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Rethinking Regional Attractiveness in the New Global Environment

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Foreword

A series of recent shocks and profound structural changes are reshaping the global environment, creating both challenges and opportunities for regions. The COVID-19 crisis, compounded by the consequences of Russia's war of aggression against Ukraine and existing megatrends of climate, demographic and technological change, are creating asymmetric impacts within and between countries and regions.

Even before the pandemic, the pace of expansion in globalisation, at least seen through the prism of global production, was slowing. Growing societal pressures for greater inclusiveness and greener supply chains, coupled with rising geopolitical tensions, are also beginning to impact on the configuration of global value chains, and supply-chain bottlenecks that arose in the wake of the pandemic and the war, have increased political focus on essential and strategic industries. The collective impact of these trends is forcing a profound reflection on the way places and firms interact with globalisation, and, in this shifting landscape, the types of levers available to attract flows of investment and people to achieve resilient territorial development.

While some regions have the assets or density considered magnetic to investment, talent and visitor flows, others have struggled, resulting in spatial inequalities within countries and in turn "geographies of discontent". The new global context, creating new challenges and opportunities for regions, including those that may have benefited from earlier waves of globalisation, calls for a better understanding of today's subnational attractiveness levers.

In this regard, the OECD has developed an innovative and multidimensional approach to assessing regional attractiveness to the key target groups of investors, talent and visitors. The methodology, which considers global engagement beyond international connections and economic factors alone, comprises more than 50 indicators covering 14 dimensions, across 6 domains of attractiveness (economic attraction, connectedness, visitor appeal, natural environment, resident wellbeing, land use and housing) to develop regional attractiveness profiles.

This report on *Rethinking Regional Attractiveness in the New Global Environment*, draws on lessons learned from 15 regional case studies undertaken in 5 European Union countries (Ireland, Italy, Portugal, Spain and Sweden), as well as additional work with Latin American and Caribbean regions, and a series of webinars and dialogues on rethinking regional attractiveness. It introduces an evidence-based "attractiveness compass" to help policy makers identify regional strengths and gaps and navigate the new uncertain environment. It also highlights the near-universal challenge faced by regions to attract and retain talent, identifies regional attractiveness "drivers" for investors, talent, and visitors, and provides an analysis of regional attractiveness policies and their governance mechanisms.

After a brief outline of the project methodology, Chapter 2 describes internationalisation in the new global environment and the importance of adopting a regional lens in policy design. Chapter 3 introduces and applies the OECD's new quantitative measurement framework for assessing regional attractiveness. Chapters 4-6 explore the need to rethink regional attractiveness for each of the specific target groups of investors, talent and visitors, highlighting key drivers of attractiveness, and providing 'roadmaps' for the implementation of attractiveness policies. Finally, Chapter 7 examines effective multi-level governance and coordination mechanisms to enhance regional attractiveness.

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In developing the regional case studies that inform the report, the OECD benefitted from active support and feedback from: RDPC delegates from Ireland, Italy, Portugal, Spain and Sweden; regional authorities in the 15 participating regions (Ireland: Eastern and Midland, Northern and Western, Southern; Italy: Campania, Liguria, Marche, Sicily; Portugal: Algarve, Centro, Lisbon; Spain: Balearic Islands, Cantabria, Valencia; and Sweden: Dalarna, Norrbotten). It also benefited from inputs of regional stakeholders who participated in round-table discussions and interviews to inform the analysis. The development and drafting of regional case studies was undertaken by the following: Ireland – Michael Flood; Italy – Mattia Corbetta and Marguerite Maramici; Portugal – Aline Matta and Claudia Quintana; Spain – Maya Camacho and Claudia Quintana; Sweden – Joel Andersson and Margaux Tharaux.

The report was also informed by a series of webinars and dialogues on rethinking regional attractiveness, and we would like to thank all speakers and participants who made those events so informative and successful. In particular, we would like to highlight the contribution of the three key experts – Richard Florida, Parag Khanna, and Juliette Langlais – and Dr Andres Rodriguez-Pose, moderator of the Dialogues on the Future of Regions.

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Executive summary

Regional development policies cannot ignore international relations and the changing shape of globalisation. From the COVID-19 pandemic to growing geo-political instability, and the effects of climate change, digitalisation and demographic change, cumulative shocks and existing megatrends are producing asymmetric impacts, but also opportunities, within and between countries and regions. Firms themselves are beginning to respond to these changes, including in response to societal pressures for more sustainable, responsible, and green supply chains, but also in response to a greater awareness of supply-chain disruptions, with increased emphasis on 'just-in-case' rather than 'just-in-time' modes of production. At the same time there is an increasing political focus on key strategic and essential industries. Whilst it is difficult to anticipate how these changes will impact on countries and regions it is clear that they could be significant, and, indeed, present new development opportunities for lagging and falling-behind behind regions. Regional attractiveness policies that contribute to inclusive and sustainable regional development and to reducing asymmetries between regions, have an important role to play in seizing these opportunities (EC, 2022[1]; Diemer et al., 2022[2]), and, in turn, helping to address challenges from rising inequalities between regions, which have increased in half of OECD countries over the last two decades (OECD, 2023[3]).

The degree to which regions can withstand and recover from shocks and crises is influenced by their international connections. For example, the unique combination of assets they possess – from digital and transport infrastructure to human capital – play an important role in determining how actively they participate in the global economy. Airports and ports, roads, rail, and fibre optic Internet are all assets that regions can leverage to attract foreign direct investment (FDI), support businesses to export and cater to talent and visitors on the move. However, the assets that enable regional participation are growing increasingly diverse and opportunities for enhanced integration of left-behind regions in GVCs have increased in recent years. Not least through the rise in renewable energy investments, which can benefit remote regions, and the use of active industrial policies to localise key segments of supply chains.

A regional attractiveness compass to guide decision makers

There is not one sole objective of regional attractiveness. Whilst the primary focus is often on attracting investors, other dimensions, such as the visitor economy, can often be more significant, as the impact of the pandemic on tourism destinations demonstrated. In addition, and as a priority for all the regions taking part in this project, the attractiveness of a territory to talent is an important consideration of regions' ability to develop.

Similarly, it follows that the assessment of attractiveness cannot be based on a single indicator, such as regional FDI, not least as, increasingly, there is a need to factor in impacts on inclusive and sustainable development. This is the basis for the OECD's multidimensional approach to assessing regional attractiveness, which considers global engagement beyond international connections and financial drivers alone. In total, the methodology considers more than 50 indicators to develop regional attractiveness profiles, covering 14 dimensions of attractiveness, across 6 domains (economic attraction, connectedness,

visitor appeal, natural environment, resident wellbeing, land use and housing). Because different regions have different challenges, opportunities and comparative advantages, the aim of this work is not to rank regions but rather provide an analysis of how they perform against each dimension.

To transform this dashboard into a policy tool, regional attractiveness compasses are developed to help regional policymakers and their partners identify potential areas to strengthen regional attractiveness and the possible trade-offs between these priorities and environmental objectives (climate and biodiversity) and/or inclusion (e.g. well-being and social cohesion). These compasses can be used to monitor, adapt and evaluate selected policies for regional attractiveness.

Actionable findings for attracting investors, talent and visitors

A regression analysis of the drivers of regional attractiveness (Chapter 3) highlights the following major levers:

- On the investment front, the results draw a distinction between what drives the total capital expenditure of FDI and the total number of FDI projects. In terms of *total expenditure*, regions with comparatively strong digital performance and those with top universities located in the region appear to be hubs of FDI. When looking at the *number of FDI projects*, these findings remain significant, while rail and air transport are also found to be important drivers. To put this in perspective, the report finds that a 10 percentage point (10pp) increase in the population reachable by rail (within 90 minutes) would have led to 171 additional foreign investment projects.
- From a talent attraction perspective, the analysis underscores the importance of affordable housing, fast internet speeds and the share of foreign students. For example, on average, and all things being equal, a 10pp increase in the share of the population satisfied with housing affordability translates into a 1.8pp increase in the share of foreign-born employed people in the working-age population (15-64 year-olds). This points to an important potential advantage for those non-metropolitan regions able to overcome the urban-rural digital divide. Moreover, the presence of international students makes a region more attractive to other foreign students, and talent, in a self-reinforcing way, increasing the potential for knowledge-sharing and co-creation.
- Finally, attracting visitors is shown to be influenced by a cleaner environment as measured by air pollution levels and a pristine natural environment. An entrepreneurial economy is another important driver, with both business and leisure visitors likely attracted to the vibrant atmosphere and society often linked to these creative environments. Evidence also indicates that regions that host a higher share of international students are more attractive to international visitors.

Together with these quantitative results, the report provides an analysis of regional attractiveness policies and their governance mechanisms. Attractiveness does not occur by accident. Governance mechanisms in particular are complex processes and require effective coordination across multiple levels of government and multiple stakeholders to allow for efficient sharing of information (across administrative and geographical boundaries) and to leverage on potential economies of scale and scope, when designing and implementing regional attractiveness strategies. Development strategies also need to be adapted to the specific conditions and bottlenecks of different regional ecosystems. Roadmaps are therefore proposed for the implementation of policies to attract international investors (Chapter 4), talent (Chapter 5), and visitors (Chapter 6), and, also, to improve multi-level governance and coordination mechanisms (Chapter 7). Across all attractiveness targets, it is imperative that regions can build on shared objectives among different levels of government and different types of actors to support the general interest of the region and the country, and to avoid zero-sum competition between regions in terms of attractiveness.

These results are based on the experience gathered through 15 European pilot regions of the project – Eastern and Midland, Northern and Western, Southern (Ireland), Campania, Liguria, Marche, Sicily (Italy), Algarve, Centro, Lisbon Metropolitan Area (Portugal), Balearic Islands, Cantabria, Valencian Community

(Spain), Dalarna, Norrbotten (Sweden) – whose regional case studies are available online (https://www.oecd.org/regional/globalisation.htm) along with webinars on key topics affecting regional attractiveness (attracting talent, ports/logistics, sustainable tourism development, Special Economic Zones).

Looking ahead

Moving beyond this report, the work to understand the territorial dimensions – including disparities – of attractiveness can be further developed in support of inclusive and sustainable regional development policies, in particular for regions in a development trap. Given that there exist intra-regional differences, adopting a finer granularity for the analysis of territorial attractiveness at the Territorial Level 3 (TL3) and conducting targeted work at this scale can provide additional insights for regional policymakers. This approach has been experimented in this project with the Swedish regions of Dalarna and Norrbotten.

OECD countries and supranational authorities are quickly adopting new orientations to strengthen their place in the world economy, for example through targeted industrial policies that aim to secure key segments of (sustainable) value chains and those that concern food security and public health. A new framework will be required to support these shifts in production which have important subnational characteristics. This needs to happen without falling into protectionism, relying instead on attractiveness policies geared towards the segments of value chains considered strategic and based on existing local assets.

Moreover, the work points to rich scope to provide additional analyses, commentary, and advice around families of regions that display similar strengths and challenges dictated, in part, by their spatial characteristics. These include border regions able to benefit from inter-regional co-operation while also needing to hedge against strong cross-border competition; coastal regions which are often well-connected in relation to ports while benefitting from the visitor economy, yet with increasing challenges brought on by a changing climate; island regions which enjoy the same advantages as coastal ones yet, often, with greater challenges related to their insularity and infrastructure gaps; and mountain regions which are often remote, with lower access to services and threatened by the impacts of climate change. Boosting the attractiveness of these diverse sets of regions demands the adoption of strategies that are sensitive to the similar challenges that they face (Iammarino, Rodriguez-Pose and Storper, 2019[4]). Moreover, an attractiveness approach can help to identify urban-rural synergies that leverage the unique assets of each to attract targets and achieve more balanced development.

This work can be instrumental in contributing to the implementation of programmes aimed at mitigating (and not only adapting to) demographic change by boosting talent attractiveness at the subnational level and supporting policies targeted at certain categories (top talent, civil servants, students, families, etc.).

It can serve as a tool to develop territorial marketing strategies by including not only the creation of a brand shared by various stakeholders but also indirect visibility strategies (e.g. film production in regions).

Finally, this report can serve as the basis for additional support to regions and their partners in implementing the policy considerations identified to improve their attractiveness in pursuit of more resilient, inclusive and balanced regional development in a volatile global context.

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1 Introduction and project methodology

This chapter briefly outlines the rationale for OECD activity on *Rethinking Regional Attractiveness in the New Global Environment*, including the need to consider regional attractiveness to key international target groups of investors, talent and visitors through a subnational lens. Furthermore, it outlines the overall project methodology, highlighting the innovative, multidimensional and interactive nature of the OECD approach. It concludes by briefly outlining the three-part structure of the report, which starts with an exploration of regions in an evolving global environment, followed by the need to rethink regional attractiveness and, finally, approaches to enhancing the attractiveness of regions.

Key messages

This synthesis report on *Rethinking Regional Attractiveness in the New Global Environment* helps regional and national policy makers understand how regions fare in a new global environment that continues to deal with the impacts of the COVID-19 crisis, compounded by the consequences of Russia's war of aggression against Ukraine and existing megatrends of climate, demographic and technological change. Many governments have adopted policy objectives aiming to secure strategic autonomy in sectors deemed essential to their development, which is adding to the complexity of decision making. All of these changes and shocks produce asymmetric impacts within and between countries and regions. This work identifies the policy levers available to enhance the attractiveness of regions to the international target groups of investors, talent and visitors. It also considers the need to co-ordinate across levels of government, across policy fields and with private stakeholders, highlights examples of good practices to implement regional attractiveness policies and proposes regional attractiveness compasses to help decision makers navigate this uncertain world.

Results draw on the OECD's innovative and multidimensional approach to assessing regional attractiveness, which considers global engagement beyond international connections and economic factors alone. In total, the methodology considers more than 50 indicators to understand the position of regions in the world, based on 4 families of international connections (business, knowledge, human and infrastructure) and develops regional attractiveness compasses, covering 14 dimensions across 6 domains of attractiveness (economic attraction, connectedness, visitor appeal, natural environment, resident well-being, and land use and housing).

Lessons are also learned from the development of 15 regional "flyer" case studies from 5 European Union (EU) countries (Ireland, Italy, Portugal, Spain and Sweden) as well as additional work with regions in Argentina, Chile, Colombia, France and Morocco as well as a series of experience-sharing webinars and one-on-one dialogues on rethinking regional attractiveness, held over the past 18 months.

