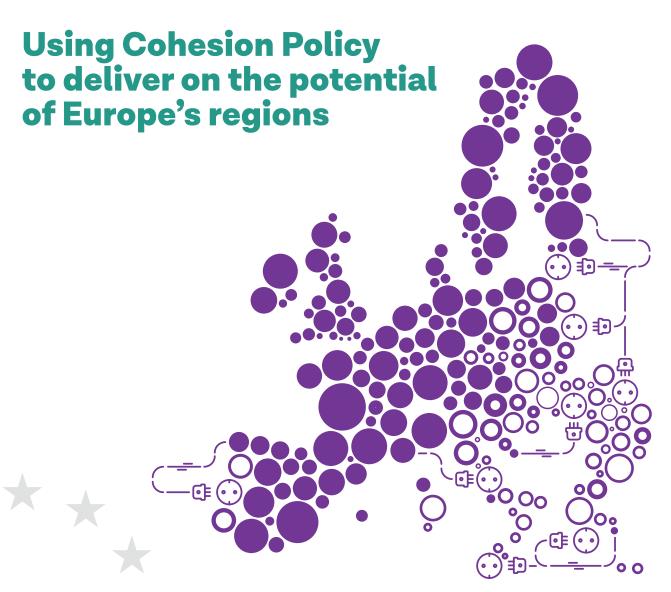


Rethinking Lagging Regions



Thomas Farole Soraya Goga Marcel Ionescu-Heroiu



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Using Cohesion Policy to deliver on the potential of Europe's regions

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Acronyms and Abbreviations

CAGR compound annual growth rate **CEE** Central and Eastern Europe **CPR** common provision regulation DG-REGIO Directorate-General, Regional and Urban Policy (European Commission) **EC** European Commission **ECD** early childhood development **EPI** Economic Potential Index **EQI** European Quality of Governance Index **ERDF** European Regional Development Fund **ESI** European Structural and Investment Funds **ESF** European Social Fund **EU** European Union **ExAC** ex-ante conditionality FDI foreign direct investment FUA functional urban area **GDP** gross domestic product **GMCA** Greater Manchester Combined Authority **GNI** gross national income **GVA** gross value added **GVC** global value chain HHI Herfindahl-Hirschman Index ICT information and communication technology III Integrated Territorial Investment JRC Joint Research Centre **LHDI** Local Human Development Index **NEET** not in employment, education, or training NUTS Nomenclature of Territorial Units for Statistics (Nomenclature des Unités Territoriales Statistiques) **OECD** Organisation for Economic Co-operation and Development **PforR** Program for Results PHARE Poland and Hungary: Assistance for Restructuring Their Economies PISA Programme for International Student Assessment PPS purchasing power standard **RDA** regional development agency **RIS3** Research and Innovation Strategies for Smart Specialisation ROP regional operational plan **SMA** special management authority SMEs small and medium-sized enterprises **TfGM** Transport for Greater Manchester

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Executive summary

Regional inequalities are high and rising around the world, and the EU is no exception.

As the World Bank's 2012 Golden Growth report emphasized, the European Union, since its founding, has been a "convergence machine," generating wealth and a higher quality of life for the poorest in the 28 EU member states. More recently, the Growing United report highlighted that while the convergence machine still works, it is not working for everyone. And among the fault lines emerging in the convergence machine, regional inequality represents a potent threat to Europe's economic well-being, and to its social and political cohesion.

In this context, Rethinking Lagging Regions highlights the nature and implications of regional inequalities in Europe and recommends how cohesion policy can be leveraged to maximize its impact on lagging regions, and on the businesses and people in these regions. The report has several key messages:

Regional inequalities are high and likely to rise.

Leading regions in European countries have, on average, 2.3 times the GDP per capita of the poorest region in their respective country. And while the EU has had great success integrating the new member states in Central and Eastern Europe, the 2008 economic crisis ended a decade of gains in convergence. Divergence is also growing at the local and at the household level, driven by factors such as urbanization and specialization. The impact of technology on labor markets will exacerbate these trends in the future. Moreover, demographics and migration patterns are emptying many of Europe's lagging regions. Parts of Southern Europe have fertility rates 20 percent below the EU average, while parts of Central and Eastern Europe continue to experience large-scale outmigration.

Europe's lagging regions are going in opposite directions, but face common challenges.

Europe's "lagging regions" include poor "low-income" regions in Central and Eastern Europe, many of which are converging rapidly, as well as "low-growth" regions in Southern Europe, that are experiencing stagnant productivity and job destruction. In fact, the economic hierarchy of European regions is on track to experience a sharp change within the next decade - if the trends of the past decade were to continue, by 2025 the poorest regions of Romania, Poland, Hungary, and Bulgaria will be richer, on average, than the lagging regions of Italy, Spain, Portugal, and Greece. But both sets of lagging regions face common challenges that constrain long-term growth prospects, including low levels of labor market participation, incomplete structural transformations, and large gaps in critical endowments like skills and institutions.

Cohesion policy can maximize its impact on lagging regions by explicitly targeting regional potential and equality of opportunity rather than convergence.

While economic convergence remains a political objective, it is neither realistic nor effective as a guide for cohesion policy. Rethinking Lagging Regions argues for a strongly region-centered cohesion policy that adopts a dual objective of: (i) maximizing regional potential, measured not simply by output per capita but also by the capacity to generate quality (productive) jobs; and (2) ensuring equality of opportunity for individuals to achieve their potential. Such an approach helps further center cohesion policy squarely on the regions. While it is clear that not all regions can reach the same level of income, it is also true that many regions have substantial underexploited potential. This report estimates that delivering on unexploited potential alone could raise GDP per capita relative to the EU average by an average of 9 percentage points across up to 100 regions. But for many lagging regions, notably for many "low-growth" regions in Southern Europe, there are no easy answers to raising regional incomes. Rather, they must strengthen fundamental endowments to build capabilities for the future.

Cohesion policy priorities can be rebalanced to help deliver on regional potential.

Delivering on the potential of lagging regions requires a rebalancing of the policy tools that are deployed in cohesion policy, with greater attention to distortion-removing and endowment-building policies as complementary tools to support targeted sectoral and firm-level support. Rethinking Lagging Regions highlights five horizontal policy priorities for cohesion policy: (1) Addressing macro-structural weaknesses that limit regional growth potential - for example, national fiscal and external debt in countries with "lowgrowth" lagging regions cripples growth potential; (2) Improving the regional business environment: firms in lagging regions are smaller, less productive, and much more likely to be engaged in nontradables than those in "non-lagging" regions, in part as a result of weak local and regional business environments; (3) Leveraging the productivity potential of cities: investment in secondary cities – which generate 45 percent of EU GDP - as as sources of productivity, human capital accumulation and locations of opportunity, is central to achieving policy objectives in the EU's lagging regions; (4) Investing in skills as a "no-regrets" policy: addressing entrenched regional gaps in foundational skills is critical to deliver on the potential of regions and to enable individuals to reach their own potential; and (5) Strengthening institutional endowments: weak institutions are one of the defining features of lagging regions, and addressing them is fundamental to expanding regional potential and to delivering regional policy. These five horizontal priorities can support smart sectoral policies, which build on the unique comparative advantages of each region.

Delivery of regional policy needs to engage ever more deeply at the ground level.

Rethinking Lagging Regions calls for an even stronger orientation toward the regions as the architects and implementers of regional programs that are designed to address the unique capabilities and challenges of individual regions. Making this a reality, however, will require more intensive, on-the-ground support, including technical assistance and capacity building at the regional and the local level.

Overview

Rosica is 19 years old and living in a rural district around Montana in northwestern Bulgaria. Like 30 percent of her cohorts, she left school before receiving upper secondary qualifications. Without qualifications, she is not eligible for most positions with the government, which accounts for one in every four jobs in the region, and factory jobs are hard to come by. As a result, she is among the one in three youths in the region who is neither in work nor any form of training and education, and is at significant risk of falling into poverty (again, like one in three). Just 100 kilometers away, however, sits the capital, Sofia, where the employment rate for women is 30 percent higher and average earnings are about 40 percent higher. But the poor state of the roads means that commuting is not an option, and high housing costs make moving to the city costly. Moreover, without access to broadband in the village, doing a job search remotely is difficult. In any case, if Rosica is going to have to move from her village, why not go to Bucharest (just 300 kilometers away), where jobs are even more plentiful and wages are almost twice as high as in Sofia? Or better yet, if she can get the money together, why not join some of her former school friends and go to London while it is still open for EU citizens? There, even a low-skilled job, if she can get one, will pay almost four times more than anything she would be lucky enough to secure in or around Montana. This will allow her to send some money back to her family or save for returning home in the future, although she knows that if she goes, she is unlikely to return.

This story is obviously a caricature. Severozapaden, the region where Montana is located, is the EU's poorest, and London is its richest. Yet, the broad dynamics which the story describes—wide disparities of economic opportunity across regions, vicious circles of economic and social exclusion, and the pull of migration on youth—are repeating themselves across the EU, and across the world. They are a function of changing technologies and globalization, exacerbated by economic shocks. But they are also a function of path-dependent economic geography and of the policy choices made by governments.



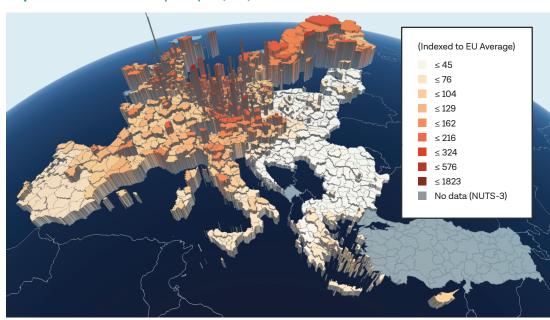
As the World Bank's 2012 Golden Growth report emphasized, the European Union, since its founding, has been a "convergence machine," propelling poorer, and newer, member states to become high-income economies, and delivering to its citizens some of the highest living standards and lowest levels of income inequality in the world. More recently, the Growing United report highlighted that while the convergence machine still works, it is not working for everyone. And among the fault lines emerging in the convergence machine, regional inequality represents a potent threat to Europe's economic well-being, and to its social and political cohesion.

In this context, the EU's cohesion policy is more important than ever. With €50 billion invested each year to support convergence across European regions, cohesion policy has the scale to make a difference. It also has a solid track record. But as the EU looks toward the next programming cycle beginning in 2021, in a context of strengthening forces of divergence and tightening fiscal constraints, it will be critical to reconsider how cohesion policy can be most effectively designed, targeted, and delivered to maximize its impact on lagging regions, and on the businesses and people in these regions.

This report aims to contribute to the debate on the future of cohesion policy, with a specific focus on lagging regions. It calls for a further shift in the objectives of cohesion policy towards an increasingly "region-centered" approach that aims to maximize potential in all regions, while seeking convergence of opportunities for individuals, no matter where they live.

Regional inequality matters for economic growth and social cohesion

Economic activity is never spread evenly across territories. As map O.I shows, peaks and plains are a common feature of the economic geography of Europe, as they are the world over. Leading regions of Europe have, on average, 2.3 times the GDP per capita of the poorest region in their country. In Europe's less developed countries, leading cities like Bratislava and Bucharest look a lot more like more like Rome, Madrid, or Copenhagen than they do like any other part of their own country.



Map O.1. Distribution of GDP per capita (PPS) across the EU at NUTS-3 level

Source: Eurostat.

But while such patterns of growth are commonplace, and arguably represent the outcome of efficient economic processes, they have consequences. Persistent inequalities have a direct impact on the well-being and opportunities of residents in lagging regions, leading to higher poverty and emigration. They lead to the underutilization of potential and the emergence of "low-growth traps"; they can also act as a drag on national growth. And increasingly, regional disparities threaten social and political cohesion, as populism feeds on both real and perceived inequality of opportunity across geography.

Regional inequality in Europe has both cyclical and structural features

After a decade of strong convergence catalyzed by the integration of new EU member states in central and eastern Europe (CEE), the economic crisis halted and reversed these trends. As shown in figure O.I, GDP per capita converged across NUTS-2 regions through 2008, but then diverged, so that by 2016, inequality was at its highest level since 2005. At a more local level—comparing NUTS-3 regions within countries—the pattern is different. While nominal inequalities are lower at this level, they have risen sharply since 2000 (by more than 12 percent), and the divergence trend started well before the crisis, although it appears to have steadied since 2010. This suggests that there may well be different factors at work at different spatial levels, with cyclical patterns of growth making a top-down impact, while structural features like increasing urbanization and specialization shaping patterns from the bottom up.

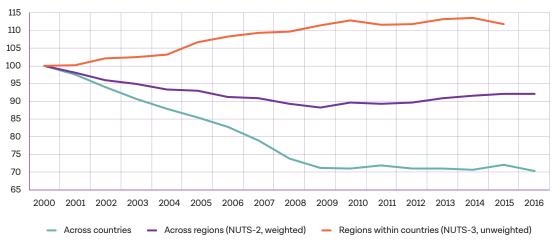


Figure 0.1. Coefficient of variation in GDP per capita (PPS), 2000-16 (Index 2000=100)

Source: Eurostat.

Note: Data at NUTS-3 level available only through 2015 at the time of publication.

"Low-growth" and "low-income," lagging regions are on contrasting paths, although significant heterogeneity exists

Between 2005 and 2015, "low-growth" regions (in Europe's South) experienced zero growth in GDP per capita compared with the EU average of 2.1 percent annually.2 By contrast, annual growth in "low-income" regions (in Europe's east) averaged 4.6 percent. If these trends were to persist, there would be a radical restructuring in the economic hierarchy of European regions, with "low-income" and "lowgrowth" regions having traded positions by 2025. But even within these groups there is significant heterogeneity. Figure O.2 shows, for example, that Bulgarian and Hungarian regions are on a much slower convergence path than Romanian and Polish regions, while Portuguese regions are performing slightly better than other "low-growth" regions. It also highlights the difficult situation in Greece, which displays all the characteristics of "low-growth" regions but at income levels much closer to those of "lowincome" regions.

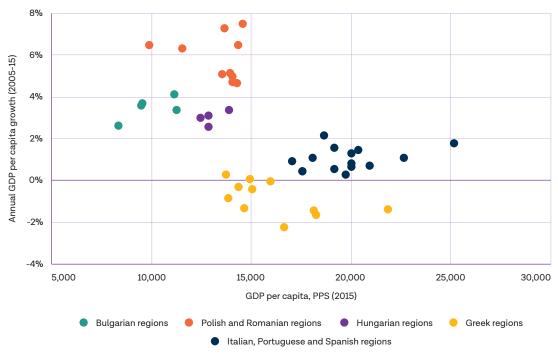


Figure O.2. Country groupings of lagging regions-income level and growth

Source: Eurostat.

"Low-growth" regions are experiencing stagnant productivity and jobs destruction, while "low-income" regions also face labor market challenges

Successful regions must sustain productivity growth, while also creating jobs. Indeed, jobs and earnings are ultimately the most important measure of economic progress, as they translate to household and individual level well-being and may play a crucial role in mitigating brain drain. In this respect, "low-growth" regions are lagging badly, with annual productivity growth of just 0.4 percent between 2000 and 2014, compared with more than 3 percent in "low-income" regions and just over 1 percent in "nonlagging" regions (figure O.3). Moreover, employment is declining in "low-growth" regions (almost 0.75 percent annually, along with declining labor force participation). In fact, almost all "low-growth," lagging regions that experienced some productivity gains shed jobs at an even faster rate—that is, productivity growth was job-destroying.3

But both sets of lagging regions underperform on two key indicators of labor market outcomes. First, the overall employment rate in lagging regions trails far behind nonlagging regions. Second, and a main explanation for the first, are very low levels of female labor force participation. The average rate of female labor force participation in the EU was 66.8 percent in 2015; but in "low-income" and "lowgrowth" regions, it was just 59.5 and 56.4 percent, respectively. In Italy, the female labor force participation rate in lagging regions is more than 20 percentage points lower than in nonlagging regions.

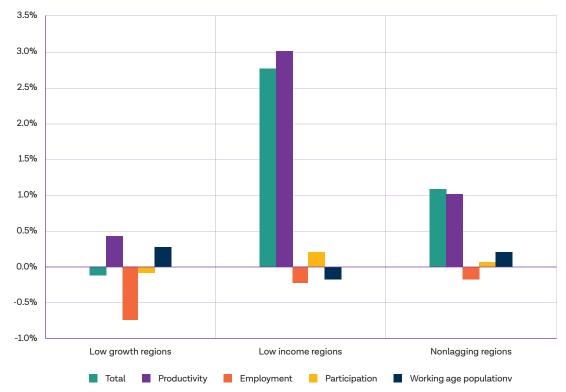


Figure O.3. Growth decomposition by region type—average annual percent change, 2000–14

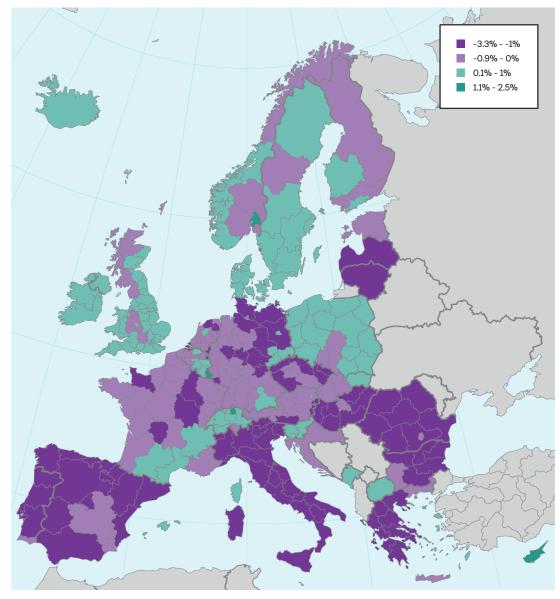
Source: Furostat

Note: Data available for only 203 NUTS-2 regions.

Demographic and technological trends heighten the risks of further divergence for lagging regions

Improved technologies-including digitization, along with major advancements in transportation and telecommunications—are contributing to significant changes in the geography of production, and in the skills demanded in labor markets. Across all parts of Europe, the share of jobs carrying out manual labor has declined sharply, while those requiring cognitive skills have increased. This is polarizing labor markets, increasing the returns to workers with skills that complement new technologies, while reducing opportunities for the least-skilled. For both workers and for enterprises, these dynamics have spatial implications. Because the highest skilled workers tend to concentrate in leading metropolitan areas, while lagging areas often have concentrations of both lower-skilled workers and lower-productivity firms, these trends can be expected to put further pressure pushing toward regional divergence.

A second force pushing further divergence is demographics. While the EU as a whole faces demographic challenges that will continue to constrain growth, the situation is more acute in lagging regions of the south and east, which have experienced net contractions in the young population of I percent or more each year over the past two decades (map O.3). This is driven both by low fertility rates -20 percent below the EU average in "low-growth" regions—and high levels of net out-migration, particularly in "low-income" regions. In this context, a simple accounting exercise highlights the limits of growth potential in many of the regions that are already lagging, and greater divergence with leading regions.



Map O.2. Annual growth of young population (age 20-35) across European regions, 2000-16

Source: Eurostat.

Poor social outcomes in both sets of lagging regions point to underlying weaknesses in key endowments

Arguably, economic outcomes matter less than social outcomes-good health, access to education and opportunities, access to quality infrastructure and public services, voice and participation in community and public lives. In a progressive polity, these outcomes need not be strongly correlated with the production of the economy. Across EU regions, it seems that high income is a necessary but not sufficient condition for ensuring high social outcomes—put simply, you can be a rich region and still not have great social outcomes, but you cannot be a poor region and have good social outcomes. Europe's richest regions, which are its biggest metropolitan areas, have social outcomes only around the EU median level, linked to high levels of local and household-level inequality. But almost all lagging regions also fare poorly on social outcomes. The poorest of the "low-income" regions are ranked lowest in measures of social outcomes. The picture is mixed in "low-growth" regions, with social outcomes worse than economic outcomes in Italian lagging regions, the opposite in Spanish lagging regions, and varying across Greek and Portuguese lagging regions.

The poor performance of lagging regions on social outcomes, particularly the low levels of human and institutional capital revealed by measures of social progress, raises questions about the limits to future growth in these regions, and highlights the two-way causality between economic and social outcomes—that is, investments in raising income levels are also likely to be critical to improving social outcomes, but investments in raising human and institutional capital are likely to be critical to driving income growth.

Taking a region-centered approach to cohesion policy—from economic convergence to regional potential

Targeting convergence of GDP per capita across regions is unrealistic, in that it fails to take account of the huge variation in endowments across regions. It is insufficient in that it masks large and growing spatial inequalities within NUTS-2 regions. And it is also inefficient, as it ultimately risks biasing (de facto) policy responses toward redistribution rather than toward growth and competitiveness.

This report argues for a continuation of the trend to move away from targeting convergence, and toward a region-centered cohesion policy that adopts a dual objective of: (1) maximizing regional potential, measured not simply by output per capita but also by the capacity to generate quality (productive) jobs; and (2) ensuring equality of opportunity for individuals to achieve their potential. Such an approach helps further center cohesion policy squarely on the regions, as the "potential" objective necessarily requires explicit consideration of the specific context of each region.

This has important implications for the approach to regional policy. First, it acknowledges that all lagging regions have some potential for growth, and that some regions may be exploiting less of this potential than others. But it also accepts that all regions do not have the same potential for growth over the same time frame, as a result of differences in endowments and structural conditions.

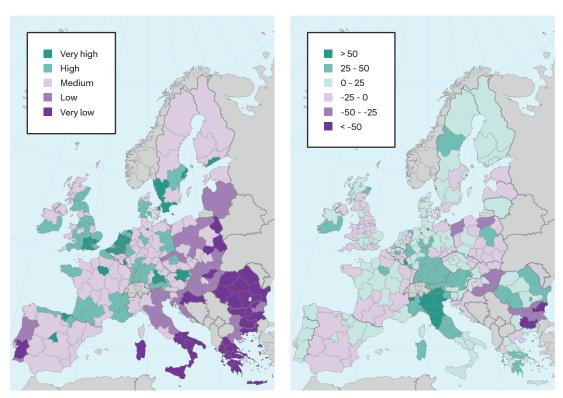
While most lagging regions have low economic potential in the short term, the factors that drive growth vary significantly across regions and have implications for convergence patterns

This report defines and operationalizes the concept of "economic potential" with a model based on three sets of regional "endowments":

- I. Human capital endowments: Education / skills and institutional quality, which capture the quality of human capital and of local economic and social institutions.
- 2. Locational endowments: Market access and population density, which capture the ability to exploit scale and agglomeration economies.
- 3. Physical and sectoral endowments: Sectoral structure and investment, which capture the specialization of the local economy and the scale of public and private investment.

Map O.3 (left) illustrates economic potential across regions in 2015. It shows that the regions identified as having the highest potential are concentrated in and around Europe's major metropolitan centers. Most important, for the purposes of this report, is the fact that lagging regions—including both "low-income" and "low-growth" regions—map closely to the "low" and "very low" potential regions. However, regions vary widely in terms of how closely the economic potential model maps to actual outcomes—some ("overperformers") have GDP per capita well above what is predicted based on their underlying endowments in the model; others ("underperformers") appear to not be achieving the economic outcomes that should be possible given their endowments. Most lagging regions in Poland, Hungary, and Bulgaria appear to be "underperformers." This suggests that significant growth potential remains in the short term. By contrast, most "low-growth" lagging regions (with the exception of those in Spain and some in Greece) "overperform" on their endowments. Thus, achieving significant growth in these regions is unlikely without strengthening fundamental endowments.

Map O.3. Map of European regions on economic potential (left) and actual GDP per capita relative to predicted economic potential (right)



Source: World Bank and European Commission (2017).

Such a model of potential, while it should not be the sole determinant of policy design, may be valuable in establishing the broad expectations of a region's prospects within any given (seven-year) programming period, as well the direction of policy priorities. Performance against potential may be improved over a programming period, but actually shifting a region to a higher potential (which is possible through improved connectivity, improving institutions, raising education levels, etc.) is more likely to be achieved within a longer time frame. Thus, some regions may be targeted for unlocking short-term growth, while the priority in other regions may be improving endowments to raise future potential for growth.

Delivering on regional potential requires a complementary approach to policy

This report argues that policy to raise the potential for growth in lagging regions needs to put greater emphasis on strengthening fundamental endowments, while complementing this with smart sectoral policies. Place-based interventions in lagging regions often focus on encouraging new investments—sectoral and spatial "strategic bets." But the expected returns to investors depend fundamentally on what investments others will make (e.g., an investment in an automotive factory will be more profitable if parts suppliers and transportation companies also decide to invest in the area; and their investments will be more profitable if universities in the area invest in training workers for the skills they need, if a new motorway is built, etc.). In the absence of existing agglomeration, coordination on such investments is difficult, and underinvestment by all parties results in a lowlevel trap. This is common across lagging regions—more so in regions that have lower agglomeration potential.

This report argues that overcoming these coordination problems and increasing the returns to placebased "strategic bets" starts with addressing government and market failures that raise costs and risks for investors. It therefore calls for a complementary policy approach that recognizes the priority of supporting sectoral development and targeted spatial investments with aggressive efforts to remove market distortions and build fundamental endowments in lagging regions.

Figure O.4 translates this principle into a basic framework for approaching policy in lagging regions, providing perspective on the scope of interventions that may be most appropriate in different regional contexts. It emphasizes the complementary approach—removing distortions to support "strategic bets" (sectoral and spatial investments)—in regions with sufficient density to support agglomerations. In low-density regions, "strategic bets" have higher risk, even if distortions are limited. Here, the main priority should be strengthening endowments—human capital, institutions, and, where still missing, connective infrastructure—and implementing smart sectoral policies. Indeed, across all lagging regions, endowment building should be given a leading place in the design of regional policy and allocation of resources.

Figure O.4. A framework for approaching policy in lagging regions



This report highlights five priority distortion-removing and endowment-building policies to complement sectoral interventions in lagging regions: (I) addressing macro-fiscal weaknesses; (2) improving the regional business environment for firms; (3) leveraging the productivity potential of cities; (4) building skills; and (5) strengthening institutions.

Remove distortions that restrict investment in high-productivity, tradable sectors

Unstable and weak macroeconomic conditions generate risk and uncertainty, which hinder the private sector from making forward-looking, productive investments. And if government fiscal conditions are such that budget austerity is required (e.g., national government debt in "low-growth" regions exploded from 79 percent of GDP in 2005 to 135 percent in 2015), growth-oriented public investments are also likely to be curtailed. This matters not only because lower public and private investment directly reduces growth potential, but also because lower investment-in infrastructure and technology, for example—limits the potential for productivity growth. These factors may be national in scope, but they matter for regional growth because they determine the bands around within which regional growth is likely to fall—where national growth is close to zero, the prospects for growth in lagging regions are limited.

In "low-growth" regions, the national conditions for growth matter even more because the private sector in these regions is dominated by family-owned microenterprises, selling nontradables in local markets. As figure 0.5 shows, firms are significantly smaller in "low-growth" Southern Europe; and they are smaller still in lagging regions—in the case of Italy, the average firm size in lagging regions is 24 percent smaller than in nonlagging regions. Moreover, firms in low-growth Southern Europe export at a rate 30 percent below the EU average.4

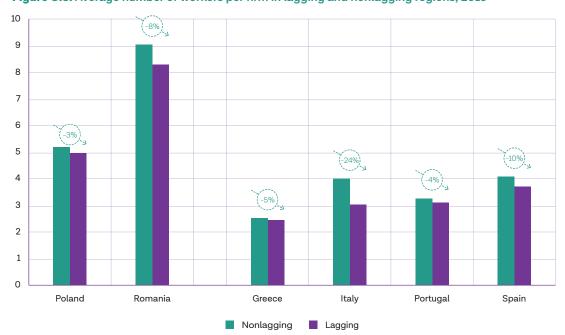


Figure 0.5. Average number of workers per firm in lagging and nonlagging regions, 2013

Source: Eurostat (Structural Business Statistics).

Note: Average firm size is measured as the number of employees. No data were available for Hungary and Bulgaria.

With such a private sector that relies on local consumption, depressed domestic demand resulting from national conditions reverberates and leads to a vicious circle of underinvestment. Thus, delivering on economic potential in many lagging regions, particularly in "low-growth" regions, will require a fundamental change in the nature of the private sector—shifting from microenterprises focused on nontradables to larger firms with a much stronger orientation toward external markets, increasingly through integration into regional and global value chains. This will require, among other things, establishing a business environment that is conducive to investment, employment, and growth. Results from the World Bank's Doing Business indicators show a strong correlation between a country's business environment and the size of firms-poor business environments are associated with the prevalence of microenterprises across Europe.

While many of the factors that contribute to the business environment are nationally legislated, their implementation varies substantially across regions. And, indeed, evidence from the Subnational Doing Business surveys shows significant differences in the business climate across regions within countries. And while patterns vary across countries, overall, lagging regions perform marginally worse—and in the case of Italy, dramatically worse. These differences matter. Analysis of a large dataset of incumbent firms across four lagging regions indicates that regional business environment factors do have an impact on firm performance in terms of sales, employment, and productivity growth, as well as investment (Farole et al. 2017).

What can be done to improve the business climate and facilitate trade in lagging regions? There are both national-level and region-specific elements to the solution. The latter require not so much policy as program- and project-level interventions to improve the administrative processes that underpin approvals and service provision. This requires substantial work to build the capacity of local institutions and actors.

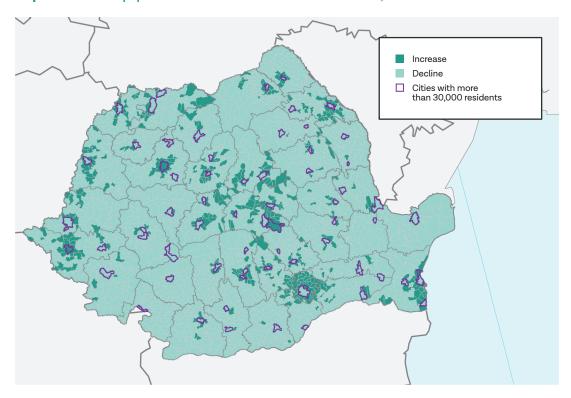
Leverage the productivity-enhancing potential of cities

As regional economies seek to shift their sectoral structure into higher value-added tradables, the role of cities becomes increasingly important. This report argues that investment in cities, particularly in secondary cities, as sources of productivity growth, human capital accumulation, and ultimately as locations of opportunity, is central to delivering on the potential of lagging regions. In effect, the argument is to focus on strengthening the strongest parts of national and regional economies—to concentrate investments on competitive cities rather than spreading it across the periphery.

