



Productivity and Jobs in a Globalised World

(HOW) CAN ALL REGIONS BENEFIT?

Policy highlights



Productivity and Jobs in a Globalised World: (How) Can All Regions Benefit?

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www.oecd.org/regional/

Contact

alexander.lembcke@oecd.org

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Productivity and jobs in a globalised world: (How) can all regions benefit?

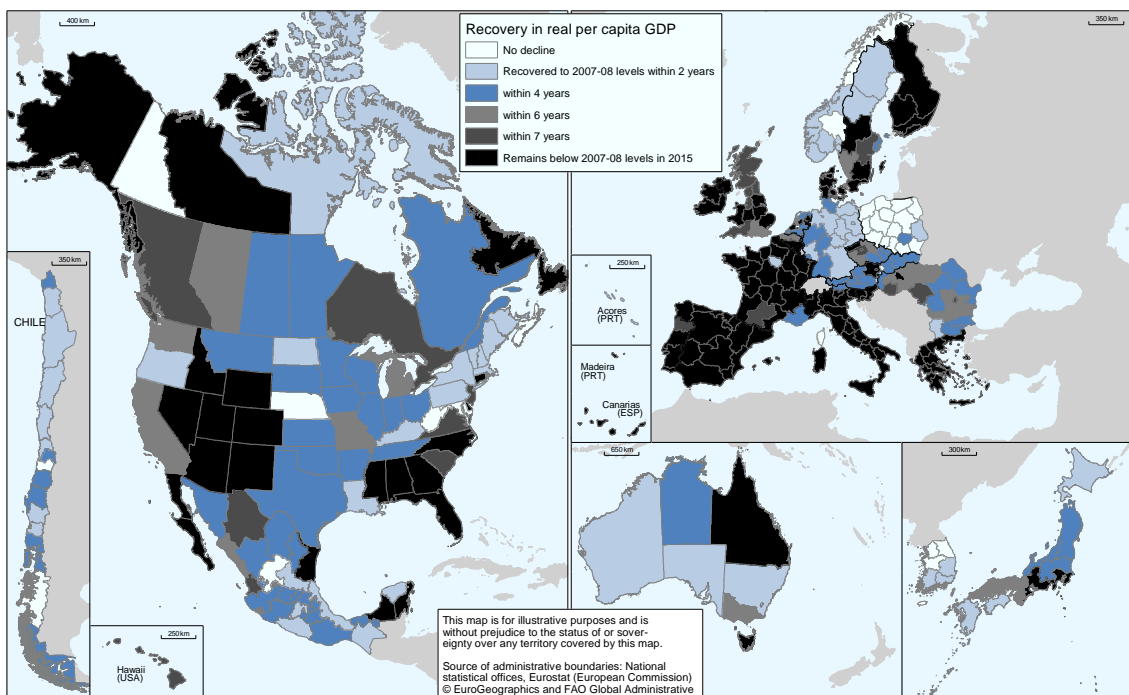
In recent years, the economic and social costs of persistent disparities in economic performance across regions have become apparent. National economic growth is limited by the lagging productivity growth in some regions. Within affected regions, persistently high unemployment and stagnating or declining wages create economic hardship and diminish people's confidence in a better future. As a consequence, there is a share of the population in many OECD countries that is increasingly discontent with the status quo and, not surprisingly, there is a geographic pattern to much of this discontent.

When considered at the scale of the OECD area, economic inequality across regions declined since the turn of the millennium. Between 2000 and 2015, inequality in regional GDP declined by 15% across the OECD and by 25% across Europe, driven by the catching up of regions in countries with comparatively lower income.

However, in many countries the gap between the region(s) with the highest labour productivity and other regions has widened. This growing divide is not a result of the global 2007-08 crisis, though the crisis revealed unsustainable growth models that some regions followed. Even 7-8 years after the onset of the crisis, its marks are still evident across OECD regions. By 2015, real per capita GDP in 135 out of 350 large OECD regions remained below 2007-08 levels.

To reduce spatial disparities, policy makers need to address low productivity growth in economically lagging regions. Raising labour productivity is not only essential for long-term economic prosperity but also the only way to ensure sustainable wage growth. Beyond economic output and income levels, productivity matters for many other dimensions of well-being.

Real per capita GDP has started to recover, but many regions remain below pre-crisis levels in 2015



Note: The year refers to the first year that per capita GDP recovered to at least 2007-08 levels after the recession that was triggered by the 2007-08 crisis. Light grey areas indicate missing data.

Source: Calculations based on OECD Regional Statistics [Database], <http://dx.doi.org/10.1787/888933707684>

The elusive quest for regional convergence?

Economic integration and global trade have created great opportunities to improve lives for many people and in many regions. Average income levels in the OECD have continuously risen over the last 20 years and only the global crisis that began in 2007-08 put the economic expansion to a (brief) halt. Disparities in terms of per capita GDP and in labour productivity have declined, driven by a catching up of countries and regions with the lowest income levels.