Background

Whilst there has been considerable attention in recent years on the national disparities associated with globalisation and existing megatrends, far less has been devoted to its impacts at the subnational level, despite evidence of their contribution to rising "geographies of discontent" (OECD, 2022[1]; Dijkstra, Poelman and Rodríguez-Pose, 2020[2]). Even before the pandemic and Russia's war of aggression against Ukraine, the pace of expansion in globalisation was beginning to slow, with changes in the configuration of global value chains being increasingly influenced by growing societal and geographical pressures for more inclusiveness and responsible and green supply chains. Supply chain bottlenecks and the increased political spotlight on essential and strategic industries (including energy security) that have followed more recently have further reinforced some of these dynamics and indeed the importance of addressing information gaps. This is all the more important because many of the factors influencing the shape of globalisation are influenced by characteristics at the regional level (e.g. geographical advantages, transport and information technology [IT] infrastructure, and local workforce skills).

National and subnational governments are increasingly tackling the challenges presented by globalisation and looking to capitalise on their assets and opportunities by looking through the prism of inclusive and sustainable development. Viewed under this lens, local quality of life conditions are taking great precedence in regional policy and planning strategies, with the recognition that economic development is inextricably linked with the well-being of communities and the environment.

To assist regions to achieve this agenda, the OECD is undertaking work on *Rethinking Regional Attractiveness in the New Global Environment,* which has been a priority activity in the Regional Development Policy Committee (RDPC) programme of work since 2021-22.

As part of this work, the OECD has developed a diagnostic tool for measuring and assessing the drivers of regional attractiveness, and to support policy makers to identify available assets and potential challenges to strengthen the attractiveness of their places to key international target groups.

The tool has been developed and refined as part of a case study report, "The internationalisation and attractiveness of French regions" (OCDE, 2022[3]), which was conducted by the OECD Secretariat following a request from France, and with the support of the European Commission's Directorate-General for Structural Reform Support (DG REFORM), undertaken in close partnership with the French National Agency for Territorial Cohesion (ANCT), the Association of Regions and the French pilot regions (Grand Est, La Réunion, Provence-Alpes-Côte d'Azur). A working paper measuring and outlining the OECD's conceptual framework for measuring the attractiveness of regions (OECD, 2022[4]) was published in September 2022.

The current activity is undertaken with the support of the European Commission (Directorate-General for Regional and Urban Policy, DG REGIO) and draws on lessons learned from the development of 15 regional case studies from 5 EU countries (Ireland, Italy, Portugal, Spain and Sweden), as well as additional work with regions in Argentina, Chile, Colombia, France and Morocco and a series of experience-sharing webinars and one-on-one dialogues on rethinking regional attractiveness, held over the past 18 months.

It aims to help regional and national policy makers to better understand the position of regions in an evolving global context, including emerging challenges and opportunities, and identify the policy levers at their disposal to enhance the attractiveness of regions to the key international target groups of investors, talent and visitors. In doing so, it seeks to support regions' transition towards new regional development policies that promote inclusive, sustainable and resilient development, while enhancing regional attractiveness.

Why measure the attractiveness of regions in the new global environment?

Not all regions are made equal. Some have assets or density that have proved magnetic to investment, talent and visitor flows for decades (e.g. large metropolitan areas, endowments in terms of natural resources, cultural capital, manufacturing capacity, proximity or accessibility to international markets). Yet spatial inequalities have made it more challenging to achieve social cohesion, political stability and economic growth in places that have been "left behind" (Iammarino, Rodríguez-Pose and Storper, 2019[5]). Indeed, over the past 2 decades, the gap between gross domestic product (GDP) per capita in non-metropolitan versus metropolitan regions – of around 68% – remains unchanged (OECD, forthcoming[6]). The case of regions which are caught in a development trap – that is they face major structural challenges in retrieving past dynamism or improving the prosperity of their residents – is another illustration of the difficulties encountered by certain territories in adapting their economic specialisation to international competition (Diemer et al., 2022[7]). At the same time, regional embeddedness in globalisation has rendered essential the need to identify levers to attract flows of people and investment to achieve resilient territorial development and improve local well-being for people and the planet. The idea of attractiveness as a development strategy has long been studied at the national level, typically looking at foreign direct investment (FDI), "brain drain" or exports, but an all-encompassing, subnational approach and, in particular, a measurement tool that blends economic and non-pecuniary, subjective and objective drivers has not been developed for policy use (Musolino and Volget, 2020[8]).

Supply chain bottlenecks have led to a profound rethink of the way places and firms interact with globalisation, with many considering how value chain macro-regionalisation, the increased use of digital analytics and, in some cases, nearshoring – or the offshoring of economic activity to neighbouring countries – can enhance resilience in the long term (Mckinsey, 2021[9]).

This reflection is not just about dealing with challenges presented by an evolving global environment and existing megatrends. It is also about capitalising on emerging opportunities and a tool to measure attractiveness can provide regions with a competitive edge to address both.

To capitalise on that latent economic potential, the provision of an evidence-based diagnostic tool, or regional attractiveness "compass", can help support regions, including those who may feel they have not benefitted from globalisation. The tool can help to identify the strengths, gaps and opportunities at their disposal to attract foreign investment, talent and visitors, which, together, can provide greater resilience in the face of future global economic and environmental shocks. The aim of this work is not to rank regions but rather to provide a lens through which regions can view their performance and comparative advantages relative to other regions at the national and supranational levels, across a range of dimensions. The proposed indicators are as much a means of identifying priorities for action as they are of understanding the trade-offs to be addressed. These compasses also make it possible to monitor, modify if necessary and evaluate regional attractiveness policies.

Project methodology

To understand the international characteristics of regions, the OECD has adopted an innovative and comprehensive approach. This approach focuses on: i) understanding the international characteristics of regions; ii) identifying existing and novel drivers of regional attractiveness; and iii) providing specific and tailored recommendations to enhance regional attractiveness for participating regions, based on an in-depth analysis of key dimensions (reflecting both international connections and attractiveness).

The OECD approach to assessing regional attractiveness considers global engagement beyond international connections and economic factors alone. At the heart of the methodology (OECD, 2022[4]) sits a regional database of more than 50 indicators to understand the position of regions in the world, based on 4 families of international connections (business, knowledge, human and infrastructure). These

indicators inform the development of regional attractiveness compasses, covering 14 dimensions across 6 domains of attractiveness (economic attraction, connectedness, visitor appeal, natural environment, resident well-being, land use and housing) (a full list of indicators by category is available in Annex A).

The OECD Secretariat worked closely with pilot regions and national governments throughout the course of what has been an interactive process to:

- Complete short fact-finding questionnaires to identify key regional actors, their attractiveness priorities and relevant regional, national and European policies affecting regional attractiveness, and share experiences and policy responses relating to enhancing regional attractiveness – including key challenges and opportunities.
- Identify complementary statistical information to support the analysis.
- Undertake short fact-finding missions to each of the participating regions to explore attractiveness priorities and strategies in greater depth, including through dynamic round-table discussions with key stakeholders from different policy areas.
- Develop short "flyer" case studies for each of the participating regions, providing: i) a snapshot of the region in the world; ii) an internationalisation profile and attractiveness compass/diagnostic tool; iii) an analysis of relevant policy initiatives; iv) an analysis of multi-level governance and co-ordination mechanisms; and v) selected policy considerations.
- Develop a community of practice to share experiences and good practices in a series of webinars and one-on-one dialogues on rethinking regional attractiveness. Fora also informed the development of case studies and the synthesis report.

Synthesis report structure

The synthesis report consists of three parts:

1. ***Regions in the world*** sets the scene with an exploration of internationalisation in the new global environment and outlines the need to adopt a regional lens (Chapter 2).
2. ***Rethinking regional attractiveness*** introduces and applies the OECD's novel measurement framework for assessing regional attractiveness (Chapter 3).
3. ***Enhancing the attractiveness of regions*** expands upon the need to rethink regional attractiveness for each of the specific target groups of investors, talent and visitors, providing roadmaps and an examination of effective multi-level governance and co-ordination mechanisms to enhance regional attractiveness (Chapters 4-7).

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2 Internationalisation of regions in the new global environment

This chapter explores in detail the need to adopt a regional approach to internationalisation and attractiveness in a changing world. At a time of economic recovery, it discusses the impact of the COVID-19 crisis on the positioning of regions in globalisation as well as the ongoing impacts of Russia's war of aggression against Ukraine and other existing megatrends. Ultimately, the chapter explores the unique position of regions in globalisation to respond to crises by implementing resilient place-based policies. It also examines how the internationalisation of sectors and policies can help to enhance regional development to promote economic development, facilitate digital and green transitions and engage regions on the global stage. Finally, the chapter presents a methodology for measuring and monitoring the internationalisation of regions with regard to international connections (business, human, infrastructure and knowledge) and concludes by examining how international attractiveness strategies can help to strengthen internationalisation.

Key messages

Regions need to navigate a new global environment

- In a global environment that continues to deal with the impacts of the COVID-19 crisis, compounded by the consequences of the war in Ukraine and changes in megatrends, the territorial dimension of internationalisation and attractiveness is even more critical for regions as these sudden shocks can translate into major risks and opportunities that depend heavily on their relative performance across international connections (infrastructure, human, knowledge and business connections).
- The heterogeneity of regions can lead to marked differences in terms of their ability to withstand shocks and crises. For example, mobile and fixed broadband download speeds vary by 50% within some OECD countries and the disparity between regional remote working rates within each country is the largest in France and Italy and relatively lower in Germany and the United Kingdom.
- Recent crises have led many decision makers in regions to rethink their place in an evolving global environment. However, they have not taken place in isolation but rather in the context of existing megatrends, notably climate and demographic change and digitalisation, all of which uniquely impact the scale and nature of the policy responses required.
- On the global scale and across the OECD, governments have favoured increased flows of goods, people and ideas across national borders but the opening up of global economies is slowing down.

Enhancing regional development through the internationalisation of sectors and policies

- Export promotion is a way to reinforce regions' participation in global value chains (GVCs) – however, more information is needed to assess the regional-sectoral linkages that can signal to policy makers uneven exposure to global shocks.
- Active industrial policies that seek strategic autonomy in certain regions and sectors are not a one-size-fits-all policy solution but are being increasingly explored as potential avenues for creating regional resilience and developing key export sectors to support regions in the likelihood of future economic shocks.
- The green and digital transitions are global shifts that regions can only capitalise on if the right policies are in place to support regions to compete on the global stage – including the widespread adoption of the Internet, investments in renewable energy and the human capital to deliver on regional ambitions.
- Regions are increasingly seen as actors in international affairs; governments at all levels should co-operate more to promote subnational participation in international events, which can bolster local industry and create linkages across borders. However, intergovernmental co-ordination should be leveraged to avoid potential externalities associated with inter-regional competition to attract target groups.

Understanding the internationalisation of regions in relation to international connections

- The OECD considers four families of international connections: business (e.g. foreign direct investment [FDI] projects, trade, employment in foreign-controlled business, etc.), human (employment, migration and visitors), knowledge (international students, research and development [R&D], patents) and infrastructure (broadband, ports, airports, stations).

- Business connections are among the most measured and monitored connections; however, collecting and/or exploiting information on regional-sectoral linkages can shed light on the resilience of regional economies to global shocks.
- Human connections are increasingly important for regional resilience, which recent shocks and global trends have shown (COVID-19, labour shortages, demographic decline) leading to a need to better design, measure and monitor policies that boost regions' international human connections.
- Infrastructure is a key portal to internationalisation. However, not all regions within countries are endowed with the same advantages in this realm – measuring regional accessibility and infrastructure performance can identify and, in turn, help to close gaps.
- Knowledge connections are an increasingly central tenet of a region's competitive advantage – and an area where governments can do more to measure and promote international networks of knowledge and innovation activity.

The attractiveness of regions increasingly depends on their ability to better connect to the rest of the world. Whether through physical connections, such as transport infrastructure and logistics, or virtual connections, such as information and communication technology (ICT), regions increasingly depend on their connectivity to the global economy through various channels. In a growingly interconnected world, it is progressively essential to create favourable environments for local innovation and entrepreneurship that promote collaboration between firms, academic institutions and government. Further investing in transport and logistics infrastructure, for example, is key for regions to facilitate the movement of people and goods, as well as investing in ICT to ensure good connectivity for firms and talent to operate in an increasingly digitalised world. Increasing digitalisation and intensifying global competition are also transforming the way regions connect with the world, requiring rapid adaptation and a redefinition of regional development strategies. Achieving a more thorough grasp of the internationalisation of sectors can contribute to designing tailored policies to enhance regional development. In addition, recent changes in the global economic environment challenge traditional policy responses and demand further understanding of the internationalisation of regions in relation to international connections, particularly to strengthen regional resilience through international attractiveness strategies.

This chapter explains the dynamics that have shifted the global playing field for regional actors before exploring the policies and strategies that are being adopted to become better connected – and more attractive – in an increasingly competitive international environment. Finally, an approach for measuring internationalisation is advanced, which can be used as a tool to select and monitor policies that aim to improve a region's international connectedness, namely, international attractiveness policies.

A new global environment

In a new global environment that continues to deal with the impacts of the COVID-19 pandemic, compounded by the consequences of the war in Ukraine and recent changes in megatrends, the territorial dimension of internationalisation and attractiveness is even more critical for regions. For the purposes of this activity:

- **Internationalisation** is defined as "the inclusion of a country, a region, a territory or a company in international networks through business, human, infrastructure and knowledge connections" (adapted from OECD (2022[1])).
- **Regional attractiveness** is defined as "the ability to map, promote and improve a territory's economic, social and environmental assets in order to attract and retain talent, investment and visitors" (OCDE, 2022[1]).