In "low-income" regions, while cities have contributed the majority to growth, large gaps remain in the productivity of primary and secondary cities. Primary cities—such as a Bucharest, Sofia, Budapest, and Warsaw-have reached the point where they compete almost on par with primary cities in Western Europe. However, the disparities between primary and secondary cities in "low-income" countries remain much higher than in other parts of Europe. In "low-growth" Europe, the problem is not so much between primary and secondary cities per se, but rather between cities in leading and lagging regions. Across "low-growth" Europe, productivity of cities in lagging regions not only trails that of leading regions, but fails even to outperform nonmetropolitan areas.

Analysis of secondary city development in Poland and Romania (map 0.4)—as well as in Greece, Italy, Portugal, and Spain-shows that much of the growth is coming not so much from internal migration but rather from significantly increased commuting resulting from suburbanization. Evidence suggests that much of this suburbanization is happening because poor planning, a lack of investment in social infrastructure, and distortions in land use contribute to rising congestion costs (high housing costs, diseconomies from crime or pollution, etc.), which undermines the productivity-enhancing potential of agglomeration.

Building competitive cities that can have strong spillovers to the regional hinterland will require addressing distortions that lead to inefficient suburbanization; strengthening the physical, social, and cultural assets of cities; and continuing to develop more effective transportation links between core cities, peri-urban areas, and the rural hinterland. Finally, it will also require raising the quality and capacity of both social and economic institutions at the city and wider regional levels. Regional policy can play an important role in unlocking the potential for urbanization to deliver positive spillovers in lagging regions. In the current programming period, EU member countries are required to allocate just 5 percent of ERDF for sustainable urban development activities. While, in practice, cities tend to capture a much larger share of resources, there is reason to consider increasing the targeted investment in cities, with an emphasis on integrated territorial planning.



Map O.4. Growth in population in and around core cities in Romania, 2002-11

Source: Cristea et al. (2017).

Investing in skills is a "no regrets" policy for regions

Building skills and supporting mobility should be at the heart of the agenda for ensuring equality of opportunity for individuals to exploit their potential. Moreover, in an environment like the EU, where comparative advantage is increasingly defined by knowledge and innovation, and where technological capabilities will increasingly define outcomes, human capital development is also central to delivering on regional economic potential.

The problem is that the disparities in income across regions in Europe are mirrored in disparities in human capital outcomes. These disparities are not simply a function of labor markets and of the accessibility and quality of tertiary and upper-secondary institutions, but also stem in part from disparities that emerge in earlier stages of education. Data from the most recent PISA results (2015) show significant gaps in performance between schools in urban and rural areas, which generally map to leading and lagging regions. For example, in Bulgaria and Hungary, the difference in mathematics scores between urban and rural schools was over 50 points (equivalent to close to two years of schooling), while the gap was 30 points in Poland and 25 in Italy and Portugal. Data available from Spain and Italy confirm significant gaps in outcomes between lagging and leading regions. In the case of Italy, the difference is stark—students in Campania are about two years behind their peers in Bolzano, Trento, and Lombardia in science, math, and reading (figure 0.6).

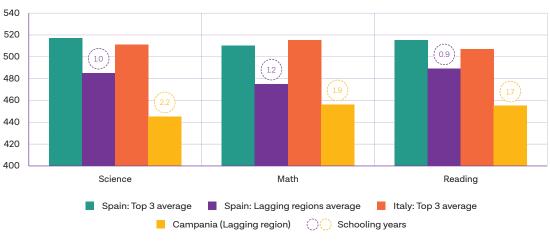


Figure O.6. Gaps in PISA scores between top regions and lagging regions: Spain and Italy

Source: OECD (2016a).

Strengthen institutions as the bridge from policy to delivery

Quality institutions are critical to support regional transformation, to enable adaptive regional economies, and to ensure equitable social outcomes. They are also essential to deliver on the reforms proposed in this report. But in fact, institutional weakness, both in terms of governance and capacity, is one of the defining features of lagging regions. Institutional quality in "low-growth" regions is just 63 percent of the EU average; in "low-income" regions, it just 57 percent. But it also varies significantly, from just 12 percent of the EU average in Campania (Italy) to 26 percent above the EU average in Alentejo (Portugal). And while institutions are often viewed as among the "deep determinants" of economic growth, evidence suggests that regional institutions can change over the short term. This may be particularly relevant for "low-income," lagging regions, which are still in the process of integrating with European institutions. Recent research (Rodriguez-Pose and Ketterer 2016) finds that regions that have been able to improve institutional quality have had significant economic payoffs.

Persistent efforts to modernize institutions must be a high priority to underpin all other aspects of regional policy. Delivering on this is easier said than done, although the use of institutional conditionalities, combined with substantial capacity-building efforts, are important components of the solution.

Target regional transformation by focusing on agricultural productivity and the regional innovation system

Sustainable growth in lagging regions is dependent on achieving structural transformation. Both "low-income" and "low-growth" regions have markedly higher shares of agricultural employment relative to nonlagging regions, and a lower share of high-productivity tradable activities (figure O.7). While "low-income" regions are undergoing rapid structural transformation, many of them-particularly the more peripherally located regions—still have a large share (20 percent or more in most cases) of their population engaged in low-productivity agriculture. Several "low-growth" regions, especially in Portugal and Greece, also remain heavily reliant on agriculture. For these regions, the priority is to raise productivity in the agricultural sector, while also developing the capacity to support investment in manufacturing and services. Based on policy scenarios run for this report, agricultural transformation could be expected to have a substantial impact on growth in many lagging regions about 7 percentage points (in PPS relative to the EU average) on average in Greece and Portugal, and more than 10 percentage points in Romania and Bulgaria. Making this transition depends precisely on the type of complementary policy approach that this report advocates. Specifically, it requires, on the one hand, targeted sectoral approaches in agriculture to raise agricultural productivity and increase value addition in agricultural outputs. But in order to enable the transition, complementary interventions—through endowment-building and distortion-removing policies—are needed to establish a regional environment that can support investment in high value-added manufacturing and services.

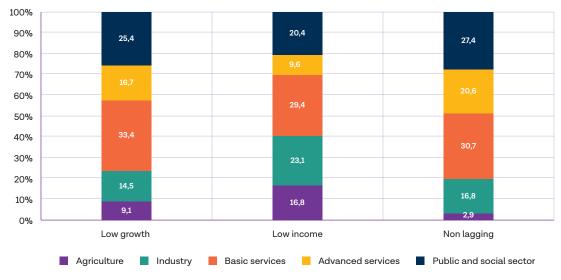


Figure O.7. Employment structure by region type, 2015

Source: Eurostat.

Note: "Basic services" include construction, wholesale and retail trade, transportation, accommodation, and food service activities; "Advanced services" include information and communication, finance and insurance, real estate, professional, scientific and technical activities; administrative and support service activities, and arts, entertainment, and recreation.

In addition, "low-growth" regions must begin making the shift into higher-value-added tradables, while "low-income" regions must start moving quickly up the value-added ladder in the manufacturing and services sectors, in order to sustain the levels of productivity that will be needed for convergence. These shifts will require removing distortions in the business environment to attract investment, designing and implementing strategies to develop key sectors where regional compara-

tive advantage exists, and strengthening competitiveness and innovation capacity of local firms and workers. In this respect, Smart Specialization will remain an important tool of cohesion policy, because it helps ensure focus on the regional context. It will be important for regional programs to also implement Smart Specialization in a way that distinguishes between targeting innovation-intensive/ high-technology sectors and treating innovation as a horizontal policy that is relevant in all sectors and in all places. The former approach risks setting unreasonable expectations and developing inappropriate strategies for lagging regions, while the latter offers the potential for adaptation to both sectoral and regional needs.

Yet, while Smart Specialization can support transformation in many regions, it may not be the most effective approach in all regions at all times. In lagging regions plagued by thin markets and government failures, an alternative approach may be to allow these sectors to emerge over time by establishing an environment that incentivizes experimentation and facilitates market entry and exit (Correa and Guceri 2016). This type of approach again emphasizes the horizontal agenda, including ensuring an unhindered business regulatory environment, a level playing field of competition, and transparent governance.

Finally, remembering the importance of complementarity in policy delivery and the importance of agglomeration in supporting innovation, lagging regions may benefit from integrating planning and programs for sectoral and urban policy. Specifically, regions should focus on leveraging the assets of their largest urban areas to create an environment that attracts and retains knowledge workers.

Strengthen the delivery of regional policy by localizing, intensifying capacity building, and focusing on results

Having a bigger impact on the ground in lagging regions requires not only the most appropriate set of policy domains for meeting and expanding regional potential but also sequencing and coordinating interventions to maximize their impact. This requires that regional development plans achieve an effective balance at both the policy and spatial levels. Arguably, investments in many "low-growth," lagging regions over the past two decades have been unbalanced, with intensive investments in transportation infrastructure not supported with complementary investment in other key development axes. Integrated strategies that take into account the current regional context and short- to medium-term economic potential when sequencing interventions, are critical for successful delivery of regional policy. In this context, the integrated planning and financing approach encapsulated in Integrated Territorial Investments (ITI) offers a model that might be expanded in the next programming period.

In terms of delivery, taking a "region-centered" approach to cohesion policy has several implications. First, it requires regional and local authorities to take the lead to define priorities and policy responses. Second, along with local ownership should also come capacity building, to enable local actors to plan and deliver on regional policy. The lack of local-level capacity is a major barrier both in planning and implementation. Effective delivery of regional policy also requires establishing the right incentives to ensure that strategies are well planned and operational programs are well executed. To date, the main instrument has been ex-ante conditionalities (ExAcs), which have targeted "enabling" conditions operating largely at the national level. There is a need to simplify these conditions, and shift from a reliance on stringent and bureaucratic ExAcs to an approach that establishes an agreed-on set of expected results and pays, ex-post, on reaching these results. While this will require significant changes to the current approach of cohesion policy and raises a number of political risks, it is worth considering as an innovation for delivery in the next programming period.

In summary, improving on delivery outcomes of regional policy will require a "region-centered" approach that designs and implements policy in a more context-specific way. This will require more intensive technical assistance and capacity building at the local level, including potentially rolling out the "lagging regions initiative" model much more widely in the next programming period. This will, in turn, have implications for how the European Commission organizes itself to support cohesion policy's delivery, including the scale of resources and the nature of technical expertise available.

Notes

- ¹ The municipality around Montana lost close to 20 percent of its population over the last decade.
- ² Even considering Greece's sharp GDP fall between 2010 and 2015 as an outlier and calculating growth in Greek regions based on the 2005-10 average, growth in "low-growth," lagging regions remains just 0.18 percent annually.
- 3 Also, the only "low-growth" regions that experienced (small) relative employment growth during the period did so in the context of declining productivity.
- ⁴ By contrast, most "low-income" countries in Europe have export shares above the EU average.
- ⁵ This is based on the 2013 European Quality of Governance data set.

Chapter 1:

Europe's regional inequalities are back in the spotlight

This chapter sets out the challenge of regional disparities in the EU, and the implications this can have for both economic growth and social, as well as political, cohesion. It argues that as the EU begins to make plans for cohesion policy's next programming period, now is the time to reconsider its objectives, policy priorities, and delivery mechanisms.

Regional inequality is normal, but it has consequences

That economic activity is not spread evenly across space is obvious even to the most casual observer. That capital is more mobile than people is perhaps less obvious, but is equally understandable and observable. The result is disparities, sometimes stark, in employment opportunities and economic outcomes among different communities. Such disparities exist across countries—where they are expected (if not necessarily accepted). They also exist within countries, where globally they are, in fact, growing even as cross-country disparities wane (Lakner and Milanovic 2013). Map 1.1 illustrates the uneven distribution of economic output across the European landscape.

Figure 1.1 gives a sense of how regional inequalities in GDP per capita play out in each country of Europe. Setting aside the large differences across countries, disparities across regions within EU countries are evident. Even more prominent in the figure, leading (mainly metropolitan) regions have, on average, 2.3 times the GDP per capita of the poorest region in their country; and among countries with at least three regions, only Finland and Austria have a gap between the richest and poorest regions of less than 75 percent. Indeed, from the standpoint of per capita output, cities like Bratislava and Bucharest look a lot more like more like Rome, Madrid, or Copenhagen than they do like any other part of their own country.

(Indexed to EU Average) ≤ 45 < 76 < 104 < 129 < 216 < 324 < 1823 No data (NUTS-3)

Map 1.1. Distribution of GDP per capita across the EU (NUTS-3 level)

Source: Eurostat.

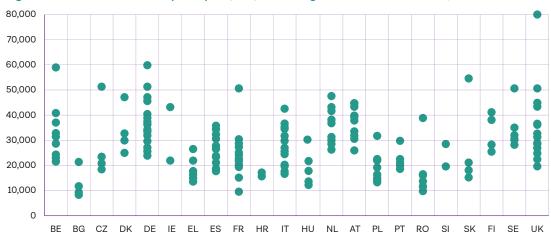


Figure 1.1. Distribution of GDP per capita (PPS) across regions within EU countries, 2015

Source: Furostat.

Note: Excludes EU countries without at least two NUTS-2-level regions; the figure does not adjust for "underbounded" metropolitan regions (Amsterdam, Brussels, Berlin, London, Prague, and Vienna) where substantial commuting across regions exaggerates the measurement of regional inequality; the graphic for London is truncated to avoid scaling problems.

The existence and persistence of such large disparities in territorial outcomes gives rise to regional development policies, which are also referred to as territorial or spatial development policies. Such policies typically have the aim of reducing regional disparities by raising the level of growth in those regions with a relatively lower income ("lagging" regions). Despite their popularity globally, regional development policies are not without controversy. There is a long-standing debate in Europe, as elsewhere, over the most appropriate response to regional disparities, often pitting "place-based" approaches against "people-centered" policies that eschew spatial targeting (see, e.g., the back-and-forth in www.voxeu.org between Gill [09, October 2010] and Garcilazo, Martins, and Tompson [20, November 2010], along with Barca, McCann, and Rodriguez-Pose 2011).

Both sides of the argument have merit. And in many ways, the people-versus-place-based argument represents a false dichotomy. Of course, at the margin some trade-off exists between the scale of growth and its territorial equity. This trade-off, which results primarily from the agglomeration-induced benefits to productivity (Duranton and Puga 2004) and innovation (Bourguignon and Morrison 2002), means that policies which aim to achieve an even spread of economic output across territories are likely to come at the cost of lower overall growth (and thus, less income available for redistribution). It is also true that regional disparities in output do not necessarily have to result in major disparities in living standards for individuals and households living within lagging regions. Rather, policies targeting individuals and households—including social service delivery, tax and income transfers, and labor mobility—can substantially mitigate disparities in output.

But even allowing for redistribution and labor mobility as mechanisms to adjust for differences in regional output, there are reasons to be concerned about growing disparities across regions. First, these disparities may have a direct impact on aggregate economic efficiency. From a structural perspective, many lagging regions are not simply failing to keep pace; they are failing to make productive use of the resources available to them, and therefore are producing significantly below their potential. This, combined with self-reinforcing institutional failures, leads to a problem of persistent underdevelopment at the regional level. This is not simply a problem for the lagging region caught in a "low-growth trap," but it also acts as a drag on national, and in this case, EU-wide growth potential (Farole, Rodriguez-Pose, and Storper 2009). Second, increasing disparities across regions threatens social and political cohe-

sion at the local and national levels, as well as threatening European cohesion. Populist movements for secession or devolution are often linked to issues of territorial income inequality. In fact, the voting patterns that resulted in the UK's Brexit decision and in the recent elections in the US, Germany, and Italy, can be traced along geographical fault lines of (real or perceived) winners and losers from the increasingly regionalizing and globalizing economy. And even where growing spatial inequalities do not give rise to political crises, they will almost certainly be factors in increasing demand for redistributive (versus productive) policies, which may again have a dampening effect on overall growth (Aghion, Alesina, and Trebbi 2004). Thus, concern for convergence and demand for targeted, "place-based" approaches have both economic logic as well as political expediency on their side.

The EU is no exception, but it is unique

The existence of regional disparities in the EU is not exceptional, nor is the scale of these disparities. Figure 1.2 compares levels of within-country regional inequality across 64 countries (mainly upper- and middle-income, but also including some low-income). It shows that most EU countries, along with most non-EU OECD countries, have regional inequalities on the lower end of the global scale. Conversely, some EU countries—notably Bulgaria, Hungary, and Romania—have regional inequalities of output at the top end of the global scale. Meanwhile, middle-income countries like Morocco and Jordan, as well as some low-income countries like Nicaragua and Bolivia, have lower regional disparities than many of the richest EU countries. Recent data from the OECD on regional disparities of disposable income shows that large, federal countries like Australia and Mexico have regional inequalities at the higher end of EU country experiences, while Canada and the US have inequality levels similar to the EU average, and Japan and the Republic of Korea compare similarly to the EU's most equal countries.

But in many ways, the EU is unique when it comes to the experience of disparities and the willingness to address them. First, what is different about the EU is the fact that it is an economic community and not a nation-state or even a federal union. Yet despite (or because of') the fact that EU is not a nation-state, there is a strong focus on-some might even argue, an obsession with-cohesion. And fundamental to cohesion is convergence, not just across member states but, crucially, also across regions. Undoubtedly, one of the greatest successes of the European Union has been its ability to drive convergence, of both institutions and economies, across a broad geography and a highly diverse set of countries. This achievement of the EU as a "convergence machine" (Raiser and Gill 2012) results from its opening of regional markets and its support for institution building, but also from its targeted efforts to promote connectivity and cohesion, including policies to promote convergence among regions. Since 1989, the EU's regional policy has been underpinned by a territorial cohesion agenda. A second implication of the structure of the EU, relative to large federal nation-states, is the fact that it has potentially fewer instruments that it can use to address EU-wide regional disparities, given that power over most of the possible policy levers remains at the national level. Thus, the EU is largely limited to financial instruments.

What is probably most unique about the EU is the sheer volume of financial and institutional resources that are devoted to regional development. Funding for cohesion policy makes up approximately 33 percent of the entire EU budget, or some €350 billion over the period 2014-20. The largest share of the budget goes to the European Regional Development Fund (ERDF), which focuses specifically on promoting the growth of less developed regions. The funds made available to support cohesion objectives have more than doubled in real terms since the late 1980s, making it now the greatest area of commitment within the EU budget. But even heavy financial commitments are no guarantee of success, particularly given the strong forces working against convergence.

1.0 0.9 8.0 0.7 0.6 0.5

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Figure 1.2. Index of regional inequality across the world (Second Theil Index)

Source: Rodriguez-Pose and Wilkie (2017).

0.4 0.3 0.2

Note: Data are for 2010 or the closest available year; green = EU countries; purple = non-EU, OECD countries.

Convergence stalled during the crisis

At the country level, the convergence machine has been strong over the past decade, with the EU's poorest countries, and virtually all EU members in Central and Eastern Europe (CEE), growing well above average (figure 1.3). That said, the slowest-growing regions are not the richest regions at the left-hand side of the figure but rather those in the middle, which tend to be relatively high-income economies in Southern Europe. So, while the big picture at the country level is, to turn Pritchett's (1997) phrase, "convergence, big time," significant parts of the EU are becoming delinked from this convergence trend.

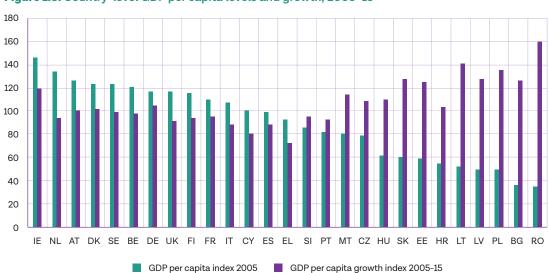


Figure 1.3. Country-level GDP per capita levels and growth, 2005-15

Note: Excludes Luxembourg (GDP per capita index = 263) in order to maintain scale in the figure.

Figure 1.4 provides a more detailed picture of European-wide convergence trends at various levels of spatial aggregation,2 over the period 2000 through 2016,3 Again, it shows a relatively strong trend toward convergence at the country level, with the coefficient of varation in GDP per capita declining by 30 percent between 2000 and 2016. However, the figure shows that country-level inequality declined sharply until the economic crisis hit in 2009, but country convergence has stalled since. At the NUTS-2 regional level, a similar but less dramatic convergence pattern is visible from 2000 up until 2008. However, after 2008, the trend reversed, and by 2016 regional inequality fell back to the level last reached in 2005.

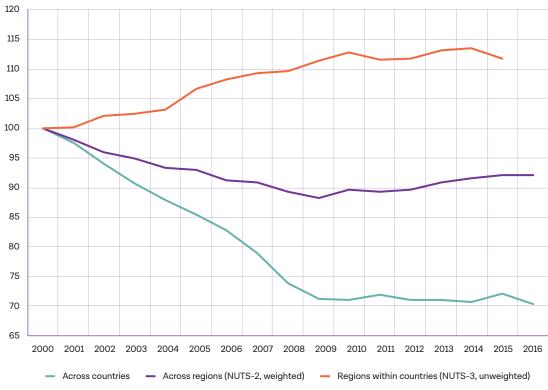


Figure 1.4. Coefficient of variation in GDP per capita (PPS), 2000-16 (Index 2000=100)

Source: Eurostat.

Finally, comparing disparities across NUTS-3 level regions within countries, the patterns look somewhat different. While the nominal levels of disparity are lower within countries, they have risen sharply since 2000 (by more than 12 percent); in this case, the upward trend started well before the crisis and appears to have steadied since 2010. This suggests that there may well be different factors at work at different spatial levels-for example, slowing growth, making a top-down impact, and increasing urbanization and specialization, potentially shaping patterns from the bottom up.

Not surprisingly, these patterns of divergence have implications for the performance of cohesion policy in recent years. Figure 1.5 looks at how regions fared over the decade, based on their classification as defined under cohesion policy (see Box I.I). These classifications, and performance against them, matters of course, because funding allocations are linked directly to them, with the large majority of funding reserved for the less developed regions, substantial amounts for the transition regions, and very little for the more developed regions. It also matters because it is, at the highest level, the overall measure on which the success of cohesion policy is judged.

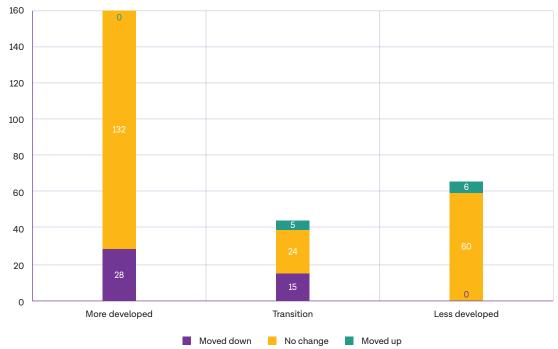


Figure 1.5. Movement of EU regions across cohesion policy categories, 2005-15

Source: Eurostat.

Figure 1.5 tells a story of downward mobility of regions, and growing polarization, since 2005. Of 66 regions with incomes classifying them as less developed in 2005, just 6 "graduated" to transition status (3 in the Czech Republic, one each in Poland and Bulgaria, along with Estonia) and remained there through 2015. Among the 44 transition regions, just 5 graduated and maintained their position, while three times as many (15 across Spain, Italy, Greece, and the UK) fell back from transition to less developed status. Finally, almost one in five more developed regions fell back into transition status during the decade.

Box 1.1. Cohesion policy classification and "Lagging Regions" classification

Under cohesion policy all NUTS-2 regions are classified as one of three regional types, based in per capita GDP (at purchasing power standard). These are: (1) "More Developed" regions with a GDP per capita over 90 percent of the EU average; (2) "Transition" regions with GDP per capita between 75 percent and 90 percent of the EU average; and (3) "Less Developed" regions with GDP per capita less than 75 percent of the EU average.

Under the "Lagging Regions Initiative" - which was launched in 2015 with the aim to provide more targeted technical assistance to support regional development in a subset of regions that are seen to face greater challenges in unlocking growth potential - a separate regional classification was developed distinct from cohesion policy. Specifically, two categories of "lagging regions" are defined: (1) "low-income regions," which are regions with GDP per capita under 50 percent of the EU average (located in Eastern Europe-in Bulgaria, Hungary, Poland, and Romania); and (2) "low-growth regions," which are regions of long-standing members where GDP per capita is below 90 percent of EU average, and have not converged towards the EU average over the past decade (located in the South of Europe-in Italy, Greece, Portugal, and Spain).

Finally, it is important to highlight that these regional trends toward divergence are also reflected at the household and individual levels. In fact, even during the period of territorial convergence during the 2000s, within-country household income inequality was rising in most parts of Europe. Figure 1.6 maps the change in household income inequality for each EU member state over two periods: 2000–09 (up to the crisis), and 2009–15 (after the crisis). It shows that in most countries, inequality was rising during the period up to the crisis (just 8 of 27 countries saw a decline in household income inequality in the period 2000–09). And the inequality has not declined in the postcrisis period—only four member states (Austria, Belgium, Latvia, and the UK) have reduced household inequality since 2009, and only three since the recovery from 2011.

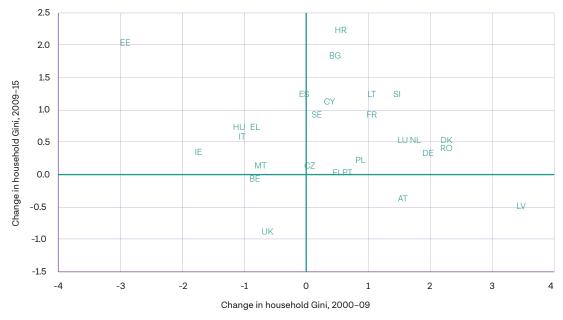


Figure 1.6. Change in household inequality (Gini), 2000-09 and 2009-15

Source: Derived from Ridao-Cano and Bodewig (2018).

Technology and demography will act as forces of divergence

The recent experience of regional divergence is not strictly a cyclical phenomenon. There are structural forces at play which are likely to push toward further divergence in the coming years, even in the face of stronger economic performance across Europe. Among the most powerful of these divergent forces are technology and demography.

Rapid technological change, along with the increasing pace of globalization, are polarizing both enterprise and labor markets. Improved technologies, including digitization, along with major advancements in transportation and telecommunications, have led to large-scale offshoring of traditional manufacturing activities. This process is expected continue in the coming decade, and will be joined by increasing offshoring of routine services jobs. It also leads to increased competition in domestic product markets. For enterprises, the implication is that those firms in Europe that are farthest from the technology frontier—operating on a small scale, with limited technology and limited knowledge-based value addition—

are likely to lose out, while those closest to the technology frontier will gain from the changing competitive landscape. For workers, a similar polarization is taking place. Figure 1.7 shows that across all parts of Europe, the share of jobs carrying out manual labor has declined sharply, while those requiring cognitive skills has increased. This has polarized labor markets, increasing the returns to workers with skills that complement new technologies, while reducing opportunities for the least-skilled.

For both workers and enterprises, these dynamics have spatial implications. Because the highestskilled workers tend to concentrate in leading metropolitan areas, while lagging areas often have concentrations of both lower-skilled workers and lower-productivity firms, these trends can be expected to put further pressure toward regional divergence.

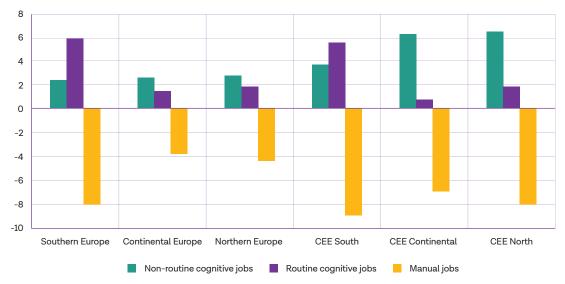
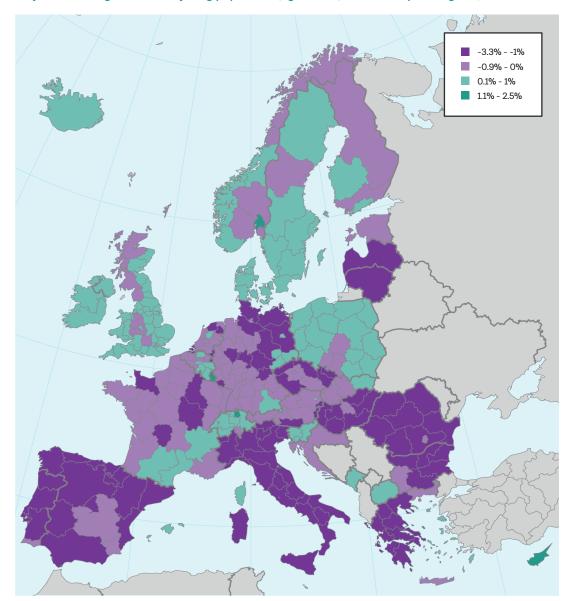


Figure 1.7. Percentage-point change in share of workers by job type, 1998–2014

Source: Ridao-Cano and Bodewig (2018).

The second force driving regional divergence is demographics. While the EU as a whole faces demographic challenges that will continue to constrain growth, the situation is more acute in lagging regions. Map 1.2 highlights that large parts of Europe experienced a net contraction in the population between 20 and 35 years of age during the period 2000-16; most regions in Southern and Eastern Europe saw declines in the young population of more than I percent each year.

This is a function of low fertility rates as well as migration. Figure 1.8 plots EU regions on a matrix showing their net migration rate (in-migration less out-migration as a share of the population) and their fertility rate (the two axes represent the EU-wide average). What is clear from the figure is that lagging regions are largely found in the lower-left quadrant—with both fertility and net migration below average. Perhaps most striking in the figure is that only 2 of 45 lagging regions have fertility rates above the EU average. In fact, fertility rates are about 10 percent below the EU average in "low-income," lagging regions and close to 20 percent below in "low-growth" regions. The gap in "low-growth" regions is aggravated further by net migration rates of just 0.06 percent versus an EU average of 0.24 percent. In "low-income" regions, the impact is even more severe, with net out-migration of 0.12 percent. In this context, a simple accounting exercise suggests severe limitations on growth potential in many of the regions that are already lagging, and greater divergence with leading regions. Of course, while fertility rates are generally not movable by policy in the short term, there is substantial endogeneity in the migration outcomes, which are shaped by regional economic opportunities.