This success was not shared by all regions. Some of the regions that fell further behind with respect to the peers in their country exhibited persistently low economic growth rates, others followed unsustainable growth models that were exposed by the global financial crisis and its aftermath. Many regions that appeared to be in the process of catching up, but relied on an expansion of non-tradable sectors, such as retail services or construction, experienced rapid declines that wiped out the gains from previously high growth rates.

Regions are held back by many factors and there is rarely a mono-causal explanation for or solution to low economic growth or high unemployment. Institutional constraints, such as high levels of corruption, ineffective governance and burdensome regulatory procedures, can make it difficult to implement policies that foster economic growth. Global competition can harm key industries in a region. Lack of access to financing and weak regional demand can hold back entrepreneurs. Skills of workers can be insufficient or badly matched to the requirements of advanced industries. Inadequate infrastructure can create bottlenecks for trade. Remote locations far away from major markets and with low population densities create further challenges for some regions.

Inequalities often persist over long periods of time. In 14 out of 19 European countries with at least 5 large regions, the most productive region was the same in all years between 1995 and 2014. Regions with large cities and those rich in natural resources are the most productive in the OECD.

But the potential to “catch up” is present in all types of regions and many have found ways to narrow the gap to their country’s frontier. Across OECD countries, regional productivity growth follows mainly two models: countries where regions’ catching up drives overall productivity growth and countries where the most productive region dominates and the economic strength becomes increasingly concentrated.

Combining dynamic growth of the most productive “frontier” regions with catching up of those that are lagging behind proves a challenge. The regional frontier is, on average, less dynamic in countries where “catching up” was predominant than in countries where the most productive region(s) were pulling away. The lack of catching up comes at a cost. Per capita GDP inequality, measured by the Gini coefficient, remained stable across regions in countries where regions managed to “catch up” to their country’s frontier in terms of labour productivity. In contrast, inequality increased in countries where the frontier regions kept pulling away from other regions.

Sustainable wage growth, and thereby growth in living standards, requires that productivity keeps pace with wage increases. As ageing becomes increasingly pervasive, regions need to find ways to compensate for a declining workforce to ensure prosperity does not decline. But even in regions with growing productivity, inclusive gains from growth are by no means automatic and a key policy challenge remains to ensure a fair distribution of the benefits created by economic growth. While in boom periods between 1980 and 2014 more than 40% of OECD regions combined productivity and employment growth, about the same percentage of regions experienced productivity growth at the expense of employment growth in the recessions that followed.

Thinking global, developing local: Tradable sectors, cities and their role for catching up

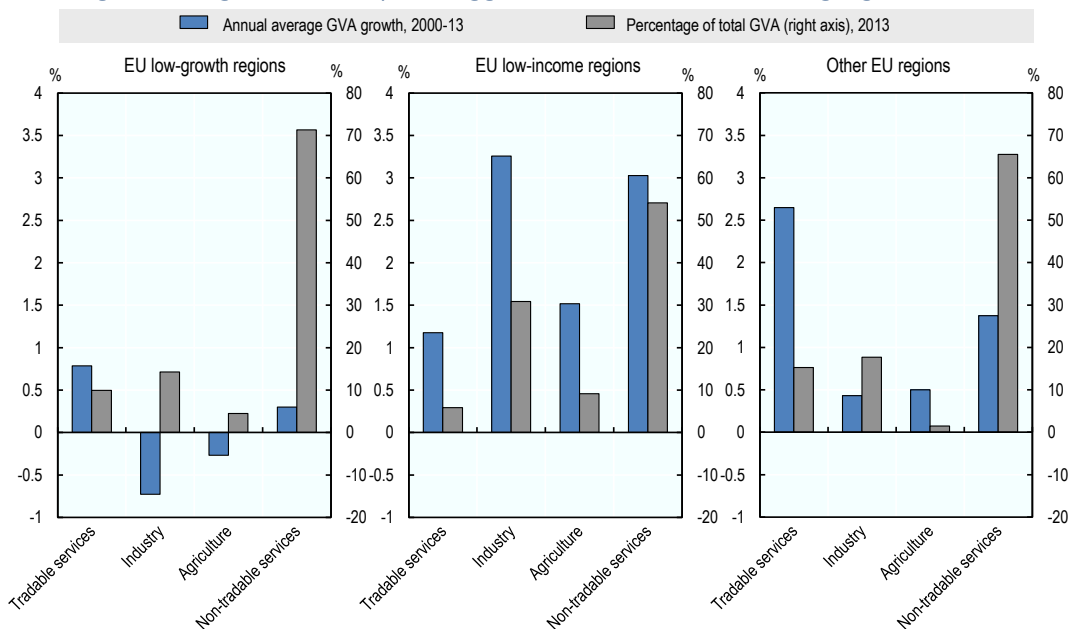
Regions that were able to narrow the productivity gap with their country's most productive "frontier" region distinguish themselves from regions that were further diverging from the frontier in two important characteristics. These characteristics are a strong and growing tradable sector and the presence of well-functioning cities. Tradable sectors are those that produce goods and services that could be traded. Growth of firms in these sectors is not limited by the size of the local market, at the same time firms are exposed to international competition and need to be dynamic and innovative to succeed.