Global openness and integration have brought important benefits to raise productivity gains, facilitate technology diffusion and lift hundreds of millions of people out of poverty. However, within such globally integrated economies, shocks can rapidly turn into severe global economic downturns, as impacts cascade through interconnected systems and sectors (OECD, 2021[2]). Indeed, the effects of sudden shocks are closely intertwined with globalisation and may disrupt global trade and investment flows, impact global supply chains and create challenges for businesses and economies. The pandemic not only temporarily slowed down international trade and many global industries such as aeronautics, but also brought into question the globalisation model by, for example, highlighting the high degree of regional dependence on foreign suppliers for essential resources. The war in Ukraine has added further layers of complexity to an already rapidly changing and highly unpredictable world (OECD, 2022[3]). From an economic perspective, the recent developments resulted in increased stress regarding energy access and pricing. This stress has made the issue of dependency more apparent and has come to pass through two opposing trends. On the one hand, there has been a push towards more localised and renewable energy production, which aims to reduce reliance on Russia's energy sources. On the other, climate-related commitments in certain areas of fossil fuel production, such as coal and fuel extraction methods, have become increasingly challenged,

especially by governments suffering from economic hardship and/or specially affected by the green transition in the short term. These trends are reflective of the ongoing complexities and trade-offs not only to address energy-related issues but also to discuss the role of multinational enterprises, pushing countries to enact place-based or place-sensitive policies to protect domestic industries and local jobs.

While the current context poses significant challenges to the envisioned new globalised world, it also presents opportunities for exploring new pathways of regional attractiveness. In the context of deep global uncertainty, achieving a forward-looking, win-win scenario for internationalisation and inclusive and sustainable territorial development cannot be ensured through the market alone and can be led to confrontations, rejection and enclaves (OECD, 2021[4]). On the basis that it is neither possible nor appropriate to reshore everything and risk the interruption of supply and sharp price increases, a gradual and territorially balanced transformation taking into account local characteristics and the existing international links between territories is needed (OECD, 2022[3]). Still, internationalisation can lead to positive local spillover effects (Lembcke and Wildnerova, 2020[5]) in terms of skills and innovation, job creation and providing access to key resources, infrastructure and services, all of which can lead to better territorial distribution of economic activity and positive environmental outcomes (OECD, 2020[6]). Therefore, a better understanding of the position of regions in a changing globalisation is key to improving their attractiveness to international target groups. In this sense, resilient regional development will require supporting diversity in the provision of supplies and attracting not only visitors but also investors and talent to further develop local capacity to foster innovation (OECD, 2021[4]).

With this in mind, the OECD developed an innovative dashboard for measuring and monitoring a region's international connections with regard to four families: infrastructure, human, knowledge and business (see Figure 2.3). The dashboard, applied first in the case of France, illustrates the regional differences that can exist within a country and offers policy makers a view into their relative strengths and gaps in terms of internationalisation. For each family of indicators, a select number of variables are provided along with a description of their utility to policy makers (OCDE, 2022[1]). This assessment of indicators of internationalisation is the basis behind the development of – and the testing of – the attractiveness framework presented in Chapter 3. Together, these frameworks support balanced regional development in complementary ways: regions can leverage their connections to attract investment, talent and visitors. This can in turn strengthen those international connections leading to the development of more attractive regions.

The unique characteristics of regions lead to asymmetric impacts

The heterogeneity of regions can lead to marked differences in terms of their ability to withstand shocks and crises. For example, mobile and fixed broadband download speeds vary by 50% within OECD countries and the disparity between regional remote working rates within each country is the largest in France and Italy and relatively lower in Germany and the United Kingdom (OECD, 2021[7]). The capacity of different places to address these digital divides – as well as to leverage existing digital assets – will be an important determinant of their ability to reposition themselves as attractive places to investors and talent looking to (re)locate.

Similarly, governments at all levels are now grappling with the implications of further disruptions stemming from the war in Ukraine and rising energy prices, which are jeopardising efforts to rebuild economies following COVID-19. Because these impacts are not felt equally within OECD countries, they require national and regional policy makers to work together to address the differentiated impact (OECD, 2022[3]) (see Box 2.1). In Italy, for example, the effect of the war was particularly pronounced in regions relying more heavily on the import of fertilisers and wheat for production, largely located in the southern and island regions – which are already facing steep economic challenges (OECD, 2022[8])

Box 2.1. The rise of energy prices has asymmetric impacts across regions and recent evolutions

Higher energy prices may have disproportionate impacts on some regions, especially in Europe where there has been a significant reliance on oil and gas from Russia. Since the summer of 2021, natural gas prices have risen from EUR 18.8 per megawatt-hour (MWh) in January 2021 to EUR 85 per MWh by 24 May 2022, an increase of 350%. The price shock is already hurting many households and threatens to disrupt the production of goods and services worldwide. As global oil and gas markets are interdependent, price rises will also affect regions, sectors and households that do not source their fossil fuel from Russia. Regional vulnerabilities will vary due to the energy mix, consumption patterns – including the presence of energy-intensive industries – and the ability of consumers and businesses to absorb price increases. This will raise the risk of energy poverty and may reinforce existing inequalities between metropolitan areas, and regions with high car dependency (rural regions, suburban cities) (OECD, 2022[3]).

Headline inflation has begun to decline mainly due to the easing of energy and food prices at the beginning of 2023. The decline in energy prices partly reflects the impact of a warm winter in Europe, which helped to preserve gas storage levels as well as lower energy consumption in many countries. While levels are still relatively high compared to pre-war, this is boosting purchasing power for most firms and households and is helping to lower headline inflation. The earlier-than-expected reopening in China is also expected to have a positive impact on global activity, reducing supply chain pressures and giving a boost to international tourism (OECD, 2023[9]).

The increased focus on energy security will create opportunities for regions as governments seek to unlock endogenous energy resources. Regions with higher renewable energy potential (e.g. windy coastal regions, sunny regions) may see substantially increased investment in wind and solar energy systems that could be exported across Europe. The life of other existing energy infrastructure in Europe may be extended. Furthermore, there are risks associated with short-term measures to import gas from further afield, resulting in higher transport emissions, and the risk of reviving mining production such as coal, which had previously been seen as being in inexorable decline to meet energy security needs (OECD, 2022[3]).

Source: OECD (2022[3]), "The implications for OECD regions of the war in Ukraine: An initial analysis", https://doi.org/10.1787/8e0fcb83-en; OECD (2023[9]), *OECD Economic Outlook, Interim Report March 2023: A Fragile Recovery*, https://doi.org/10.1787/d14d49eb-en.

Climate change is requiring regions to rethink their proposition to key targets

Recent crises have led many regions to rethink their place in an evolving global environment, however, they have not taken place in isolation but rather in the context of existing megatrends, notably climate and demographic change and digitalisation, all of which uniquely impact the scale and nature of the policy responses required.

In the context of climate change, there is great variance between regions as to the risks faced in terms of attractiveness, with some regions facing more severe impacts, sooner than others, which in turn calls for subnational action (Xu et al., 2020[10]; Hultman et al., 2020[11]). Well before that threshold is surpassed, the outlook for residents and visitors will be drastically altered as today's hotspots become less desirable places to live in or visit. At the same time, the global investment landscape needs to become a part of the solution in meeting net-zero targets, meaning that multinationals will need to think more strategically about how investment location choices align with sustainability commitments. At the same time, regional investment attraction efforts will need to consider the environmental impacts of potential investments, while also demonstrating their environmental value proposition to prospective investors and talent required to fill

new jobs. This creates advantages for regions with abundant renewable potential to become emerging hotbeds of FDI attraction (OECD, 2022[12]). At the same time, the ongoing energy crisis has elevated perceived national security risks in developed economies leading to a proliferation of FDI screening mechanisms that, in several country cases, include the renewable energy sector (UNCTAD, 2022[13]). Climate change is a global problem with local origins and consequences that requires a rethink of how subnational actors engage on the world stage (WEF, 2023[14]; OECD, 2021[15]).

Demographic change is widening territorial disparities

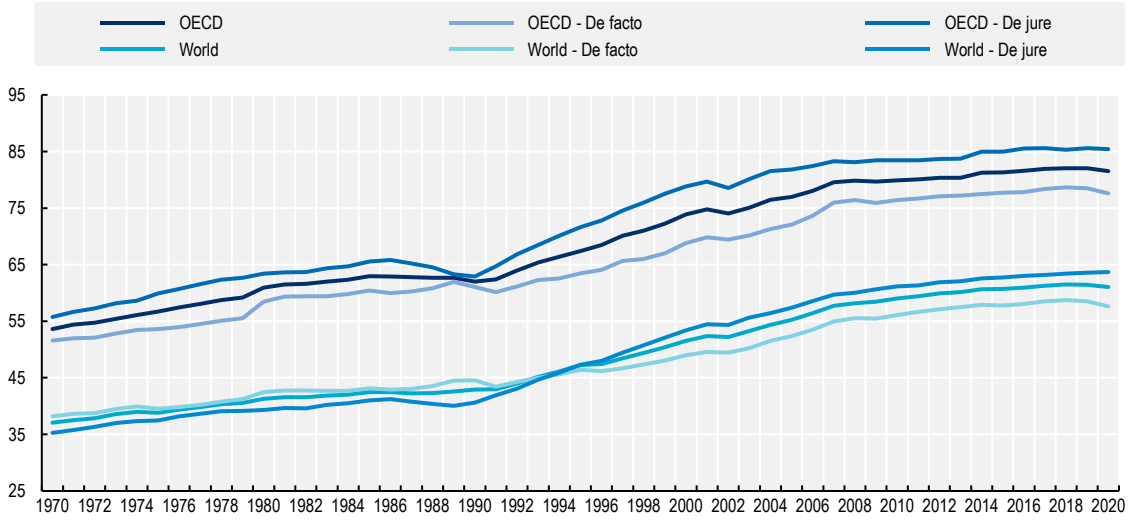
Demographic change is a structural force that can widen territorial disparities in access to services. Talented young people are moving away from areas affected by population decline, due to the lack of labour market prospects. A large part of the population, however, remains, even though they may be lacking the knowledge and skills needed by local businesses, which puts the viability of these businesses under pressure and generates a “labour market mismatch” (OECD, 2014[16]). Population decline directly affects the provision of public services by shrinking the pool of potential users, leading to professional shortages and forcing facilities to close and consequently increasing the distance to services for users in remote areas. Indeed, with population decline and ongoing concentration in metropolitan regions, the population base of many regions is becoming smaller, older and more dispersed. Within Europe, 35% of people live in a region that saw a population decrease between 2011 and 2019. The population of regions covering about half of the European territory, most of them non-metropolitan, is projected to decline in 2011-35. As a result, depopulation widens and reinforces regional disparities, disproportionately affecting rural and remote areas. Such regional demographic decline will require changes to the provision of local public services, building on efficiency gains across levels of government (OECD/EC-JRC, 2021[17]). For instance, projections from Statistics Portugal (INE) foresee a further 30% drop in the population of the Alentejo Region between 2020 and 2080. As in the rest of Portugal, Alentejo is experiencing population ageing and low in-migration due to the preference of nationals and migrants for coastal areas. This trend will particularly affect the more remote areas of the region – which already have an elderly dependency ratio 10 percentage points higher than in other regions in Portugal. As demand recedes, governments, mandated to provide equal access to all residents, will face higher costs from the lack of economies of scale and larger distances between settlements (OECD, 2022[18]).

Globalisation is not ending, it is changing, requiring policy makers to rethink strategies

Across the OECD and the world, governments have favoured increased flows of goods, people and ideas across national borders but the opening up of global economies and policies is slowing down in both an OECD and global context (see Figure 2.1) (Gygli et al., 2019[19]).

The trend towards ever-greater globalisation had already begun to stagnate over the past decade, with a dramatic reduction in Chinese exports, slow down in GVCs and a sharp reduction in services exports prior to the COVID-19 pandemic (Rodrik, 2020[20]). Compounding this, the COVID-19 pandemic and war in Ukraine have further disrupted supply chains and led many countries and regions to re-evaluate the benefits of globalisation to consider reshoring and nearshoring opportunities (see Box 2.2). This will not prompt policy makers to move back towards a pre-COVID-19 pandemic status quo. On the contrary, there is a general acknowledgement of the need to rethink the economic model that prevailed until now, based on which globalisation was considered a full success delivering benefits from a growing openness to trade, investment and movement of people. The question is not about more or less globalisation – it is about strengthening regional positions in globalisation to bring about more inclusive and sustainable development.

Figure 2.1. The KOF Globalisation Index, OECD and world, 1970-2020



Note: There is a flattening trend in both *de jure* (referring to policies that facilitate internationalisation) and *de facto* (referring to actual flows of goods and activities) globalisation (0 = no globalisation; 100 = max globalisation).
The index measures the social, political and economic dimensions of globalisation covering everything from trade to tourism to international R&D. *De facto* globalisation refers to total actual international flows of goods and activities while *de jure* refers to the changes associated with internationalisation policies that facilitate said flows.
Source: Based on Gygli, S. et al. (2019[19])), "The KOF Globalisation Index – Revisited", https://doi.org/10.1007/s11558-019-09344-2.

When considering the dynamics and directions that are influencing globalisation, it might be argued that the world is trending towards more (macro)regionalised camps of global capital flows (macro-regions such as Europe, Latin America and the Caribbean, the Middle East and North Africa, etc.), with almost all macro regions depending heavily on China (McKinsey Global Institute, 2022[21]; EIU, 2020[22]). Recent research covering the European Union's imports over the period 2001-22 shows an increasingly concentrated import share where the relationship is driven by China's rise and is more salient for high-tech and final goods (Bruegel, 2023[23]). A response to this has been the "China plus one" strategy where nations seek to diversify their value chains away from a dependency on one foreign supplier. For regional actors, it is important to monitor these shifts and to provide support to firms to secure their supply chains while continuing to attract FDI from diverse markets.

Box 2.2. Active industrial policies for regional resilience

Strategic autonomy is being discussed as a means of relocating certain sectors closer to home

OECD governments are actively rethinking their positioning in GVCs to secure more strategic autonomy in certain sectors deemed essential or where a current foreign dependency exists. Mechanisms range from reshoring to nearshoring and friendshoring strategies and have been the subject of ample policy attention in recent years, however, little evidence illustrates the degree to which this has been embedded in territorial development strategies.

Examples of how these mechanisms can be embedded in territorial development strategies, however, are starting to appear. One such example involves the West Midlands region in the United Kingdom. Here, a regional approach to implement a national industrial strategy in order to make a more attractive

case for the reshoring of manufacturing activities led to the relocation of a large firm supplying the automotive sector (Pegoraro, De Propris and Chidlow, 2021[24]).