Map 1.2. Annual growth of the young population (age 20–35) across European regions, 2000–16

Source: Eurostat.

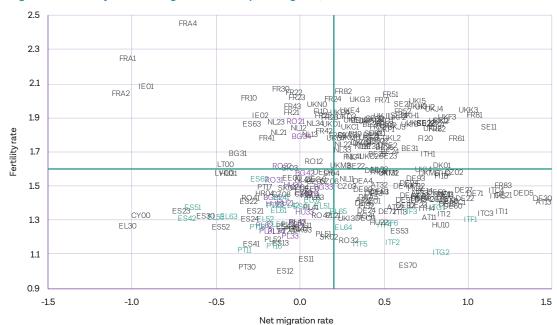


Figure 1.8. Fertility and net migration in European regions, 2012-15

Source: Furostat.

Note: "Low-income" regions of Central and Eastern Europe are highlighted in purple; "low-growth" regions of Southern Europe are highlighted in green; axes are set at EU average levels.

Rethinking lagging regions: Approaching the future of cohesion policy

In summary, the convergence machine appears to be facing challenges on many fronts. This is not to say that cohesion policy and its implementation have not been effective. The discussion in this chapter takes no consideration of the counterfactual, nor of attribution. The simple point is that delivering convergence, not to mention growth, across 276 regions in 28 disparate countries is difficult. And trying to do it in the face of major global and regional economic and political headwinds may mean engaging in a losing battle.

This challenge has been recognized in the objectives of the most recent cohesion policy programming period (2014-2020). Thus, while convergence in economic outcomes across Europe remains the political objective of cohesion policy and guides funding allocations, the 2014-2020 programming period undertook a major shift in eschewing an explicit convergence objective.

With the next seven-year programming period (2021-27) coming soon, the next two or so years will be a time of important opportunity for the European Commission to consider further adjustments to its objectives and approach to regional development, including support for lagging regions, from both policy and delivery perspectives. There is an expectation that the funding available through the Structural Funds is likely to be increasingly limited. This makes it more important than ever to consider how cohesion policy can be used most effectively to deliver improved outcomes for regions, the businesses that are based there, and the people who live there.

This report aims to provide observations and recommendations on the future direction of cohesion policy, with a specific focus on lagging regions. The messages outlined in this report are based on evidence drawn from a set of analytical activities carried out over the past 18 months, several in collaboration with the EC.5 It also draws on experiences of the World Bank working on the ground in lagging regions in Poland and Romania, as well as in many countries outside the EU. Yet it is important to be clear that this by no means represents a comprehensive analysis of the issues relevant for considering the future of cohesion policy. Also, as stated above, this report is neither based on or intended to provide an evaluation of the effectiveness or efficiency of past programs.

The report is organized according to four basic questions that need to be considered in framing policy for lagging regions:

- · Who? Chapter 2 presents recent trends in regional outcomes, highlights the importance of regional heterogeneity, and recommends priorities for targeting specific regional types.
- · Why? Chapter 3 considers the objectives of cohesion policy proposes an approach based on maximizing regional potential and achieving convergence in social outcomes through ensuring equality of opportunity for individuals.
- · What? Chapters 4 through 7 outline a policy agenda to address the challenges holding back regional potential, which puts emphasis on removing distortions and strengthening regional endowments as priorities to complement more targeted sectoral interventions.
- · How? Finally, Chapter 8 suggests ways to make the delivery of regional policy more context-specific and results-driven, while strengthening regional and local capacity.

Notes

- ¹ The sustainability of the community could be considered more fragile than that of a nation-state, thus raising the importance of policies promoting cohesion, including through convergence in economic outcomes.
- ² The Nomenclature of Territorial Units for Statistics (NUTS) spatial unit system is used by the European Union to facilitate analysis of economic and social conditions within it. There are four geographic levels of aggregation: NUTS o: national; NUTS I: major socioeconomic regions; NUTS 2: basic regions for the application of regional policies; and NUTS 3; small regions for specific diagnoses. The aggregation boundaries are based on the existing internal administrative unit boundaries of member countries and on population standardization—NUTS 1 regions have populations between 3 and 7 million; NUTS 2 regions, between 800,000 and 3 million; and NUTS 3 regions, between 150,000 and 800,000.
- ³ Data at the NUTS 3 level are available only through 2015.
- ⁴ This report has no intention to assess the effectiveness of investments in lagging regions, much less the efficiency of those investments. For recent research looking at the impact of cohesion policy, see, for example, Crescenzi, Fratesi, and Monastiriotis (2017).
- ⁵ Eight analytical activities were undertaken: (1) An exploration of alternative definitions of "lagging regions"; (2) an analysis of the economic potential of European regions (in collaboration with DG-REGIO); (3) an assessment of the impact of the regional business climate on firm performance (in collaboration with JRC); (4) an analysis of secondary cities and migration and commuting patterns in Romania, Poland, and Southern Europe; (5) an assessment of regional policy, fiscal instruments, and conditionality; (6) short case studies of four lagging regions (Sardinia, IT; Central Macedonia, EL; Podkarpackie, PL; and North-East, RO); (7) a benchmarking of the absorption of EU funds in Romania; and (8) an analysis of the approach toward fiscal transfers and "rules of the game" for financing subnational regions in countries around the world.

Chapter 2:

Different regions with different challenges: Performance trends in Europe's lagging regions

This chapter outlines the current objectives and targeting approach toward lagging regions in the EU. It argues for a need to consider both economic and social outcomes, including productivity growth and job creation as critical intermediates that bridge both economic and social outcomes. And it traces the performance of two very different types of lagging regions—"low-income" and "low-growth" regions—along each of these dimensions, highlighting the importance of a tailored approach to individual regions.

What are lagging regions? The "low-income"/"low-growth" dichotomy

Lagging (n): The action or condition of lag (v)

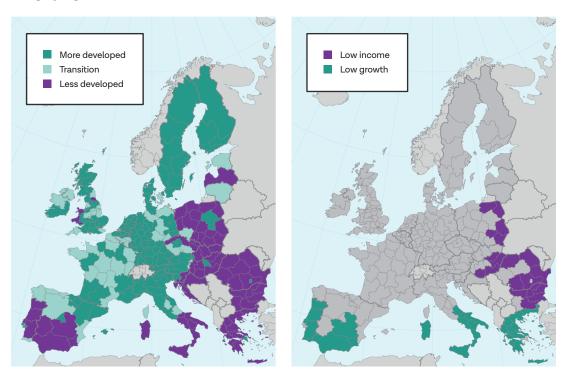
Lag (v): To fail to maintain the desired speed of progress; to slacken one's pace, as from weakness or sloth; to fail to keep pace with others; to hang back, fall behind, remain in the rear.

-Oxford English Dictionary

Designing and delivering on policies to support lagging regions first requires a clear definition of what is the state of "laggardness" that one is trying to resolve, as well as the spatial scale over which it is manifest. While the concept may be straightforward, the operationalizing of "lagging" and "region" vary widely in practice. As discussed in Box I.I, cohesion policy and the "Lagging Regions Initiative" define specific regional classifications - both of which are based on GDP per capita levels and growth. These are illustrated in map 2.1.

Measuring GDP per capita has the clear advantage of being a simple, easily understandable outcome measure that is politically at the heart of the cohesion project in Europe. GDP also tends to be a good proxy for measuring most economic and social outcomes. But even considering only outcome measures, a number of other indicators are arguably of equal or greater relevance to understanding regional outcomes, particularly if the ultimate concern is not the geographical territory per se but rather the individuals living in them. In fact, few places with substantial regional development programs rely solely on economic output as their policy objective (see box 2.1).

Map 2.1. NUTS-2 regions classified by cohesion policy category (left) and lagging region category (right)



In order to look at alternative potential measures of progress in lagging regions, table 2.1 shows the correlation of regional outcomes across a number of indicators, including measures of the regional economy (GDP per capita, GDP per capita growth, and disposable income); labor market (employment rate; youth not in employment, education, or training, NEET); migration, health, poverty, and access to key infrastructure (broadband); it also includes two aggregate indicators: one on competitiveness (the EU Regional Competitiveness Index); and one on social outcomes (the EU Social Progress Index). As expected, GDP per capita is well correlated with most other outcomes, although several other indicators are actually more highly correlated with the full set of measures, including disposable income, the employment rate, youth NEET, and broadband access, as well as both indices. The very high crosscorrelation of disposable income is worth pointing out, because while it is not explicitly used to define the success of cohesion policy, in practice it is what matters to individuals and households. Moreover, regional variation is markedly lower for disposable income than it is for output. It is also worth noting that the indicator least correlated with other outcome indicators is net migration. While this is unsurprising, and while we argue later in this report that migration is working relatively well as a mechanism for adjustment across European regions, it underscores the reality that significant frictions will always constrain the labor maket's response to economic and social outcomes.

Table 2.1. Correlation table of key regional outcome indicators

	GDPpc	Disposable income	GDPpc growth rate	Employmentrate	Net migration	NEET	Health	Broadband access	At-risk of poverty	Competitiveness	Social progress	Avg of cross-correlates
GDPpc	1											0.5025
Disposable income	0.7310*	1										0.6247
GDPpc growth rate	0,0801	-0,0017	1									0.2139
Employment rate	0.4584*	0.5966*	0.3989*	1								0.6298
Net migration	0.3199*	0.4368*	0.1782*	0.4555*	1							0.3813
NEET	-0.4782*	-0.4907*	-0.4297*	-0.8372*	-0.3692*	1						0.6147
Health	-0.5440*	-0.7280*	0.4769*	-0.1929*	-0.2452*	0.1738*	1					0.4680
Broadband access	0.6778*	0.6431*	-0,0014	0.5543*	0.2759*	-0.6664*	-0.5116*	1				0.6198
At-risk of poverty	-0.5497*	-0.3883*	-0,0938	-0.7030*	-0.3276*	0.6366*	0.2320*	-0.5499*	1			0.5035
Competi- tiveness	0.6504*	0.8063*	0.2310*	0.7928*	0.4726*	-0.7572*	-0.4796*	0.8537*	-0.6372*	1		0.7271
Social progress	0.5358*	0.7997*	0,0331	0.6782*	0.3511*	-0.6934*	-0.6282*	0.8443*	-0.4132*	0.8630*	1	0.6489

Sources: Eurostat; European Commission (DG-REGIO).

The results shown in table 2.1 suggest that beyond economic outcomes, tracking progress on social outcomes should be a high priority in lagging regions. There are two reasons for this. First, from both a moral and political perspective, social outcomes are fundamental to supporting cohesion. No social contract can be sustained for long where large groups of the population (concentrated geographically) have visibly poorer human capital outcomes. The other reason is that social outcomes are critical determining factors for economic outcomes. As is discussed throughout this report, some of the most significant determinants of economic performance are social endowments—human capital and institutions.

Thus, while the traditional cohesion policy classification has its use, it is clearly limited in its descriptive capacity, and in its ability to signal the types of policies which are most relevant. In this context, the introduction of the "low-income"/ "low-growth" dichotomy for lagging regions is an important step that, recognizing fundamental differences between these two types of regions, has potentially significant implications for the design and delivery of cohesion policy. As the subsections that follow show, "low-income" regions are poor, but they are converging rapidly and many (but not all) of them are well positioned for the future, while "low-growth" regions are truly lagging and face fundamental structural barriers to convergence. Indeed, the categorization and its implications to a large degree mirror what was observed at the national level in the Golden Growth report (World Bank 2012) as "chasers" and "laggards."

Box 2.1. Regional development policies: Comparing objectives and spatial targeting in the EU with global examples

Regional policy and territorial development initiatives are not unique to the EU. Countries around the worldparticularly larger, federally organized states—increasingly utilize them. This partly reflects concerns over large and growing regional disparities but also the shift in focus from nation-states toward regions and localities as drivers of growth (Castells and Hall 1994). Table 2.2 provides a comparison of EU cohesion policy objectives and definitions with those used in a sample of comparator countries around the world. It shows that, even with just a handful of examples, the definition of "lagging"-the indicator which defines the objectives of the programs and the targeting of regions-varies significantly. Most notably, there are differences in terms of whether measurement focuses (1) at the level of the regional economy overall (the EU, China, and Brazil) or the level of the household or individual (United States, Colombia, and also Brazil); and (2) on economic outcomes (EU, Brazil, China, and US), on social outcomes (US, Colombia), or on physical/structural conditions (China, US). As is clear from the above, it is most common to measure laggardness on more than one basic parameter. Colombia uses 15 individual metrics from three categories: education, health, public services, and housing.

Similarly, the geographic scale of intervention and the formal definition criteria for "lagging" vary greatly. From large regional scales to county and city levels to block levels, the geography of "regions" (or at least the geographic scale at which to address laggardness) is not conceptualized in a consistent way across countries. Again, it is clear that in many countries, territorial interventions are multiscalar in nature rather than being targeted at one geographical level.

Table 2.2. EU and international examples of regional policy objectives and spatial targeting

	Spatial target (the 'region')	Outcome target (the 'lag')
EU	NUTS-2 ("development region"—equivalent to somewhere between the state/province and county levels), with delivery at levels between NUTS-0 and NUTS-3	GDP per capita (indexed to EU average) GDP per capita growth (indexed to EU average)

	Spatial target (the 'region')	Outcome target (the 'lag')
Brazil	Both macro- (state) and micro-level regional programs	 Target on (1) median HH income; (2) growth in GDP per capita Focus on improving economic opportunities and quality of life Four region types defined: (1) high income; (2) dynamic; (3) stagnant; (4) low income
China	At broad region (Coastal, Western, etc., and "Special Regions") and micro (County) level	Broad Region" based on (1) capacity (resources + environment); (2) current development density; (3) development potential; (4) future population distribution; (5) economic distribution; and (6) land use and urbanization Micro = "Poverty Affected Regions": Counties with 1985 per capita net income < RMB (higher thresholds for special situations—e.g., minorities, pastoral)
Colombia	Municipality level (1,102 municipalities)	Municipalities classified based on 15 variables to take into account a broad socioeconomic assessment under headings: education; health; public services; housing Regions classified into 1 of 7 development categories
United States	Census tracts (Enterprise Zones Program; less than 2,000 people)	 "Poverty or chronic distress": > 70% of households with income < 80% state median Housing focus: Eligibility based on conditions of housing stock, need for housing assistance (based on poverty, unemployment, welfare, etc.), and potential for improvement

Economic growth patterns vary widely across lagging regions

Economic growth dynamics of "low-income" and "low-growth" regions over the past decade could hardly be more different. Between 2005 and 2015, "low-growth" regions experienced zero growth in GDP per capita compared with the EU average of 2.1 percent annually. In fact, of 26 "low-growth" lagging regions, 21 one of them experienced growth at less than half the EU average growth rate. In stark contrast, "low-income" regions grew on average by 4.6 percent annually, with II of I9 "low-income" regions growing at more than twice the EU average rate.

If these trends were to persist, there would be a radical restructuring in the economic hierarchy of European regions over the upcoming two cohesion policy periods. As figure 2.1 shows, already by the start of the next cycle (2021), "low-income" regions should, on average, reach the threshold of 50 percent of the EU average that currently defines "low income." On this trajectory, by the end of the next cohesion policy programming period, "low-income" and "low-growth" regions will have traded positions, with the average "low-growth" region having fallen to the 50 percent threshold and the average "lowincome" region having risen well above it; by 2035, "low-income" regions will have reached "transition" levels. In the meantime, as highlighted above (figure 1.5) and as evident from the downward-sloping line in figure 2.1, many "transition" regions are in relative decline (see the discussion in box 2.2).

140 120 100 80 60 40 20 Ω 2019 2029 2032 2033 2015 2017 2018 2020 2023 2027 2034 Low growth Low income More developed Transition (nonlagging)

Figure 2.1. Trajectories of EU regions based on 2005-15 growth rates

Source: Eurostat.

Of course, this is just a simple, linear projection designed to illustrate how different are the trajectories of these two groups of regions and how quickly their relative status could change. In reality, the basic mathematics of convergence, and subsequently reduced access to large EU funding for investment, mean that as "low-income" regions converge, we can expect their pace of growth to slow. Moreover, GDP per capita growth in many "low-income" regions is arguably inflated by the relatively rapid decline in population—this will have its limits. But figure 2.1 is useful to highlight the fact that regions which are chronically lagging from a growth perspective are a much bigger concern than regions which are simply poor. This is particularly true where product and factor markets are already well integrated⁴—in such contexts, as we see in the EU, regions that are relatively poor are likely to experience rapid growth and convergence. By contrast, "low-growth" regions are going in the opposite direction. Not only are they "lagging" in the true sense of the definition, but these are regions that have long been integrated (in theory) into EU markets and institutions yet whose economies consistently underperform.

It is also worth noting that even within these "low-income" and "low-growth" groups, there is heterogeneity. Figure 2.2 plots lagging regions by their current level of income and their growth over the last decade. It shows strong country groupings (which is interesting in its own right, and highlights the importance of national conditions in setting the parameters for regional growth—see chapter 5) and indicates that Bulgarian and Hungarian regions are on a much slower convergence path than Romanian and Polish regions, while Portugal is on a slightly slower path of divergence than other "low-growth" regions. Figure 2.2 also highlights the difficult situation in Greece, which even before the crisis displayed all the characteristics of "low-growth" regions but at GDP per capita levels much closer to those of "low-income" regions.

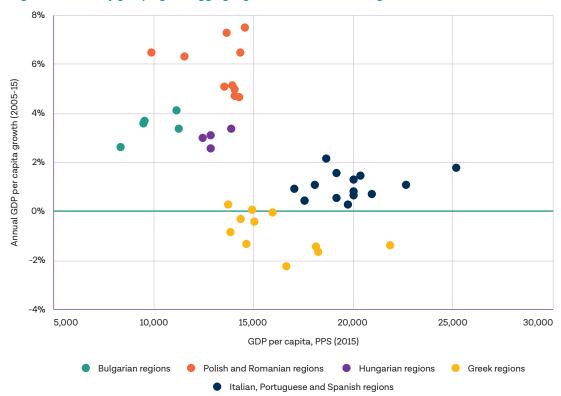


Figure 2.2. Country groupings of lagging regions-income level and growth

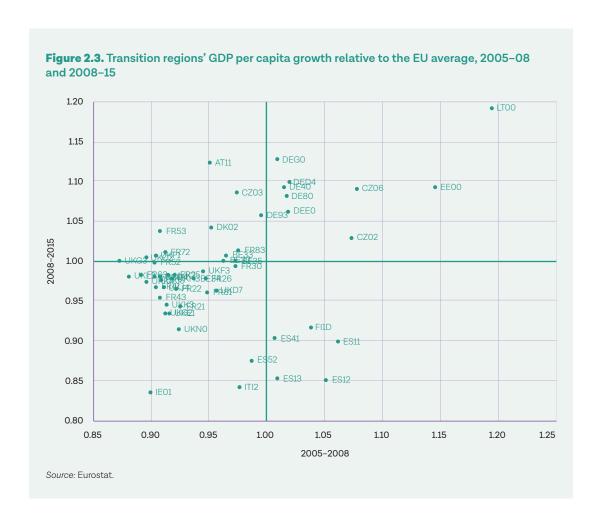
Source: Eurostat

Box 2.2. Falling back? Unfinished transitions and the returning risks of postindustrial regions

The classification of "transition" regions by cohesion policy was based on the idea of linear progression from "less developed" to "more developed" status. The transition category helped to ensure that attention and resources were focused on ensuring the ultimate graduation of these regions. "Transition" regions have tended to include a mix of (1) lower-income CEE country regions, which were converging steadily with the European average; (2) old industrial regions that were in the process of transitioning their economies to be competitive in new sectors; and (3) peripheral, typically rural regions, that tended to lag behind in income.

While "transition" status did function, for most regions, as merely a phase on the way to convergence, this process appears to have been at least interrupted since the crisis. As noted previously, between 2005 and 2015, just one-third of "transition" regions graduated to "more developed" status, while more than two-thirds fell back to "less developed" status. This downward mobility is a cause for concern and calls for consideration of whether these trends are cyclical or structural in nature.

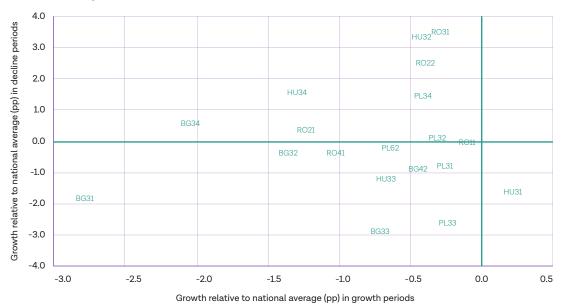
Figure 2.3 plots growth trends of "transition" regions relative to the EU average in the period leading up to the crisis (2005-08) and then after the crisis through 2015. Notably, the figure shows significant country-level patterns. Notably, most "transition" regions in the UK, France, and Belgium-which include many "old industrial" regionsexperienced relative declines in both periods. On the other hand, "transition" regions in Germany and the Czech Republic, which also include many classically "old industrial" regions, outgrew the EU average in both periods. This may underscore the importance of national growth for supporting postindustrial regions that are still in transition, and highlight that these regions with "incomplete transitions" may be particularly vulnerable to economic downturns. This may be especially true when downturns result in fiscal consolidation and severe reductions in capital availability, both of which hinder regions from making the investments needed to support transitions.



While this report argues for greater attention to existing "low-growth" regions, a critical challenge for cohesion policy in the next programming period is to ensure that today's "low-income" regions do not become tomorrow's "low-growth" regions. Indeed, there exists significant heterogeneity across "low-income" regions, which suggests a strong likelihood that some regions will end up continuing to converge while others may soon start to stall.

A defining characteristic of a lagging region is that it tends to experience less growth during a national growth surge; while in periods of decline, it may experience more intensive decline or, in the case with regions that are sheltered from competitive markets (Fratesi and Rodriquez-Pose 2016), it may experience less severe decline. Figure 2.4 shows that almost all "low-income," lagging regions grew more slowly than the national average during the growth periods between 2000 and 2015. In fact, just 1 of 19 "low-income," lagging regions—North Hungary (HU 31)—outpaced national growth during periods of growth. The performance during periods of decline was more mixed. The initial picture suggests that despite relatively strong growth in lagging regions at present, most of the poor regions in these countries are converging more slowly than their national growth levels would predict. How much of this is a story of truly lagging and/or sheltered regions or rather is explained by the surge of metropolitan regions in "low-income" countries would require further analysis. Later discussions on productivity trends and on "economic potential," in particular the quality of underlying human capital and institutional endowments (see the second section of chapter 3), will provide further insights on "low-income" regions that are likely to face structural constraints to growth in the coming years.

Figure 2.4. Growth in "low-income" lagging regions relative to the national average over business cycles



Source: Eurostat.

Note: The figure depicts average growth or decline of the region relative to the national average during the years in which national growth was relatively high or low (years vary by country).

Social outcomes do not always track economic **outcomes**

As discussed in the opening section of this chapter, social outcomes are of equal importance. Of course, the expectation is that these two are closely interconnected. But while they are certainly correlated, the relationship between economic and social outcomes in European regions is much less straightforward than might be imagined. This can be seen in figure 2.5, which compares all NUTS-2 regions along the dimensions of economic performance (as measured by GDP per capita) and social performance (as measured by the European Social Progress Index). Notably, there are a large number of regions—rich and poor—with social outcomes well below what would be expected based on their level of income. There are also a number of regions with good social outcomes, despite relatively lower levels of income. These latter regions come from all parts of Europe, but in particular from Central and Northern Europe.

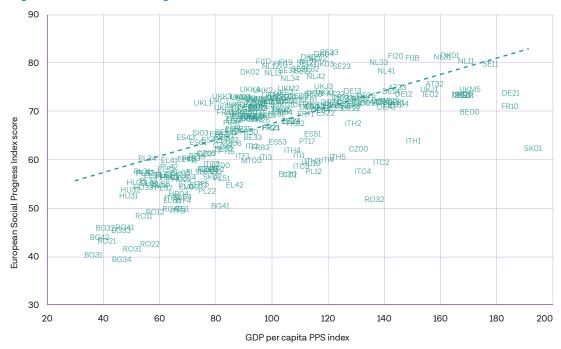


Figure 2.5. Distribution of regions on economic and social outcomes

Sources: Eurostat; European Social Progress Index.

Table 2.3 provides more details by comparing the top 10 and bottom 10 ranked regions in each outcome area. It shows that, with the exception of Stockholm, many of the richest regions in Europe have social outcomes far below their economic level—in fact, only around the median of regions. This is likely to reflect high levels of inequality in large, metropolitan regions. By contrast, the highest-ranked regions in terms of social outcomes—all of which are in Northern Europe (Sweden, Denmark, Finland, and the Netherlands)—are generally high-income regions, but not among Europe's very richest. At the other end of the spectrum, the lowest-ranked regions in terms of economic outcomes (mostly in Bulgaria and Romania) map very closely to the those ranked lowest on social outcomes. The picture is mixed in "low-growth" regions, with social outcomes worse than economic outcomes in Italian lagging regions, the opposite in Spanish lagging regions, and varying across Greek and Portuguese lagging regions.

This simple illustration suggests that relatively high income levels are necessary but not sufficient conditions for ensuring high social outcomes—put simply, you can be a rich region and still not have great social outcomes, but you cannot be a poor region and have good social outcomes. From a policy perspective, this again highlights the two-way causality between economic and social outcomes—that is, investments in raising human capital are likely to be critical to driving income growth; but investments in raising income levels are also likely to be critical to improving social outcomes. Another implication is that if we are concerned with cohesion at the interpersonal level and not simply the territorial level, more finegrained targeting of human capital and of social outcomes more broadly, even in high-income regions, will be important. And here, local and regional governments play a crucial role.

Table 2.3. Comparing economic and social outcomes in European regions-topand bottom-ranked regions

	Rank on GDP per capita	Rank on Social Progress		Rank on Social Progress	Rank on GDP per capita
UKI3	1	81	SE33	1	51
LU00	2	58	DK04	2	54
UKI4	3	90	DK01	3	25
BE10	4	152	FI20	4	20
DE60	5	44	NL31	5	12
SK01	6	176	DK05	6	69
CZ01	7	158	FI1B	7	14
SE11	8	18	NL22	8	73
FR10	9	106	NL32	9	49
AT13	10	64	NL11	10	27

	Rank on GDP per capita	Rank on Social Progress
HU32	254	240
RO41	255	255
RO31	256	262
HU31	257	243
BG34	258	263
BG33	259	257
RO21	260	259
BG32	261	256
BG42	262	258
BG31	263	263

	Rank on Social Progress	Rank on GDP per capita
RO11	254	253
RO41	255	255
BG32	256	261
BG33	257	259
BG42	258	262
RO21	259	260
RO22	260	251
RO31	261	256
BG31	262	263
BG34	263	258

Sources: Eurostat; European Social Progress Index.

Productivity and job creation performance highlights contrasting regional fortunes

Table 2.1 earlier in this chapter highlighted the importance of labor market outcomes as an indicator of regional performance. Indeed, the degree to which regions are able to generate sustainable, quality job opportunities for all their residents of working age (notably women and youth) may be seen as a fundamental objective of regional policy. Labor market outcomes are relevant not simply because jobs and earnings are the channel through which economic progress at the regional level is translated into economic and social outcomes at the household and individual levels. But jobs also have significant, positive economic and social externalities, as workers become more efficient in the presence of other workers, and tend to invest more in building the human capital of the next generation (World Bank 2013). They can also build social cohesion within regions by breaking down ethnic, racial, and socioeconomic segmentation. Moreover, from a dynamic perspective, job creation in lagging regions may play a critical role in mitigating brain drain in future generations.

Weak economic growth in "low-growth," lagging regions (and more broadly of the countries of Southern Europe in which they are located) has long been associated with the problem of low productivity growth. But, as figure 2.6 shows, the problem goes beyond simply productivity growth.

Clearly, "low-growth" regions are lagging in productivity, with average annual productivity growth of just 0.4 percent between 2000 and 2014, compared with more than 3 percent in "low-income" regions and just over I percent in "nonlagging" regions. A cause for more concern is that "low-growth" regions are not creating enough jobs and employment is declining (almost 0.75 percent annually, along with declining labor force participation). In fact, almost all "low-growth" lagging regions that increased productivity experienced relative employment declines that were faster than the productivity gains—that is, productivity growth was job-destroying. While both "low-income" and "nonlagging" regions also experienced declining employment, it was at a rate considerably below the level of productivity growth. This was particularly the case in most "low-income" regions, especially in Poland and Romania. However, "low-income" regions in Hungary showed patterns more like "low-growth" regions, in that productivity growth came at the expense of job creation.

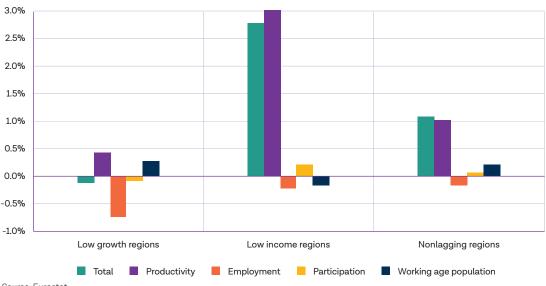


Figure 2.6. Growth decomposition by region type—average annual percent change, 2000-14

Source: Eurostat

Note: Data available for only 203 NUTS-2 regions.

Despite these significant differences between "low-income" and "low-growth" regions in terms of productivity and job creation, both sets of lagging regions underperform on two key indicators of labor market outcomes—the overall employment rate and, related, female labor force population. Map 2.2 shows significant local (NUTS-3) level variation in the employment rate across many parts of the Europe, and highlights relatively low rates in most lagging regions. One of the main reasons for this is the very low levels of female labor force participation in both types of lagging regions. While the EU average female labor force participation rate was 66.8 percent in 2015, in "low-income" lagging regions it was 59.5 percent; and in "low-growth" lagging regions it was just 56.4 percent—more than 10 percentage points below the European average. In Italy, the average female labor force participation rate in lagging regions is more than 20 percentage points lower than in nonlagging regions.