In European regions that were catching up, tradable sectors contributed, on average, about 37% of the total output in the region in 2000 and this percentage increased even further to nearly 40% in 2014. In contrast, diverging regions started with a lower percentage of gross value added (GVA) in tradable sectors in 2000 than catching-up regions and the contribution of tradable sectors had not increased by 2014.

A breakdown of the productivity dynamics in regions shows that in the tradable sector, increasing productivity was based on improvements by firms within the sector and region over the 2000-13 period. For non-tradable sectors this within-sector and region improvement accounts for only half the growth, the other half was due to shifts of employment from less to more productive non-tradable economic activities.

Manufacturing is still a key element of the tradable sector, but tradable activities are not limited to manufacturing. Tradable services accounted for 15% of total regional output in 2013 and they had the highest growth rates – more than 2.5% per year between 2000 and 2013 in most European regions. Yet, many regions are not taking advantage of this potential. In European regions with the lowest per capita GDP levels and growth rates, tradable services grew by a mere 1% annually between 2000 and 2013.

Low-growth regions in Europe struggle to transition towards high-growth sectors

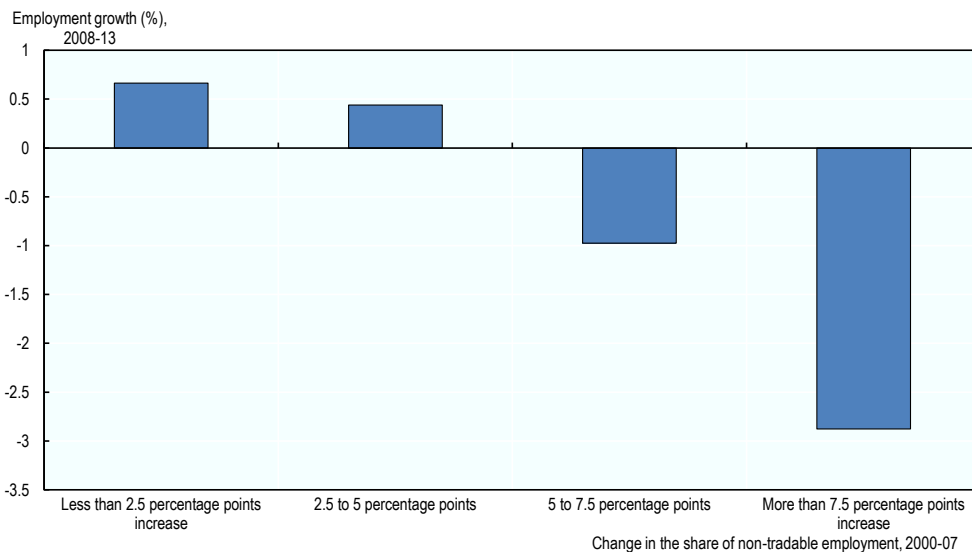


Note: GVA level and growth (2000-13) in 2010 USD at constant prices and PPPs. Data for 17 EU countries. Low-income regions are EU regions with less than 50% of EU-average per capita GDP in 2000; low-growth regions are EU regions with less than 90% of the EU-average per capita GDP in 2000 that grew less than the EU average over the 2000-13 period.

Source: Calculations based on OECD Regional Statistics [Database], <http://dx.doi.org/10.1787/888933707893>

Regions with strong pre-crisis increases in non-tradable sectors lost more jobs

Annual average employment growth (2008-13) and change in the share of non-tradable workers in total employment in 2007 compared to 2000



Note: Data for 203 territorial level 2 (TL2) regions in 19 OECD countries: Austria, Australia, Belgium, Bulgaria, Czech Republic, Denmark, Finland, Greece, Ireland, Italy, the Netherlands, Portugal, Romania, Slovenia, Slovak Republic, Spain, Sweden, the United Kingdom and the United States. Categories from left to right include 81, 84, 19 and 19 regions.

Source: Calculations based on OECD Regional Statistics [Database], <http://dx.doi.org/10.1787/888933707931>

A focus on tradable sectors might be seen to increase the exposure to global shocks and to risk the jobs and livelihoods of people in a region. The experience of European regions before and since the 2007-08 crisis shows that the opposite is the case. On average, employment grew by about 0.7% annually between 2008 and 2014 in regions that experienced only small shifts in employment to the non-tradable sector before the crisis. In contrast, regions that experienced strong shifts experienced an average decline in employment of nearly 1%, and the 10% of regions with the largest pre-crisis shifts also experienced the strongest employment losses since the crisis (2.9% annually).