In Italy, the reshoring activities of micro and small enterprises (MSEs) proved that even when production processes are relocated abroad, firms tend not to cut ties with their local-level suppliers, and vice versa (Canello, Buciuni and Gereffi, 2022[25]). This directly challenges the notion that a firm's embeddedness in GVCs is contradictory to its embeddedness in the local economy. From an attractiveness point of view, this is not a trivial result. It suggests that both international investment attraction and micro, small and medium-sized enterprise (MSME) linkages can be a part of the same policy mix – a matter further explored in Chapter 4.

In France, the *Territoires d'industrie* programme aims to foster co-operation across levels of government and with private stakeholders to support the reindustrialisation of French territories thanks to a broad range of activities, which includes the identification of reshoring opportunities in specific sectors (such as flax spinning in Alsace). Within the framework of a method of agreement (signed on 30 July 2020), the central government and the regions have pledged to co-finance – as part of recovery plans – the reshoring of segments of production value chains within French territories (OCDE, 2022[1]; forthcoming[26]).

These strategies are also manifest at the supranational level. In the release of the European Union Green Deal Industrial Plan (February 2023) and the associated Net-Zero Industry Act (March 2023), the rationale clearly stipulates the need to develop European energy production that can compete with established strategies abroad (e.g. United States Inflation Reduction Act and China's massive investments in greener industry) as well as to ensure "public order and security" (EC, 2023[27]). The proposal includes specific stipulations for the development of net-zero technologies as a catalyst for growth in less-developed regions.

While reorganising segments of GVCs is being discussed as a vehicle for promoting regional resilience, it is important to consider that firms which reshore for strategic reasons may be required to operate with smaller headcount due to the higher cost of labour and inputs. The impact of these strategies will likely vary across places and should be further assessed to determine when and where strategic autonomy translates into resilient and inclusive regional development. Regions should also consider evidence that GVC participation can be associated with greater market diversification, increasing, in turn, economic resilience.

Source: Criscuolo, C. et al. (2022[28]), "An industrial policy framework for OECD countries: Old debates, new perspectives", https://doi.org/10.1787/0002217c-en; Borin, A., M. Mancini and D. Taglioni (2022[29]), "Integration in global value chains might not increase exposure to risk after all", https://voxeu.org/article/integration-global-value-chains-might-not-increase-exposure-risk-after-all; Pegoraro, D., L. De Propris and A. Chidlow (2021[24]), "Regional factors enabling manufacturing reshoring strategies: A case study perspective", https://doi.org/10.1057/s42214-021-00112-x; Canello, J., G. Buciuni and G. Gereffi (2022[25]), "Reshoring by small firms: Dual sourcing strategies and local subcontracting in value chains", https://doi.org/10.1093/cjres/rsac015; OECD (2022[1]), *L'internationalisation et l'attractivité des régions françaises*, https://doi.org/10.1787/6f04564a-fr; OECD (forthcoming[26]), *The Future of Rural Manufacturing*, OECD Publishing, Paris; EC (2023[27]), *Proposal of a Regulation of the European Parliament and of the Council on Establishing a Framework of Measures for Strengthening Europe's Net-zero Technology Products Manufacturing Ecosystem (Net Zero Industry Act)*, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023PC0161 (accessed on 4 April 2023).

The internationalisation of sectors and policies to enhance regional development

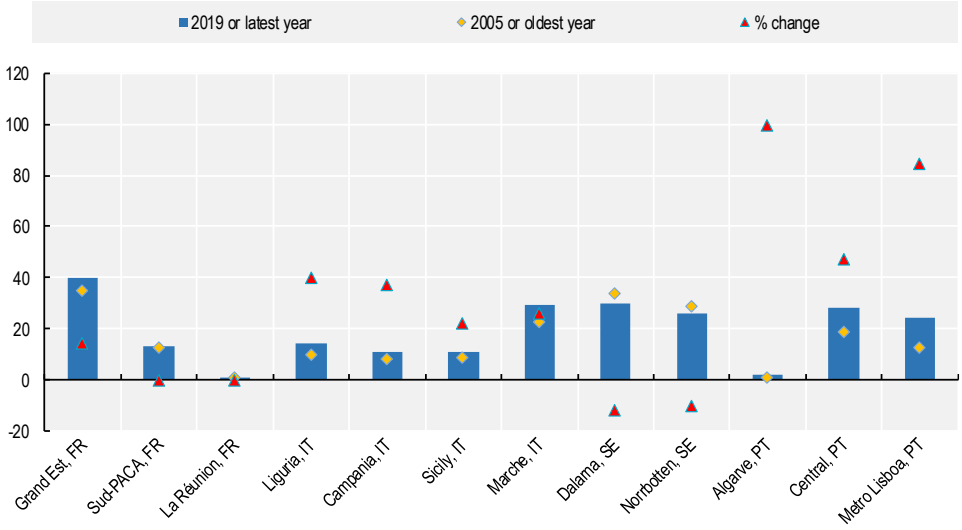
As global value chains evolve, it is up to regions to define how they fit in. The impacts of megatrends/GVCs are not even and depend on the incumbent strengths and weaknesses of individual regions, including their traditional sectors and endowments in terms of natural and cultural capital, transport and information technology (IT) infrastructure. Within countries, the disparities can be significant and can in turn influence

how effectively said regions are able to engage in globalisation, including attracting investment, talent and visitors and developing exports. Thankfully, the assets that enable regional participation in GVCs are growing increasingly diverse. As a result, opportunities for enhanced integration of left-behind regions have increased in recent years, not least, through greater investment in renewable energy, which can benefit remote regions, and the use of active industrial policies to localise key segments of supply chains. Embeddedness in GVCs should not be seen, however, as the answer to all of region's questions, and in fact can be a source of potential vulnerability. For example, a region embedded in a long value chain may be highly exposed to the choices of other countries in relation to their own resilience.

Export shares are one way of assessing regions' embeddedness in GVCs, with a higher share (as a percentage of gross domestic product [GDP]) illustrating their dependence on foreign markets. Collecting – currently scarce – information on the regional-sectoral concentration of exports can help policy makers to assess this embeddedness more precisely and to support regions in the likelihood of future economic shocks. As depicted in Figure 2.2, export shares are prone to change over time and can vary significantly within countries. By way of example, among the 15 regions studied, Portuguese regions exhibit some of the largest increases in terms of exports as a share of GDP over the period, while the dynamic shows strong regional differences in Italy and a decrease in both Swedish TL3 regions, Dalarna and Norrbotten.

Indeed, supporting the export development of domestic firms is a key part of a region's internationalisation process. A benefit of attracting foreign investors is the spillover to local small- and medium-sized enterprises (SMEs) – one of which includes providing them easier access to foreign markets. Across the European Union, about 600 000 SMEs, employing just 6 million people, are exporting to markets beyond the union: growing export opportunities for SMEs can help them to take advantage of growth opportunities in untapped, especially developing and emerging markets, which will account for roughly 60% of world GDP by 2030 (EC, n.d.[30]). The role of regional policy makers is clear: to support firms in developing international contacts and supply chain linkages and to overcome barriers to international market access (see Chapter 4).

Figure 2.2. Exports as a share of GDP across selected European regions



Note: First year and last year are 2010 and 2018 for Sweden due to data availability. The selection of regions is based on their involvement in the OECD's growing community of practice on *Rethinking Regional Attractiveness in the New Global Environment*. In La Reunion, exports as a share of GDP were unchanged at 1%. For the Algarve region, the share doubled from 1% to 2%.
Source: Based on (OECD, 2023[31]), "Regional economy", *OECD Regional Statistics* (database), https://doi.org/10.1787/6b288ab8-en (accessed on 31 March 2023).

Promoting resilient, inclusive and innovative regional economies

Engaging in globalisation can be a means for sustainable and inclusive development when strategies are aligned with regional priorities. This also requires due consideration for the potential spillovers for local firms and residents – both positive and negative (OECD, 2022[32]). It is less a question of diversification or specialisation as it is about attracting investment that enhances the innovative capacity of regions and makes the best use of the assets, skills and infrastructure that can foster regional development (Ortega-Argiles, n.d.[33]). A policy tool being widely adopted – albeit with a greater leadership role required for subnational actors – are smart specialisation strategies (S3) – explored further in Chapter 4. Regional approaches to innovation, specialisation and diversification can enhance the ability of territories to adopt or absorb innovations from outside the region, as well as enable the development of clusters in areas of emerging potential, such as renewables, artificial intelligence and the blue economy. Regional bodies can act as stewards of this process, bringing together different actors across categories of internationalisation and ensuring that multi-level governance arrangements and attractiveness policies are in place that support internationalisation (OECD, 2021[4]). Moreover, regions need to consider which skills gaps – high, medium and low – are needed to be bridged to achieve inclusive and sustainable regional development (OECD, 2022[32]). This involves adopting a regional approach while taking into account regional authorities' competencies, the need to clarify the "who does what" and the implementation of relevant multi-level co-ordination mechanisms, as explored in Chapter 7.

Territorial marketing is also a key strategy to promote resilient, inclusive and innovative regional economies. It can be used not only to promote regional assets, thus contributing to its attractiveness to foreign targets, but also to engage local stakeholders around a territorial project. For instance, countries and regions use geographical indications (GIs) to defend and promote local interests at the international level. Furthermore, a cohesive and consistent territorial marketing strategy is a necessary step for regional talent attraction and retention, as demonstrated in Chapter 5. A cohesive territorial marketing strategy is also needed to attract visitors, as explored in Chapter 6. For example, three territorial brands have been set up in French regions *(Provence, Enjoy the Unexpected*, *Alpes French South* and *Côte d'Azur France*) as part of territorial marketing strategies to reinforce the tourist appeal of the Provence, Alpes and Côte d'Azur destinations (OCDE, 2022[1]). In these regions, the participation of stakeholders in the development of territorial marketing strategies is an opportunity for dialogue and consensus building among actors working on regional attractiveness, which ultimately leads to better policies and outcomes for the wider region.

Facilitating the digital and green transitions through international connections

The digital and green transitions pose new challenges and opportunities to regions, which will differ across places within countries. Across OECD regions, people enjoy significantly different access to high-quality Internet. This is particularly true for fibre fixed broadband connections (fibre-to-the-home, FTTH), while the green transition is changing jobs, skills and local economies and presenting new challenges and opportunities, both of which show regional asymmetries (OECD, 2023[34]). Regions can turn challenges of digital and green transitions into opportunities by using regional assets to restructure the local economy. Providing access to high-quality broadband services at affordable prices, across different territories will help to ensure that economic and social activities can continue in an increasingly remote manner. This is of particular concern for non-metropolitan areas which do not typically have the same access to high-speed broadband, revealing a clear urban-rural divide. According to the information provided by regulators in 26 OECD countries, overall, only 7 out of 26 countries have succeeded in ensuring access to a high-speed connection to more than 80% of households in rural regions (OECD, 2020[35]). At the same time, remote areas are particularly poised to become leaders of the green transition given that clean energy sources, from wind to solar (farms) to tidal, are well-placed in non-metropolitan areas. Across Ireland and the United Kingdom, for example, off-shore windfarms are a core part of regions' spatial development

strategies, taking advantage of the record wind speeds in the North Atlantic. They are also a way to further develop and make use of regional ports, which support the economies of small and medium-sized towns.

Digital and green skills shortages are a major obstacle to local economic growth, firms' investments and delivering the digital and green transition in regions. Therefore, to seize the benefits of the digital transition, access to digital infrastructure in regions is essential, not only for local communities but also to attract the key target groups of investors, talent and visitors. This needs to be accompanied by the widespread adoption of digital technologies in regions, complemented by minimum digital skills. There is also a need to address a skills gap when it comes to the green transition. This is highlighted by the fact that, in 2022, 58% of surveyed companies in Europe indicate the shortage of a skilled workforce as a major barrier to making their business model greener (Eurochambers, 2022[36]). Still, the share of workers in green-task jobs grew overall from 16% in 2011 to 18% in 2021, ranging from 10 percentage point increases to 7 percentage point decreases across OECD regions (OECD, 2023[34]). The challenge today is for regions to attract diverse talent and investment – from healthcare workers to renewable energy to creative and cultural industries – and thus to provide the infrastructure and offerings needed to make these transitions a possibility. Moreover, regions need to consider which skill gaps – high, medium and low – are needed to be bridged to achieve inclusive and sustainable regional development, which is explored in Chapter 5 (OECD, 2022[32]).