50.01 - 65.00 65.01 - 80.00 > 80.01

Map 2.2. Average employment rate by NUTS-3 region, 2010-14

Source: Eurostat.

Finally, Figure 2.7 highlights significant differences between "low-growth" and "low-income" regions in the drivers of productivity growth. It shows clearly that "low-income" regions are gaining a significant contribution to productivity growth from the process of structural transformation, or the "intersectoral shift"—that is, the relative shift of the economy from lower- to higher-productivity sectors. They are also experiencing rapid productivity growth in manufacturing and moderate productivity growth in agriculture and services. By contrast, the minimal productivity gains in "low-growth" regions are all coming from within-sector gains in services, with almost no contribution from the intersectoral shift or from agriculture (suggesting no shift out of low-productivity agriculture).

3.5% 3.0% 2.5% 2.0% 1.5% 1.0% 0.5% 0.0% -0.5% Low growth regions Nonlagging regions Low income regions Change in productivity Agriculture Industry Services Intersectoral shift

Figure 2.7. Productivity decomposition by region type—average annual percent change, 2000-14

Source: Eurostat.

Notes

- ¹ Indeed, there is hardly a regression model anywhere measuring a socioeconomic phenomenon where GDP per capita is not a highly significant explanatory variable.
- ² Even considering Greece's sharp GDP fall between 2010 and 2015 as an outlier and calculating growth in Greek regions based on the 2005-10 average, growth in "low-growth," lagging regions remains just 0.18 percent annually.
- ³ In fact, a number of "low-income" regions have already passed the 50 percent threshold.
- 4 Of course, as is discussed later in this report, a lack of product and factor market integration, whether due to geographical or political factors, may critically undermine convergence potential.
- ⁵ Also, the only "low-growth" regions that experienced (small) relative employment growth during the period— Calabria, Sicily, and Campania, all in Italy—did so in the context of declining productivity.

Chapter 3:

Reframing the objectives: Promoting untapped potential in lagging regions

This chapter argues for a continued shift toward a tailored, "region-centered" approach to cohesion policy. Specifically, it proposes adopting two primary objectives for cohesion policy: (1) maximizing the potential of individual regions to create productive jobs; and (2) ensuring equality of opportunity for individuals to fulfill their own potential, regardless of where they live.

Convergence of regional economies is unrealistic focus instead on regional potential

Convergence of economic outcomes across regions is not only unrealistic (at least in an absolute sense) but also ineffective as an objective of regional policy. One reason has to do with the spatial granularity of the measurement. Under the EU's cohesion policy, objectives on convergence are set at the NUTS-2 level. But, as discussed in chapter I (figure I.4), it is also the case that inequalities in outcomes exist within NUTS-2 regions, with significant concentrations of poverty and unemployment even within relatively dynamic regions. In about half the EU countries, the coefficient of variation in NUTS-3 level GDP per capita growth rates (within their respective NUTS-2 regions) is significant. Map 3.1 illustrates how NUTS-3 level output growth varies significantly in some countries and regions. Thus, the risk of relying on broad GDP per capita targets is that headline convergence may mask very different experiences on the streets and in households.

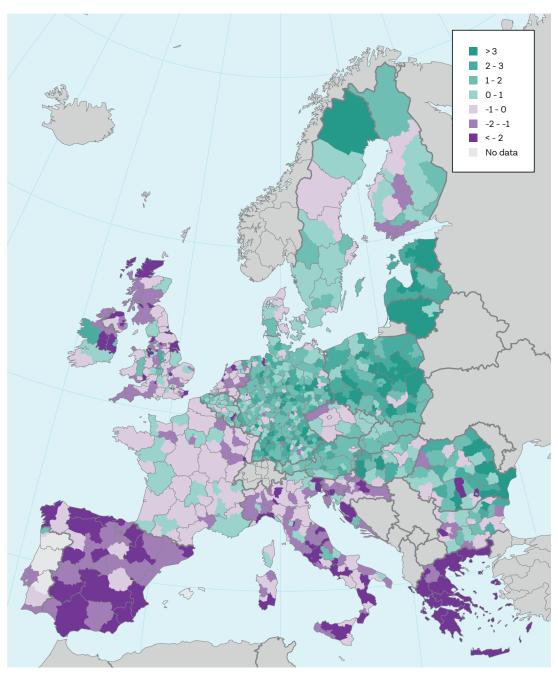
Convergence in economic outcomes (GDP per capita) is also unhelpful given the substantial heterogeneity across regions and regional types in the EU. For "low-income" regions, the fact that withincountry regional disparities are increasing in a high-growth context is very much in line with economic theory and with evidence from around the world and over time. Leading regions, which typically are metropolitan regions, tend to pull away in the early stages of growth, increasing regional disparities, which later experience some convergence. "Low-growth" regions are defined fundamentally by their lack of economic convergence. Thus, in these regions, the question is whether they are simply underperforming or whether they have structural features that prevent them from achieving an "average" level of output per capita.

In fact, the foundational theory of place-based policy is predicated not on redistribution or even convergence, but rather on the removal of market barriers for factors of production as the mechanism for stimulating latent economic resources (Hall 1981; Butler 1981; Ferrara 1982). It is about catalyzing unused potential. And cohesion policy, both in its infancy and in more recent formulations, has recognized this theoretical approach explicitly. For example, the Thomson Report (Commission of the European Communities 1973) stated "The purpose of a Community regional policy is to give areas suffering from regional imbalances the means to correct them and enable them to put themselves on a footing of more equal competitiveness. If this can be achieved, then it will be possible for the various factors of production of the community to be more fully utilised and the idle human resources and under-used social capital and infrastructure to be more fully employed". More recently, the Barca Report (Barca 2009) argued for resetting the objectives of cohesion policy "One objective, efficiency, is about realising the full utilisation of the potential of every place or region; the other (equity) is about ensuring equal opportunities for individuals irrespective of where they live". Indeed, following Barca, the explicit convergence objective was dropped in the 2014-2020 programming period.

Moving to the post-2020 programming period, this report argues for a continuation of this trend to move away from targeting convergence and toward a region-centered cohesion policy that focuses explicitly on maximizing regional potential. Specifically, this report calls for adopting two objectives: (I) maximizing regional potential, measured not simply by output per capita but also by the capacity to generate quality (productive) jobs; and (2) ensuring equality of opportunity for individuals to achieve their potential. Such an approach helps square the circle between "place-based" and "people-based" (as well as between "competitiveness" and "equity") approaches to regional development. This is because the place-based objective is now conditional on potential. Meanwhile, the objective of convergence remains, but it is defined not in terms of spatial economic outcomes but rather in terms of social outcomes and individual opportunities. The focus on potential also helps further center cohesion policy squarely on the regions, as the "potential" objective necessarily requires explicit consideration of the specific context of each region.

Such an objective will have implications for the both the design of policy and its targeting for lagging regions.

Map 3.1. GDP per capita annual growth rate, NUTS-3 level, average, 2009-13



Source: Eurostat.

Putting the idea of regional potential into practice

Eschewing convergence per se with a focus on maximizing regional economic potential has important implications for the approach to regional policy. First, it acknowledges that all lagging regions have the potential for growth, and that some regions may be exploiting less of this potential than others. But it also accepts that all regions do not have the same potential for growth over the same time frame, as a result of differences in structural conditions or slowly changing endowments. Thus, subsidizing growth without considering regional potential will at some point be an inefficient use of resources. It is critical, therefore, to have a clear, operational definition of "regional potential" so that it is possible to monitor progress against it and respond appropriately with policy.

Identifying and exploiting regional potential

The regional "Economic Potential Index" (EPI) (World Bank and European Commission 2017) offers a possible approach for operationalizing the concept of "potential" defined in the proposed objectives. The model, derived from Roberts (2016), focuses on identifying the factors that are associated with regional GDP per capita. It is based on the observation that while a variety of factors potentially have an impact on economic outcomes, the literature has demonstrated just a few key determinants are robust across methodologies, time periods, and territories. Thus, the model is based on three sets of regional "endowments" and associated economic concepts:

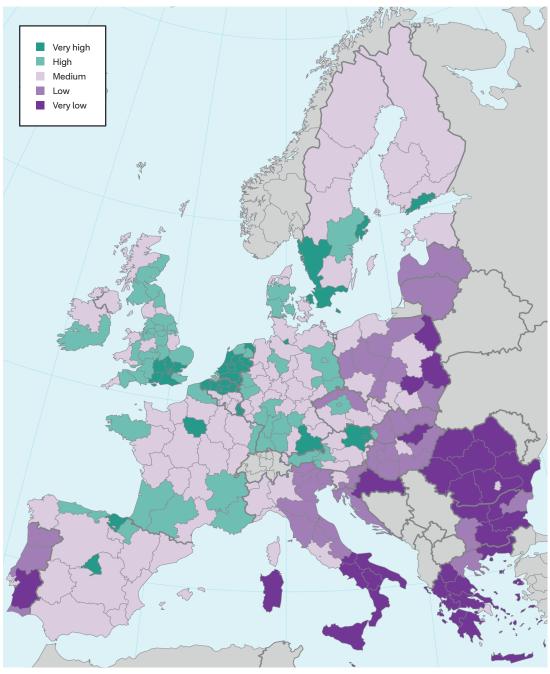
- I. Human capital endowments: Education / skills and institutional quality, which capture the quality of human capital and of local economic and social institutions.
- 2. **Locational endowments:** Market access and population density, which capture the ability to exploit scale and agglomeration economies.
- 3. Physical and sectoral endowments: Sectoral structure and investment, which capture the specialization of the local economy and the scale of public and private investment.

Together, these factors set the parameters for economic outcomes over the short to medium term. Map 3.2 illustrates results of the EPI model across European regions. A few things stand out on this map. First, the regions identified as having the highest potential are largely concentrated in and around Europe's major metropolitan centers. Second, the regions with the lowest potential are generally concentrated around the southern and eastern periphery of the EU. Most important, for the purposes of this report, is the fact that lagging regions—including both "low-income" and "low-growth" regions—map closely to "very-low" potential regions in the EPI. This is not surprising; but it does imply that, at least over the short to medium term, the convergence of lagging regions toward the European average should not be expected.

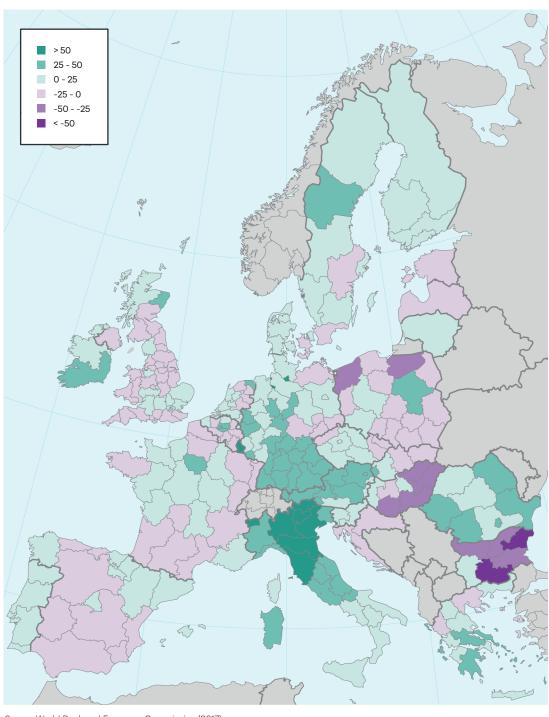
With economic potential defined, it is then possible to measure this against actual economic outcomes to get a sense of performance relative to potential. This is illustrated in map 3.3, which shows regional GDP per capita against its predicted level based on the EPI analysis. Regions with EPI scores below their current performance may be considered to have endowments which have not been fully exploited, and thus may be expected to achieve higher income levels,2 by removing distortions or otherwise improving the efficiency by which endowments are translated into outcomes. The results of this assessment are more heterogeneous across lagging regions. For example, while "low-growth" regions in Spain and many in Greece appear to be underperforming on their potential, those in Portugal and especially Italy are achieving GDP per capita levels well above what their underlying endowments would suggest. The operational implications of this would be that performance improvements in Spain and some regions Greece may have short-term payoffs for growth, while in Italy and Portugal (and other regions in

Greece), lagging regions require fundamental strengthening of endowments before faster growth can be expected. In "low-income" regions, the story is also mixed. Most lagging regions in Poland, Hungary, and Bulgaria appear to be underperforming on their potential. This suggests that significant growth potential remains in the short term. By contrast, lagging regions in Romania are largely performing above expectations and may soon hit the stage of slowing convergence if fundamental endowments are not strengthened.

Map 3.2. Mapping of NUTS-2 regions by economic potential



Source: World Bank and European Commission (2017).



Map 3.3. Difference in actual and EPI-predicted GDP per capita across NUTS-2 regions

Source: World Bank and European Commission (2017).

What implications does this all have from an operational perspective? EPI might be seen to establish a broad boundary for a region's economic potential within any given (seven-year) programming period. Performance against potential may be improved over a programming period, but actually shifting a region to a higher potential (through improved connectivity, improving institutions, raising education

levels, etc.) is more likely to be achieved over longer periods (e.g., potential can change from one programming period to another). This is why, as noted above, some regions may be targeted for unlocking short-term growth, while the priority in other regions may be improving endowments.

Indeed, beyond the confines of a single programming period, simply closing the gap between the current "potential" implied by a region's endowments and actual performance is probably not a sufficient objective. In almost all lagging regions, the bigger opportunity for regional growth over the medium term will come through improving existing endowments—that is, by raising potential.



Figure 3.1. Performance versus potential—implications for regional priorities

Note: "Low-income" regions are highlighted in purple; "low-growth" regions are highlighted in green; axes are set at EU average levels.

Equality of opportunity to enable individuals to reach potential

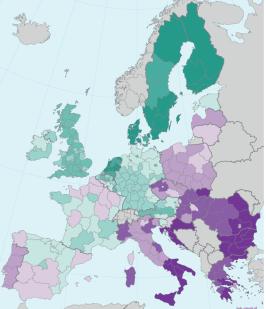
The concept of social equity, or equality of opportunity, has been a foundation of progressive political thinking for at least the past 30 years. Following World Development Report 2006: Equity and Development (World Bank 2005), equality of opportunity can be defined as a situation where the prosperity of individuals and firms is solely determined by talent, effort, and entrepreneurship, not by circumstances at birth (e.g., birthplace, parental education) which are outside their control. Few, on the left or the right, can find much fault in this objective. But putting it into practice is notoriously difficult.

From the perspective of measuring and monitoring, it is possible to draw on existing indices that provide comprehensive coverage of the many factors that go into determining social equity and equality of opportunity. In fact, as discussed in chapter 2, the European Commission's Social Progress Index already does a good job with this. The index is compiled based on 50 indicators across three subindices: (I) Basic Human Needs (nutrition and basic health care, shelter, water and sanitation, and personal safety); (2) Foundations of Well-Being (basic education, access to information, health and wellness, and environmental quality); and (3) Opportunity (personal rights, personal freedom of choice, personal freedom, and access to advanced education). The results (map 3.4) show a strong correlation with lagging regions in the overall index; for the Opportunity Subindex, they show a greater country-level effect, especially in "low-growth" Southern Europe.

This report emphasizes human capital—specifically, education and skills development—as the operational foundation of "equality of opportunity." There are a few reasons for this. First, while policies and programs that target "economic potential" are obviously critical to ensuring that good jobs are created across lagging regions, the potential for individuals to take advantage of the opportunities resulting from job-creating growth will depend on the quality and relevance of their skills. And this relationship goes in both directions—the potential for firms to grow and generate good jobs will be shaped in large part by their access to workers with the necessary skills. In addition, equality of opportunity goes hand-in-hand with mobility—in other words, for individuals to exploit their potential, they should be free and capable to moving to wherever they can maximize opportunities. And human capital is fundamental for enabling this mobility.

Chapter 6 provides more details on the elements of a skills agenda that delivers on the objectives of both economic potential and equality of opportunity in lagging regions.

Map 3.4. European Social Progress Index scores: overall (left) and Opportunity Subindex (right)



Source: European Commission.

Note: Higher scores are in green, lower scores are in purple.

In conclusion, raising economic potential and expanding opportunities for individuals across all regions require an ongoing process of facilitating economic transformation in regional economies, a process which encompasses (I) structural transformation of industry sectors; (2) spatial transformation (urbanization) that typically accompanies structural transformation; and (3) enterprise transformation, which involves the necessary shift in the nature and structure of private sector enterprises in the region. It also requires building capacity for ongoing adaptation, to enable regions to withstand economic shocks and structural changes that may upend the status quo. Delivering on it requires a comprehensive but relatively targeted policy agenda. The elements of this agenda are discussed in the next chapter.

Notes

- ¹ In 12 of the 24 EU countries (with two regions or more) the coefficient of variation is 1.50 or greater.
- ² It is important to note that this is more illustrative of the principle being discussed here, rather than being a robust measure of regional performance. From the perspective of the model, the gap between EPI predictions and actual GDP per capita is explained by factors that the model is not picking up. This residual in the model is called "performance" here, but it may also be explained by a variable that has been missed out in the model.

Chapter 4:

A policy framework for exploiting regional potential

This chapter sets out a proposed policy agenda for exploiting existing potential and expanding potential in lagging regions. It argues that many lagging regions have the opportunity to exploit agglomeration for productivity growth, investment, and job creation. Unlocking this growth potential in lagging regions requires overcoming coordination failures through an approach that complements well-targeted sectoral interventions with a strong emphasis on (1) removing distortions (caused by government and market failures) that lead to underinvestment; and (2) strengthening core endowments—notably skills and institutions—within regions.

Structural features should not condemn lagging regions

The first pillar of the EPI defines slowly changing structural features that typically set strict bounds on the economic potential of regions. These are functions of geography and their interaction with demographics—specifically, market access and the density of the population. Market access is critical because it determines the size of markets in which firms can sell, and thus shapes the potential to raise productivity through realizing scale economies. it also determines the size of available labor markets. Density determines whether productivity-enhancing agglomeration processes are likely to be triggered (Krugman 1991). The potential for agglomeration is crucial, for two reasons. First, agglomeration is associated with accelerated productivity gains. And second, equally important for lagging regions is the fact that agglomeration can trigger a cumulative causation process, theoretically enabling a region to shift to a new equilibrium and create a new development path (Boschma 2004).

Figure 4.1 plots NUTS-2 regions according to their population density and relative proximity to markets,¹ with the axes representing the EU average. Here we see clearly that peripherality (i.e., low proximity) is a defining feature of lagging regions—more so in "low-growth" than in "low-income" regions. This is not surprising, as we know these regions are located at the edges of the EU. However, while it raises limitations in terms of locational competitiveness in tradables sectors (see chapter 5), it need not be a fundamental barrier to regional potential. Rather, requires particular attention to well-designed sectoral strategies. Conversely, figure 4.1 also shows that while some regions are both peripheral and sparse (mainly in "low-growth" regions), a substantial number of lagging regions are in the bottom right quadrant, meaning that they are peripheral but more densely populated than the European average.

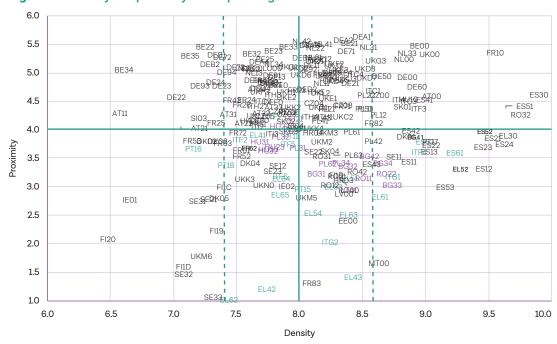


Figure 4.1. Density and proximity in European regions

Sources: Density: Eurostat (based on GEOSTAT 2011); proximity: European Commission, Joint Research Centre (JRC); Ibáñez and Rotoli (2017).

Note: "Low-income" regions are highlighted in purple; "Low-growth" regions are highlighted in green; vertical lines to the right and left of the y axis represent 1 standard deviation from the mean.

Moreover, only a very few lagging regions (mainly in Portugal and Greece) are more than I standard deviation below the average level of density in European regions. This suggests that the potential for agglomeration may exist in many lagging regions, even in peripherally located ones.

Thus, a critical question for policy in lagging regions is how to trigger and sustain processes of agglomeration by encouraging investment—by both firms and individuals. This requires complementary policies that overcome the pervasive problem of coordination failures.

Remove distortions and strengthen endowments to overcome coordination failures

Investments tend to be "lumpy," if not irreversible—they require relatively large fixed costs, with streams of benefits that tend to follow only later. For example, think of a firm that invests in a new manufacturing plant from which it will produce for the next 40 years, or think of an individual that invests in an academic qualification that will give them a wage boost until they retire. And for this reason, such investments typically bring with them path dependence. The firm that invests US\$1 billion in a new automotive factory is not likely to move to another location overnight. And the individual who invests US\$100,000 to obtain an aerospace engineering degree will not easily decide to instead become a doctor. Thus, investment decisions—whether by firms, households, or individuals—are what economists like to refer to as "nontrivial." In other words, they have consequences and require some calculation of expected future returns before committing. In this context, the issue of agglomeration economies highlighted in the previous section comes to the fore. The reason is that investments have externalities. The returns to the automotive factory will be higher if parts suppliers and transportation companies also decide to invest in the area. The returns to the individual investing in the aerospace degree will be higher if the factory moves in, and if others invest in engineering degrees so that a deep local pool of labor is available to entice investors. Thus, expected returns on investment depend fundamentally on the expectations of what investments others will make. This is the classic coordination problem, where underinvestment by all parties can lead to a low-level trap.

Such coordination failures can be particularly problematic in lagging regions, where agglomeration economies remain underdeveloped. Thus, there is a clear case for public intervention. Most place-based investments—such building a new highway, expanding electricity capacity, or establishing a special economic zone or an innovation center—are predicated on this argument of overcoming coordination failures. In fact, the majority of regional development resources are devoted to such sectoral and spatial "strategic bets," where governments invest with the hope that it will unlock private investment and catalyze agglomeration. In practice, however, these investments often turn out to be insufficient, because there remain market distortions-in the form of both market and government failures-that undermine the effectiveness of the intervention.

Thus, overcoming coordination failure and unlocking agglomeration potential in lagging regions require systematic efforts to remove both government and market failures.² Government failures are pervasive and, given institutional weaknesses, may be more common in lagging regions. They may include, for example: regulatory regimes that impose costs or delays in business investment and operations; barriers to financing caused by poor macro-fiscal management; barriers to accessing education caused by mismanagement; and restrictions on mobility caused by inefficient social services delivery or rigid regimes for acknowledging professional credentials. Market failures are also more likely to be present in lagging regions, due to the thinness of markets and a lack of scale, particularly in sparsely populated regions. Market failures will be common in land and housing markets (markets may be nonexistent due or information asymmetries prevalent), in labor markets (supply and demand mismatches for the same information and scale reasons), and in product and capital markets (barriers to competition, and information and scale barriers resulting in an inability to price or pool risk).

Only when the distortions of government and government failures are mitigated as much as possible are place-based "strategic bets" likely to be effective in overcoming coordination failures, particularly through the type of lumpy investments that are expected to catalyze a sector-specific private sector response. In practice, of course, it is not practical simply to hold off on more targeted regional policy interventions until all or most distortions are eliminated. But this report at least calls for a complementary policy approach that recognizes the priority of supporting sectoral development and targeted spatial investments with aggressive efforts to remove market distortions and build fundamental endowments in lagging regions.

Based on this principal, the matrix presented in figure 4.2 provides a basic framework for approaching policy in lagging regions, providing perspective on the scope of interventions that may be most appropriate in different regions. It draws on the discussion in the previous subsection of structural determinants of potential in lagging regions to establish four different regional contexts.3

STRATEGIC BETS **REMOVE DISTORTIONS** ENDOWMENTS Unlikely to be lagging... if lagging, likely to be a major government and / or market Institutional upgrading Skills development (Some) infrastructure Heavy emphasis on endowment-building **REMOVE DISTORTIONS** Peripheral coordination failures **STRATEGIC BETS** · Sectorally-targeted investment Sparse Dense

Figure 4.2. A framework for approaching policy in lagging regions

The four quadrants of figure 4.2 can be considered as follows:

I. Densely populated, centrally located regions (upper right): These regions are highly unlikely to be lagging unless they are in the very early stages of the integration process (i.e., poor regions that will converge rapidly). Indeed, a densely populated centrally located region that is lagging is likely to be the result of serious government failures and/or major institutional weaknesses or conflicts. In this context, place-based interventions would be limited to addressing the government failures that prevent investment.

- 2. Densely populated, peripherally located regions (lower right): These regions, of which there are many among the EU's lagging regions (particularly among "low-growth," lagging regions), represent the types of regions where typical place-based sectoral or spatial investments ("strategic bets")—for example, the implementation of Smart Specialization Strategies—can be effective in overcoming coordination failures to unlock agglomeration. The emphasis here should be first on identifying and addressing any market and government failures that may be creating distortions that undermine the effectiveness of targeted investments.
- 3. Sparsely populated, peripherally located regions (lower left): These regions are unlikely to have the key ingredients required for a sustainable transformation to develop high-value-added activities as they lack agglomeration potential and face serious market access limitations. Strategic bets should be eschewed here in favor of a strong focus on delivering equality of opportunity for individuals in the region—specifically, to develop the institutions to support quality social services, with a focus on human capital accumulation. In sparse, peripheral regions where advanced, quality institutions exist and human capital has already reached high levels, niche opportunities for regional economic development should emerge through existing institutions.
- 4. Sparsely populated, centrally located regions (upper left): These regions are often located in proximity to larger agglomerations, so the priority is to improve connectivity to the agglomeration. Targeted sectoral investments may also be relevant in this type of region. The challenge here is that limited agglomeration potential means that specialization is likely to be particularly important, which raises the typical risk of regional industrial policies that aim to "pick winners."

Across all region types, approaches focusing on removing distortions and/or on making sectoral or spatially targeted investments should be supported by an ongoing strengthening of endowments, at the levels of both individuals and institutions.

Policy priorities in lagging regions

While the discussion in the previous subsection provides broad guidance on the approach for policy intervention in lagging regions, it says nothing about specific policy priorities. In a proposal for the 2014-20 round of the cohesion policy, Barca (2009) recommends identifying a small set of "core priorities" and allocating the majority of funding toward addressing them. In this section, we argue that these core priorities should include five policy areas that target the principles of "removing distortions" and "building endowments." These represent critical complements to the more sectorally and spatially (when it comes to infrastructure) targeted investments that tend to dominate spending in lagging regions.

Identification of these specific policy priorities is based, in part, on the analysis undertaken as part of the previously discussed Economic Potential Index (EPI) (World Bank and European Commission, 2017). Figure 4.3 summarizes the results of a set of policy scenarios that incorporate EU-wide policy objectives—it reports the relative impact that improvements in different policy domains would have on regional GDP per capita, based on the relationships defined in the EPI model. The results show clearly that human capital endowment-building policies-education and institutions-should, if scenario targets could be met, have the biggest impact on regional economic outcomes. They account for about 55 percent of projected growth potential in both "low-income" and "low-growth" regions, reaching 75 percent in Hungary and Italy. Sectoral transformation—particularly through the agricultural sector and a shift to tradables—would contribute close to 45 percent of growth potential in "low-income" regions (and close to 60 percent in Romania and Bulgaria) and still 25 percent in "low-growth" regions

(more than 40 percent in Greece). Greater investment, meanwhile, would play an important role in the growth of "low-growth" regions (explaining about 20 percent of growth potential, and nearly 30 percent in Spain), while being negligible in "low-income" regions.

Considering the results from the EPI, together with the other findings discussed in this section, suggests five crosscutting priority policy domains—macro-structural reforms; business environment and trade; skills and mobility; urbanization and connectivity; and institutional modernization—along with sectoral transformation, for delivering on regional potential. These policy domains are illustrated in figure 4.4, which also situates them in terms of their role in achieving each objective as well as the degree to which they are most likely to be delivered at the national or the local level.

Low income avg Romania Low income Poland Hungary Bulgaria Low growth avg Low growth Italy Portugal Greece Spain 0% 40% 50% 60% 80% 10% 20% 30% 70% 90% 100% Large-scale infrastructure Education Institutions Sectoral transformation Investment

Figure 4.3. EPI policy scenario results: Relative contribution of policy areas for raising economic potential in lagging regions

Source: World Bank and European Commission (2017).

Note: Results report distribution of contribution to GDP per capita increase where regions reached targets across all policy scenarios (effects from interaction are excluded in this distribution); No scenarios were run for the EPI variable "population density"; figures presented at the national level and for the regional aggregates are unweighted averages.

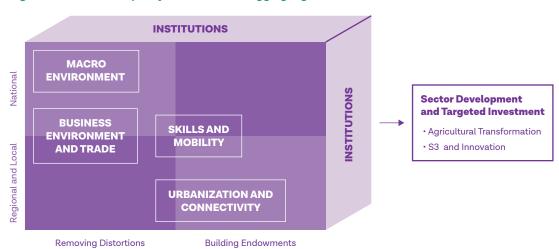


Figure 4.4. Schematic policy framework for lagging regions

In considering these policy priorities, getting the spatial targeting right will also be critical—this means matching the nature of the market, government, or coordination failure with the spatial area over which it takes place. Often, this will not be equivalent to the NUTS-2 level. For example, land market failures which have an impact on urban investments and trigger inefficient suburbanization (and underexploitation of agglomeration potential) typically occur at the local level—at the NUTS-3 or lower spatial level. Labor market failures may also occur at the NUTS-3 level (e.g., urban spatial mismatches) but are more common at the NUTS-2 and national levels (and in the EU context, at the EU-wide level). Meanwhile, product-market distortions, such as barriers to competition or trade policy distortions, also may take place at the NUTS-2 and national or European levels. The relative spatial level at which these policies are relevant is identified through the location of the policies on the y axis of figure 4.4 and are discussed in further detail in the chapters that follow.