Well-functioning cities contribute to productivity dynamics through different channels. They attract more tradable services and high-tech manufacturing activities, whereas rural areas tend to specialise in mature manufacturing sectors and resource extraction. Business creation tends to be most dynamic in a country's region that includes the largest or capital city. An important reason for these patterns and for productivity differences within a country are so-called "agglomeration economies" – a set of economic mechanisms that increase productivity levels in large cities compared to smaller cities and less densely populated areas.

Because more people live and work closely together in larger cities, infrastructure is used more efficiently and ideas and innovations spread faster. As a consequence, productivity levels are, on average, 2%-5% higher in a city that is twice the size of another.

Rural regions can benefit by "borrowing" agglomeration benefits from nearby cities if they are well-connected. This includes physical transport connections, but is not limited to them. For example, firms in rural regions should be connected to universities and research institutes that are often found in cities. Likewise, access to financing often depends on connections to financial institutions that also tend to be located in cities.

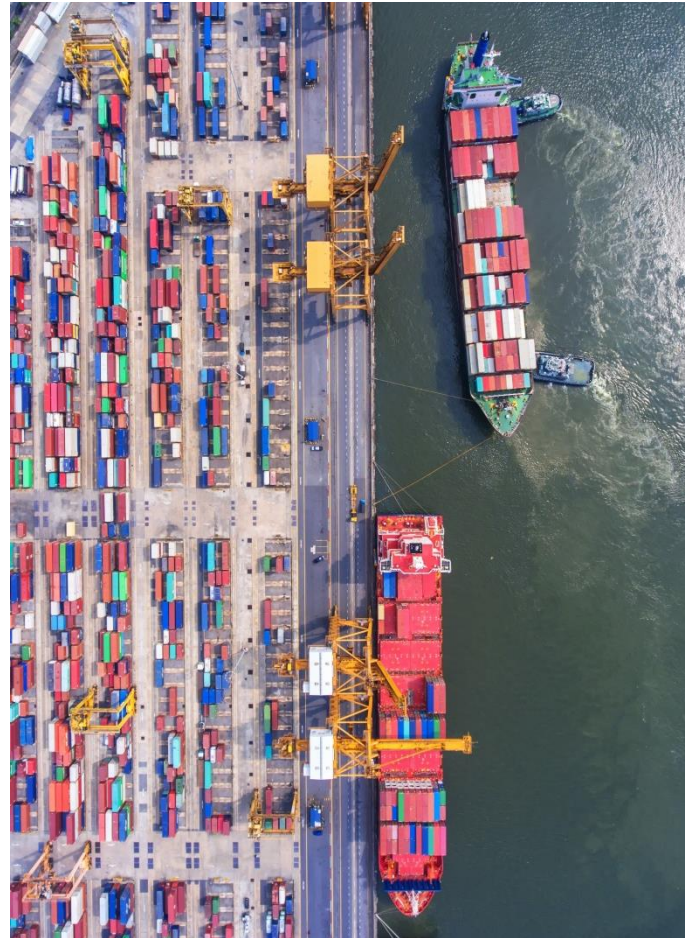
For urban regions, the focus should not only be on the benefits from agglomeration, but also on addressing the costs related to it. Congestion, environmental degradation, high housing prices and other downsides from agglomeration partially offset the productivity gains from agglomeration and reduce the well-being of urban residents. Therefore, policy makers should pay sufficient attention to reducing the monetary and non-monetary costs associated with urban agglomerations.

Policies can help better anticipate or cushion shocks from trade in specific regions

Over the last decade, it has become clear that the costs and benefits from trade are unevenly distributed across regions. Whereas in most regions benefits from trade outweigh the costs, the downsides are heavily concentrated in some regions. In regions most strongly affected by trade, old industries have been harmed severely by foreign competition and large numbers of workers have lost their jobs. Furthermore, adjustment processes have been very slow and in many of those regions, unemployment has remained persistently high. In the future, unemployment might be exacerbated as jobs become increasingly automated.

In such circumstances, skills policies are essential in preparing workers for changing labour markets and protecting them from trade or other shocks. Having the right skills is one of the best protections against unemployment that an individual worker can have. At the regional level, skills policies need to be adapted to the demands of the regional economy. This includes universities that offer training programmes that match the needs of regional employers for specialised skills. Vocational programmes in collaboration with local firms can provide the labour market with relevant skills. This is particularly applicable to young people without a university degree. In addition, retraining programmes can be especially useful for workers who struggle to find jobs because their skills have become obsolete in the labour market.

Despite their importance, education policies are not enough to recover jobs in regions that are severely affected by trade shocks. Due to increased competition from trade, many businesses in those regions are forced to close down. Without firms to hire them, even the best skilled workers will not find jobs. Thus, regions where trade shocks caused substantial harm to the fabric of firms need policies that foster firm creation and recovery. Such policies can include cluster policies, programmes to



Support start-ups and business creation or policies to attract foreign direct investment.

They need to be adapted to place-specific factors and make use of the particular strengths of a region. Too many trade adjustment programmes focus solely on retraining workers and neglect this important dimension.