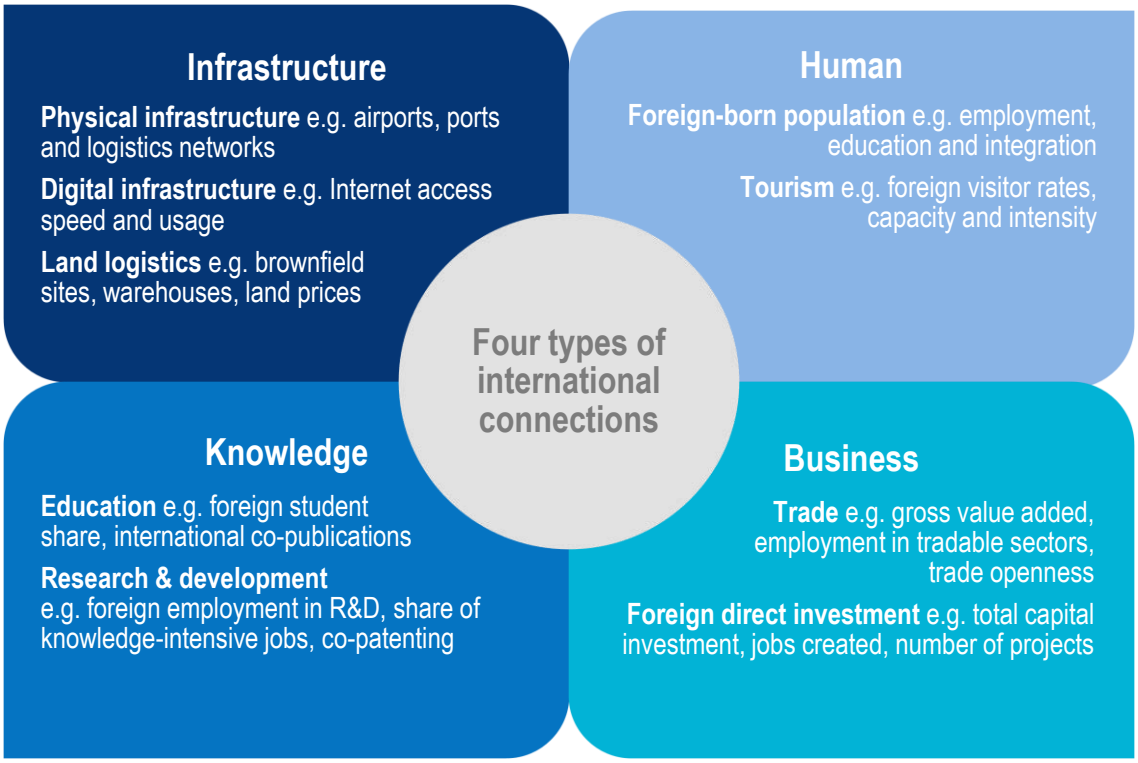
Regions as actors on the global stage

Regions are increasingly seen as actors in global exchanges in a process dubbed paradiplomacy, where legitimate representatives of local and regional authorities undertake external relations with other local, regional, national and international actors (OECD, 2019[37]). In France, for instance, the Rhône-Alpes region and its partner Entreprise Rhône-Alpes International have several economic representations abroad and, in Spain, Catalonia has 4 delegations (France, Belgium, Germany, United Kingdom) as well as 34 trade bureaus, 4 cultural and linguistic representatives, 9 overseas development offices, 10 tourism centres and 5 cultural industries representatives (Paquin, 2019[38]). Although national governments continue to have the means and power to influence international agendas, regions and cities are more visible on the international scene through various fora (Acuto, 2013[39]). Indeed, paradiplomacy is a tool for regions to increase attractiveness by advancing their global interests and attracting global investment and talent, increasing international visibility and intervening in global flows of international relations (Lord, 2000[40]). Although there may be restrictions for certain subnational governments to play a role in the international arena, many countries hold extensive consultations with subnational governments and other stakeholders in the lead-up to significant international agreements. Even where multi-level governance arrangements do not provide an easy path for regions to participate in international affairs, it is imperative that regions work across sectors and levels of government to co-operate in promoting their key assets on the global stage, including through support for subnational investment promotion agencies, which exist at the municipal and/or regional level across virtually all OECD countries. These activities benefit from national-regional co-ordination efforts, which can reduce the risk of races-to-the-bottom where regions compete to attract investors, talent and visitors through offering competitive fiscal advantages. For instance, the case of Germany is a telling example of how cities and regions can collaborate with their peers in the Global South. Germany has put in place a dedicated multi-level governance architecture with specific programmes and funding schemes to support both federal states and municipalities in strengthening their decentralised development co-operation strategies and to co-ordinate activities across levels of government (OECD, forthcoming[41]).

Understanding the internationalisation of regions in relation to international connections

National factors alone are no longer sufficient to determine international attractiveness to foreign targets. A set of subnational information is needed to address the broader sensitivities expressed in the current environment (e.g. teleworking conditions, broadband connections, access to public health and education, logistics networks and environmental and cultural quality). In doing so, this information offers regional and territorial actors new possibilities to act and distinguish themselves in globalisation, supported by countries to sustain opportunities and favour synergies rather than subnational competition (OCDE, 2022[1]). To deliver on this, the OECD developed an approach to allow regions to be situated in their global environment by distinguishing four categories of international "connections" (Figure 2.3) (OECD, 2021[4]).

Figure 2.3. Analytical framework for the diagnosis of the internationalisation of regions



Source: OECD (2022[1]), *L'internationalisation et l'attractivité des régions françaises*, https://doi.org/10.1787/6f04564a-fr.

- **Business connections**: Consisting of international exchange of goods, services and capital. Business connections are often the most important among a set of international exchanges and they are cited by actors as a priority for their internationalisation activities, in particular exports by local companies and the attraction of FDI.
- **Human connections**: International flows of people. These are mainly migrants and visitors, defined as a traveller taking a trip to a destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purposes) other than to be employed in the country or place visited (OECD, 2018[42]).
- **Infrastructure connections**: The physical and digital networks that are provided by a region to national and international actors. They condition the existence and intensity of the various flows – human, financial, goods or data – linking regions to their international partners.

- **Knowledge connections**: The international relations developed by R&D actors: public and private research centres and universities. International collaboration in the field of research and innovation is a key element in the internationalisation and attractiveness of a territory (OECD, 2021[4]). These connections are thus also embodied in the flow of foreign researchers and international students and include international cultural relations, which are more difficult to capture statistically. Furthermore, these knowledge connections include the diplomatic action of the regions and in particular exchanges linked to decentralised development co-operation (OECD, 2018[43]).

Business connections

Business ties are key to globalised networks and are often among the only aspect measured. They materialise primarily through trade, imports and exports to final or intermediary destinations. Multinational enterprises are driving both globalisation and the resulting international fragmentation of production but there is an increasingly important role for SMEs in supporting the internationalisation of regions. There is a need for better measures of the actual scale of the activities of both multinational enterprises (MNEs) and SMEs (including their foreign affiliates, supply chain linkages and their core markets abroad). MNEs and SMEs play an ever-increasing role in the development of GVCs, which are not limited to trade and FDI alone: they have a direct and global effect on the organisation of production networks (through R&D, marketing and branding, parent and affiliate companies, etc.). Overall, comparable statistical indicators on business connections at the regional level are scarce, with the most relevant measures relating to a region's trade, such as the share of the regional economy in the "tradable goods" sectors (including agriculture, industry, information and communication, financial and insurance activities, and other services) (OECD, 2018[44]), the level of imports/exports and the level of FDI, the latter of which is expanded upon in Chapter 3.

While many countries have regional data on imports and exports of goods, about half of OECD countries do not provide this information in detail. Information is even scarcer when considering sectoral data – which would be a vital tool for regions to understand their region-sector linkages and their resilience against global shocks. For example, using input-output (IO) tables from the cross-border EUREGIO database, which synthesises the regional flows of all goods and services, the Banco de España analysed Spanish regions in GVCs and determined that the Basque Country was most exposed to global economic shocks through backward participation (meaning they rely most on inputs of production from other regions and countries). Madrid, Spain, was found to be most impacted by changes in US tariffs and the largest overall foreign dependency (OECD, 2022[32]).

Human connections

People, and more specifically visitors and migrants, are an important dimension of internationalisation. Human connections are therefore measured using both migration and visitor data. Data on migration cover not only the length of stay but also the foreign-born share of the population and their integration into society with regard to employment and education outcomes. On the visitor front, measurements from the United Nations Educational, Scientific and Cultural Organization (UNESCO) (e.g. number of World Heritage sites), the European Commission's Joint Research Centre (JRC) (e.g. an indicator of regional vulnerability to tourism shocks) (Batista e Silva et al., 2018[45]) and Eurostat (e.g. number of overnight tourist stays) provide useful assessments of a region's embeddedness in the global tourism economy. In terms of visitor connections, for instance, the Algarve region, Portugal, and the Balearic Islands region, Spain, performed well above other EU regions, with the Balearic Islands having recorded the highest number of visitor nights spent per square kilometre (sq. km) (over 1 540) out of all of the Spanish regions. In addition, many OECD member countries, such as Canada, France, Spain and the United Kingdom, collect useful information on the number of arrivals and foreign-born employment across sectors and at the subnational level (OECD, 2016[46]). Measuring human connections – especially following shocks like

COVID-19 where these flows tend to decline – can support regions to enhance their visitor and talent attraction policies (explored in Chapters 6 and 5 respectively).

Infrastructure connections

Infrastructure connections are the physical connections a region offers to its potential international partners. The existence and characteristics of infrastructure connections condition the existence and intensity of the various flows that link regions to their international partners – whether these are flows of people, goods, finance or information. When infrastructure connections are limited, it can isolate regions from an attractiveness perspective, as prospective talent, investors and visitors find these places hard to reach and to work or export from (see Box 2.3).

Projects like Ireland's All-Island Strategic Rail Review, a cross-border project including both Northern Ireland and the Republic of Ireland, are aimed at reducing these regional disparities by "catching up" on years of lost international connections in relation to a limited rail network. One of the key tenants of the strategy is to promote regional accessibility in the Northern and Western regions – a key barrier to its development and attractiveness as illustrated in Chapter 3 (Government of Ireland, 2021[47]).

Box 2.3. Ports and logistics networks, an asset for regional development

Without relevant access to road, air, train, broadband and logistics networks, regions may lose opportunities for export and be less attractive to FDI, talent and visitors. Among infrastructure hubs, ports remain at the frontline of globalisation, with around 90% of traded goods carried by sea. At the same time, regional policy choices related to port and logistics networks can also shape different types of globalisation.

In May 2022, the OECD held a webinar on "Making ports and logistics networks an asset for regional development". The webinar discussed infrastructure connections as a factor in the internationalisation and attractiveness of regions and the critical role ports and logistics networks can play in regional development, especially for island regions such as the Azores (Portugal), Islas Baleares (Spain) and La Reunion (France), due to their dependence on maritime transport, in the case of outermost islands, their strategic role as a frontline presence for nations. Key takeaways included the following:

- Ports are pivot points of international economic activity in terms of organisation and value creation and they should be planned and developed to complement other transport and logistics policies and infrastructure.
- However, the current shipping model, based on the presumption that more, bigger and cheaper is better, has reached its limits. Thanks to record-high freight rates since 2020, the ten largest container shipping companies registered large profits in 2021, a substantial part of which has been used to fund acquisitions of firms operating inland logistics and transport to achieve vertical integration of the supply chain. Meanwhile, the pandemic showed the limits of the hub-and-spoke tendencies in maritime transport as companies consolidated port networks resulting in increased calls to main hub ports and a reduction in calls to secondary ports. This consolidation by industry giants creates significant challenges for coastal regions looking to attract port activity and investment that improves both their maritime and inland logistics infrastructure.
- Indeed, the post-pandemic period has highlighted that congestion in only a few hub ports can result in severe disruption of global supply chains. A shipping model based on smaller ships, more direct connectivity, delivering value-added and better environmental performance would help rebalance the current "race for critical mass" and be more aligned to regional development

objectives. This renewed approach could also allow for new regions and territories, including those with mid-sized ports, to become more attractive to global trade.

- Shifting to such a model will present multi-level governance challenges and require quality partnerships between stakeholders (e.g. national and regional governments, cities and the private sector, and ports). For example, the Nexus Agenda, led by the Ports of Sines and the Algarve Authority in Portugal, is a consortium of 35 national and international representatives from the transport and logistics sector, academia, research institutions and technology companies, to develop solutions for the digital and ecological transition of the transport and logistics sector in Algarve. It is estimated that by 2030, products created under the agenda will generate 1 000 jobs and reduce the carbon footprint of the Port of Sines by 55%.

Source: OECD (2022[1]), *L'internationalisation et l'attractivité des régions françaises*, https://doi.org/10.1787/6f04564a-fr; OECD (2022[48]), "2nd in the OECD webinar series on Rethinking regional attractiveness in the new global environment: Making ports and logistics networks an asset for regional development – 24 May", https://www.oecd.org/regional/globalisation.htm; ITF (2022[49]), "Performance of Maritime Logistics", https://doi.org/10.1787/8e06fcd1-en; Merk, O., J. Hoffmann and H. Haralambides (2022[50]), "Post-COVID-19 scenarios for the governance of maritime transport and ports", https://doi.org/10.1057/s41278-022-00228-8.

Knowledge connections

Knowledge flows are a crucial aspect of internationalisation and – in a digital, rapidly changing society – they strongly contribute to the success of individual, business and territorial activities. In principle, knowledge connections include many aspects, although the existing literature provides few indicators to enable the comparison of regions from one country to another. Available indicators include patent production, R&D spending and measures relating to knowledge-intensive industries. The core hypothesis of this pillar is that the most innovative sectors create more performant international links. Empirical research shows that increased access to foreign markets increases stimulus for innovation, which in turn increases productivity and ultimately market size (Lileeva and Trefler, 2010[51]). In addition, R&D enable businesses to better withstand foreign competition (Matray and Hombert, 2015[52]). The number of co-patents filed by partners in different countries is one of the best measures because it is inherently linked to knowledge flows (at least between inventors). Making progress on these indicators requires regional actors to work across sectors to promote their region as a knowledge hub. The Ruhr area, Germany, for example, exploited its large urban population to create a knowledge hub for the chemical and green industries. By 2014, the Ruhr area had 22 universities with more than 250 000 active students. The large investment was very successful in creating a highly skilled workforce that built an innovation-led economy, attracting companies and new employment. Indeed, regions with a high share of digital or green jobs have a comparative advantage in attracting green investment, given the availability of workers and other firms with which they can collaborate (OECD, 2023[53]).

Strengthening internationalisation through international attractiveness strategies

Recent crises have prompted regions in OECD countries to rethink their participation in globalisation, as well as their relative attractiveness to investors, talent and visitors. As a result, regions need to better understand the structural challenges emerging or reinforced by these crises (i.e. COVID-19 pandemic, the war in Ukraine) and existing megatrends (climate change, globalisation, digitalisation and demographic change) and how their international profiles may have changed, while maintaining a focus on providing benefits to local residents and businesses and preserving environmental resources.

To help regions better understand their position in the new global environment and rethink their attractiveness strategies, the OECD has designed an innovative and multidimensional methodological

framework that first considers and maps a region's international connections, as presented above. However, simply understanding a region's position in the world is not sufficient: other tools need to be identified to help strengthen that position. Spotting available policy levers to enhance international connections and more effectively attract specific target groups (e.g. investors, talent and visitors), for example, requires a closer examination and understanding of subnational drivers of regional attractiveness. To do this, the OECD regional attractiveness framework, presented in the next chapter, considers global engagement beyond international connections and economic factors alone.

The discussion needs to focus on how to transform globalisation as a driver of regional development, making trade work for all, with respect to climate, demographic and technological change and rising social and economic inequalities. Reflecting on ways to articulate global and local development leads to multiple questions:

- What levers do regions have at their disposal to reinforce their attractiveness and global engagement? (Chapter 3).
- How can regions strengthen their value proposition to attract global investment? (Chapter 4).
- How can regions enhance economic opportunities and well-being to attract international talent? (Chapter 5).
- What are the levers that promote sustainable international tourism activity beyond metropolitan regions? (Chapter 6).
- How can regional policy makers work across sectors and levels of government (including international) to co-ordinate their attractiveness policies? (Chapter 7).