Notes

- 1 Population density is measured using a spatial model that places higher weights on higher-density areas; Proximity is measured by market access, which is the population-weighted distance from the region to all other regions.
- ² In fact, the fundamental theory of spatial policy is predicated on the idea that market failures (whether one or many) may be concentrated in certain areas; and so spatial policies are meant to remove or alleviate one (or a few) specific barrier(s) to unlock potential. By doing so, theory argues that underutilized resources will become catalyzed and eventually the other market failures will also become resolved (Hall 1981; Butler 1982; Ferrara 1982).
- ³ This is just one typology of regions, based on structural characteristics of location and density. It is derived, in part, from Farole, Rodriguez-Pose, and Storper (2011). There are, of course, many different ways that regions can be characterized and categorized.

Chapter 5:

Policies to remove distortions in lagging regions

This chapter discusses two priority policy domains for removing distortions resulting from market and government failures. It begins with the macro-structural environment, arguing that, while it is an issue in the national policy domain, macroeconomic and fiscal conditions are acting as a major constraint in "low-growth," lagging regions by restraining investment. The chapter then moves on to the business environment, arguing that both national as well as regional policies are factors in restricting firms—again, especially in "low-growth" regions—from operating competitively and exploiting opportunities for growth, particularly in export markets.

Address macro-structural weaknesses that undermine regional growth potential

National-level macroeconomic, fiscal, and structural policies may not seem an intuitive starting point for considering policies to address lagging regions. But while it is clearly not as simple as just "getting the macro right," and some regions may manage to carve out success despite a bad macro environment, there is good reason to believe that addressing macroeconomic and structural distortions is a necessary, if not sufficient, condition to unlock regional potential.

National macro-fiscal and structural conditions shape regional potential because they are critical to establishing an environment that is conducive to investment, to active participation in the labor force, and to productivity. Where large imbalances—both external and fiscal—are the norm, the environment for growth-oriented investment will be weak. Figure 5.1 (left) shows that countries with "low-growth" and "low-income" lagging regions run consistent trade deficits and, despite significant improvements since the crisis, trail the EU average. Overall, "low-income" regions tend to be much more engaged in exports, with Hungary, Bulgaria, and (to a lesser extent), Poland having export shares of GDP well above the EU average. By contrast, all "low-growth" lagging regions trail the EU average, with Greece, Italy, and Spain exporting at 30 percent of GDP or less, versus 42 percent for the EU as a whole.

4% 70 60 2% 0% 50 -2% 40 -4% 30 20 -6% 10 -8% 0 -10% 2010 Low income Low growth

Figure 5.1. Current account balance (left) and exports (right) as share of GDP by region type (national-level figures)

Source: Furostat.

National government deficit and (especially) debt positions also matter for future growth, with high levels of debt potentially crowding out investment and limiting fiscal space for governments to respond to cyclical downturns and shocks. The former reduces one key channel for growth, while the latter has the potential to knock growth back to a lower trajectory. Figure 5.2 highlights major differences between "low-growth" and "low-income" regions on both measures. "Low-growth" regions entered the crisis with annual deficits below the 3 percent target in the EU Growth and Stability Pact, ran large deficits throughout the crisis, and as of 2015 were still running well below the EU average (with the exception of Italy). The implications for government debt have been significant, with low-growth regions on average increasing their ratio of debt to GDP from 79 percent (already 20 percentage points above the EU average) in 2005 to 135 percent by the end of 2015. "Low-income" regions, by contrast, are not only running much lower budget deficits but have substantially more space to do so, given their very low debt levels, which increased only moderately during the crisis.¹ It is worth noting that these patterns are also mirrored in the state of private sector debt. The average private

sector debt in "low-income" regions is 83 percent of GDP versus 145 percent in "low-growth" regions, indicating that firms in "low-growth" regions may be highly leveraged, which is likely to raise their risk profile and hinder investment.

0 160 140 -2 120 -4 100 -6 80 60 -8 40 -10 20 -12 2005 Q1 2006 Q1 2006 Q2 2006 Q3 2007 Q3 2009 Q1 2008 Q1 2009 Q1 2009 Q1 2010 Q3 2011 Q 2005 2006 5009 2013 2007 2008 2010 2011 2012 Low income Low growth EU 28

Figure 5.2. Government deficit (left) and debt (right) as share of GDP by region type (national-level figures)

Source: Eurostat.

Unstable and weak macroeconomic conditions generate risk and uncertainty, which hinder the private sector from making forward-looking, productive investments. And if fiscal conditions are such that budget austerity is required, growth-oriented public investments are also likely to be curtailed. This matters not only because lower public and private investment directly reduce growth potential, but also because lower investment—in infrastructure and technology, for example—limits the potential for productivity growth.

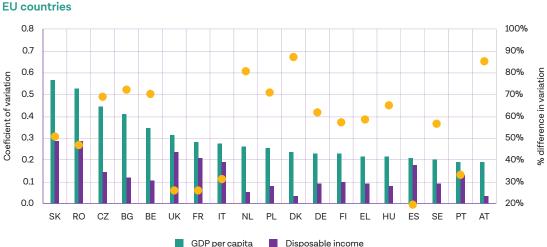
These factors may be national in scope, but they matter for regional growth because they determine the bands around within which regional growth is likely to fall. This is highlighted in some of the trends illustrated in chapter I—for example, figure I.4 shows that while the coefficient of variation in GDP per capita averaged 0.46 across all EU regions between 2000 and 2015, it was just 0.30 for regions within countries. The strong country-level grouping of GDP per capita levels and growth observed in figure 2.2 also attests to the close link between national and regional growth. And the relationship in countries with lagging regions can be seen clearly in figure 5.3. All this is to say that national factors which determine potential GDP generally set the broad parameters around which regional performance is bound. This does not mean that some regions will not grow higher or lower than the national trend on a consistent basis (as discussed previously), but it does mean that that broad parameters around which regional growth performance will be determined are shaped significantly by national-level factors.

10 8 Annual average % growth 6 4 2 0 -2 -4 Greece Spain Italy Portugal Bulgaria Hungary Poland Romania High Average

Figure 5.3. Regional variation in average annual GDP per capita growth in lagging regions

Source: Eurostat.

Aside from the issue of how the national macroeconomic and fiscal context shapes regional growth potential, another reason why national fiscal policies matter for regional development outcomes is because national policies with regard to interpersonal taxation and fiscal transfers have a large impact on spatial outcomes. Indeed, despite most countries in the EU having large internal disparities in output (GDP per capita), regional differences in disposable income are sharply lower in almost all cases (figure 5.4)—on average, across the EU, variation in disposable income is 55 percent lower than variation in GDP per capita. This results from the fact that regional disparities not only result in interpersonal disparities in outcomes but are also determined in part by the spatial sorting of human capital (i.e., peripheral and lagging areas tend to have concentrations of lower-skilled workers, while higher-skilled workers select into urban and leading areas).



% Difference in variation between GDP per capita and disposable income (right axis)

Figure 5.4. Coefficient of regional variation of GDP per capita and disposable income across **EU countries**

Source: Eurostat.

Thus, tax and transfer systems targeting interpersonal inequalities can have significant effects on reducing spatial inequalities, but this varies widely across countries. In countries with relatively generous social safety nets—like the Netherlands, Denmark, and Austria—regional variations in output are reduced by more than 80 percent when measuring by disposable income. At the other end of the spectrum, in Spain just 16 percent of the regional output variation is closed through taxes and transfers, while the UK and France close just 25 percent of the gap. In general, "low-growth," lagging regions (with the exception of Greece) close relatively little of the regional variation through taxes and transfers, while "low-income," lagging regions (with the exception of Romania) close a substantial share of the gap. The degree to which countries choose to redistribute depends in part on political ideology, but also on fiscal conditions. The higher the deficit and debt levels, the less fiscal space is available for redistribution.

Finally, as lagging regions consider the necessary macro-fiscal and structural reforms that are required, they must also begin preparing for the life without large EU grants and begin to establish fiscal legitimacy through the use of alternative financial instruments, including greater private sector participation.

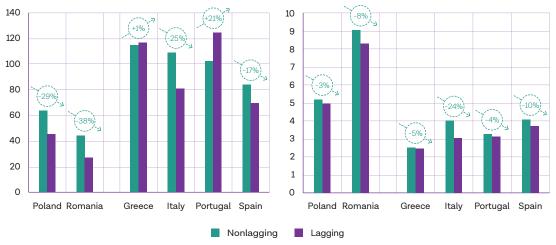
Raise the quality of the regional business environment to enable firms to thrive

Delivering on economic potential in many lagging regions is likely to require a fundamental change in the nature of the private sector. Notably, this includes a shift from dominance by firms that are micro and small in size, often individually and family-owned, and oriented to selling nontradables in local markets, and toward the emergence of somewhat larger firms with a much stronger orientation toward external markets, increasingly through integration into regional and global value chains.

Evidence from the EU indicates that the firm landscape does indeed look different in lagging regions, with the "pretransformation" enterprise environment being the norm in most lagging regions. Again, there are differences between "low-growth" and "low-income" regions. Compared with "low-income" lagging regions, more developed regions across the EU have nearly 60 percent more firms relative to their working age population. Figure 5.5 compares lagging and nonlagging regions within countries and shows clearly that both firm density and average firm size are lower in the lagging regions. "Lowgrowth" regions as a whole stand out for having much higher density but much smaller firm size than in "low-income" regions. In fact, the enterprise structure of "low-growth" regions is very much in line with "pretransformation" structures around the world, with dominance from self-employment and family-run enterprises specialized in local nontradable activities. "Low-income" regions look rather different, perhaps reflecting the fact that many of these regions have industrial legacies, including substantial involvement of state-owned enterprises.

While the structures of the two sets of lagging regions differ, the net result is much the same—low private sector job creation. Both sets of lagging regions have firm employment creation levels far below those in more developed regions. As figure 5.6 (left) shows, with the exception of Greece (where employment creation even in nonlagging regions has been very poor), private sector firms in lagging regions support employment from 25 percent (in Portugal) to more than 40 percent (Romania and Italy) less than in nonlagging regions. This implies that lagging regions are likely to be much more dependent for jobs on sources other than the formal, private sector, notably self-employment (agricultural and nonagricultural) and the public sector. In addition, the quality of jobs, as measured by wages, differs dramatically between lagging and nonlagging regions. Figure 5.6 (right) shows that, with the exception of Portugal, average wages in lagging regions are dramatically lower than in nonlagging regions—from 30 percent in Spain to 50 percent in Romania to nearly 70 percent in Greece, Italy, and Poland. Clearly, these large differences are affected considerably by the sectoral composition of employment across regions, but they also are likely to reflect large differences in productivity. To the degree that wages reflect productivity differences across regions, they are not only a symptom of structural problems that cause regional disparities but are also likely to perpetuate these disparities, as they will trigger migration (internal and regional) of higher-skilled workers, who will look to move to locations where they can maximize returns on their productivity potential (see the next subsection).

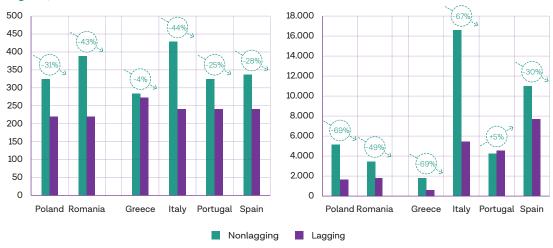
Figure 5.5. Firm density (left) and average number of workers per firm (right) in lagging and nonlagging regions, 2013



Source: Eurostat (Structural Business Statistics).

Note: Firm density is measured as the number of firms per 1,000 working population; average firm size is measured as the number of employees. No data were available for Hungary and Bulgaria.

Figure 5.6. Employment density (left) and average wages (right) in lagging and nonlagging regions, 2013



Source: Eurostat (Structural Business Statistics).

Note: Employment density is measured as the number of employees per 1,000 working age population; wages are average nominal wages in euros.

Firms in lagging regions are not only smaller, less productive, and less job creating than those in nonlagging regions; they also often perform worse across all these measures. So, the problem—at least in "low-growth" regions—is a dynamic one. Figure 5.7 shows the percentage-point difference in the growth rate of sales, employment, and productivity in lagging versus nonlagging regions in Italy, Spain, Poland, and Romania. In Italy and Spain, lagging regions have significantly slower sales growth; differences in productivity growth are also significant, if relatively small. "Low-income," lagging regions show a mixed performance, with lagging regions in Poland actually outperforming nonlagging regions; and across all measures in Poland and Romania, results are not significant.

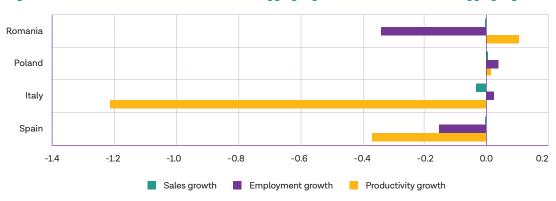


Figure 5.7. Performance of incumbent firms in lagging regions: Difference from nonlagging regions

Source: Farole et al. (2017); results include firm, sector, and regional controls.

What can be done to improve the performance of private sector enterprises in lagging regions, to progress toward the type of enterprise transformations that are needed? There are many reasons why the private sector in lagging regions may be less likely to invest, grow, and create jobs, even when risks are subsidized through tax incentives. For the vast majority of firms, which serve only local markets, lagging regions (defined either in levels or growth of income) may be inherently less able to sustain highgrowth firms, as limitations on market size, growth, and margins are likely to restrict the potential for firms to reap economies of scale or exploit sources of high value added. The fact that lagging regions are often less economically dense than nonlagging regions also means that firms are less likely to be able to exploit sources of agglomeration for productivity growth, and core/periphery patterns in any case may result in the sorting of the more productive firms into the core (Baldwin and Okubo 2006). The lack of market scale and economic density may also result in a relatively weak competitive environment that undermines a firm's incentive to invest in building capabilities to sustain competitiveness. Finally, in regions with all these characteristics, coordination failures may also be a significant barrier (see chapter 4).

But beyond these structural issues, the failure of governments to establish and administer a facilitative business environment has been well documented as a major constraint on private sector investment, productivity, and job creation.² As described in the World Bank's Doing Business Report (World Bank 2017b), "Good rules are a key to social inclusion. Enabling growth—and ensuring that all people, regardless of income level, can participate in its benefits—requires an environment where new entrants with drive and good ideas can get started in business and where good firms can invest and expand" (emphasis added). While many of the regulations and policies that make up the so-called "business environment" are—from a de jure perspective—nationally determined and standard across the country. Their impact may vary significantly across regions, for several reasons. First, the implementation of national regulations may vary significantly across regions, both due to differing interpretations of laws and regulations as well as differing capacities (and incentives) of local authorities responsible for implementation. Second, even with no variation in regulations or their implementation, national regulations will affect regions differently.

Recent analyses of the regional business climate by the World Bank Group's Subnational Doing Business program highlight that there are, in fact, very significant differences in the business climate across European regions, and even within countries. While there are no clear patterns in the results between lagging and nonlagging regions, overall, lagging regions perform marginally worse—and in the case of Italy, dramatically worse (figure 5.8). These differences matter. An analysis of a large dataset of incumbent firms across four lagging regions indicates that business environment factors do have an impact on firm performance in terms of sales, employment, and productivity growth, as well as investment (Farole et al. 2017). Again, the results are somewhat mixed on the impact; but in Italy, where the differences are largest, the effects appear to be greatest, with increased delays in obtaining construction permits hitting investment and employment growth rates, and delays in enforcing contracts hitting sales and profits.

Box 5.1. Comparing business environment across regions: Some findings from Subnational Doing Business for Italy, Poland, and Spain

Results from Subnational Doing Business indices highlight substantial differences both across countries and across regions within countries. Here is a summary of some results for Italy, Poland, and Spain:

- · Registering a business, the average across Italian regions is just 9 days, versus 16 in Spain and 29 in Poland. But the within-country variation is also significant: in Italy, from a low of 6 days in Lazio, Lombardy, and Veneto (all nonlagging) to a high of 16 in Campania (lagging); in Poland it takes just 8 days to register a business in Wielkopolskie (nonlagging) but 42 in Zachodniopomorskie (nonlagging), and 37 and 36, respectively, in Podkarpackie and Swietokrzyskie (both lagging).
- · For obtaining a construction permit, the situation reverses, with Spain and Poland averaging 173 and 176 days, respectively, while Italy averages 231 days. Again, the internal variation is even larger: in Italy, from 151 days in Lombardy (nonlagging) to 316 days in Sicily (lagging); and in Spain from 114 days in Asturias (nonlagging) to 297 days in Galicia (nonlagging).
- · For enforcing a contract, it takes on average 518 days in Polish regions versus 1,400 days in Italian regions. But within Italian regions, it takes just 855 days in Piedmont (nonlagging) versus more than 2,000 days in Puglia (lagging); in Poland, the region with the fastest court procedures (Warminsko-Mazurskie, 328 days) and the slowest (Pomorskie, 715 days) are both lagging.

Source: Subnational Doing Business (Italy, 2013; Poland, 2015; Spain, 2015)

Among the strongest results that come from the analysis is that delays in the time required to start a business show a positive impact on the growth and profits of incumbent firms. This is perhaps not surprising, as it acts as an entry barrier to new firms and so benefits those that are already in the market. The finding highlights another aspect of the regional business environment that may be critical to supporting productivity growth and transformation of regional enterprises—competition. In the analysis of the effects of Subnational Doing Business indicators on firm performance, a proxy was also included for the level of competition (at the regional-sector level).3 This measure generally showed results that were clearer and stronger than those for the business climate. Almost unambiguously, firm performance as a whole was stronger in regions where competition was higher. This matters in the context of lagging regions, because market competition in lagging regions (partly for structural reasons, but partly also for reasons related to governance) tends to be lower than in nonlagging regions.

Romania (2017) Poland (2015) Italy (2013) Spain (2015) 0.60 0.65 0.70 0.75 0.80 0.85 0.90 0.95 1.00 Nonlagging Lagging

Figure 5.8. Subnational Doing Business Index Score—lagging versus nonlagging regions

Source: Authors' calculations, based on data from Subnational Doing Business reports.

Note: Index calculated on main three subnational measures—starting a business, obtaining a construction permit, and enforcing a contract—and based on the time to complete (days). The measure for registering a property was not included due to a lack of regional variation in some countries. In the case of Spain, data on enforcing a contract were not collected during the study and have been replaced here by data on obtaining an electricity connection. Each measure is weighed equally in creating the index, and the "frontier" score is calculated at the country level (i.e., performance relative to the best region in the country). Subnational Doing Business data are collected at the city level, and regions are mapped against the cities for this analysis.

Competition can be enforced through improved market governance; but a lack of scale in many lagging regions may still limit the practical degree of competition that will exist in the thin local markets of lagging regions. But competition can also be introduced through more engagement with external markets. As discussed previously, trade matters for facilitating the emergence of a more competitive regional enterprise environment. One reason for this is that engaging with external markets (globally, across Europe, and even across the country) brings the disciplining effects of greater market competition as well as more demanding customers. It also brings potential for firms to exploit knowledge and technology spillovers from customers and competitors. While regional-level data are available on firm export propensity and intensity, the data on national export volumes combined with the enterprise structures presented earlier suggest that lagging regions (particularly in "low-growth" regions) have a limited exposure to export markets. They may also have a limited exposure to imports, which is another critical source of competition and spillovers.

What can be done to improve the business climate and facilitate trade in lagging regions? One encouraging finding from the analysis of business climate effects is that while the quality of the business climate varied across regions, the relative impact of business climate constraints on firms was not significantly different in lagging versus nonlagging regions⁴—which is to say, improvements in the business climate should have equally positive effects in lagging regions as in nonlagging regions. Thus, there are both national-level and region-specific (place-based) elements for the solution. On the latter, it requires not so much policy as program- and project-level interventions to improve the administrative processes that underpin approvals and service provision. This, of course, has a significant political economy element, and requires substantial work to build the capacity of local institutions and actors.

The proposition for trade integration is less straightforward. Particularly for relatively sparse and peripheral regions, processes of global and regional trade integration can deepen isolation, as firms and consumers in the core increasingly engage outwardly, at the expense of the domestic hinterland. Thus, while some regions in the "low-income" east are in the position to take advantage of European integration, those further east, and especially at the southern edge, risk increasing peripheralization, particularly in the context where further EU expansion is not on the immediate horizon. Simply put, distance to markets remains an important barrier on the periphery. Interventions could thus focus on supporting better exploitation of comparative advantage in these regions, particularly in activities like high-value services, where the barriers of physical distance to market are less binding. In this context, investment in broadband connectivity is likely to play an increasingly important role in peripheral regions. While broadband is more and more recognized as essential infrastructure, household access varies significantly across EU regions and is aligned closely to income levels.

Box 5.2. Reforming the business environment at the regional level—examples from Subnational Doing Business on streamlining construction approval processes

One of the primary bottlenecks is the number of approvals required prior to applying for the building permit, especially in Bulgaria and Romania. In both countries, an entrepreneur must visit each agency separately. Establishing a sort of one-stop shop with a single focal point that could coordinate with all these agencies and issue a single pre-construction clearance would make the process more efficient. In Bulgaria, the Municipalities could be the focal point; and in Romania, the City Halls. The applicant would present all required documents for all preapprovals at one time to the Municipality or City Hall, which would then take care of obtaining all the preapprovals on behalf of the applicant. This could be done by sending each application to the pertinent agency. However, this would require more staffing and possibly an increase in fees charged to cover the additional staffing costs. It would be even more efficient if each agency sent a representative to sit at the permit-issuing agency and reviewed applications on site (even if done on a part-time basis).

Timisoara in Romania provides a good example for other cities. The City Hall issues situation and location plans required for the urban planning certificate. In other cities, these are done by an engineer and endorsed by the Cadastre Office. The Timisoara City Hall has records of the entire city mapped through the GIS system, which makes it possible to obtain the plans faster and more cheaply, without hiring additional experts. Also, a single utility clearance, which is required for the building permit, can be obtained from the City Hall's single window. This single clearance includes six utility clearances that would typically have underground networks, such as the water company and the electricity company. This could be expanded to include representatives from nonutility agencies that have to provide clearances, such as the Environmental Protection Agency and the Health Department.

Another example is Georgia, which established a one-stop shop that consolidated all approvals for a construction project from several departments (e.g., the Ministry of Culture, Ministry of Environment Protection, water utility, electricity utility) into one process. This cut the time to deal with construction permits by 70 days and reduced the number of steps by 10. Hungary has gone one step further beyond physical one-stop shops by introducing an "electronic" one-stop shop where all agencies review the application online.

Source: World Bank (2017a).

Structural issues aside, it is challenging to shift existing domestic firms, many of which lack scale and competitiveness, to start competing in external markets. Studies (e.g., Farole 2011) find that firmlevel characteristics (rather than physical location or the local business climate) explain the majority of differences in a firm's likelihood to export. This suggests that efforts to raise the competitiveness of lagging regions and to expand export participation of firms in these regions must go beyond the external environment to address firm-level competitiveness, which also tends to be weaker in lagging regions. The implications for place-based interventions is a need for focus on training, access to technology, and addressing management skills and capacity, as well as the perennial issue of access to finance. In addition, where there is an explicit emphasis on export participation, export promotion programs will need to be "retooled" to be able to deliver more effectively at the regional level. Indeed, while the EU already provides support on some aspects of the former, it is more the latter issues—notably access to high-quality business development services, and in particular facilitating information and expertise to identify and exploit new market opportunities—for which firms in lagging regions are looking for greater support (see box 5.3).

Box 5.3. Giving businesses the services they really need

Increased growth of small and medium-sized enterprises (SMEs) is a key part of efforts in Poland to develop lagging regions. The World Bank worked with the European Commission, regional governments at the voivodeship level, and the Ministry of Economic Development to understand the needs of SMEs and improve the public sector interventions to support them. Face-to-face interviews were conducted with 40 SMEs in the targeted districts in mid-2016.

The interviews found that most SMEs were competing on costs and price, because of a lack of differentiation of their product compared with competitors (thus making it difficult to earn a premium price). Since most SMEs compete in markets where only minimal quality standards are required, they are stuck in a race to the bottom on price. Smaller companies are often subcontractors to larger firms, and have little power to negotiate prices because their products are widely available.

Based on these findings, it was proposed that support for SMEs should include support to help firms change their orientation, reach new markets, and differentiate their products. This would help firms with their overall strategy (choice of markets in which to compete), and would be broader than the traditional focus on "basic" training and business skills (financial management, business planning, marketing). Some firms in the region were already highly successful using such an approach-for example, a producer of handmade glass decorations that has national and foreign buyers and is increasing its production capacity; and a manufacturer of specialized mirrors that has increased its production capacity 25 times in the last 10 years. The strategic support would help more SMEs join the club of fast-growing, competitive SMEs.

The instrument for this support was designed in detail, in collaboration with the regional administrations. There would be a strong focus on the quality of consulting services, since firms complained that "sometimes it turns out we know more than the 'expert." Firms declared their willingness to partly pay for such services, as long as they were of sufficient quality. Furthermore, the services provided would be customized at the individual SME level, since market opportunities to export apples will be different to those of glass decorations, and assistance needs will vary by business size, management structure, willingness to take risks, and other firm-specific factors. An independent adviser is available to applicants to help determine their needs and to help select qualified consultants to work with the SME.

This support for SMEs complements other programs that aim to boost innovation through research and development and improvements in products and processes that are new at a national or even international level. In lagging regions, innovation may be more modest (new products and processes only at the level of the firm—through imitation and through use of technologies already developed by others).

Source: World Bank (2017a).

Notes

- ¹ There is country heterogeneity of course, with Hungary having much higher debt levels (about 75 percent as of 2015, still well below the EU average) and Romania experiencing relatively rapid growth in debt but from a very low base (from 16 percent to 38 percent between 2005 and 2015).
- ² See, for example, Djankov et al. 2002; Bastos and Nasir 2004; Klapper et al. 2006; Aterido and Hallward-Driemeier 2010; and Commander and Svejnar 2011.
- ³ The Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market competition. It is calculated by squaring the market share of each firm competing in a market, and then summing the resulting numbers, and can range from close to zero (high competition) to 10,000 (low competition).
- ⁴ The analysis tested the interaction of the business climate variables with a dummy variable for lagging regions and found no significant effects.

Chapter 6:

Policies to build endowments in lagging regions

This chapter focuses on three priorities for building regional endowments—urbanization, skills, and institutions. First, the chapter argues that both "low-growth" and "low-income" regions are missing out on the opportunity to fully exploit the productivity potential of urbanization. Moving on to education and skills, it argues that ensuring quality and equity across the educational lifecycle—from basic foundational education through training and retraining initiatives—should be considered a "no-regrets" policy that benefits individuals, regions, and all of Europe. As such, it requires greater attention in regional policy and greater integration with other instruments and programs targeted to lagging regions. It should also be supported through policies that facilitate mobility across regions. The chapter then focuses on the foundational issue of institutional quality and highlights that regional institutional quality is not only critical to delivering improved regional performance but also directly shapes the effectiveness of policy design and delivery. The chapter argues that, while institutional quality receives much attention in the policy dialogue, it requires yet more attention and resources on the ground.

Leverage the productivity potential of cities

Transformation of national and regional economies from a structural (sectoral) perspective is almost always accompanied by spatial transformation—specifically, a change in the scale and/or nature of urbanization. As economies shift from agriculture to industry or from industry into higher-value-added services, the role of urban areas to facilitate productivity growth and higher earnings by exploiting the potential for agglomeration becomes increasingly important. In this subsection, we argue that investment in cities as sources of productivity growth, human capital accumulation, and ultimately as locations of opportunity is central to achieving objectives of policy for lagging regions. In effect, the argument is to focus on strengthening the strongest parts of national and regional economies—to concentrate investments on competitive cities rather than spreading it across all of the periphery.

Across Europe, cities are driving growth. While primary cities account for less than 16 percent of the EU's population, they generate 23 percent of its GDP.¹ Moreover, Europe's 228 secondary cities generate another 45 percent of the EU's GDP. When the larger zones around cities are taken into account, the picture is even starker. For example, in Romania, the functional urban areas (FUAs) of Bucharest and the county capitals generate 90 percent of all the revenues of enterprises in the country.

But city performance varies across countries, with the urban environment often failing to deliver on the full potential of cities as drivers of productivity growth. This is most notable in secondary cities. And as we have seen throughout this report, there are also significant differences in the dynamics of the secondary cities between "low-growth" and "low-income" countries. In just about all EU countries, primary and secondary cities accounted for more than half of national output growth between 2000 and 2013. The biggest outliers were Spain and Italy: in Spain, Madrid underperformed the national economy while the secondary cities experienced economic regress, stagnation, or modest growth; in Italy, virtually every major city experienced modest economic performance, including Rome.

In "low-income" regions, while cities overall have contributed the majority to growth, large gaps remain in the productivity of primary and secondary cities. Primary cities—such as a Bucharest, Sofia, Budapest, and Warsaw—have reached the point where they compete almost on par with primary cities in Western Europe. However, the disparities between primary and secondary cities in "low-income" countries remain much higher than in other parts of Europe (figure 6.1).

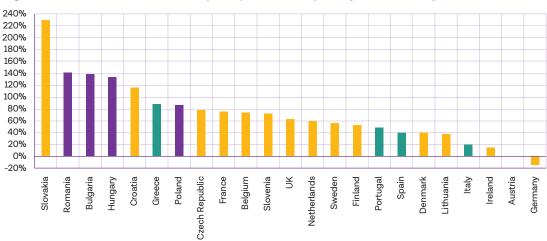


Figure 6.1. Percent difference in GDP per capita between primary and secondary cities

Source: Cristea et al. (2017).

Note: Green bars represent countries with "low-growth" lagging regions; purple bars represent countries with "low-income" lagging regions.

In "low-growth" Europe, the problem is not so much between primary and secondary cities per se, but rather between cities in leading (including primary and secondary cities) and lagging regions (all of which are secondary cities). Figure 6.2 shows that across Southern Europe, productivity of cities in lagging regions not only trails that of leading regions, but in the cases of Italy and Spain they are also performing worse than nonmetropolitan areas (and in Greece, the difference is marginal).

