
changing external
circumstances is critical**

This also serves as a reminder that, while many of the key growth drivers are endogenous to regions, not all of them are. Skill in adapting to changes in the external environment can be a great asset in itself, and a lack of adaptive capacity has been identified in several of the case studies as a significant bottleneck.

Bottlenecks can also come in packages, but these are less clear-cut (Table 4). The study found simultaneous problems with policy



frameworks, infrastructure provision and connectivity in three regions. Three others were characterised by inadequate institutions and labour market fragmentation, which might suggest a link between the two. Moreover, it is the quality of institutions emerged as a key issue in both successful and under-performing regions – institutional bottlenecks were identified in nine case studies and improvements to institutions cited as factors supporting growth in eight others. *Thus, governance matters.*

There are more recipes for failure than for success...

...but there are still many different paths to success

Perhaps the most striking feature of the case studies is that the commonalities observed among successfully converging regions are far more apparent than those seen among regions that are losing ground. The latter are characterised by greater variety of conditions with respect to the variables under study. Their experience brings to mind the opening line of Tolstoy's *Anna Karenina*: "Happy families are all alike, but every unhappy family is unhappy in its own way." The same appears to be true of regions. In fact, this is not accidental: to achieve catch-up growth, regions must successfully address a range of different challenges; deficiency in any one may be sufficient to thwart them. There are thus more "recipes" for failure than for success. This does not, however, mean that there are "one-size-fits-all" formulae for growth: on the contrary, while a certain range of policy challenges is common to all regions, their very different circumstances mean that they must tackle them in their own ways.

Table 3. Common growth factors in regions with above-average growth

	Policies (shift mentality, silos, fragmentation, adjusting policies to assets, linkages, cross-border, urban spatial)	Human capital	Infrastructure, connectivity	Business environment, public sector activity and industry	Geography	Institutions (governance, leadership capacity, continuity, mobilisation)	Innovation and entrepreneurship	Other	International competition and brand-name attractiveness	Presence of natural assets and amenities	FDI	Economy (diversified, differentiated, market awareness)	Tourism
Jalisco	x	x	x			x			x				
Asturias	x	x	x			x							
Brandenburg	x	x	x										
Durango	x	x	x							xx			
San Luis Potosi	x	x	x	x	x								
Sachsen-Anhalt	x	x	x	x	x						x		
Wielkopolskie			x	x	x	x		x	x			x	
Central Trandania			x	x	x						x		
Zuid Nederland	x					xx	x						
Marche				x		x	xx						
Midi Pyrenees		x					x		x				
Aquitaine	x						x						x

Table 4. Common bottlenecks in regions with below-average growth

	Policies (shift mentality, silos, fragmentation, adjusting policies to assets, linkages, cross-border, urban spatial)	Infrastructure, connectivity	Human capital	Institutions (governance, leadership capacity, continuity, mobilisation)	Density (cohesion, internal fragmentation, labour-market mismatch)	Business environment, public sector activity and industry	Innovation and entrepreneurship	Geography	Other	Economy (diversified, differentiated, market awareness)	Demographic factors	Agriculture	Environmental constraints
Lubelskie	x	x						x				x	
Podlaskie	xxx	x		x	x			x					x
Vychodne Slovenko	x	x	x					x					
North East (Tyne and Wear)				xx	x	x							
North West (Manchester)				x	xx								
Yorkshire and Humber (Leeds)			x	x	x								
Estado de Mexico	x		x								x		
Nord Pas de Calais			x				xx	x					
Chiapas		x	x		x			x	x				
Zacatecas			x		x	x					x	x	
Sicily	x			xxx		x					x		



To sum up

Policies that seek to foster growth in less developed regions make good economic sense. Such regions can and often do grow strongly. This benefits national performance, while strengthening both resilience and equity. Yet catch-up growth cannot be achieved via a top-down, subsidy-based approach. It requires a co-ordinated effort at regional level to identify local assets and remove the policy and other barriers to their mobilisation. A mix of top-down and bottom-up initiative is therefore needed, and the case studies suggest that success is most likely when the bottom-up element is strengthened.

This is because designing the kind of policy package most likely to unlock a region's potential is likely to require information that is available only in the region itself. An understanding of the growth factors and constraints that tend to matter at different levels of development, such as those discussed above, should help policy-makers identify the kinds of questions they need to be asking and the kinds of initiatives that might help. For example, where an advanced region might prioritise R&D and innovation support, a less developed region might focus first on an absorption/adoption strategy, developing human capital and improving the business environment rather on science-based innovation. This must be an exploratory, bottom-up learning process. Regions can learn from one another, but they will rarely be able simply to imitate others' success or follow a pre-defined formula. *Ultimately, there is no substitute for self-discovery.*

For more information

For more information about this note and the OECD's work on promoting growth in all types of regions, please contact **Jose Enrique Garcilazo**, Head of the Regional and Rural Programme, Regional Development Policy Division, Directorate for Public Governance and Territorial Development (tel.: +331 45 24 86 18 or e-mail: joseenrique.garcilazo@oecd.org).

For further reading

The findings summarised above are based on the OECD study *Promoting Growth in All Regions* (forthcoming, 2012).

See also:

[*OECD Regional Outlook: Building Resilient Regions for Stronger Economies* \(2011\)](#)

[*OECD Regions at a Glance* \(2011\)](#)

[*How Regions Grow: Trends and Analysis* \(2009\)](#)

[*Regions Matter: Economic Recovery, Innovation and Sustainable Growth* \(2009\)](#)

These books can be purchased from our online bookshop: www.oecd.org/bookshop. OECD publications and statistical data-bases are also available via our online library: www.oecdilibrary.org.

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