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3 Measuring what works for regional attractiveness

This chapter provides an in-depth introduction to the OECD's novel quantitative measurement framework for assessing regional attractiveness. This innovative approach considers global engagement beyond international connections and financial drivers alone. In total, the methodology considers more than 50 indicators, covering 14 dimensions, across 6 domains of attractiveness (economic attraction, connectedness, visitor appeal, natural environment, resident well-being, and land use and housing). The chapter also introduces a diagnostic tool in the form of a regional "attractiveness compass" to identify regional strengths and gaps and to inform the development and monitoring of regional attractiveness policies. Finally, it identifies a range of drivers of regional attractiveness to the key international target groups of investors, talent and visitors.

Key messages

A multi-dimensional regional attractiveness compass can guide decision makers

- In this report, the OECD proposes an innovative and multi-dimensional approach to assessing regional attractiveness: the regional attractiveness compass. The approach considers global engagement beyond international connections and financial drivers alone. In total, the methodology considers more than 50 indicators to develop regional attractiveness profiles, covering 14 dimensions of attractiveness, across 6 domains (economic attraction, connectedness, visitor appeal, natural environment, resident well-being, land use and housing).
- The use of an evidence-based attractiveness compass can help identify regional strengths and gaps as well as consider trade-offs and synergies related to regional development strategies to attract investors, talent and visitors.
- For policy makers, the compass can be seen as an off-the-shelf tool for prioritising, monitoring, adapting and evaluating regional attractiveness policies, providing a holistic approach instead of siloed implementation.

Investment attraction is motivated by physical and digital infrastructure as well as universities

- Foreign direct investment (FDI) is analysed in terms of two outcome variables: the total number of projects and the total capital expenditure.
- Greenfield FDI, in terms of the number of projects, exhibits a significant and positive relationship with rail performance, flight accessibility and the presence of a top 500 university.
- When measured by total capital expenditure, Internet download speeds and top universities matter in the context of OECD regions.

Housing and broadband are of utmost importance to talent

- The location decisions of international talent – defined as people with skills corresponding to the needs of public and private, place-specific economic and social development strategies – appear to be motivated above all by Internet quality and affordable housing. These trends are likely to rise with the potential continued adoption of hybrid and remote working schemes.

A range of factors influence the attractiveness of regions to visitors

- Visitors are enticed by regions with a cleaner environment, paving the way for more sustainable tourism development.
- Small and medium-sized enterprises (SMEs) are the backbone of the tourism sector and those regions with high levels of entrepreneurship are likely to be more attractive to visitors.

Some factors are effective in attracting multiple target groups

- Regions attractive to talent, visitors and investment appear to either host a higher share of international students or a top 500 university, suggesting a potential policy synergy between the internationalisation of education and attractiveness.
- For both talent and FDI, Internet access and quality are prominent drivers, underscoring the importance of upgrading digital infrastructure.
- Future work will build out both the TL2 and TL3 databases to better serve policy makers at more local levels, in addition to being applied in more international contexts (e.g. OECD regions in Asia, North America).

Setting the context

This chapter introduces and applies a novel measurement framework for assessing regional attractiveness. It was first published as a methodological working paper and applied in a regional context across France (OECD, 2021[1]; 2022[2]; 2022[3]). Six domains of attractiveness broadly encompass the potential assets of territories:

- Economic attractiveness (economy, innovation, labour market).
- Connectedness (transportation, digitalisation).
- Visitor appeal (tourism, cultural capital).
- Natural environment (environment, natural capital).
- Resident well-being (social cohesion, health, education).
- Land use and housing (land, housing).

Going beyond traditional economic factors, this chapter seeks to explore non-financial and non-market drivers of attractiveness to determine what contributes to drawing investors, talent and visitors to a region. The quantitative analyses focus on actionable regional development policy tools such as infrastructure, skills, environment and well-being, while considering the scope (i.e. breadth of indicators, availability, missing indicators), scale (geographic, time-bound) and robustness of the database. It concludes with a selection of indicators to support the design, monitoring and evaluation of attractiveness policies as they pertain to the three targets covered under this work: talent, investors (considering also export development) and visitors.

While the determinants of attractiveness are context-dependent and vary from country to country, looking at a broad sample of regions across the OECD provides important insights into the common variables that define regions which have proved attractive to talent, investors and visitors on the move. The chapter presents statistically robust, time-bound and large geographic samples of data helping policy makers unpack what is important for regional attractiveness. Given the choice of outcome variables, it is likely that a whole host of factors not shown in these statistical results may also matter. The purpose of this chapter is not to exhaust all significant drivers of regional attraction but to highlight the common denominators across places. Doing so can guide policy makers and regional actors to dive deeper into the results and the performance of their territory in relation to the findings. For example, education – measured by both the number of top institutions and international student shares – appears to matter for talent, investment and visitor attraction. Does your region perform well across this dimension? If not, what other assets can explain regional attractiveness in your territory? The chapter aims to stimulate these types of questions, which can ultimately inform regional attractiveness strategies. Opting for such an approach makes attractiveness strategies available to all regions, enabling them to identify and strategically build on their assets.

These questions are an essential ingredient to reducing territorial asymmetries made clear by recent shocks and crises. The impact of the COVID-19 crisis, compounded by the consequences of Russia's war of aggression against Ukraine and existing megatrends (e.g. climate change, globalisation, digitalisation and demographic change), continue to produce asymmetric effects within and between regions, with the scope and scale depending on their unique characteristics. For example, regions already found to be caught in or at risk of falling into a regional development trap – regions that are unable to both maintain their past dynamism and keep up with their peers in terms of income, employment and productivity growth – are found to have a smaller share of manufacturing, a higher old-age dependency ratio and a lower share of the population with secondary education. These regions – which span low, medium and high incomes and exist in most developed, emerging and developing countries – will be less resilient to external shocks if preventative measures are not implemented to mitigate against further entrapment (Diemer et al., 2022[4]). These differences manifest also in terms of human development and remain apparent when

looking at a global sample of nations: the subnational results of the United Nations Human Development Index (HDI) show a roughly equivalent score difference between the highest-scoring state in the United States (US) – Connecticut – and the lowest-scoring – Mississippi – as between the United States and Sao Tome and Principe, which rank 3rd and 156th respectively in terms of HDI.

To respond to these regional disparities, the OECD has developed this innovative and multi-dimensional approach to assessing regional attractiveness to help regional and national policy makers better understand the position of regions in this evolving global context. Moreover, the framework provides a view into emerging challenges and opportunities and supports the identification of policy levers to enhance the attractiveness of regions to the key international target groups of investors, talent and visitors. In doing so, it seeks to support regions' transition towards new territorial development policies that promote inclusive, sustainable and resilient development, while enhancing regional attractiveness.

The aim of this work is not to rank regions but rather to provide an analysis of how they perform against each dimension. Moreover, it is to improve policy makers' understanding of how this performance translates into the attraction of investors, talent and visitors (OECD, 2022[3]). In this sense, the framework is more of a diagnosis of where a region stands relative to other regions in its country and international counterparts (e.g. OECD or EU) and a tool that allows regions to prioritise efforts to enhance the attractiveness of their territory to the key target groups, by building on strengths and closing the gaps.

Above all, the imperative is to measure the assets – the natural, human, social, manufactured and economic capital – of regions and to situate these within a broader global context influenced by recent economic shocks, existing megatrends and current shifts in policy priorities. In doing so, policy makers can better assess their strengths and gaps, which can be leveraged or addressed to improve regional resilience. The levers of regional attractiveness identified by this approach are not those of the macroeconomy, of financial allocations or of sectoral policies. They are part of a full array of regional development policy strategies. In addition, each dimension is as actionable as it is measurable. The rationale to include a large selection of indicators and dimensions is based on the cross-cutting nature of the regional attractiveness paradigm. In other words, no one variable suffices to entice key international target groups to a region and no one policy alone will address a region's attractiveness challenges. Taken together, however, trade-offs and synergies can be identified that stimulate strategic thinking about what works for regional attractiveness in the new global environment.

In the first iteration of the methodology, three potential challenges to regional attractiveness to investors, talent and visitors were considered including, above all: i) citizens' increasing questioning of globalisation; ii) the risks posed by climate change, demographic change and digitalisation; and iii) global shocks including COVID-19 and the war in Ukraine (OECD, 2022[3]). Regarding globalisation, not only citizens but firms, regions and nations share this sense of insecurity. Since the outbreak of COVID-19, the consideration of potential opportunities related to reshoring, onshoring and nearshoring has increased tenfold in the reports to investors required of publicly listed companies (IMF, 2023[5]). Meanwhile, the climate change rhetoric as outlined in the US Inflation Reduction Act, for example, is very much about enhancing domestic energy security and attracting foreign investment thanks to competitive energy prices. A similar dynamic can be seen in Europe where domestic energy subsidies have surged following the outbreak of the war (Kiel Institute, 2023[6]). Meanwhile, across the OECD, active industrial policies are being explored to identify how the production of strategic assets – from face masks to banking – can be conducted domestically, a policy known as "strategic autonomy" (Criscuolo et al., 2022[7]). As the frequency and gravity of shocks grows, the asymmetric impact within countries becomes more apparent, furthering the need to adopt a regional lens to support attractive policies that lead to more inclusive and resilient regional development.

The extent to which the COVID-19 crisis impacted regional economies depended heavily on their positioning within global value chains and the type of FDI they attract. Disruptions to value chains and the slowdown in FDI were universal in 2020 but, in countries ranging from Brazil to the United States, the subnational impacts demonstrated strong heterogeneity. In the United States, for example, states, where FDI relies on the movement of people, declined (e.g. Nevada, with its strong tourism sector) while foreign investments increased in the Southeastern states where international investment is concentrated in acquisition/market-seeking activity. Across Brazil, while the largest states with the most globally-embedded supply chains suffered negative economic shocks brought on by the pandemic, the effects were more severe in backwardly-integrated states whose core function is the supply of key inputs to the larger states (Wright and Wu, 2022[8]). The same can be said about the impacts of the war in Ukraine, as regions with stronger trade linkages with Belarus, Russia and Ukraine are now needing to rethink their positioning in the global fold (OECD, 2022[9]).

Finally, the changing global climate continues to force regions to rethink their territorial assets. Europe's ski regions saw some of the highest temperatures and lowest snowfall by January of this year (OECD, 2023[10]). More and more, climate considerations are an integral part of people's location decisions. A survey conducted in the United States found that roughly one-third of respondents between 18-41 years of age cited climate change as a reason to relocate in 2022 (Forbes, 2023[11]). Increasingly so, moving is less of a decision. While climate migrants are often depicted as refugees from less developed nations, research shows that between 2008 and 2019, nearly 700 000 people on the European continent were internally displaced due to weather events (IDMC, 2020[12]). While many are able to return to their home region, the rate at which disruptive weather events are increasing slowly degrades the liveability of places (Khanna, 2022[13]). More to the point, the environmental quality of a region is of utmost importance to talent (see Annex Table A A.2). People – especially talent and visitors – want to know that the air is clean, nature is accessible and good environmental practices – from recycling to a clean supply of energy – are being implemented.

In an increasingly uncertain global environment, a compass is needed to support decision makers identify the levers at their disposal to take advantage of the opportunities associated with globalisation and its evolution and to make their regions more attractive and economically dynamic, sustainable and resilient, as discussed in Chapter 2.

A regional attractiveness methodology

The intention behind rethinking what a framework for attractiveness entails is about going beyond traditional cost- and market size-related drivers to incorporate less conventional cost and non-cost assets that are core levers of a region's appeal to investors, talent and visitors. For example, the importance of housing affordability – an issue afflicting regions and cities across the OECD, especially in the wake of the COVID-19 crisis – is a fundamental tenant of a place's appeal to potential talent and an important indicator to monitor for regional decision makers hoping to attract and retain new residents. The employment rate of migrants is an important measure of integration that, again, regional decision makers should be concerned with in the face of demographic decline, as it demonstrates the absorptive capacity of the region's economy to new talent. Employment in cultural and creative industries is an indication of the cultural assets of a region to be enjoyed by potential visitors. On the investment front, a robust talent pipeline – illustrated by education rates and top universities – assures investors of access to human capital.

All in all, the dimensions cover policy areas that contribute to a region's capacity to attract international investors, talent and visitors according to the following taxonomy, which reflects the relationship between attractiveness and regional development:

- International investors are international firms, entities or individuals willing and able to make capital investments in regional economies.

- International talent are people with skills corresponding to the needs of public and private, place-specific economic, environmental and social development strategies.
- International visitors are people travelling inbound from a region outside the region and the country of reference.

While this illustrates that the focus of this exercise is to conduct statistical and policy analysis on the *international* aspect of regional attractiveness and development, the methodology can be equally applied in a domestic context where a more equal spread of within-country target groups across places can generate more balanced regional development. Indeed, applying this approach in a domestic context can serve to widen the discussion from attraction to retention, focusing on the policies and indicators required to implement and monitor whether attraction policies translate into medium- and long-term retention – especially in the context of talent and investment. The database can be extended to look at a more localised understanding of attractiveness by exploiting available small region data (Territorial Level 3 – TL3) – also allowing for an analysis of disparities within medium-sized regions (Territorial Level 2 – TL2). A preview of the dimensions below forms the foundation of the regional attractiveness methodology (OECD, 2022[3]). Each cover between three and six indicators that are deemed essential ingredients to a region's attractiveness (Figure 3.1):

- **Economic attractiveness**: Ten of the indicators cover regional economic performance, including yet reaching beyond (regional) gross domestic product (GDP). For example, the framework looks at Patent Cooperation Treaty (PCT) patent applications per million inhabitants, given that intellectual property is a key determinant of a region's innovation ecosystem and has been found to not only attract but retain foreign investment at the subnational level (Tang and Beer, 2022[14]). Additional indicators cover employment, research and development (R&D), productivity and entrepreneurship.
- **Connectedness**: This domain considers both physical and digital infrastructure, from roads to the Internet, which are fundamental pieces of any region's development path. In exploring the drivers of attractiveness below, these infrastructure variables show salient results given their strong relationship with greenfield FDI projects and expenditure in regions (see Annex Table A A.1).
- **Visitor appeal**: On the visitor front, indicators assessing the tourism performance of regions are included to take stock of both visitor numbers and tourism capacity across regions. Cultural capital is also considered, one measurement being the share of employment in cultural and creative industries which shows significant correlations with foreign visitor numbers (see Chapter 6).
- **Natural environment**: The natural environment varies significantly depending on the type of region, with rural regions in particular facing vulnerabilities in light of both climate change and the climate transition given their sectoral composition which relies heavily on natural resources (OECD, 2020[15]). Evidence on the connection between talent attractiveness and the natural environment illustrates a negative relationship between deteriorated air quality and talent location decisions (Flood et al., forthcoming[16]). Moreover, outdoor amenities and activities that are part of the local conditions for well-being depend heavily on the quality of and access to the local environment. In the regional case of Nova Scotia, Canada, research on provincial levels of well-being indicate that, on a 7-point scale, a 1-point increase in perceived environmental well-being translates into a 0.59-point increase in overall well-being (Flood and Laurent, 2021[17]).
- **Resident well-being**: The OECD's work on regional well-being illustrates the importance of looking at multi-dimensional well-being within countries, noting that the within-country differences can sometimes be greater than those across borders. The poverty rate (after taxes and transfers) shows an average gap of 18 percentage points between best- and worst-performing regions within OECD countries, with the most marked differences among European countries observed in Belgium, Italy and Spain (OECD, 2022[18]).