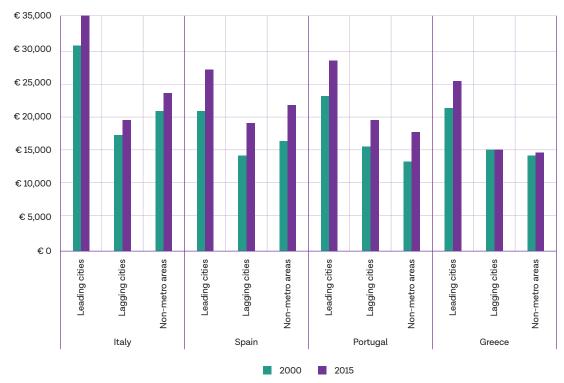
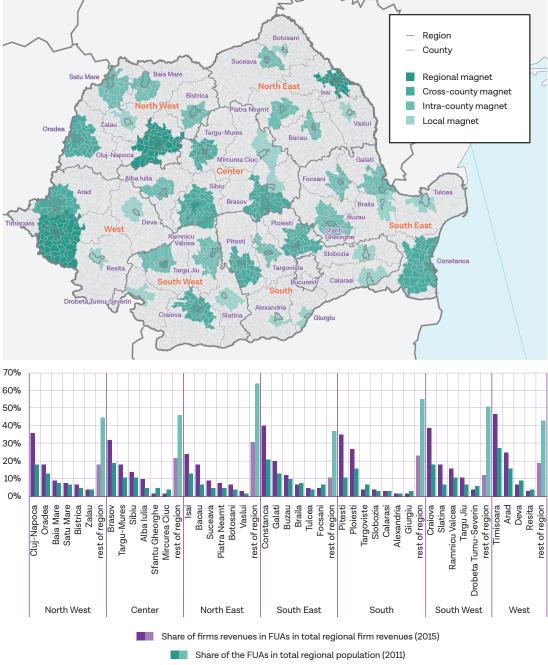


Figure 6.2. GDP per capita of cities in leading and lagging regions of Southern Europe

Source: Eurostat.

Why does secondary city performance matter for lagging regions? Because if cities indeed drive growth, then the growth of lagging regions will to a large degree depend on the competitiveness of the secondary cities within their reach (not necessarily inside the lagging region). Evidence from an assessment of secondary cities' performance in Romania attests to these broad trends of secondary cities as the growth engines of their regions. Map 6.1 shows the main growth poles in the country (outside Bucharest) - Braşov, Cluj-Napoca, Constanța, Craiova, Iași, Ploiești, and Timișoara. These not only attract migrants from the widest areas, but they also have a share in the regional economic output that is usually double their share in the regional population.



Map 6.1. Classification of FUAs in Romania and profiles of large, regional FUAs

Source: Cristea et al. (2017).

The findings from the analysis of Romania also indicate a clear premium for city size, with larger cities having significantly higher productivity. This is important, because it again suggests that there are likely to be some limits as to which cities can drive regional development on a sustainable basis, with large metropolitan areas and second-tier cities having significant potential, but smaller urban areas and towns less likely to be effective as growth drivers. For lagging regions, an implication is that many of them may not have such a "high-potential" city within their region (box 6.1).

Box 6.1. Cities in lagging regions—an area for direct policy intervention?

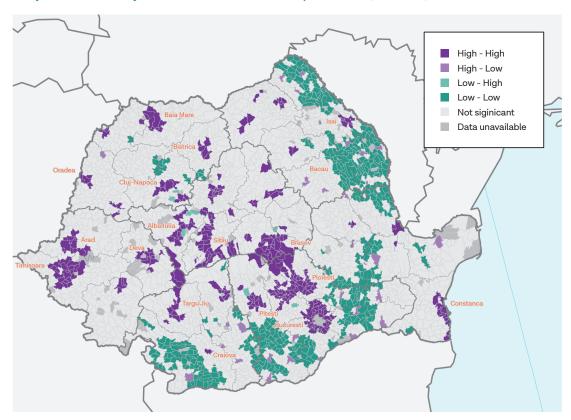
Case studies carried out in several EU lagging regions have highlighted significant differences between the economy in the leading cities of lagging regions (which tend to be secondary cities) versus that of the rest of the region (which tends to be rural). For example:

- North East (Romania) lași, which is the most dynamic city in the region:
 - Has a GDP per capita significantly higher than the rest of the region (€5,900 compared with €4,600 for the region), although it is significantly lower than that of Romania as a whole (€7,600).
 - Displays an average net monthly earning close to the national average (€404 compared with €418 nationally), and significantly above that of the region (€351) The composition of the city's GDP is different from that of the region as a whole (e.g., in NE Romania, which is significantly agricultural).
- Central Macedonia (Greece)—Metropolitan Municipal Area:
 - Produces 65 percent of the regional GDP.
 - Captures most of the regional GVA contribution for primary and tertiary sectors (62 percent and 67 percent, respectively).
- Podkarpackie (Poland)—Rzeszow region (secondary city):
 - Was among the fastest-growing subregions in Poland, improving its GDP per capita relative to the country's average by 4.5 percentage points, to 87 percent of the national average between 2010 and 2013.
 - Urban areas in Podkarpackie have a larger number of business per capita and enjoy lower levels of unemployment than in rural parts of the region.

But while buoyant cities appear to be critical for growth, it is not necessarily the case that all cities perform well. This is particularly true in lagging regions. Identifying high-potential cities ("picking winners") is difficult, as highlighted in a recent World Bank study of Europe and Central Asia (Cadavid et al., 2017). The study describes significant shifts in economic activity and population in Eastern and Central Europe, along with a significant increase in the number of cities that are declining. Between 2000 and 2010, 61 percent of cities in Europe and Central Asia declined in population. But at the same time, population became concentrated in selected urban areas. Indeed, "winning" cities are usually capital cities and their agglomerations, and they are larger in population and economic output. They are also generally better located (i.e., have access to larger markets). "Losing" cities, by contrast, tend to be smaller and not to be part of agglomerations.

Therefore, support for secondary cities is likely to be an important part of policy to support lagging regions; but this is not the same as saying that all cities should be supported and that all lagging regions should focus resources on their largest cities. Some lagging regions will be home to potential growth poles. Others may not have viable cities in their region, but can benefit from cities in proximate regions. Still other regions—rural and remote lagging regions—may have little opportunity to benefit from urbanization directly. The focus should be on a selected set of cities with high potential to increase productivity, to drive growth, and, critically, to deliver positive spillovers into their hinterlands.

Indeed, it is not simply the competitiveness of the city alone that matters for lagging regions, but also the degree to which its improved economic and social outcomes spill over to the hinterland, where laggardness tends to be concentrated. An analysis of human development outcomes in Romania—the Local Human Development Index (LHDI)2—show that cities there are far ahead of the rest of the country in human development outcomes (map 6.2), and those municipalities that are improving their LHDI tend to be the ones surrounding urban areas. The findings also show that while variations across locations are declining slightly over time, the biggest convergence is happening within the group of urban locations.



Map 6.2. Cluster analysis of the Local Human Development Index, Romania, 2011

Source: Cristea et al. (2017).

But there are also significant differences across cities in their spillover effects. Analyzing the speed of decay in the LHDI outcomes as we move outside cities, figure 6.3 shows that the "half-life" of LHDI (i.e., how far from the functional urban area one needs to go before the LHDI value in the area falls to 50 percent of the value in the functional urban area) ranges from as little as 10 kilometers in Cluj to more than 50 kilometers in Arad. Across all cities, the impact appears to decay on average at 30 kilometers, which suggests a relatively limited reach into the hinterland. While some cities experienced no change in spillover over time (e.g., Constanta and Sibiu), on average the spillover from cities expanded by 8 kilometers over the decade.

It is unclear whether the dynamics of Timisoara and Arad, with expanding suburbanization (see the discussion below) and strong spatial spillovers of LHDI, are better or worse than the dynamics of Cluj and Iaşi, which have compact core cities but limited spillovers to the hinterland. The reality is that they are shaped to a large degree by the nature of the structural transformations happening in their respective regions—in Cluj and Iași, toward high-value services that cluster in urban areas; and in Timisoara and Arad, toward manufacturing that locates along transportation corridors in peri-urban areas.

60 Distance to reach half of city-level LHDI (2011) Arad 50 40 Ploiesti 30 Timisoara Brasov 20 Pitesti Bacau Oradea Constanta 10 0 0 -5 5 10 15 20

Change in distance (km) to reach half of city-level LHDI (2002-11)

Figure 6.3. Distance decay of LHDI outcomes across cities—distance and change in distance for LHDI to decay by half, 2002-11

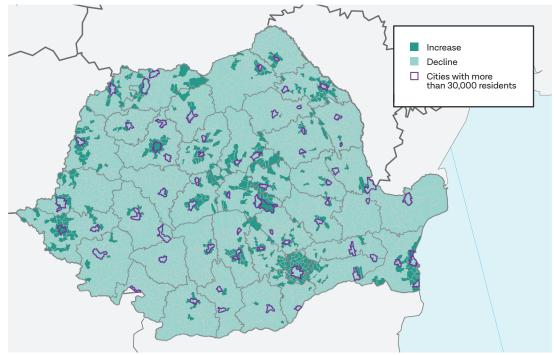
Source: Authors' calculations, based on data from Cristea et al. (2017). Note: Axes are set at average level across all cities.

What determines the scale and nature of the spillover effect from cities? While evidence is limited, the broad channels are migration, commuting (extending the periphery), and (more amorphously) through regional supply chain and service delivery linkages. From an interpersonal rather than a spatial perspective, cities have positive spillover effects simply from absorbing economic migrants, raising their productivity, and improving their human development outcomes. As shown above, not only is this happening on a fairly large scale in Romania (and elsewhere in Europe) but much of this migration is also coming precisely from the local catchment area—that is, the lagging parts of lagging regions. Between 2002 and 2011, 1.1 million Romanians moved to the functional urban areas of Bucharest and the 40 county capitals. This move implied for these people not only an increase in standard of living (the LHDI for these functional urban areas is well above the regional LHDI) but also an increase in productivity. Migrants both benefit from and reinforce agglomeration economies, and the easier it is for people to migrate to cities (e.g., by encouraging private sector development, developing connective infrastructure, or promoting healthy land and housing markets), the better the regional outcomes.

Another point to consider is the fact that cities generate both centripetal and centrifugal dynamics. Dense places have higher productivity and salaries, but also a higher cost of living. Cities enable an easier access to culture, art, entertainment, and diversity, but they also have a higher incidence of crime, pollution, and congestion. Also, relying on the migration channel alone for spillovers risks hollowing out nonurban areas, and may be both economically inefficient and politically untenable.

This issue of congestion effects links to the broader trend of commuting and suburbanization. Analysis of secondary city development in Poland and Romania—as well as in Greece, Italy, Portugal, and Spain shows that much of the growth is coming not so much from migration but rather from significantly increased commuting. Indeed, in many secondary cities, FUAs are growing rapidly, primarily as a result of suburbanization. Whether the growth of the scope of cities through growing suburbs is a sign of positive or problematic dynamics is a critical question for considering the effectiveness of secondary cities for driving regional growth and having positive spillovers into the hinterlands. If this trend is happening simply because of rapid growth and opportunities in FUAs pulling workers from the (previous) hinterland into the orbit of the city, it is largely a good thing. However, if it is happening because distortions in land use or other factors are raising congestion costs (high housing costs, diseconomies from crime or pollution, etc.), it will make continued rapid productivity growth unsustainable.

Evidence from Romania (map 6.3) suggests that while populations in Romania's FUAs mostly grew over the period 2002-II, in most cases this was driven by strong growth in suburban areas. Meanwhile, populations in most core cities declined (with the notable exceptions of Cluj and Timişoara). A similar trend of suburbanization has been noted across many European cities (Cadavid et al, 2017) and suggests that suburbanization is happening across many lagging regions, particularly in "low-income" Europe—with FUAs expanding even as core cities stagnate or shrink, due both to demographic changes and policy-induced congestion costs.



Map 6.3. Growth in population in and around core cities in Romania, 2002-11

Source: Cristea et al. (2017).

Finally, in considering the potential for cities in lagging regions to support high-productivity growth, to transform regional economies, and to generate regional spillovers, it is important to consider the links between cities and human capital accumulation—in particular, the role of universities as drivers of city economies. Evidence from across Europe suggests that university cities may have a unique potential to support growth in lagging regions, both due to their potential for positive economic spillovers and also because they are typically associated with quality-of-life features that attract and retain skilled workers (see box 7.1 in chapter 7)

Regional policy can play an important role in unlocking the potential for urbanization to deliver positive spillovers in lagging regions. Urban areas already absorb a large share of Structural Funds, in part due to their capacity to attract funding. However, EU member countries were required to allocate only 5 percent of the European Regional Development Fund (ERDF) for sustainable urban development activities. Given the increasing importance of urban areas in driving outcomes in lagging regions (even when the urban area in question is not located in the lagging region), this is unlikely to be sufficient. The dis-

cussion above highlights the importance of considering the role of urban regions and the nature of the urban form that is appropriate to support regional transformation. Building competitive cities that can have a deep and positive spillover to the regional hinterland will require addressing distortions that lead to inefficient suburbanization, and thus strengthening the physical, social, and cultural assets of cities, and continuing to develop more effective transportation links between core cities, peri-urban areas, and the rural hinterland. It will also require raising the quality and capacity of both social and economic institutions at the city and wider regional levels.

Finally, linked closely to urbanization policy is the issue of connectivity. Both urbanization and connective infrastructure support economic potential (raising productivity) and access to opportunities through the same channel—providing access to markets (consumers, suppliers, and labor markets). Infrastructure connectivity has long been central to cohesion policy, with tens if not hundreds of billions of euros spent on large-scale connective infrastructure (e.g., the Trans-European Networks). This has clearly paid dividends in integrating European markets, supporting market access and labor market mobility. Evidence suggests that while some regions still require large-scale connective infrastructure investment, we may be reaching the limits of the impact of these broad investments. Data from the EPI analysis shows clearly that market access, determined in part by transportation infrastructure (in addition to physical location), has a significant impact on the economic potential of a region. At the same time, a scenario analysis carried out as part of the EPI exercise suggests that the impact of Europeanwide connective infrastructure investments on lagging regions would now be quite limited.

Instead, anecdotal evidence and indications from case studies indicate that three types of connective infrastructure investments may be most effective in lagging regions. The first is transportation infrastructure connecting towns and rural areas to regional growth poles. This appears to be particularly critical in lagging regions, where rural areas often remain cut off from economic opportunities emerging in urban hubs. Related to this is the need for focused urban infrastructure investments, including improving connectivity in the urban cores, and, even more important, providing more efficient and sustainable links (e.g., through public transportation) between the urban cores and the increasingly broad urban periphery resulting from the growth of suburbanization. Finally, improving access through broadband connectivity is becoming a high priority in lagging regions, particularly peripheral ones. Evidence discussed previously indicates a high correlation between broadband access and economic and social outcomes. High-performing peripheral regions in the EU tend to have high levels of household access to broadband. Meanwhile, both "low-income" and "low-growth" lagging regions not only have low levels of broadband access overall but also exhibit high disparities between access within the lagging regions and access within other regions in the same country.

Box 6.2. Differential connectivity challenges in Central and Eastern Europe

Peripheral lagging regions, particularly in CEE, still face many connectivity-related barriers to market integration:

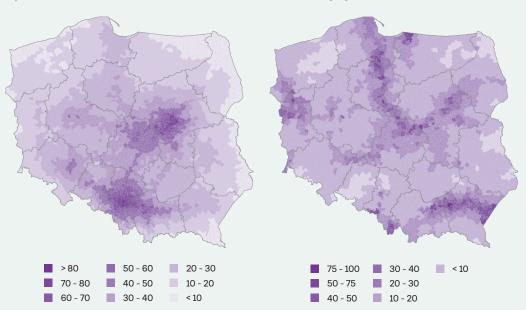
Eastern Poland

In the regions of eastern Poland, the opening of western borders challenged Podkarpackie and Świętokrzyskie because they are a significant distance from the large market of neighboring Germany. Additionally, relatively poor road and rail infrastructure made travel to major urban centers within Poland slow, while significant trade links with proximate neighbors, Ukraine and Slovakia, never developed. In recent years, major road and rail investment projects have substantially improved connectivity of the regions.3 Podkarpackie has significantly benefited from construction of the national highway, the A4, that established a much better east-west connection to the major urban centers of Krakow and Katowice, and from the modernized railway

line, E-30, from Cracow to Lviv. Likewise, there is a significant improvement in connectivity that resulted from the construction of the new bridge over the Vistula River, linking Podkarpackie and Świętokrzyskie, in Połaniec. These projects benefited from EU funding. However, even after these improvements, Podkarpackie and Świętokrzyskie are still unable to match other regions of Poland in access to large internal markets or the most important foreign market (Germany) due to their geographic locations (maps 6.4 and 6.5).

Map 6.4. Municipality accessibility by road

Map 6.5. Change in municipality accessibility by road, 2007-15



Source: Rosik, Stępniak, and Komornicki (2015).

North East Romania

Counties in North East Romania are located at a large distance (about 2,000 kilometers) away from the center of Europe and 375 kilometers on average from Bucharest. While these distances are large, the biggest problem in the region is the underdeveloped road infrastructure. There is no highway between the North East region and Bucharest, nor between the region and Transylvania or neighboring countries. The main road that links Bucharest to the North East county capitals, the E85 (European road), as well as the national road, the DN2 are in poor shape. The road has only two lanes and is heavily used by trucks and long vehicles. That makes transporting people and goods a very challenging endeavor. It might take up to one day to reach Botosani, the northernmost county capital, from Bucharest.

However, further major investment in improvement to connectivity of regions should be accurately prioritized and selected to deliver good value for money. In the case of the North East region of Romania, critical connective infrastructure linking the region to the national hub (Bucharest) and to European markets appears to still be a top priority. However, in Poland the situation is quite different. It takes only two hours to drive from Rzeszów to Krakow, four hours to get to Warsaw or Wroclaw, seven hours to Berlin, and about 10 hours to Hanover and Hamburg. Further investments in that case are likely to deliver only marginal travel time savings at high cost. It is also unclear whether such improvements will improve the competitive potential of businesses in lagging regions. While some further investments might be required, particularly related to connections between Rzeszów and Warsaw, they should only be approved if they can deliver substantial travel time economies and thus justify the high costs. At the same time, significant improvements to regional potential may be possible through focused investments to improve connectivity between rural areas and small towns and regional hubs like Rzeszów.

Invest in skills as a "no regrets" policy for regional competitiveness and individual mobility

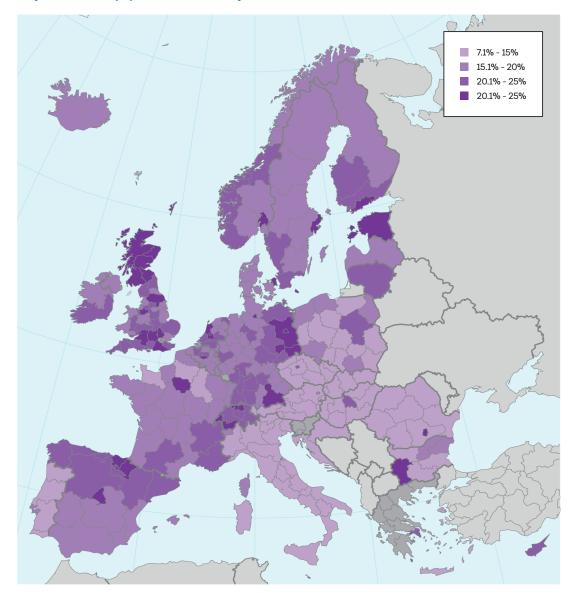
Building skills and supporting mobility should be at the heart of the agenda for ensuring equality of opportunity for individuals to exploit their potential. Moreover, in an environment like the EU, where comparative advantage is increasingly defined by knowledge and innovation, human capital development is also central to delivering on regional economic potential. The problem is that the disparities in income across regions in Europe are mirrored in disparities in human capital outcomes. Moreover, this is happening through two mechanisms that reinforce one another and amplify their effects. First, educational outcomes in lagging regions trail those in leading regions. Second, spatial sorting (which shapes educational outcomes in the first place) means that higher-skilled students and workers tend to migrate out of lagging regions and into leading regions, where they can achieve higher returns on their human capital-that is, brain drain.

How important are educational outcomes for regional economic performance? The analysis of the EPI findings earlier in the report (figure 4.3) showed that measures of educational outcomes were associated significantly with regional GDP per capita. The scenarios show that in Portugal, Italy, Spain, Hungary, and Poland, improved human capital outcomes-including through lower secondary school leavers and higher tertiary education graduates - would contribute half or more to potential growth.

Addressing the gaps is easier said than done, as they are pervasive across all parts of the educational lifecycle. Looking first at educational attainment in the current labor force, the map 6.6 highlights a clear gap in tertiary educational attainment between Northern and Central Europe versus Southern and Eastern. On average, the share of tertiary educated people in 2015 was 20 percent in "low-income" and 21 percent in "low-growth" regions—putting lagging regions 9 to 10 percentage points below the EU average. And while lagging regions have steadily raised their share of tertiary graduates over the past decade, the gap with the EU average has actually increased by about 1.5 percentage points over this period. Gaps between lagging and nonlagging regions are also apparent within "low-growth" and "lowincome" countries. Figure 6.4 shows that, with the exception of Greece, a lower share of the working age population has a tertiary education in lagging regions. The gap is minimal in Poland and Portugal but very high in Bulgaria (almost 16 percentage points), as well as in Romania and Spain (8.2 and 7.5 percentage points, respectively).

Of greater concern perhaps than the stock of current workers is the flow of future workers. Here, many of the same broad trends persist, most notably in "low-income," lagging regions, where the differences between lagging and nonlagging regions are acute (figure 6.4). In Romania, just 52.5 percent of 15- to 24-year-olds are in education in lagging regions, versus almost 71 percent in nonlagging regions; in Bulgaria, the figures are 51 percent versus 67 percent. The gaps in other regions are smaller but still significant. And while the gaps are larger in general in "low-income" regions, in Italy not only is the gap relatively large (6.4 percentage points) but the overall share of youth in education is also by far the lowest among all the countries compared here—just 51 percent of working age youth in lagging regions are in education.

The disparities in educational outcomes for youth and the working age populations are not simply a function of labor markets and of the accessibility and quality of tertiary and upper secondary institutions, but also stem in part from disparities that emerge in earlier stages of education. Data from the most recent PISA results (2015) show significant gaps in performance across most EU countries between schools in urban and rural areas, which generally map to leading and lagging regions. For example, in Bulgaria and Hungary, the difference in math scores between urban and rural schools was over



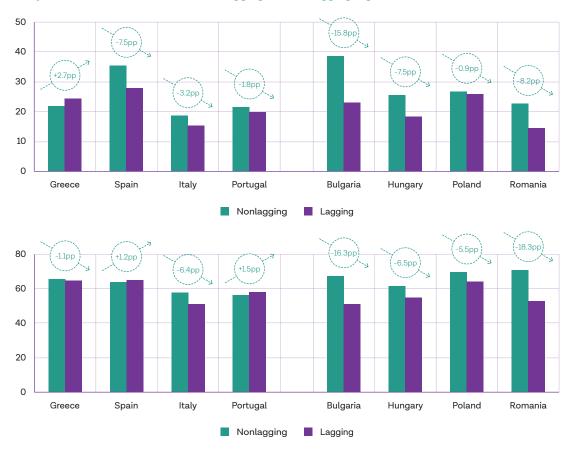
Map 6.6. Share of population with tertiary education

Source: Eurostat.

50 points (equivalent to close to two years of schooling), while the gap was 30 points in Poland and 25 points in Italy and Portugal. Data from Spain and Italy (figure 6.5) confirm significant gaps in outcomes between lagging and leading regions. In the case of Italy, the difference is stark (with the caveat that there were data for only one lagging region)—students in Campania are about two years behind their peers in Bolzano, Trento, and Lombardia in science, math, and reading.

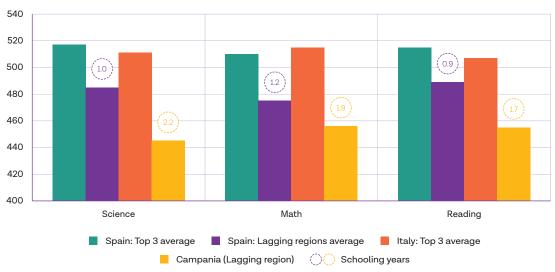
Going back further to early childhood development (ECD), where gaps in linguistics capacity and cognitive and socioemotional skills can have severe effects on long-term educational outcomes, significant inequalities in access are common across regions. For example, in Poland availability of preschool facilities varies from less than 60 percent coverage of children age 3 to 5 to 100 percent across different counties. Counties in lagging regions of the country, especially in the East, have particularly low coverage.

Figure 6.4. Share of working age population with a tertiary education (top) and share of 15- to 24-year-olds in education (bottom) in lagging and nonlagging regions, 2015



Source: Eurostat.

Figure 6.5. Gaps in PISA scores between top regions and lagging regions: Spain and Italy



Source: OECD (2016a).

As with the interventions discussed previously in this chapter, improving access to and the quality of education in lagging regions are no simple tasks. A big part of the agenda is investing to ensure increased access to educational facilities, along with increased quality of provision, from ECD through the tertiary stages, and through to training in the workplace. But interventions will need go beyond simply the educational institutions and also address the economic, social, health, and other factors that shape individual decisions to invest in education and institutional planning and in the delivery of education and training services.

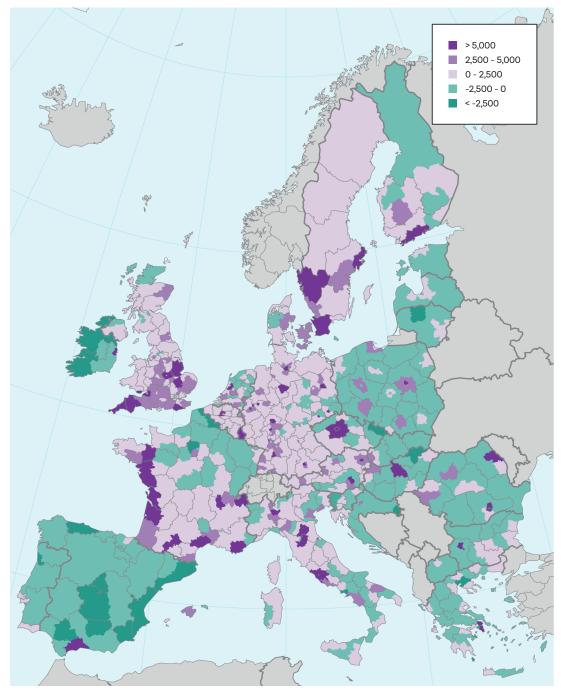
The argument made against prioritizing human capital investments for the development of lagging regions is often that these investments are undermined by brain drain—that by investing in raising the human capital of youth they are even more likely to migrate to leading metropolitan regions in the country or elsewhere in Europe. Indeed, migration is happening at a fast pace, at least in "lowincome" regions. This is illustrated in map 6.7, which shows net migration rates at the NUTS-3 level.

Map 6.7 highlights several important points. First, out-migration generally maps closely to lagging regions, with peripheral regions most likely to show net out-migration (shaded green on the map). Second, within lagging regions, out-migration trends are much stronger in "low-income" than in "low-growth" regions. Whether lower net out-migration in "low-growth" regions is due to higher inmigration or to lower out-migration is unclear. Third, the map highlights large spatial variations in migration rates within proximate locations, even within the same NUTS-2 area-it is perhaps most noticeable in the "low-income" eastern regions. This suggests that short-distance migration (ruralurban) is happening on a significant scale. Finally, most migration, even within lagging regions, is rural-urban in nature, with most migrants moving to metropolitan regions.

Migration is of course a rational decision at the individual level and will result in brain drain (defined here as a higher rate of net out-migration for higher-skilled workers), where the returns to human capital from migration are relatively higher for higher-skilled workers than for lower-skilled workers, as has typically been the case in Europe.

But the fact that brain drain exists does not necessarily mean it should be mitigated, particularly if the objective is to enable individuals to exploit their potential. In fact, with this objective, mobility should be encouraged where an individual is unable to make full use of their human capital assets in their current location. First, regional convergence will not be achievable without raising the levels of education and skills in lagging regions, both in absolute and relative terms. The reality is that even in the more extreme cases, the majority does not migrate. And thus, maximizing the human capital of the majority in a lagging region will likely have a significant impact on growth potential. Second, preventing labor from moving to where it can obtain its greatest returns is not only fighting a losing battle, but is also fighting a battle which, if won, results in a lower equilibrium for everyone, as it constrains productivity potential. Third, in the context where regional potential is limited, exporting productive human capital to where people can maximize their earnings potential and remit income is a proven, viable economic strategy, and thus one that already plays an important role in the economies of many regions of Europe and globally.

At the margin, of course, there are programs and incentives that can be put in place to try to keep human capital in situ. These include local educational subsidies and creating more lucrative or interesting professional opportunities. It is unclear whether such investments have a significant impact on migration decisions. More innovative approaches, particularly relevant in peripheral regions, actually encourage out-migration but with a built-in incentive to promote circular migration, with the benefit that returning migrants come back with strengthened human and social



Map 6.7. Net migration rate at NUTS-3 level in EU (latest three-year average)

Source: Eurostat.

capital (box 6.3). Yet, even these programs face difficulties. Increasingly the evidence suggests that retaining high-skill workers depends as much on quality of life as it does on relative earnings potential, which points to the potential importance of investing in urban physical, social, and cultural infrastructure.

Box 6.3. Sardinia's "Master and Back" Program

The Master and Back program, which encourages learning mobility, was launched in 2005 by the Italian region of Sardinia and cofinanced by the European Social Fund, with overall expenditures of more than €200 million. The scheme was expected to make university education for regional residents more accessible, more diversified in terms of available courses, and of better quality. The scheme was also expected to foster knowledge spillovers toward Sardinia and make its beneficiaries more "employable" by improving their skills matching in the labor market and reducing "brain waste." It did this by financing scholarships targeted at young Sardinian graduates to enable them to attend higher education courses training abroad; critically, it also provided for a return path, by providing a wage subsidy to employers willing to take on these students when they return.

A recent evaluation of the program (Crescenzi et al. 2017) found that while the program has a strong potential to improve the quality of both vertical and horizontal matching, benefits tended to "spill out," away from the local labor market of the region sponsoring the program. Individuals returning to work in Sardinia benefited less from the program in both vertical and horizontal matching than those who stayed abroad. This is likely to be the result of the weak local labor market conditions in Sardinia, and suggests that supplyside labor market policies cannot be decoupled from appropriate demand-side policies in lagging regions. Improvement of local firms' absorptive capabilities for skills is thus a crucial precondition for the local appropriation of the potential benefits of learning mobility schemes (in particular in lagging and peripheral regions).