Lastly, policies that encourage labour mobility should be part of any package to address severe regional shocks from trade. Economic and social constraints may prevent workers from seeking jobs in other regions. Providing support and information on how to overcome these constraints helps workers to find jobs elsewhere. Such policies can also benefit workers who remain in the region by reducing the number of people competing for limited job openings.

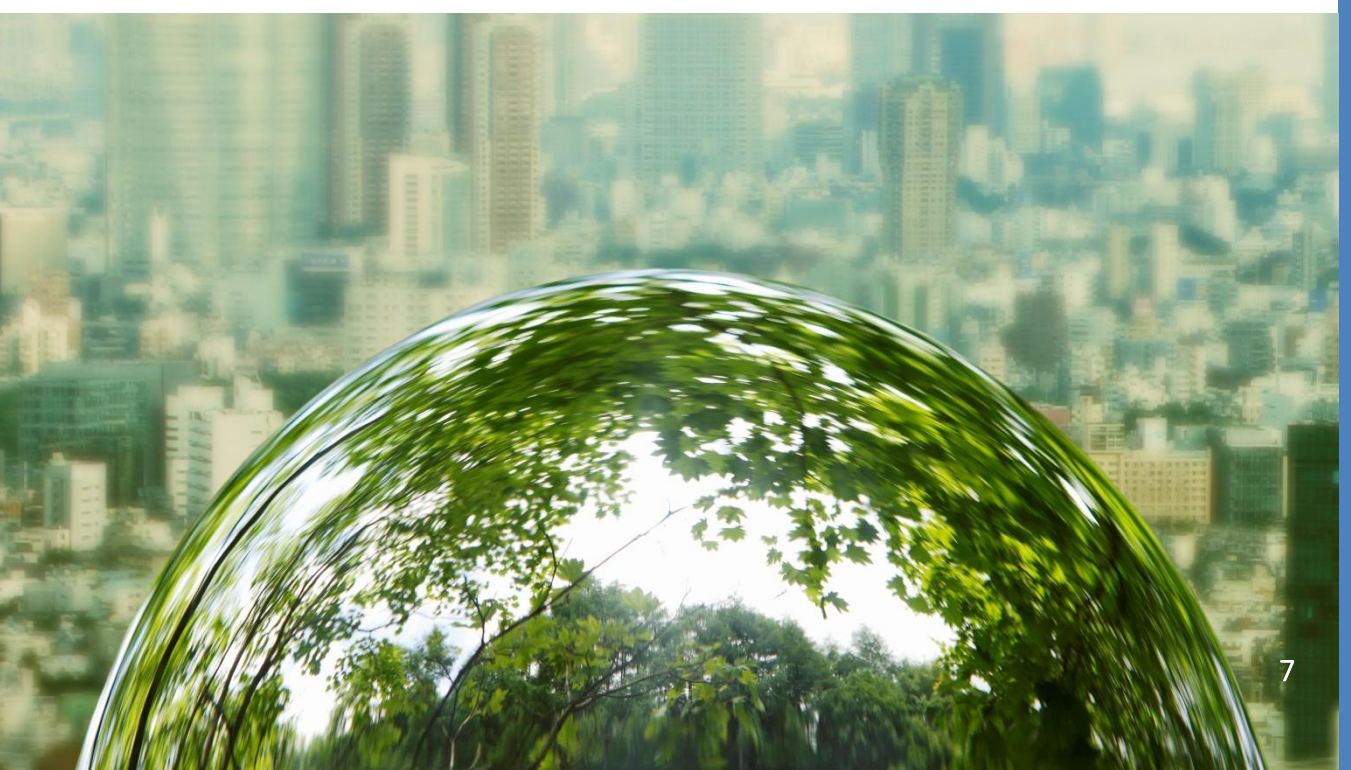
Global trends and regional links: Jobs, clusters and global value chains

Clusters of economic activity are important sources of innovations and productivity growth. Yet, the importance of individual clusters for regional economies varies strongly. In some European regions, the largest cluster employs less than 5% of the workforce, whereas in others it employs more than 40% of the workforce. At the same time, there appears to be no statistical link between the size of the largest cluster in a region and the total share of regional economic activity that occurs within clusters. This indicates that greater specialisation in a few clusters does not lead to a greater overall importance of clusters.