- **Land use and housing**: The importance of housing affordability as a determinant of quality of life cannot be overstated and has worsened in as many OECD countries as it has improved between 2010 and 2020, despite generally increasing incomes (OECD, 2020[19]). This indicator is included as a key measure of regional well-being that varies significantly within countries and can lead to a crowding-out effect for low-income groups together with an agglomeration of high-income groups, thereby exacerbating spatial inequalities (Yang and Pan, 2020[20]). Land prices and land development are part of a complex policy mix whereby governments must balance catering to investors' needs, providing adequate quality housing for newcomers and residents alike and, above all, protecting the environment through the containment of land conversion. Given the salience of these competencies at the subnational level, it is critical to take stock of their performance across and within countries (OECD, 2022[21]).

Figure 3.1. Dashboard of regional attractiveness indicators

Source: OECD (2022[3]), "Measuring the attractiveness of regions", https://doi.org/10.1787/fbe44086-en.

An attractiveness compass to navigate an uncertain global environment

To calculate the scores presented on the OECD regional attractiveness compasses, the data for each indicator are first normalised within a scale of 0 to 10. Then, the normalised values are divided into percentiles on a scale of 0 to 200. For indicators where a negative value signifies higher attractiveness, for

instance the air pollution indicator, the percentile scores are adjusted accordingly. As a final step, the averages of all of the indicators are calculated to become composite scores in each dimension (for the full dashboard of indicators and database sources, see Annex Table A B.1). The attractiveness compass serves as a powerful tool for diagnosing the attractiveness of a region to investors, talent and visitors, which can be used to support the design, implementation and evaluation of regional development strategies.

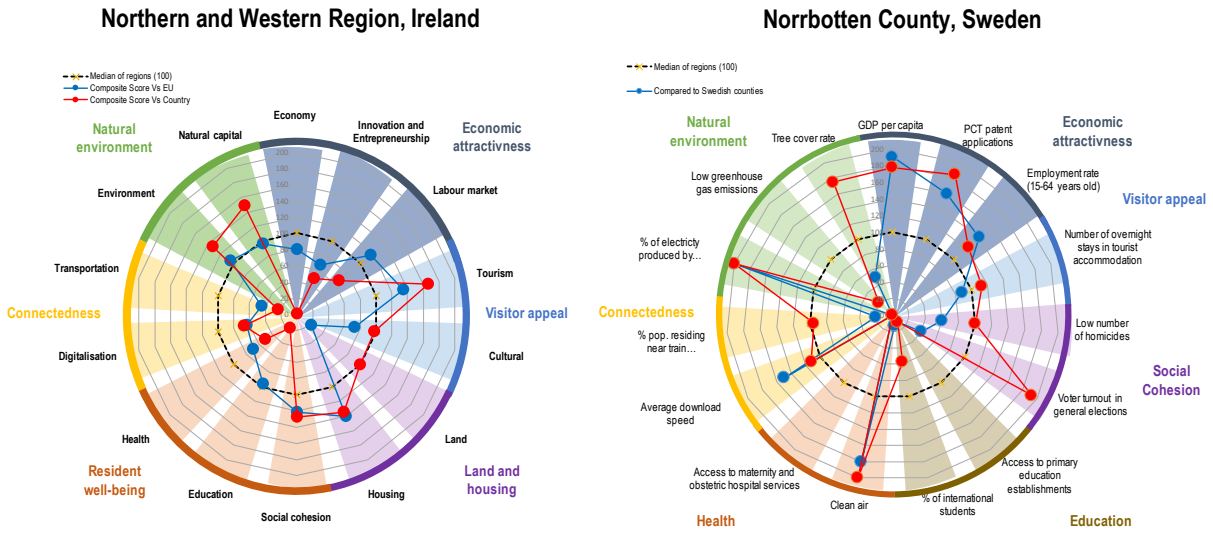
Providing an evidence-based compass to regions gives decision makers a snapshot of their comparative performance that can support regional attractiveness strategies in two ways. First, it demonstrates what advantages the region holds when compared to regional peers at home and abroad. Then, it shows where gaps exist and the scale of those gaps, which can indicate if it aligns with existing regional development priorities and, if not, may indicate potential areas for future development. The compasses are based on databases covering two geographic levels: TL2 (regions) and TL3 (small regions). In the former, an extensive database exists that has now been deployed across the OECD while in the latter case – as depicted in the Swedish example – the database covers a smaller selection of reference indicators in EU countries. The compasses have been put to use across a community of practice now comprising 25 regions in 10 countries, after having been initially applied to the case of French regions (see OECD (2022[2])). Released together with this report, and mainly focused on European countries, are 15 regional cases – each with its own compass and attractiveness diagnostic – including regions in Ireland (3), Italy (4), Portugal (3), Spain (3) and Sweden (2).

Scores in each dimension do not consistently translate into “higher is better” and require regional policy makers to situate their scores within their respective development agenda. For example, the share of land converted to the artificial surface under the Land dimension may indeed signal responsible development and/or investment in needed infrastructure (e.g. roads, housing, rail), while it could also refer to environmental malpractice. In this vein, it is essential to note that trade-offs might exist in one area with respect to another. To take a local-global view, it is a key part of the global sustainable development agenda to protect a minimum of 30% of terrestrial land by 2030 – an indicator which varies significantly across regions within a country while at the same time, land is often needed as a precursor for investment (in particular manufacturing industry) attraction. Similarly, the share of foreign visitors in a region’s tourism mix is encouraging insofar as it signifies the international appeal of the territory; however, the domestic visitor base is a vital driver of the sector’s recovery and long-term resilience (OECD, 2021[22]).

In the case of the Northern and Western region of Ireland (Figure 3.2), the region stands out as a visitor hub exhibiting stronger performance than any region in Ireland and well above that of the majority of EU counterparts. Social cohesion is another strong point, as is the environment and natural capital, particular draws for talent and visitors. At the same time, the region has not benefitted from the same levels of economic growth and productivity that have defined the other Irish regions over the past several decades. Transportation and digital infrastructure remain barriers to the region’s growth and development with limited options in terms of rail and less accessibility to flights and major roads than regions in Ireland and abroad.

In the Swedish county of Norrbotten (TL3 region) (Figure 3.2), an economy based primarily on natural resources (i.e. minerals and forestry resources) combined with critical energy infrastructure help to explain the strong economic performance of the region. Growing demand for tourism in Sweden’s north aligns well with Norrbotten’s existing natural and cultural strengths and provides significant opportunities to leverage the region’s attractiveness to visitors. Yet, Norrbotten has the smallest share of inhabitants with good access to train stations in the country and scores below the European average. Moreover, especially in inland areas, public transport is insufficient, spots without coverage remain and the rail network is not extensive. On the environmental front, Norrbotten produces far more greenhouse gas emissions per capita from the transport sector than the EU and national averages. At the same time, it offers good tree coverage and particularly good air quality compared to the average of EU regions.

Figure 3.2. A regional attractiveness compass to guide decision makers



Note: Compass interpretation:

- Scale from 0-200 (200 represents the region with the best performance; 100 represents the median).
- The median for the European Union and the country is represented by the same black dashed line (100).
- The composite score for each dimension is represented by a blue dot indicating performance relative to the EU median and a red dot relative to the country median.

Source: Various sources; compiled as part of the OECD Regional Attractiveness Database (2022 or latest available).

In each case study, the attractiveness assets and gaps are assessed and aligned with broader regional development objectives and contexts. They are then connected to existing strategies, including how they relate to recent crises, and how multi-actor co-ordination mechanisms can enhance the attractiveness of the regions (explored further in Chapter 7).

An evidence scan – What works for regional attractiveness towards key targets

Given the asymmetric impacts explored above and the need to examine regional attractiveness through a regional lens, the aim of this activity was to develop a methodology to explore drivers of regional attractiveness for the three key international target groups of investors, talent and visitors beyond purely financial factors (Box 3.1). In doing so, this body of work examines some of the links between these target groups and the factors associated with their concentration, including detecting associations that may not have been identified previously in the literature. Moreover, the following chapters situate the findings in regional contexts, illustrating how the evidence can be translated into concrete regional attractiveness strategies. The detailed regression summary and tables from the technical analysis can be found in Annex A (Tables A.1, A.2 and A.3).

There is a particular need to explore these drivers at the subnational level given the significant regional disparities that exist within countries and the policies and tools regions have at their disposal to implement measurable attractiveness strategies (OECD, 2022[3]). The data included look at the TL2 unit of analysis (region-province-state, etc.) to ensure the inclusion of the maximum number of attractiveness indicators and cover a broad sample which encompasses all regions of the European Union and OECD where data are available. Analysis of the data begins with an assessment of the drivers of FDI, followed by talent attraction and, finally, visitors.

Box 3.1. Methods for assessing attractiveness towards the key target groups

Methodology

While the attractiveness database consists of both TL2 and TL3 regional data, the territorial unit of analysis has been chosen as TL2 for better data availability. The results presented hereafter cover a sample of the maximum number of TL2 regions per variable in question, usually consisting of either an EU sample or a larger OECD sample (according to the data accessibility).

While regression analysis has been used for all three key target groups (investors, talent and visitors), different regression methods have been used for each, mainly due to limited data availability. Two-way fixed effects panel regression was conducted for tourism (Figure 3.5), with time and region fixed effects, presented in a stepwise progress. Similarly, time and region fixed effects panel regression was used for talent (Figure 3.4), along with the time-lag model to incorporate some variables that only have two time periods in its time series data. In the case of FDI (Figure 3.3), cross-sectional regression was used with the most recent years chosen for each variable. The dependent variable for FDI was the aggregated sum of greenfield FDI from 2017 to 2022 and some of the main variables that exhibited a strong correlation with the FDI variable were only available for one year of data. For the regressions with talent and tourism, missing values were handled through data imputation so as to avoid the potential loss of data associated with using time series data for a multitude of indicators. The linear interpolation method was chosen to fill in the missing values.

Limitations and future research

To better understand the drivers of FDI attractiveness over time, a panel regression for FDI analysis – as carried out for visitors and talent – should be conducted. Moreover, while this research studies greenfield investment due to data availability, incorporating brownfield data can shed further light on what drives this type of investment, which is crucial for attracting SMEs with less liquidity for capital investments and completing new investors results with the extension of existing FDI in regions.

Finally, while the TL2 (NUTS-2 for European countries) level allows for the testing of a multitude of indicators related to attractiveness, this territorial level can mask within-region disparities in terms of attractiveness. Using a small selection of indicators available at a more local level (i.e. TL3/NUTS-3) can shed light on the attractiveness of sub-regional geographies, which was experimented with in some countries such as France and Sweden.

Note: Technical analysis is included in Annex A of the report.

Foreign direct investment

Attracting foreign investment is typically a major aim for regional economies, which is often reflected in regional development policies. Indeed, FDI can be an important lever to create jobs, foster skills development, increase wages, support productivity and encourage innovation and exports (OECD, 2019[23]). FDI projects tend to concentrate in specific locations, as they benefit from agglomeration effects, which can lead to important imbalances within and between regions. Indeed, regional disparities in FDI are considerably larger than those for GDP and productivity in nearly all OECD countries, with potential implications for inclusiveness. For example, between 2003 and 2021, the top 10% of regions in OECD countries with the highest greenfield FDI attracted on average 700 times more than the bottom 10% of regions (OECD, 2022[24]). Hence, uncovering which factors are driving FDI and how they interact is of capital importance to foster regional development but also to fight regional disparities.

National drivers of FDI have been the subject of significant examination in the past, while regional drivers have been less studied. For example, positive impacts are observed from information and communication technology (ICT) infrastructure development on foreign investment attraction in specific regions of China (Tang and Beer, 2022[14]), while a host of factors including proximity effects, GDP levels, labour abundance and innovation are determinants of FDI attractiveness as evidenced in different country-region contexts across Europe and India (ESPON, 2018[25]; Mukherjee, 2011[26]; Antonescu, 2015[27]). Studies comparing subnational jurisdictions across borders are scarcer, in part due to a relative lack of comparative FDI data at the regional level in different country contexts.

The outcomes of work on regional drivers of FDI tend to support what has been found at the national level. Foreign investors are attracted by regions where exploitable resources are abundant or where there are large consumer markets. They are also increasingly attracted by places where highly skilled workers, research and innovation, but also industry clusters are gathered, while other critical determinants include transport infrastructure and accessibility, as well as the quality of regional governance (OECD, 2022[24]; ESPON, 2018[25]; Amendolagine, Crescenzi and Rabellotti, 2022[28]). This report mainly explores this latter set of non-market drivers to provide support to regional development policies in a more holistic manner.