Overall, however, this report argues for promoting both human capital improvements and mobility. In this respect, while migration levels are significant, there exist still many barriers that prevent individuals from making use of their human capital assets through mobility. One of them is transportation connectivity, in particularly local and regional-level links between rural areas and secondary towns. Another, as discussed previously, is broadband connectivity, which plays an important role in connecting workers to job opportunities and migrants to their homes. There is also an important role in improving the information flow through public and private employment services. And, finally, there is the need for direct support for mobility through financial and other support to address transportation and housing cost constraints.

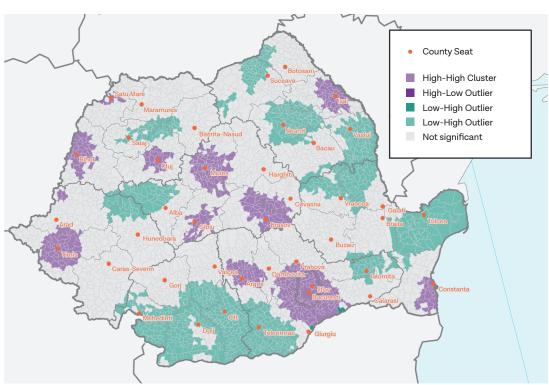
Finally, while cross-European migration tends to grab the headlines, the big story is much more local, involving shifts from rural areas to secondary cities and from secondary cities to national metropolitan regions. Figure 6.6 shows that the variation in migration rates among NUTS-3 regions (within NUTS-2) is much higher than the variation of income levels or growth. In some regions, these shifts are happening rapidly, suggesting an ongoing process of structural and spatial transformation.

For the most part, these shifts are urban-to-rural. Analysis of migration patterns in Romania over the past decade—for example, in figure 5.6—shows how cities have attracted the vast majority of internal migrants. Outside Bucharest, which attracted more than 36 percent of all internal migrants, another 30 percent of migrants moved to secondary cities (which account for less 20 percent of the existing population). Most of this is happening through relatively short-scale migration. In fact, the regions of Romania that are affected most by long-distance, external migration are remote and densely populated ones that lack a large and dynamic urban center to absorb the rural workforce. Thus, cities appear to be key to the labor mobility story, as they are key to the broader transformation agenda for lagging regions.

45,0 35,7 19,6 9 8 7 6 5 4 3 2 1 BG NL ΙE EL RO CZ PL SI IT SK UK FR ES DE GDP per capita growth - EU avg. Net migration rate - EU avg.

Figure 6.6. Coefficient of regional variation at NUTS-3 level: Net migration, 2012-15

Source: Eurostat.



Map 6.8. Romania migration analysis-clusters of significant relative growth and decline

Source: Cristea et al. (2017).

Target institutional strengthening as the critical endowment to bridge from policy to delivery

Delivering on reforms in the policy domains discussed in the previous chapter can only be possible in the presence of effective national and regional institutions. But in fact, institutional weakness, of both governance and capacity, is one of the defining features of lagging regions the world over. Thus, deep and persistent efforts to modernize institutions must be a high priority to underpin all other aspects of lagging regions policy.

Why do institutions matter for delivering on the lagging regions agenda, and what are the inherent challenges that arise in lagging regions? First, institutions matter for transformation. Facilitating economic transformation fundamentally requires a change to the structure and functioning of both economic and political institutions. Shifting from traditional economies (relying on agriculture, on natural resource extraction, or on local trade) or from economies reliant on mono-industries toward modern, externally oriented economies requires institutions that facilitate knowledge absorption, innovation, and competition—for example, prioritizing transparency and predictability to create a level playing field over support for "regional champion" firms and industries.

Second, institutions are critical to support adaptive regional economies. Institutions are fundamental to establishing an environment that facilitates regional adaptability, enabling regions to adjust to changing external contexts. At the regional level, it has been argued that regional adaptability is best served by an effective balance and interaction between societal institutions (often manifest through national-level institutions) and inclusive, engaged local communities (Rodriguez-Pose and Storper 2006). This requires the development of local institutional capital through intense community engagement—or "thick" local institutions (Amin and Thrift 1994)—operating within the context of an established and respected set of national institutions. The challenge in many lagging regions is that they often operate in a problematic (often sclerotic) national institutional environment. In such a context, community-level institutions offer an alternative; but in lagging regions, these are often thin and fragmented, dominated by entrenched elites who have both the knowledge base and incentives to reinforce the status quo.

Finally, in the absence of transformation and adjustment—in the many lagging regions where significant economic modernization may be unrealistic-institutions are critical to deliver equitable social outcomes. In the context, the nature of institutional needs will be different. The effectiveness of economic institutions will matter much less, but high-quality social institutions will be needed to ensure effective and efficient delivery of public services in difficult contexts, most notably in supporting human capital accumulation. Indeed, the absence of quality institutions may not only undermine economic competitiveness directly but also can have the effect of pushing out local human capital. For example, a 2015 survey of young migrants from Greece found that the top reason given for moving abroad was the lack of meritocracy and corruption in society (cited by 40 percent of respondents-even more than those who cited the economic crisis as the main reason for migrating abroad).

The quantitative evidence from an analysis of the role of institutions on regional outcomes in the EU strongly supports the theoretical views of institutional primacy. For example, the results from an analysis of the European Quality of Regional Governance indicators (EQI) show a strong correlation with GDP per capita and human development outcomes (Charron, Dijkstra, and Lapuente 2015). Similarly, the Economic Potential Index analysis found institutions (proxied by EQI) to have the strongest relationship with economic outcomes among all indicators in the model (World Bank and European Commission, 2017). These relationships matter from the perspective of lagging regions because

lagging regions generally perform poorly on measures of institutional quality. Figure 6.7 shows that most regions in countries containing lagging regions fall well below the European average level of institutional quality, with Portugal and Spain being the exceptions. However, an important caveat is that within countries, lagging regions do not necessarily have the lowest institutional quality scores. While lagging regions have markedly lower institutional scores than nonlagging regions in Italy, the differences are minimal in Romania, Poland, and Spain; and lagging regions actually have better institutional scores than nonlagging regions in Bulgaria and Portugal. One commonality (that explains the result in Bulgaria) is that large metropolitan areas often rate worst in terms of institutional quality.

As discussed above, results from the EPI assessment also support the primacy of institutions as a determinant of regional economic outcomes. The top 20 regions ranked according to their EPI index score have institutional quality measures 30 percent higher than the EU average. The findings on low potential regions are even starker—the 20 regions ranked lowest according to their EPI index have institutional quality measures 60 percent lower than the EU average.

But while institutions are often viewed as among the "deep determinants" of economic growth, evidence suggests that regional institutions can change over the short term. This is particularly true in the context of European integration, and so may be relevant for "low-income," lagging regions. Recent research (Rodriquez-Pose and Ketterer 2016) finds that regions which have been able to improve institutional quality have had significant economic payoffs. Figure 6.8 plots lagging regions according to their latest EQI score (x axis) and the three-year change in their EQI score (y axis). The results illustrate significant institutional change, both upward and downward. But no clear patterns emerge; both "low-growth" and "low-income" regions populate rising and falling regions, and while country clustering appears, it does not dominate, with Italian lagging regions (for example) among both those that increased (Calabria and Sicily) and decreased most (Molise, Basilicata, Abruzzo, and Sardinia). This suggests that policies focused on improving governance and institutional quality at the regional and local levels may have scope to effect significant change over the short to medium terms.

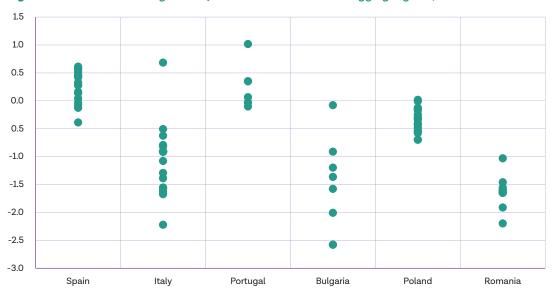


Figure 6.7. Distribution of regional EQI scores in countries with lagging regions, 2013

Source: Charron, Dijkstra, and Lapuente (2015).

Note: Greece and Hungary are excluded from the analysis as EOI is only measured at the NUTS-1 level.

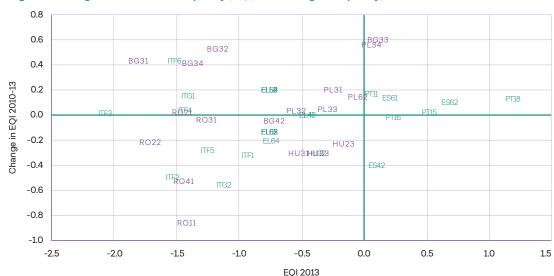


Figure 6.8. Regional institutional quality (EQI) and changes in quality, 2010-13

Source: Charron, Dijkstra, and Lapuente (2015).

Note: "Low-income" regions are highlighted in purple; "low-growth" regions are highlighted in green; axes are set at EU average levels

Notes

- ¹ Primary cities are defined as the largest city in each country.
- ² This is as developed by Dumitru Sandu, a member of the Faculty of Sociology at the University of Bucharest.
- ³ The connectivity is evaluated using the accessibility indicator that is widely applied in academic literature. The index for each of areas is calculated as the sum of populations of all other areas in the country divided by the travel time to those areas. For details of the methodology, see Rosik, Stepniak, and Komornicki (2015).
- ⁴ These scenarios used EU 2020 targets for early school leavers and tertiary education.
- ⁵ "Low-growth" regions arguably have had a chance to integrate institutionally for decades, so one might expect large short-term improvement from "low-income" regions.
- ⁶ The scale for EQI generally ranges from about −3.0 to +3.0.

Chapter 7:

Policies for sectoral transformation in lagging regions

Development of a competitive private sector—that invests and creates good jobs—depends on having the type of quality business environment and strong endowments discussed in the previous two chapters. But this is not enough. It also requires facilitating the process of regional transformation by helping high-value-added sectors and firms to emerge in an environment that promotes experimentation and self-discovery, supported by a strong regional innovation system and dynamic urban spaces.

Structural transformation is needed across lagging regions

Removing market distortions and strengthening the endowments of regions establishes an environment in which the private sector can be more confident that it can profit from investments, that it can appropriate these profits, and that it can access the finance needed to invest in the first place. But in the context of rapidly changing technology and globalization (as discussed in chapter 1), profitable investments will increasingly require shifting into high-value-added, knowledge- and technology-intensiveactivities. For all European regions, this means that policies supporting the competitiveness and upgrading of sectors, and in particular innovation policies, as well as policies supporting the upgrading of firm capabilities, are a critical complement to the horizontal policies emphasized in the previous chapters. And as shown in chapter 2, for lagging regions the situation is more complex, as most still require a structural transformation to move their economies and firms closer to the technology frontier.

Lagging and nonlagging regions differ in their structures of employment, as shown in figure 7.1. "Lowincome" and "low-growth" regions both have markedly higher shares of agricultural employment relative to nonlagging regions. They also have a much lower share of high-productivity, tradable activities, notably industry and advanced services, with "low-growth" regions having very low levels of industrial employment and higher levels of advanced services employment, while "low-income" regions show the opposite structure.

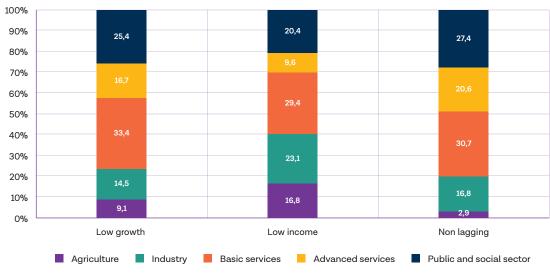


Figure 7.1. Employment structure by region type, 2015

Source: Eurostat.

Note: "Basic services" include construction, wholesale and retail trade, transportation, accommodation, and food service activities; "Advanced services" include information and communication, finance and insurance, real estate, professional, scientific and technical activities; administrative and support service activities, and arts, entertainment, and recreation.

"Low-income" regions are in the middle of a process of relatively rapid structural transformation. As discussed in chapter 2, the shift of workers from low- to higher-productivity employment—mainly through the shift out of agriculture and into industry and services—is contributing substantially to growth. A big part of this transformation has come through trade and investment integration with the EU, including through participation in regional value chains. Figure 7.2 puts this integration into perspective. In 1995, new EU member countries had only 45 percent of their exports in the EU's three

largest export sectors - machinery (e.g., computers, integrated circuits, cell phones, TVs, video displays, refrigerators), transportation (e.g., cars, vehicle parts, buses, motorcycles, planes, trains), and chemical products (e.g., medicine, cosmetics, cleaning products, pesticides, glue). By 2015, they reached parity with old member countries at 72 percent.

The challenge for "low-income," lagging regions is twofold. On one hand, many of them—particularly the more peripherally located regions—are still in the early stages of the transformation process and have a large share of their population engaged in low-productivity agriculture. For example, almost all lagging regions in Poland and Romania rely on agriculture for at least 20 percent of employment. For these regions, the priority is to raise productivity in the agricultural sector, while also developing the capacity to support investment in manufacturing and services. In parallel, "low-income" regions must also find a way to start moving quickly up the value-added ladder in the manufacturing and services sectors, in order to sustain the levels of productivity that will be needed for convergence. This will require attention to strengthening human capital but also designing and implementing strategies to develop key sectors where regional comparative advantage exists.

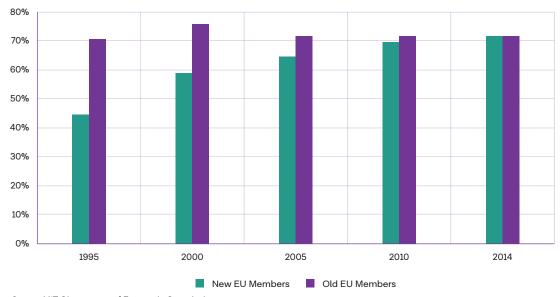
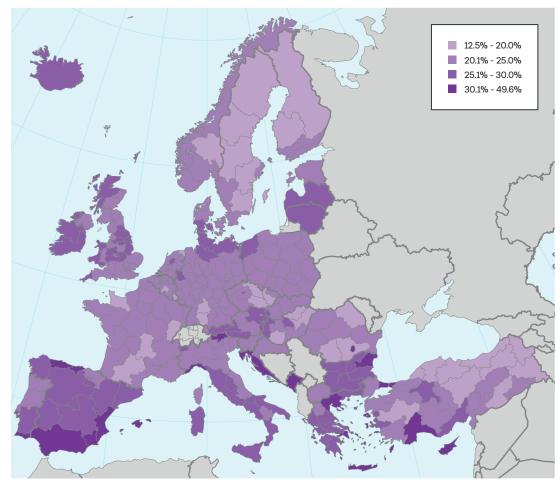


Figure 7.2. Convergence of sectoral export composition in old and new EU members

Source: MIT Observatory of Economic Complexity.

Note: Data refer to exports (in US\$) in the following three sectors: machines, transportation, and chemical products. New EU member countries include Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, and Slovenia. Old EU member countries include Belgium, Denmark, Finland, Germany, France, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

For "low-growth" regions, the challenge for regional transformation is addressing the overreliance on low-value-added, (typically) nontradable services, as the map in map 7.1 shows. In the most extreme case, one "low-growth" region has 56 percent of all jobs concentrated in low-value-added services. In another region, half of all employment comes from the public sector. Indeed, a number of "lowgrowth," lagging regions display the characteristics of "sheltered economies" (Fratesi and Rodriguez-Pose 2016), where the lack of exposure to competitive markets contributes to long-term, below-trend growth. For these regions, the priority is developing opportunities for the growth of firms and sectors that can compete outside local markets and drive faster productivity growth. This will require not only establishing a business environment that attracts outside investors but also strengthening the competitiveness and innovation capacity of local firms.



Map 7.1. Employment in low-value-added services sectors

Source: Eurostat

Transform agricultural regions by moving up and moving out

For most lagging regions, structural transformation from agriculture remains an unfinished project. This is true mainly in "low-income" regions, particularly in Romania and Bulgaria, but it is also true in Poland, as well as in Greece and Portugal. Policy scenarios carried out as part of the EPI analysis discussed earlier in this report suggest that agricultural transformation could be expected to have a substantial impact on growth across most lagging regions (figure 7.3)—about 7 percentage points (in PPS relative to the EU average) on average in Greece and Portugal, and more than 10 percentage points in Romania and Bulgaria.

Making this transition depends precisely on the complementary policy approach this report advocates. Specifically, it requires, on one hand, targeted sectoral approaches in agriculture to raise agricultural productivity and increase value added in agricultural outputs. But in order to enable the

transition, complementary interventions-through endowment-building and distortion-removing policies—are needed to establish a regional environment that can support investment in high-valueadded manufacturing and services. As outlined in a recent report (World Bank 2018), many countries in the EU have been successful in making the transition out of low-productivity agriculture, to the point that agriculture is no longer correlated with poverty in Europe at the regional or local levels. Figure 7.4 illustrates the central finding from that report, showing the pathway of transformation, from those countries and regions in the upper right-where agriculture and poverty are co-located and Common Agricultural Policy (CAP) payments are concentrated in high-poverty areas-to the "successful transformers" in the lower left, where these relationships are no longer correlated. The findings indicate that Poland, and especially Hungary, among the countries with lagging regions, are well on the pathway to successful transformation. However, most of the rest of "low-income" and "lowgrowth" Europe—especially Portugal, Spain, Romania, and Bulgaria—remains in the very early stages of transformation.

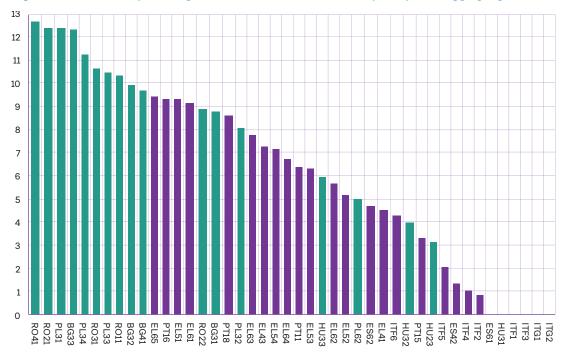


Figure 7.3. Potential impact of agricultural transformation on GDP per capita in lagging regions

Note: The purple bars indicate "low-income" regions and the green bars are "low-growth" regions; based on data from Eurostat as analyzed in the EPI model (World Bank and European Commission 2017); the policy scenario assumes regions' agricultural share of the economy at the EU average.

Some common ingredients are apparent in the approaches of these "successful transformers" (World Bank 2018). First, funding from the CAP, particularly "decoupled" payments (payments not linked to production) plays a central role not only in supporting and smoothing the earnings of farmers but also in supporting investments that contribute to increased productivity. At the same time, the successful transformers have benefited from (I) "getting the basics right"—that is, strengthening key endowments through investments in rural roads, electricity and communications, human capital, and sector-specific institutions like extension services and farmers organizations; and, (2) complementing this with support—through Pillar II of the CAP, which funds rural development, including through the European Agriculture Fund for Rural Development Fund (EAFRD)—for value-adding investments in agribusiness and other diversified activities.

2.0 Average Strength of Association between CAP payments and Poverty (Standardized) 1.5 1.0 0.5 0.0 -0.5 -1.0 -1.5 -2.0 -2.0 -1.5 -1.0 -0.5 0.0 0.5 1.0 1.5 2.0

Strength of Association between Agricultural share of area and Poverty (Standardized)

Figure 7.4. The path and performance of agricultural transformation across EU countries

Source: World Bank (2018).

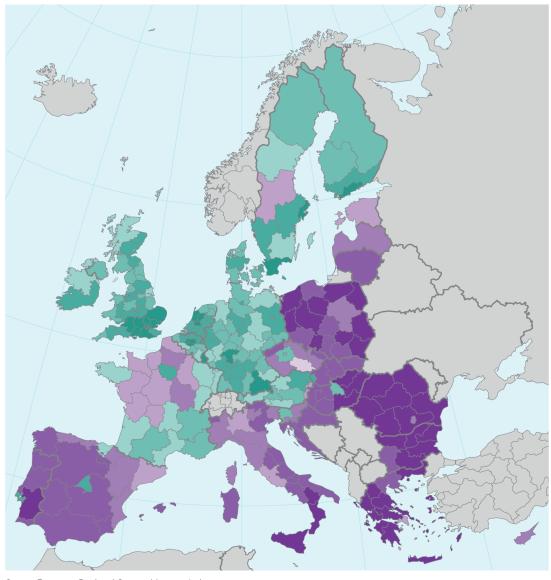
Note: Purple represents new member states; green represents old member states.

Complement smart specialization with crosscutting innovation

Beyond agriculture, the emphasis in Europe is, quite rightly, on technology- and knowledge-intensive activities as the drivers of productivity growth and regional transformation. Development of the highproductivity, knowledge-intensive tradables sectors and support for firms to enter and expand in these sectors remain a major focus of cohesion policy spending in lagging regions. This includes substantial support directly for firms—to increase firms' capabilities and provide access to finance for investments to expand and upgrade. And, particularly since the last programming period, it has included an intense emphasis on innovation, through a combination of interventions at the firm, cluster/sector, and regional levels.

Yet, the starting point of regions, when it comes to innovation outcomes and innovation capacity, obviously varies tremendously. Map 7.2 illustrates NUTS-2 regions on the innovation capabilities, highlighting broadly the regional divides seen throughout this report. On one hand, this innovation divide highlights the need for a focus on innovation policy in lagging regions to close the gap. On the other hand, it raises the question of whether it is reasonable and effective for all regions to set similar objectives with regard to innovation-driven growth. Indeed, the very nature of technological innovations over recent decades has increased the returns to agglomeration (Iammarino, Rodriguez-Pose, and Storper 2017), exacerbating regional divergence.

In this context, Smart Specialization, which was adopted as the primary approach to sectoral intervention under cohesion policy in the 2014-20 programming period, has been important. Smart Specialization aims to force regions to identify and focus resources on sectors that are in line with existing or latent regional comparative advantage, and where there is potential to leverage strong cluster effects. In this way, regions are not all aiming to become the next Silicon Valley or the next biotech hub. Perhaps more important, Smart Specialization helps make the distinction between targeting innovation intensive / high technology sectors and treating innovation as a horizontal sectoral policy that is relevant in all sectors and in all places. The former approach risks setting unreasonable expectations and developing inappropriate strategies for lagging regions, while the latter offers the potential for adaptation both to sectoral and regional needs.



Map 7.2. European Regional Competitiveness Index-Innovation Sub-Index, 2016

Source: European Regional Competitiveness Index.

Note: Green (and darker) indicates highest innovation; purple (and darker) indicates lowest innovation.

Yet, while Smart Specialization can support transformation in many regions, it may not be the most effective approach in all regions at all times. In particular, where regional comparative advantage is not already apparent, there is a tendency to identify these sectors ex ante and channel resources to develop them. Instead, a more appropriate approach, especially in lagging regions plagued by thin markets and government failures, may be to allow these sectors to emerge over time by establishing an environment that incentivizes experimentation and facilitates market entry and exit (Correa and Guceri 2016). This type of approach again emphasizes the horizontal agenda, including ensuring an unhindered business regulatory environment, a level playing field for competition, and transparent governance.

Furthermore, while it is hard to argue against the innovation agenda per se, it is important to emphasize that the nature and extent of innovation should be context-specific. Lagging regions in Europe operate relatively far from the technology and knowledge frontier, so a greater emphasis on adaptation rather than innovation may be more appropriate, as would measures to support basic technology adoption. At the same time, this can be supported by efforts to develop a strong innovation ecosystem, which focuses on building knowledge, and by connecting knowledge to markets in a way that is not locked in to specific sectors or technologies.

Finally, remembering the importance of complementarity in policy delivery and the importance of agglomeration in supporting innovation, lagging regions may benefit from integrating planning and programs for sectoral and urban policy. Specifically, regions should focus on leveraging the assets of their largest urban areas to create an environment that attracts and retains knowledge workers. Key to this is the role of universities. In the context of demographic decline, universities ensure a continuous inflow of young and well-qualified people. An in-depth analysis of migration dynamics in Romania and Poland (Cristea et al. 2017) indicated that the localities most astute at attracting people, and the cities with the most dynamic economies were university cities like Krakow, Wroclaw, Gdansk, Poznan, Cluj-Napoca, Timișoara, and Iași. These are also some of the youngest cities in the EU. "Low-growth" regions in Southern Europe also have large universities in cities like Seville, Naples, Porto, Coimbra, and Thessaloniki, although many of these have struggled to retain students in the city after they graduate.

In this context, cohesion policy could contribute to more and better ways of supporting universities and improving their performance. This includes increasing dialogue between universities and the private sector, to ensure that universities adequately respond to market needs. For example, in Cluj-Napoca and Iaşi (see box 7.1), in Romania, representatives of the burgeoning information technology sector are directly teaching university courses and offering generous internships to students, and they train them with the skills that are required in the local market.

Box 7.1. The role universities can play in the development of the least developed region in Romania

The North East Region of Romania is the poorest NUTS-2 region in the country, and one of the poorest in Europe. Its peripheral position, relatively low urbanization, and dominance of smallscale agriculture are some of the ingredients responsible. The region has a bright spot, however—the City of Iași. Iași is the third-largest university center in Romania (after Bucharest and Cluj-Napoca), with a student population of about 55,000. The universities in Iași bring to the city a constant flow of young and well-educated people, which is of critical importance in an environment of overall demographic decline and aging. Also, while laşi is only 12th in the country in terms of economic output, it is 4th when it comes to the number of migrants it has managed to attract. Moreover, Iaşi has a much larger migrant catchment area than more developed cities (e.g., Constanța, Braşov, Ploiești, Pitești, Galați, Târgu Mureș, Arad), which may enable it to become more competitive in the future, as a larger migrant catchment area also means access to a larger and more diverse pool and human capital.

Universities have also enabled the development of high-value-added industries in Iaşi, such as IT&C (with companies like Amazon and Oracle present locally), pharmaceuticals, and consulting. Moreover, several

manufacturing companies have opened research-and-development centers in lasi, trying to take advantage of the human capital in the city. When looking at the Hachman Index (which measures the complexity of a local economy), Iași is ranked 3rd in Romania (after Bucharest and Cluj-Napoca), indicating a high economic dynamism despite relatively poor economic output overall. Iași may well prove to be the economic engine that will boost the economy of the North East Region, and it may absorb a share of the excess labor force in rural areas. Unlike other lagging regions in Romania, such as the South Region and the South West Region, the North East Region has a high number of young people living outside one of the main functional urban areas (FUAs). Provided the FUAs in the North East Region will strengthen their private sector, they may attract more of these young people (which have the highest likelihood of migrating) and increase productivity rates.

Source: "North East Romania Case Study" (Mazurencu-Marinescu 2017).

Chapter 8:

Aligning institutions and incentives to deliver a "region-centered" cohesion policy

Textbook policy prescriptions may be grounded in theory and supported by evidence, but too often insufficient attention is paid to how they will be delivered in practice. This may be especially true of regional policy, where a solution which works well in one location may need to be designed or delivered very differently in the next location. This chapter discusses key principles for the delivery of policy in lagging regions. It argues for more coordinated planning across both sectoral and spatial levels. It also makes a case for a stronger focus on local ownership of the planning and implementation process, supported through intensified technical assistance and capacity building, along with greater responsibility for delivering results. In this respect, the chapter argues for a more targeted approach to deploying conditionalities and proposes greater emphasis on results-oriented financing.

Improve coherence through balanced programs and coordinated planning

Delivering bigger impact on the ground in lagging regions requires not only the most appropriate set of policy domains for meeting and expanding regional potential but also sequencing and coordinating interventions to maximize their impact. This requires that regional development plans achieve an effective balance at both the policy and the spatial levels. In terms of policy, the important issue for regions is developing balanced strategies that consider the sequencing of interventions. For example, a program that increases the connectivity of a peripheral region without also strengthening the productivity of local firms and human capital opens up the region to hollowing out as more competitive firms from outside the region displace local businesses—the classic "two-way road" argument. Similarly, investing solely in building human capital without also creating an environment for local job creation will simply lead to brain drain (Rodriguez-Pose and Wilkie 2017). Arguably, investments in many "low-growth," lagging regions over the past two decades have been unbalanced, with intensive investments in transportation infrastructure not supported with complementary investment in other key development axes. Integrated strategies that take into account the current regional context and short- to medium-term economic potential when sequencing interventions are critical for the successful delivery of regional policy.

Planning and delivering regional policy in such a balanced way requires sectoral and spatial coordination. It also requires a mechanism for more integrated access to funding instruments. At present, regions are typically forced to draw separately from individual funding instruments. This fragmentation not only limits the potential to benefit from complementarities and from scale economies in projects but also increases transaction costs and imposes administrative delays.

Recognizing this, the EC introduced "integrated territorial investment" (ITI) during the most recent cohesion policy programming period (2014–20).¹ ITI is a tool that allows for implementation of operational programs in crosscutting way, and to draw on funding from several priority axes of one or more operational programs to ensure the implementation of an integrated strategy for a specific territory. Consequently, ITIs can involve investments from the ERDF, the ESF, and the CF. Funding can also be complemented with support from the EAFRD and the EMFF.

ITIs have proven quite popular-20 member states use them-but the actual funding applied to the ITIs remains limited, and funding is concentrated. Of ITIs' total allocated funding of €13.8 billion, more than 85 percent (€11.8 billion) is through ERDF, 12 percent (€1.7 billion) is through ESF, and just €0.3 billion is through the Cohesion Fund. Almost 80 percent of ITIs' funding is concentrated in nine member states, and 28 percent in Poland alone. As anticipated, ITIs proved quite popular in urban areas to support sustainable urban development strategies (SUD), which became a legal requirement under Article 7 of the ERDF. Of the 880 SUD strategies formulated as of mid-2017, just 28 percent used the ITI approach, despite the fact that 71 percent used a multipriority axis to justify their investments. However, those that did use the ITI approach were much more likely to draw on multiple sources of funding, including combining ERDF and ESF funding, as well as funding from multiple operational programs.

In terms of spatial coordination, the use of ITIs also shows mixed results. ITIs do appear to have been useful in ensuring vertical coordination between various levels of government. However, the use of ITIs appears to mainly be used to "compensate" for the absence of a planning/financing tool below the NUTS-2 region designation, rather than to coordinate across spatial units.