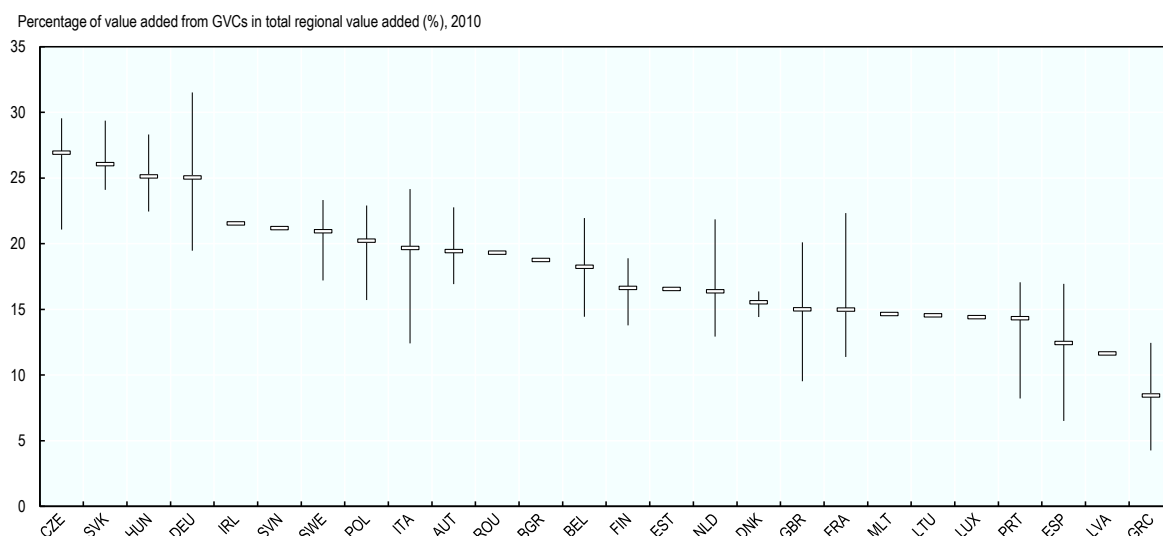
While highly specialised regions have higher per capita GDP levels than regions whose economy is more evenly distributed across many clusters, their per capita GDP growth rate is lower than in more diversified regions. This implies that specialisation is increasing when regions become richer, but this effect can limit their future growth potential. The optimal degrees of diversification differ from region to region. Dense urban economies can generate greater economic diversity than economies in sparsely-populated, rural areas.

Not all forms of diversification are likely to have the same positive effects. Evidence suggests that diversification into so-called related varieties (economic activities that are characterised by similar, but not identical processes) is most beneficial. Through such diversification, innovations can spread from one cluster to another without restricting opportunities for future growth through excessive concentration in a single economic activity.

Regional policy can use cluster policies to support tradable sectors by ensuring that infrastructure encourages trade, by providing training for SMEs on how to access foreign markets, and by strengthening programmes that enable workers to acquire relevant skills such as foreign language competencies. Cluster-based initiatives can complement other tradable-oriented policies, such as direct support through agencies that promote exports or “temporary export managers” that work for several (small) companies simultaneously. But one of the most fundamental measures is to avoid excessive incentives for economic activity in the non-tradable sector, such as the construction sector. Such incentives can prop up economic activity in the short term, but are rarely sustainable in the long term.



Contribution of GVCs to total regional value-added in Europe, 2010



Note: Small horizontal bars denote weighted country averages, long vertical bars show the range of values across regions within a country. No regionally disaggregated data available for Romania, Bulgaria, Slovenia, Malta, Latvia, Luxembourg, Lithuania or Estonia.
Source: Calculations based on data provided by Los and Chen (2016), <http://dx.doi.org/10.1787/888933708102>

Global value chains (GVCs) is a term used to describe supply chains that divide production processes into different stages distributed across several countries. After growing rapidly in importance throughout the 1990s, GVC integration in most regions in Europe remained stable from 2000 to 2010 except for an intense but brief dip in the aftermath of the global financial crisis in 2008. As of 2010, an average of approximately 18% of all value-added in European regions was created within GVCs.

Although GVC integration coincides with higher GDP levels, the effect is not uniform. Regions with either particularly low or particularly high productivity levels have GVC participation rates that are below average. In low productivity regions, this is due to a weak tradable sector. In contrast, the low share of GVC integration in high productivity regions is due to a strong service sector. Highly productive regions often include large cities, whose economy is dominated by services that are less tradable than manufactured goods.

Moreover, not all types of GVC integration yield the same benefits. The greater the amount of value-added produced in a region, the higher the economic benefits. Labour intensive low-skilled manufacturing that creates little value-added can bring jobs to regions with high unemployment rates, but it offers little potential to diversify the economy. Furthermore, such production will only stay in a region while wage levels remain low. Instead of focusing on these activities, regions should try to attract production activities at the beginning and at the end of a GVC that are likely to add more value, such as product development, marketing and after-sales services.

Regional governments can intervene in a variety of ways, depending on the nature of the GVC. In GVCs that are primarily based on arm's-length transactions between firms, government policies have to focus on improving the business environment. In GVCs that are organised hierarchically, governments can seek to co-operate with leading firms to encourage knowledge transfers and activities with higher value-added in their regions. Lastly, government policies to strengthen GVC integration should not ignore traded services, which often offer untapped potential for GVC integration.

Macroeconomic frameworks and institutional factors for regional economic performance

At the national level the 2007-08 crisis has led to a renewed focus on sound macroeconomic framework conditions and the role of structural reforms in ensuring that economies are competitive and resilient to adverse shocks. At the same time there is much less attention in the debate on the role that national policy frameworks play in reducing or reinforcing interregional disparities.

Within countries or single-currency areas, such as the euro area, wage growth that is disconnected from productivity growth can lead to imbalances in regional competitiveness. If regional wages grow faster than productivity, unit labour costs rise and the competitiveness of the tradable sector is reduced. In contrast, regions where wages grow slower than labour productivity enhance their competitiveness, which can negatively affect other regions within a single-currency area. This effect can be indirect, i.e. rising wages in the non-tradable sector that are not supported by productivity growth leading to higher prices for non-tradable services, both for consumers and (tradable) firms.

The analysis of economic performance at the regional levels shows that a 1 percentage point increase in the growth rate of unit labour costs is, on average, associated with a 0.3 percentage point decrease in the growth rate of value added per capita and 0.4 percentage point decrease in exports per capita.

Flexible regulations that account for the needs of workers, the unemployed and firms in different regions are particularly important for productivity growth in lagging regions.



European regions with the lowest per capita GDP and those with low per capita GDP growth benefitted more than other European regions from reforms to employment protection of regular contracts in terms of productivity growth over the 2000-13 period. Similarly, product market regulations in wholesale and retail trade appear to have particularly negative impacts on the productivity growth of a country's least productive regions. Structural reforms should be undertaken preferably during periods of high economic growth.

However, as many recent reforms occurred during a period of severe economic weakness, these reforms created higher social costs in terms of job losses than they would have if they had been implemented during a boom period.

Governance and the efficient functioning of public administration can contribute to narrowing productivity gaps. A barrier to the well-functioning of cities is a fragmented administrative structure: a large number of municipalities within the boundaries of a metropolitan area is associated with lower productivity. Judicial efficiency can also play a role. Evidence shows that employment and turnover in Italian firms and the likelihood of participating in global value chains are lower for firms located in jurisdictions where legal proceedings take longer than for firms located in more efficient jurisdictions.



Policy lessons: Productivity and growth in regions



What policies can support productivity and growth in regions? Levers in three broad areas are among those that help regions seize the opportunities of cities and tradable sectors, while addressing the possible adverse repercussions that increased openness and international competition can bring. These levers are better policy co-ordination, a focus on regional strengths and regional links to support knowledge diffusion.

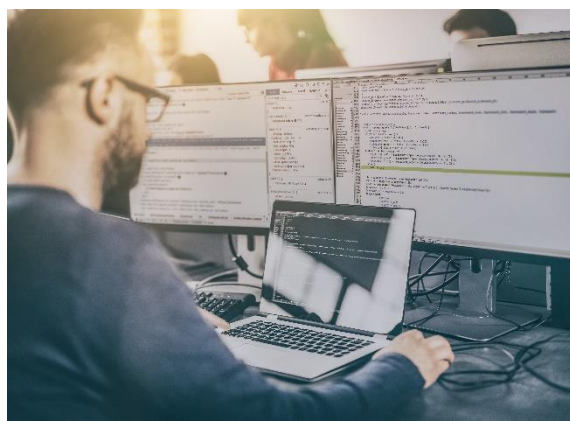
To realise the potential of cities and the tradable sector in regions, policies should be co-ordinated across administrative boundaries and across policy fields. A holistic approach that brings together actions from different policy fields is particularly relevant for well-functioning cities and to address adverse shocks from trade (as highlighted before).

A typical approach to regional economic development is the provision of incentives to firms to come to a region. This can include direct subsidies, tax incentives, or reduced regulatory requirements. However, such policies can be counterproductive for several reasons. From the national perspective, they can lead to a redistribution of economic activity without generating additional growth. Furthermore, they can contribute to a race-to-the-bottom, where different regions try to undercut each other, for example at the expense of tax revenues or environmental and labour standards.

Even from a regional perspective, relocation incentives are often an ineffective way to boost economic growth. They can be very costly, because they are often paid to firms that would locate in the region even without receiving incentives. Furthermore, they often create a limited number of jobs. Moreover, firms that locate in a region because of incentives are often very mobile. Once the incentives expire, they could very well move on to the next location, without having created long-lasting benefits for the region.

Instead, regions should build on their particular strengths to attract firms. Many successful regional development strategies identify unique characteristics of a region and focus on how they can be leveraged. Unique regional characteristics can include natural features, such as location, particular geography or the abundance of resources, or man-made features, such as the availability of specific infrastructure, highly specialised research institutes, or already existing economic clusters. Instead of creating a race-to-the-bottom, such approaches can encourage a race-to-the-top, helping regions to perform better while lifting the economic performance of the entire country.

Copying successful strategies from other regions or following blueprint solutions rarely works. Such approaches are often tailored to different conditions and are not adequate for the specific circumstances of another region. Furthermore, they are often pursued by many regions at the same time. In such instances, too many regions can end up chasing the same firms and hence the chances to succeed are slim.