But despite the challenges—including institutional and administrative capacity, regulatory hurdles, and inherent difficulties with coordination—the integrated planning and financing approach encapsulated in ITIs offers an opportunity to contribute not only to more effective program delivery but also, over the longer term, to improved strategic planning, innovation in program design, and improved communication and mobilization of local actors. Indeed, strengthening local capacity for planning and delivery is particularly important in the context of a regional policy that aims to maximize the potential of individual regions.

The ITI example is just one of several opportunities to better integrate planning and funding instruments not just within cohesion policy but also between cohesion policy instruments and other instruments of European regional development—for example, CAP's EAFRD.

Improve effectiveness of delivery through empowered local planning

Taking a "region-centered" approach to cohesion policy has several implications for delivery. First, it requires regional and local authorities taking the lead to define priorities and policy responses. This is important both to ensure that the strategic direction reflects the local context and that it has local legitimacy. Recent research (Crescenzi, Fratesi, and Monastiriotis 2017) identifies the importance of planning consistency and of consistency between targeted objectives and on-the-ground needs in determining the effectiveness of cohesion policy spending.

Yet, in practice the delivery of cohesion policy programs to regions varies considerably across the EU, and is highly top-down in many countries. For example, in Greece, for the 20 years from 1993 through 2010, regional operational programs reflected almost exclusively the priorities of the central government, with no strong regional institutions and procedures for participation in decision making. This only changed after 2010 with elected regional authorities. A similar situation prevails in Romania, where regional programs are strongly centrally determined and regional development authorities have minimal authority. In both Greece and Romania, one of the results is that program funding is often distributed through nationwide calls for proposals in programs that are thematic or sectoral in nature but are expected to be completely uniform from one region to the next. Poland offers a contrast, with 16 autonomous regional operational programs.

Even subsequent to the "decentralization" of EC funds (after 2010), the administrative disconnect between the management of the EU funds at the regional level in several countries (including in Greece, Romania, and Italy) and the existing structure of government creates parallel systems, exacerbating conflict between national, local, and regional priorities, and straining the capacity of the local entities. This is clear in both Greece and Romania. In Greece, the management of the Regional Funds is through a parallel Special (Regional) Management Authority, chaired by the elected president of the Regional Government. Quite apart from the coordination concerns that parallel structures raise, the relationship between the Regional Government and the Special Management Authority (SMA) has meant that, in practice, the regions can and have made use of the SMA in their planning for a regional strategy, and then in prioritizing their programs and projects in line with that of the Regional Operational Program (ROP).

In contrast, the municipalities which have a nonhierarchical relationship to the region are unable to capitalize on the SMA resources in the same way and therefore enter into the discussions on the ROP at a disadvantage. Furthermore, because of the nonhierarchical relationship between the local and regional entities in Greece, the priorities of the two entities are often not aligned, with local govern-

ments tending to follow the priorities of their parent ministry rather than those of the region. Accessing finance from the ROPs may, therefore, be difficult for municipalities since their priorities would not reflect those of the region.² Similarly, in Romania—which is constitutionally organized administratively into communes, towns or municipalities, and counties-NUTS-2 divisions of the EU Classification Criteria (Regional Development Agencies—RDAs) have no administrative attributes or capabilities. Instead, the RDA develops strategies, attracts resources, identifies and implements financing programs, and provides services for implementing economic development programs and partnerships, but there have been examples were these are not aligned with the local government councils' priorities and have, therefore been rejected by these councils.3

Poland, by contrast, has greater administrative alignment, with the regional level of government (wojewodztwa) corresponding to the NUTS-2 region. Underneath this is the county or district level, and below that are the towns and rural communes. Each level is governed by an elected council (self-government). There is an overlap between the central administration and the self-governments, in that the provincial governor is nominated by the president. This appears to have an effect of ensuring a more coordinated approach to regional development, while providing a clear channel for prioritization and program development to emerge from the local level. Of course, realigning administrative structures is not a simple solution-indeed, it may require constitutional change. Therefore, it is necessary to find working solutions, even in the absence of administrative alignment, to ensure effective coordination and enable local ownership. Many models exist throughout the EU, which can be adapted to the needs of individual regions (see box 8.1 for one example, from Sardinia).

Box 8.1. Contrasting approaches to regional planning in lagging regions—Central Macedonia and Sardinia

Central Macedonia (Greece)

The regional strategy for Central Macedonia is reflected in the Strategic Program of the Region 2015-19, which amalgamates (1) the Strategy of the Regional Operational Program Central Macedonia 2014-20; and (2) the RIS3 strategy, which is the conditionality of the Regional Operational Program (ROP). The ROP focuses on the "promotion of the existing and the creation of new competitive advantages through the integration of innovative components and processes in all sectors of the economy" and sets priorities as (1) innovation, competitiveness, openness; and (2) the development of human resources and employment. The RIS3 sets the objective for the region "to become an Innovation Node for the wider area of Southeastern Europe...". Municipalities are required under Law 3852/2010 to prepare their own five-year Operational Programs. Despite this obligation, these remain incomplete for several municipalities in the region. In addition, the municipalities have followed a template provided by their parent ministry, whereby both the overall strategic goal and individual measures/indicators are predefined. Thus, operational plans come top down and do not necessarily reflect local realities and priorities, and local priorities are not necessarily incorporated into regional strategies.

This lack of effective alignment-from the national to the regional to the local levels-exacerbates problems with on-the-ground implementation. One example from the region can be seen in the operationalization of innovation strategy. As an EU and national priority, innovation has taken center stage in much of Greece's cohesion policy program and, as discussed above, it is at the heart of Central Macedonia's ROP. However, it has been argued that at the regional level, there is often little ownership of the innovation agenda. Rather, innovation was treated as an "obligation" rather than a priority by the regional partners. And when it was decided to create innovation support structures, the lack of institutional framework, their low priority in the partners' aspirations, and the lack of available resources led to enormous delays. This is illustrated in the creation of the "Alexander Innovation Zone," a science park in Thessaloniki designed to attract innovative enterprises and research institutions). The Alexander Innovation Zone has been a goal since 2000; and much later, in 2006, an institutional framework for its governing body was acquired, and there is still (as of 2017) no institutional framework to enable businesses to establish in the park.

Sardinia (Italy)

Sardinia mixes bottom-up and top-down approaches. The process allows the participation of local actors at all stages, starting from the definition of issues, identification of needs, and finally implementation of the response. Local administrative units define the "needs" through the Union of Local Administrative Units (Unione dei Comuni). Economic and social actors play a fundamental role in this bottom-up phase through the constitution of the Partnerships of Business and Social Actors (Parternariato delle parti economiche e sociali).

The process starts with the presentation of place-based development projects by the Union of Local Administrative Units to the economic department of the regional government, which evaluates the plan based on consistency with the Regional Development Plan. Once the projects are evaluated, the Union of Local Administrative Units, along with the Partnerships of Business and Social Actors, are invited to open a negotiation with the economic office of the regional government, aiming at better defining the project strategy and, above all, the operations that can be funded with its management plan. Each negotiation concludes with a governance agreement formalized with the deliberation of the executive power, which is finally approved by the regional parliament. In this way, the planning approach associates all available financial sources to a set of common, place-based objectives, with the view of concentrating and integrating these resources. The innovation of such an approach for local development lies in (1) the precise identification of the areas covered by the intervention; (2) the promotion of development through projects funded by the various available European funds; and (3) the certainty of the timing, process, resources, and the tracking of results.

Sources: "Sardinia Regional Case Study" (background paper for this report); "Central Macedonia Regional Case Study" (background paper for this report); ground paper for this report).

A second implication of taking a more "region-centered" approach is that, along with local ownership, should also come capacity building, to enable local actors to plan and deliver on regional policy. The lack of local-level capacity is a major barrier both in planning and implementation. In terms of planning, it has been highlighted in several lagging regions that capacity at regional and lower (e.g., municipality) levels for planning is weak. Moreover, capacity for project management is often very limited, with heavy reliance on external technical consultants (also of variable capacity).

There are no data identifying determinates of absorption across the EC. However, several studies—including from the Netherlands (De Rooij 2002), Slovakia (Zubek and Henning 2016), Estonia (Tatar 2010) and Romania (Volintiru, Ionescu-Heroiu, and Goga 2018)—provide pointers. Among the findings is that administrative and project management capacity, as well as local leadership, significantly affect the absorption of EU funds. In turn, however, the EU fund absorption process also assists in capacity development. The case study on Romania found no statistically significant correlation between GDP levels and the level of EU fund absorption; however, municipalities that were most effective in attracting EU funding were also the ones most successful in attracting FDI. In addition, the analysis found that the economic environment affects the development and the implementation of EU projects (especially the availability of construction workers, bankruptcy of contractors, etc.).

Finally, evidence in Romania also points to the fact that most of the Romanian municipalities had relatively proportional capital expenditures and EU funding allocations between 2010 and 2015. This follows the broader aid absorption capacity observed across the EU regions, and is congruent with the principle of co-funding structural projects: the bigger a local government's own budget, the bigger its willingness to invest in partially funded EU projects. In general, therefore, this points to some evidence that size—especially the size of the municipal budget—matters. This is substantiated by research done by De Rooij (2002) and Tatar (2010) on size and by Tatar (2010) and Zubek and Henning (2016) on the fact that budget size (i.e., municipal financial resources) is important due to the co-financing aspects. This may have a negative impact on local governments in lagging regions, which presumably have less financial resources for co-financing. What also emerges significantly in Estonia, Slovakia, and Romania, however, is that absorption performance is also linked to administrative capacity for project management, both in accessing finance and in implementing projects, as well as local leadership (see also Tatar 2010; Zubek and Henning 2016).

Table 8.1. Key aspects of organizational performance in EU-funded projects

Municipality 	Technical Assistance		External Consultants		Chain of Command—Direct Subordination to the Decision-Maker	
	Standard TA	Additional TA	Programming and technical	Project management	Directly under the Mayor	Fast-tracked to decision-maker
Arad	х	х	X			
Oradea	Х	Х	Х		Х	
Craiova	Х	Х	Х	Х	Х	Х
Slatina	Х		Х	Х	X	Х
Târgoviște	х	Х	Х			Х
Focșani	Х		n.a.	n.a.	X	Х
Brăila	х		n.a.	n.a.		
Bacău	х		X		Х	Х
Piatra Neamț	Х		Х		Х	Х
Botoșani	Х		Х		Х	Х
lași	х	Х	х		х	х
Miercurea Ciuc	Х			X		X

^{*} difference between (a) the budgeted staff in the specialized department of the Local Government, and (b) the World Bank Recommendation of optimal staffing (i.e., 1 project manager per €10 million project allocation).

Source: Technical assistance information was gathered from the 2007-13 POAT funding, and in-depth interviews with local government and Regional Development Agency representatives on additional technical assistance programs accessed by each local government (e.g., World Bank, PHARE); external consultants' information was gathered from in-depth interviews with local government and regional development agency representatives, and for local governments that had none, limited or not satisfactory project management external consultants it is not marked in the table; chain of command information was gathered from the local governments organizational charts and from in-depth interviews with local government and regional development agency representatives.

First, capacity matters in accessing finance; and at this stage of the process, technical assistance packages, especially with regard to a local development strategy or development road maps, are essential to the quality of applications, and the clarity of subsequent implementation phases. What also emerges is that at this initial stage, external consultants are extremely useful; although the issue is that these are often available only to municipalities that can invest in their services on the assumption that they will generate a return on investment for the municipality (i.e., accessing the funds).

Second, organizational chart architecture is telling of the priority a local government gives to attracting and implementing EU-funded projects. The shorter the "power distance" is to the decision maker (i.e., mayor or city manager) the more swiftly documents are signed and procedures are resolved. That is not to say that specialized departments cannot perform well if they are subordinated to a deputy mayor, but the core issue is to spend as little time as possible collecting all the necessary signatures and approvals. Tellingly, what this also means is that the benefits for external consultants diminish once implementation starts—the main reason for this is the limited access that external consultants can have to internal procedures (e.g., signatures, validations, documentation), which means that the internal teams are involved anyway in the management process.⁴ At this point, it is important to have a specialized section leader or city manager who has experience with absorption mechanisms, as well as proactive engagement to stay ahead of the changing "rules of the game" and build a specialized team.

Third, having sufficiently large project management teams (i.e., one project manager per €10 million allocated)⁵ emerges as a factor of success in absorption, once implementation begins. The lack of experience with large investment projects, as well as the bureaucratic specificities of managing EU-funded projects, means that a project manager should not oversee too many projects at the same time, especially if these are complex, large investment projects that can expose the local government to serious financial risks in case of irregularities.

However, one of the most discernible effects of the EU fund absorption process has been the strengthening of the administrative capacity of local governments. In this regard, previous research on other Central and Eastern European countries also attests to the role of EU funding as a driver of institutional reform or administrative consolidation (Dabrowski 2008). Still, many other studies are more cautious with regard to the actual accomplishments, seeing administrative capacity as still being faulty in new member states, as well as having a limited ability to develop their own strategies, coherent public policies, and monetarization mechanisms in the absence of EU conditionalities (Verheijen 2007).

The Romania study reflects a more optimistic picture with regard to administrative consolidation; as challenged as they might have been at the beginning of the 2007-13 funding period, most of the highperforming local governments testify to substantial learning effects. As such, the benefits of EU high absorption levels are not confined to finalized projects, as they also include developing an institutional culture of complying with structured procedures and elaborating strategic planning. We also find evidence of learning effects with regard to organizational structuring, as adaptive patterns emerge in more ambitious local governments that aim to increase further their absorption capacity over the next period (e.g., Iași Municipality has recently designed a new organizational chart for its specialized unit with dedicated subsections for each of the main targeted programs or funding lines).

Strengthen the incentives for reform

Effective delivery of regional policy also requires establishing the right incentives to ensure that strategies are well planned and that operational programs are well executed. Three key aspects of the incentive environment should be considered: What (actions, policies) to incentivize? At what level? And through what instruments? To date, the main instrument has been ex-ante conditionalities (ExAcs), which have targeted "enabling" conditions operating largely at the national level. However, there is increasingly a move to simplify these conditions and shift from an ex-ante to and ex-post approach.

Fewer, more targeted, and enforced ExAcs

ExAcs, which establish eligibility criteria to access financing, were introduced during the 2014–20 programming period in an effort to ensure that member states implemented structural changes and policy reforms at the national level, and set strategies, planning, and investment prioritization at the national, NUTS-2, and NUTS-3 levels. Establishing ExAcs also implicitly recognized the importance of accountability between the EC and member states.⁶ The intent of ExAcs was to tackle persistent bottlenecks to investment that were both horizontal (e.g., procurement, small business etc.) and sectoral (e.g., transportation, energy, etc.) in nature. As such, ExAcs have been introduced in the regulatory framework for the European Structural and Investment Funds (ESIF) for the 2014-20 period to ensure that the effectiveness of EU investment is not undermined by unsound policies or by regulatory, administrative, or institutional bottlenecks.7

Box 8.2. Thematic Ex Ante Conditionalities

- A.1-1 Research and innovation ex ante conditionality
- A.1-2 Research and innovation infrastructure
- A.2-1 Digital growth
- A.2-2 Next Generation Network (NGN) Broadband Infra.
- A.4-1 Energy efficiency in infrastructure, public buildings, housing sector
- A.4-2 Cogeneration
- A.6-1 Water
- A.6-2 Waste
- A.7-1 Transportation
- A.7-2 Railway
- A.7-3 Other modes of transportation
- A.7.4 Smart energy distribution, storage & transmission
- A.8-1 Access to employment
- A.8-2 Self-employment
- A.8-3 Labor market institutions
- A.8-4 Active and healthy ageing
- A.8-5 Adaptation of workers, enterprises/entrepreneurs to change
- A.8-6 Youth Employment Initiative
- A.9-1 Active inclusion
- A.9-2 Integration of marginalized Roma communities
- A.9-3 Health
- A.10-1 Early school leaving
- A.10-2 Higher education
- A.10-3 Lifelong learning
- A.10-4 Vocational education and training
 - A.11 Institutional capacity and efficient public administration

The 48 ExACs contain seven general ones that are related to Common Provisions Regulation (CPR) and are linked to horizontal aspects of program implementation, applicable to all ESI funds. The seven Ex-ACs include provisions on antidiscrimination, gender, disability, public procurement, state aid, environmental legislation, and statistical systems/result indicators. The remaining ExAcs are thematic, and related to sectors (see box 8.2). Each ExAc has a list of fulfillment criteria, and the EC has also developed guidelines on fulfillment of the criteria (see table 8.2 for an example on solid waste management).

Initial findings are that the ExACs were extremely successful in ensuring regulatory and institutional convergence as they sped up the execution of structural and institutional reforms, thus providing the foundation for additional reforms and new policy design. However, the introduction of the ExAcs did come at some cost, as the ExAcs were deemed to be extremely complex, rigid, and time consuming (particularly to assess implementation)—and, for some member states, the criteria were difficult to fulfill.8 The proposed solution for the complexity of the ExACs has led several member states to request fewer ExACs.

Table 8.2. Example: Waste ExAc link to thematic objectives, investment funds, and fulfillment criteria

Thematic objectives	Investment priorities	Ex ante conditionality	Criteria for fulfilment
Preserving and protecting the environment and promoting resource efficiency [referred to in Article 9(6)]	ERDF + Cohesion Fund: Investing in the waste sector to meet the requirements of the Union's environmental acquis and to address needs identified by the Member States for investment that goes beyond those requirements	6.2 Waste sector: Promoting economically and environmentally sustainable investments in the waste sector particularly through the development of waste management plans consistent with Directive 2008/98/EC, and with the waste hierarchy.	An implementation report as requested by Article 11(5) of Directive 2008/98/EC has been submitted to the Commission on progress toward meeting the targets set out in Article 11 of Directive 2008/98/EC. The existence of one or more waste management plans as required under Article 28 of Directive 2008/98/EC. The existence of waste prevention programs, as required under Article 29 of Directive 2008/98/EC. Necessary measures to achieve the targets on preparation for re-use and recycling by 2020 consistent with Article 11(2) of Directive 2008/98/EC have been adopted.

Source: European Commission, "Guidance on Ex ante Conditionalities for the European Structural and Investment Funds."

The benefit of having fewer ExAcs is also supported by the experience of other international financial institutions that make use of conditionalities. For example, the World Bank has shifted from the use of old-style "structural adjustment loans" (in the 1980s and early 1990s), which were defined by dozens of conditionalities, to a newer framework which emphasizes selectivity in the design of conditionality (a small number, of targeted, high-quality actions), ownership by the recipient government, and use of the recipient government's own systems to manage budget support.

The first round of EC conditionalities appears to be significantly focused on strategy and regulation (i.e., strategic frameworks, passing of laws, etc.). While this was clearly driven by contextual factors as the EC moved to ensure policy convergence across the Union, the EC should carefully consider how to now ensure that its conditionalities are more focused on implementing the policy considerations, strategies, laws, and the like that were conditionalities of the 2014-20 programming period.

Second, the "stick" of withdrawing financing in the event of noncompliance with the ExAcs has proven difficult to implement. By the start of the programming period, only eight member states had met all the general ExAcs, while only three had fulfilled all thematic ExAcs. Approximately 800 Action Plans were then prepared, and these had to be fulfilled by 2017, midway through the implementation period. Disbursement of funds proceeded based on the Action Plans. However, imposing consequences for not completing the Action Plan is difficult for both procedural and political reasons—no member state has had payments suspended due to nonfulfillment of the ExAcs or Action Plans.

Improved monitoring with results frameworks

Linked to this is the issue that there it is no clear mechanism to monitor whether the Actions Plans or the ExAcs are being implemented. Since the Ex Acs are a "one off" exercise, monitoring the implementation of the ExAc within the program implementation does not occur. There is also no midterm review or ex-post evaluation to ensure that the ExAc remains fulfilled after completion of the Action Plan. There are no tools to monitor how implementation occurs subsequent to the fulfillment of the ExAc. What this means in practice is that most countries, regions, and local governments focus di-

rectly on fulfilling the actual ExAC (e.g., developing the strategic framework, policy) but may not take the additional step of ensuring that the Strategic Frameworks are reflected in the project selection and implementation. Several questions also emerge from this concern—including whether and how the EC should move to incentives based on outputs and outcomes and not inputs; how the EC should define the "indicators" of success; how should these be measured not only at the end of the "deadline" period but also at midpoints during the period and, related to that, what should be the deadline for ex-ante conditionalities; and what tools could be introduced for measuring the indicators and how should/ could these be monitored.

Again, there are some lessons on the design of results frameworks that could be learned from the experience of other financing institutions as the EC begins to design its programs for its next programming period. At the most general level, these include:

- a) Measure the conditionality in terms of outcome indicators (e.g., PISA learning scores, increased numbers of people and goods transported) rather than output indicators (e.g., school enrollments kilometers of road or rail built) should be used;
- b) Link the Results Monitoring Framework (which is separate from the conditionality and is more focused on measurement of the impact) to the actual conditionality, to ensure that the objectives, outputs, and outcomes that the grant/loan aims to achieve are included; and
- c) Ensure that outcomes are specified, concrete, and quantifiable, with clear baselines and target levels in clear measurable units of measurement. Data collection for the results framework should also be financed, if the country does not have the systems to finance the collection itself.

There are also lessons on setting up a multiyear results monitoring system to measure interim results for multiyear programs that are linked to, but somewhat separate from, individual project results.

Pushing accountability to the regional and local levels

Finally, at the level of overall design, the ExAcs go against a key success factor for conditionalities that is, that for a conditionality to be effective, it must be contextual and consider the implementation capacity of the implementing government or region. The design of the EC conditionalities, oriented as it was toward a convergence goal, did not take these differential starting points and implementation capacity into account. Consequently, the eight member states that fulfilled all of the general ExAcs and the three member states that fulfilled all the thematic ExAcs prior to the start of the programming period were the more "well off" ones, while the "less-well-off" the member states struggled to fulfill both the general and thematic ExAcs. Furthermore, the less developed regions were also less likely to have fulfilled the ExAcs and were also more likely to have to develop new strategies/frameworks to fulfill the ExAcs and their criteria as compared with the developed and transitional regions.

The existing EC financing instruments do give regional and local authorities some role in the implementation responsibility of the ExAc, but this varies based on the allocation of expenditure assignments and responsibilities within a country, as well as the ExAc itself. Consequently, 77 percent are the responsibility of the national government, 12 percent are implemented at both the national and regional levels, and II percent are implemented at the subnational level. The Smart Specialization ExAc was the one most applied at regional level. A recent EC assessment of ExAcs found that those which had some measure of local responsibility (mainly the sector-specific ExACs) benefited from having a better quality of national and regional policy and strategic frameworks, improved coordination and prioritization of investments between different levels of government, improved links between public and private investments, and strengthening of monitoring mechanisms for strategy and policy frameworks (European Commission 2017).9

The EC is not the first entity to design conditionalities that specific target subnational entities. Conditional grants are a common tool for providing the central government's contribution to subnational entities and the grant specifies that the funds must be used for a specific purpose: a sector, a project, a program, or a type of expenditure (e.g., teacher salaries). The conditional nature of the grant might also specify policy actions. Conditional grants are designed in a variety of ways, including both ex-ante and ex-post design mechanisms. In fact, a survey of 20 OECD countries showed that the majority used some form of conditionality in making public investment grants to subnational authorities, with the most common being additionality; matching requirements; earmarking to specific priorities; use of environmental assessment; and, implementation of reform or legislations (OECD 2016b). However, the design of the EC grant is more akin to budget support, where disbursement is based on achievement of ex-ante conditionalities. In this context, a key caution has emerged in implementing budget support operations over a long period of time. Although these budget support operations do demonstrate success in the initial stages of implementation, more recently, the lessons that have emerged include the finding that budget support over a long period to a low-capacity place can undermine the local fiscal base. Consequently, results first improve but then decline over a period as funds decline. 10 Therefore, it is important to complement reform-oriented conditionalities with a mechanism to incentivize fiscal sustainability—see box 8.3 on "City Deals" in the UK.

Box 8.3. UK City Deals and Greater Manchester Combined Authority

In 2012 the UK introduced and new and unique approach to devolution, by offering an array of policy measures to cities, recognizing the place differences between cities and avoiding a one-size-fits-all approach. The UK City Deals offer cities new powers (and funding), which provide them with a greater remit over transportation, infrastructure, business development, education, and planning issues. The deals were the results of negotiations between the local government or a coalition of local governments and thus were unique. The deals, however, were contingent on cities establishing stronger governance arrangements (e.g., an elected mayor, greater coordination among local authorities). Cities with stronger governance track records got bet-

Greater Manchester agreed to a City Deal with the UK Government in 2012, after it had united the metropolitan area's 10 local authorities in a Combined Authority in 2011. The Greater Manchester Combined Authority (GMCA) developed a Greater Manchester Strategy and established Transport for Greater Manchester (TfGM) as GMCA's executive body for transportation functions. The GMCA, TfGM, and other Greater Manchester institutions have clearly defined roles that are based on agreements between the area's local authorities, which opt to delegate powers to coordinated bodies. Notable achievements for GMCA include major refurbishment of the Bolton and Rochdale railway stations as part a city region transportation investment program, and permission for building up to 7,000 new homes by 2017 (Smith 2012).

Source: City Growth Commission (2014, 15, 31).

Shifting from ex-ante conditionalities to results-based financing

As the EC begins to design delivery mechanisms for the next programming period, other instruments that disburse payments against an agreed-on set of results may be considered. These are outlined in this subsection.

Performance-Based Grant Systems (PBGSs) are increasingly popular with international financial institutions. Typically, these grants assume that transfers to local governments are conditional, based on their overall performance. In most PBGSs, local governments (LGs) need to show that they have complied with basic or minimum (usually statutory) conditions in order to access their grants (or part of them). Many PBGSs, however, go one step further—by either increasing or decreasing the size of basic LG grants in relation to their assessed performance of LGs. By linking the level of fiscal transfers to performance, a PBGS can provide incentives for LGs to improve themselves in a range of areas (e.g., revenue collection, planning, budget execution, downward/upward/horizontal accountability, financial management, and good governance in general). There is considerable that PBGS incentives evidence have resulted in genuine improvements in LG performance, especially in core administrative and financial areas.11

Box 8.4. Subnational grants: Key lessons

How does the transfer work? Conditional grants to subnational entities based on specific criteria, with a strong focus on institutional performance. Some key lessons from international experience with subnational grants:

- Pay attention to the "starting point"—that is, the baseline of the subnational entity—as these vary significantly even within a country for the conditionality that is chosen. A "one-size-fits-all" starting point automatically places "lagging areas" at a disadvantage.
- · Make sure that the grant is structured so that the incentive provided relative to the LG budget is sufficient to leverage the actual action, but that the prior action is not too onerous.
- Must provide more than a "one-off" conditional grant to achieve long term goals, as a one-off conditionality is only helpful for a "one-off" goal.
- · Ensure that the transfer and the execution of the transfer (i.e., the required prior actions) build up to meet the long-term goal over the different phases of the transfer program.
- · Be serious about the conditionality—that is, be ready to enforce the "stick" or provide support to meet the conditionality and its implementation.

Payment for Results: Disbursement-linked or ex-post conditionalities are rarer at the national government level but are increasingly popular with international financial institutions. 12 These instruments define upfront a set of results that are to be achieved and the amount of funding to be made available for the agreed-on results. Disbursement of funds is only made once the results are achieved and verified.

Payment-for-results programs have emerged as good for combining capacity building with policy and institutional reforms in line agencies and local administrations. They use country systems, including designation of the program as on-budget, national budget preparation and execution procedures, as well as national competitive bidding procedures for procurement.

Output Base Aid Grants are also popular; however, they work best when the objective is simple service delivery or conditional cash transfers payments.

Notes

- ¹ ITIs were described as "multi-dimensional, tailored to place-specific features and outcomes, which may go beyond traditional administrative boundaries and would require greater willingness of different levels of government to co-operate and co-ordinate actions" (European Commission, "Factsheet on Integrated Territorial Investment," March 2014).
- ² "Central Macedonia Regional Case Study" (background paper for this report).
- ³ "North East Romania Regional Case Study" (background paper for this report).
- ⁴ Within the scope of the selected case studies on Romania, positive experiences with external consultants for project management are reported only for Slatina and Craiova. Outside the scope of the selected case studies, benchmark examples include Cluj or Ploiesti, as well as Sibiu, which engaged in a strategic project implementation partnership with GtZ.
- ⁵ World Bank benchmark recommendation—"rule of thumb" developed on the basis of the type of Romanian EUfunded projects at the local government level, given the list of projects implemented by each municipality assessed in this study.
- ⁶ Accountability can be both horizontal and vertical. Horizontal accountability refers to the capacity of state institutions to check abuses by other public agencies and branches of government, or the requirement for agencies to report sideways. An alternative conception of horizontal and vertical accountability relies on the relationship between parties to determine whether one party exercises horizontal or vertical accountability over the other. In instances where there is a top-down, principal-agent relationship, whereby the principal delegates to the agent, the agent is accountable to their direct superiors in the chain of command constituting a form of vertical accountability. See World Bank (n.d.).
- ⁷ European Commission, "The Implementation of the Provisions in Relation to the Ex-Ante Conditionalities during the Programming Phase of the European Structural and Investment (ESI) Funds," 2016, 17.
- ⁸ European Commission, "The Value Added of Ex-Ante Conditionalities in the European Structural and Investment Funds," Commission Staff Working Document, March 2017.
- ⁹ European Commission, "Value Added of Ex-Ante Conditionalities."
- 10 "Joint Evaluation of Budget Support to Uganda Final Report, Volume 1," May 2015. This evaluation was jointly managed by the European Commission (DG DEVCO Evaluation Unit) and the World Bank's Independent Evaluation Group (IEG), in cooperation with the Government of Uganda (Ministry of Finance, Planning, and Economic Development, and the Office of the Prime Minister), Ireland (Department of Foreign Affairs and Trade), and the United Kingdom (Department for International Development).
- ¹¹ United Nations Capital Development Fund, "Performance-Based Grants Systems Concept and International Experience," 2010.
- ¹² For more information, see World Bank, "Program-for-Results: An Early-Stage Assessment of the Process and Effects of a New Lending Instrument," 2016.

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