Support for innovation and knowledge diffusion can narrow regional gaps

An essential asset for a region's economy is the knowledge embedded in its workers, firms and academic institutions. But the diffusion of knowledge and innovation is often difficult. Public authorities can contribute to the diffusion of productivity-increasing knowledge across firms. In many cases, such knowledge does not have to be developed from scratch but can leverage best practices already adopted by more productive businesses. Innovation agencies and business support centres can help small businesses to implement effective production and management practices. Such training programmes can be combined with other relevant assistance.

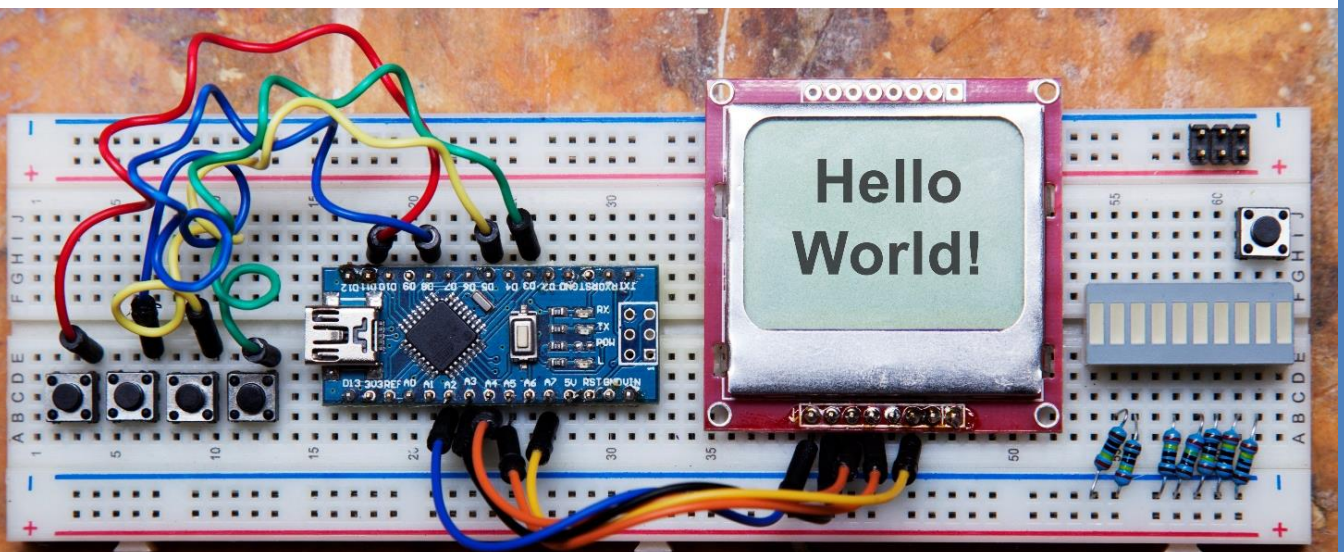
Industry associations can help firms to learn from each other's experiences and can co-ordinate joint research activities between businesses. Governments should encourage such co-ordinated efforts by businesses as long as they do not lead to collusion among competing firms.

Effective university-industry collaboration is another successful strategy to create and spread innovation. Universities can be most beneficial to a region if their research activities are linked to areas that are of importance to the local economy. In return for industry-relevant R&D, universities benefit from private sector research grants.



To further encourage knowledge transfer, technology centres that aim to connect university research with firm R&D can play a vital role in translating abstract research into innovative new products.

Governments can also actively encourage innovation through innovation-friendly procurement. This can involve incorporating innovation-related criteria into calls for tender or procuring recently-developed, innovative products. Furthermore, the public sector can procure pre-commercial R&D directly to encourage the speculative development of new products.



A place-based approach to skills development and utilisation



The skills of the local workforce are a key asset for any city or region. Different regional economic specialisation can require the regional workforce that have very different skill sets. Furthermore, structural changes within the regional economy can create specific challenges, such as the need to retrain a large number of workers with a skill set that has suddenly become obsolete.

Vocational training programmes can be effective solutions in providing training to future workers who do not wish to pursue their studies at university. Such programmes can provide a mix of job-specific and general skills that workers can build on to adapt to future changes in technologies and jobs.

By relying heavily on workplace-based training they can ensure that workers' skills match the needs of the regional industry.

National and regional authorities play a key role in developing frameworks for vocational training and setting up close collaborations between the education sector and regional firms.

Polytechnics, community colleges and universities of applied sciences can provide specialised technical education that meets firms' needs. They are especially important for the provision of skilled labour in rural regions that do not have research universities. Such regions often struggle to attract highly skilled workers, since many residents who move outside of the region fail to come back after completing their studies.

By offering the possibility to study in the region, polytechnics and similar institutions increase the potential to attract and retain highly skilled workers. Furthermore, they play an important role in fostering social mobility in regions because they provide pathways enabling less skilled workers to acquire the skills that will allow them to move into higher paying jobs.

Co-ordination across policy fields is essential as skill development policies are most effective when they do not stand on their own but when they are linked to policies for local skills utilisation and with wider regional economic development.



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