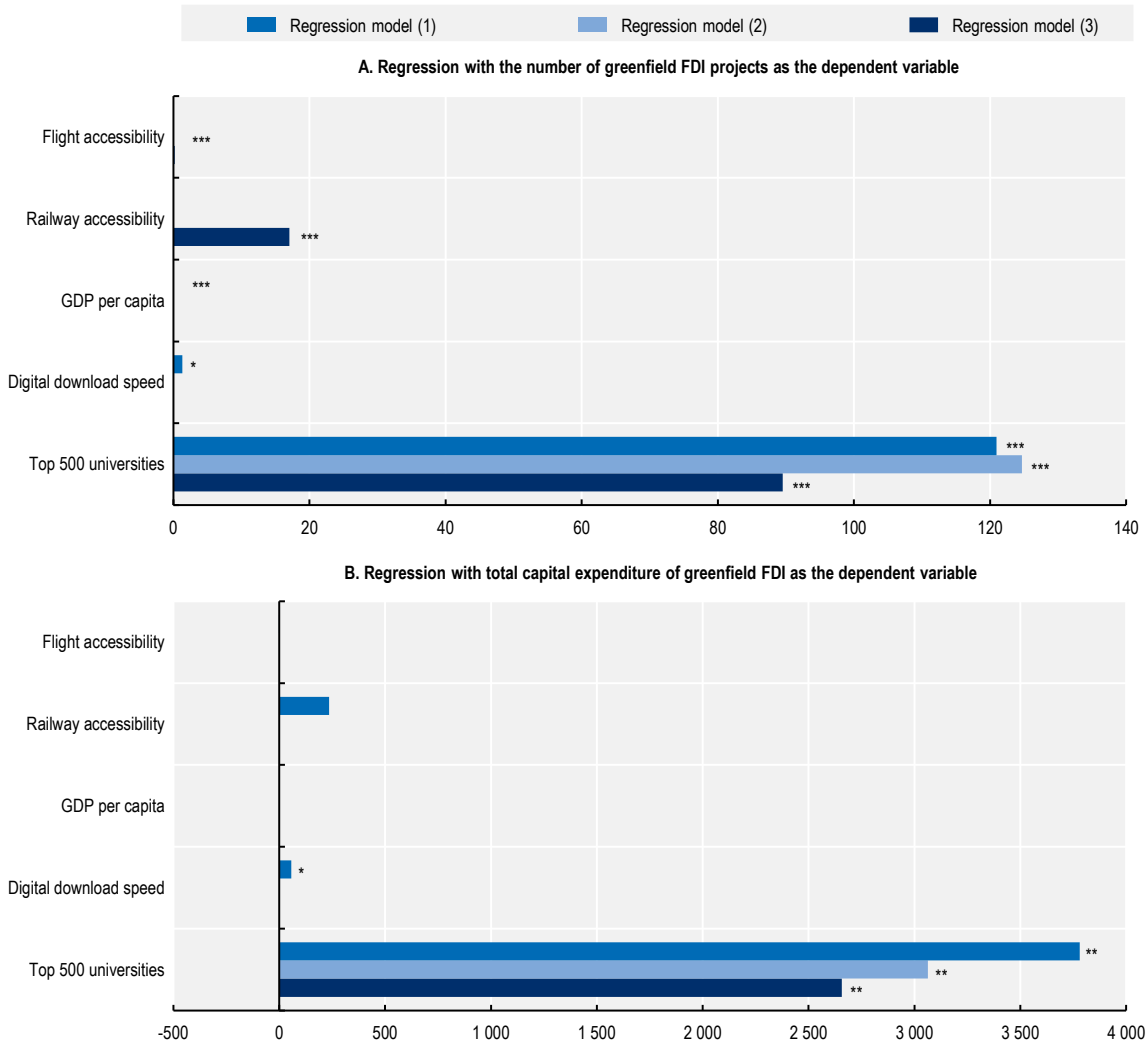
Methods and definition: Investment

To investigate how these factors relate to foreign investment, this report relies on several models, using two different dependent variables as indicators for foreign investment attractiveness. The three models cover different sub-samples of regions: i) OECD and EU regions; ii) OECD regions; and iii) EU regions. The different sub-samples of regions were constructed, not for comparative purposes, but rather to address the disparate regional coverage of each variable; transport-related indicators, for instance, cover EU regions but not all OECD regions. The two response variables are: i) the number of new greenfield FDI projects in each region over the 2017-22 period; and ii) the sum of foreign capital expenditure received by each region over the same period. There is a rationale to investigate these two indicators which, even if correlated, do not tell the same story. The second one encompasses the number of projects and the size of the projects. A high amount of capital expenditures can come from one or two big multinational firm(s) that make significant investments in a specific region, possibly in establishing a dominant position or from numerous SMEs investing relatively small amounts in a competitive market. In fact, the motivations of smaller investors can be driven by more diverse attractiveness factors as their strategic location decisions may be guided by considerations such as the work of subnational investment promotion agencies (IPAs), local relationships, networks and resources (Crescenzi, Di Cataldo and Giua, 2021[29]).

Summary of regression results

Presented in Figure 3.3, Panels A and B are a summary of regression coefficient results for investment attraction. The detailed regression summary and tables from the technical analysis can be found in Annex A. In Panel A, the number of greenfield FDI projects (the dependent variable) is, above all, concentrated in regions with a (higher number of) top 500 universities, and greater railway accessibility, flight accessibility and digital download speeds. In Panel B, the dependent variable is the total capital expenditure of greenfield FDI, where top 500 universities and digital download speed are the most relevant drivers.

Figure 3.3. Regression coefficients for investment attraction



Note: The significance level is expressed as the stars added to each coefficient. The smaller p-value signifies higher statistical significance level: *p<0.1; **p<0.05; ***p<0.01.

Key drivers of FDI attraction

Based on the existing literature, a number of variables that have proven to be influential in the location theory behind FDIs are included in the analysis. The results of regression analyses utilising the regional attractiveness database and assessing FDI – in terms of both the number of projects and capital expenditures – are presented in Annex Table A A.1. Above all, the results illustrate the importance of educational institutions as beacons of investment attraction, in addition to good digital infrastructure and well-connected physical infrastructure, notably rail and air. The identified key drivers of FDI to regions are presented as the following:

- **Education: Top 500 universities** – The number of top 500 universities emerges as an important driver of FDI for both the larger subsample and the EU regions' sample, displaying the highest correlation coefficient with both the number of projects and the amount of capital expenditure. The explanatory link is quite straightforward: Top 500 universities are recognised for their high-level research and their capacity to attract and retain in the region high-skilled workers that are essential parts of the talent pipeline for competitive firms. Additionally, firms can co-operate with universities'

research centres, resulting in collaborative innovations, inventions and knowledge spillovers. They also benefit from a direct pool of skilled talent with managerial, technical and creative skills.

- **Digitalisation: Access to broadband Internet** – Digital connectedness is also identified as a key driver of FDI, as it is increasingly more important for firms because of the digitalisation of their activities and as remote working and online conferences have become commonplace (Dorakh, 2021[30]). One control variable – GDP per capita, purchasing price parity (PPP) – is added to not confuse the influence of digital infrastructure and the presence of universities of excellence with local demand. It matters first and foremost for firms that do not aim only to benefit from efficiency gains and skilled labour of the local environment but that wish to also tap into local consumer markets.
- **Transportation: Train and flight accessibility** – The importance of physical infrastructure can be seen as a means of enticing investment to new subnational locations through providing ready-made logistics solutions for prospective investors while it can also facilitate their plans for exporting to foreign markets. Indeed, this case has been observed in countries such as Portugal, where road expansion led to investment attraction in new localities throughout the 1980s and 1990s. This was particularly the case in places where the distance to the main cities (Lisbon, Porto) previously deterred investment in regional hubs (Guimarães, Figueiredo and Woodward, 2000[31]). Similarly, one of the roles of Italy's Special Economic Zone programme (discussed in Chapter 4) involves building infrastructure connections (road, rail, freight and air) between lagging regions in the South and national and European transport networks. By connecting relatively remote regions to the existing transport grid, these regions became more attractive to investors and the new infrastructure facilitated the flow of goods (and talent).

Finally, it is important to consider the sectoral differences leading to FDI attraction. The projects with the highest capital expenditures across European regions over the time period studied are made in renewable energy, batteries and semiconductors, manufacturing, oil and gas and electricity. These types of investments are generally driven by access to natural resources – which can render non-metropolitan areas particularly attractive – and rely on a workforce with a unique – yet transferable – skillset. On the contrary, sectors that rely most heavily on human capital, such as business services and R&D sectors are associated with the projects in which lower amounts of money have been invested over the period – but with a larger number of projects.

Talent

Global flows of people are shaped by migration policy regimes, which can both enable and create barriers for those looking to move. With a pool of over 300 million seeking to move and work in other countries, combined with the 750 million who would move if they were able to (Esipova, Pugliese and Ray, 2019[32]), countries and regions have become frequently involved in a "war for talent". A highly skilled and vibrant migrant population – especially the case in lagging euro regions (OECD, 2022[33]) – contributes significantly to regional economic development matters. In the context of increasing international migrations and the likelihood of climate shocks sending these flows into overdrive, policy makers need to consider how to attract talent to enhance regional development (Khanna, 2022[13]).

There are a number of international indices ranking top destinations for talent, however, these rankings often lack the regional dimension and exclude a more holistic vision of talent attraction that both takes into account a more inclusive definition of talent and less conventional indicators of their attractiveness. One complementary approach to regional attractiveness is the OECD Indicators of Talent Attractiveness, which allow users to assess which country-destination is most attractive to them according to select criteria (quality of life, income and tax, family environment, etc.) (OECD, 2023[34]). Fortunately, some evidence does make headway in exploring the regional dimensions across specific regional contexts. The interregional mobility of skilled labour across European regions may still be somewhat predicated on

physical proximity between the host and sending region – often referred to as a gravity model in migration studies. Yet, other important non-cost variables that determine where talent chooses to locate are becoming more evident. For example, while access to amenities is an important factor, the degree to which this favoured metropolitan area decreased over time as non-metropolitan areas of Europe caught up by developing attractive amenities of their own (Miguélez and Moreno, 2013[35]). The results presented hereafter confirm the importance of amenities in the location decisions of talent.

Methods and definition: Talent

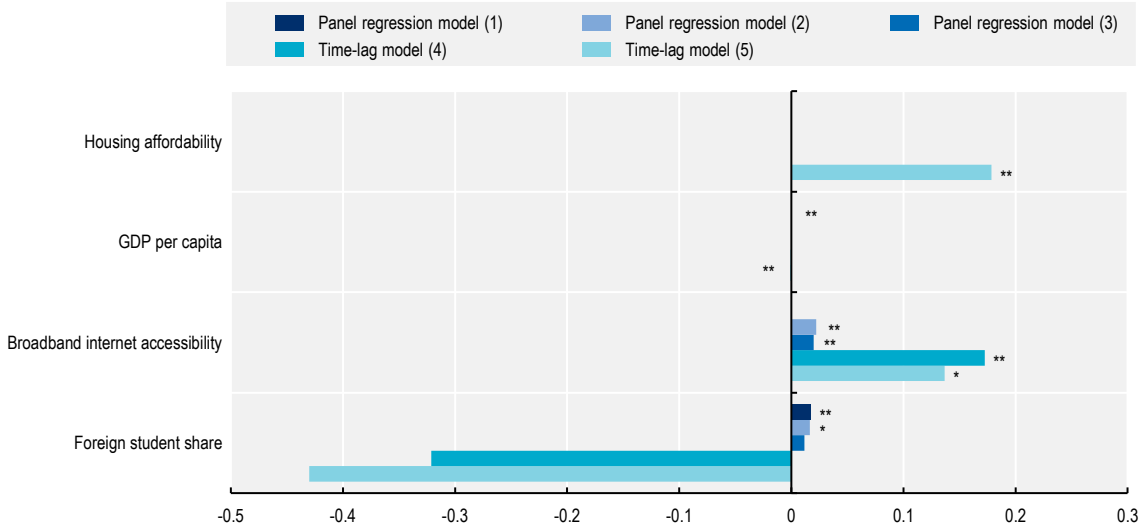
To better understand the link between talent attraction and various regional indicators, talent is defined as people with skills corresponding to the needs of public and private, place-specific economic and social development strategies. While traditional literature on talent migration has a narrower definition of talent, mostly as high-skilled people with tertiary education, talent is defined with a broader brush, focusing on the alignment of regional labour markets and the skills offered by talent, whether low- or high-skilled. Reflecting the choice of talent definition, the share of foreign-born employed people in the total working-age population (15-64) is used as the dependent variable for the analysis of talent attraction.

Summary of regression results

Presented is a summary of regression coefficient results for talent attraction. The detailed regression summary and tables from the technical analysis can be found in Annex A. As illustrated in the figure, housing affordability, Internet accessibility and a higher share of international students prove to be strong drivers of international talent attraction.

Figure 3.4. Regression coefficients for talent attraction regression

Share of employed foreign nationals in the total working-age population (15-64) as a dependent variable



Note: The significance level is expressed as the stars added to each coefficient. The smaller p-value signifies higher statistical significance level: *p<0.1; **p<0.05; ***p<0.01.

Key drivers of talent attraction

The results of panel regression analyses with time and region fixed effects as well as time-lag regression models assessing talent attraction are presented in Annex Table A.2. The results demonstrate the crucial role of digitalisation in attracting talent, along with housing affordability and education, notably foreign

students in universities. The identified key drivers of regional talent attraction are presented as the following:

- **Education: International students in higher education** – Foreign talent is more open to locating in a region with an already substantial number of international talent (in this case, students). Research shows that the mobility of foreign students contributes to knowledge sharing and creation, underlining the need for collaborations between universities and industry in attracting talent, especially for low-middle-income countries (Sudibor and Ünlü, 2022[36]). A higher share of foreign student population also entails that the region's social infrastructure and attitudes are receptive to foreign talent, which can facilitate talent's arrival and integration into the regional economy and society.
- **Digitalisation: Access to broadband Internet** – Talent thrives in regions with fast Internet speed. Higher Internet speeds facilitate teleworking and conducting everyday digital activities. This is indicative of the spreading trend of remote working culture, which slowly began before the pandemic and accelerated with COVID-19. In fact, the filter most chosen by guests on Airbnb, an online house-sharing platform, is Wi-Fi availability, which attests to the importance of digitalisation in regions (OECD, 2023[37]). In this sense, broadband access can serve both the talent and visitor economy – and increasingly so, as firms and places adopt more remote and hybrid-friendly approaches to work and public service delivery.
- **Housing: Housing affordability** – While high housing prices may indicate regional innovation outputs and consequently talent attraction, housing prices start to be negatively associated with innovation outcomes of regions where the housing prices form a bubble and potentially leads to a crowding-out effect (Lin et al., 2020[38]). Many cities across the globe often implement policies that provide financial support for housing to enhance housing affordability, which is one of the crucial components of benefit packages that regions can offer to attract and retain talent, thereby maintaining a stable pool of the working force for the regional economy (UNDP Kolba Lab, 2020[39]).

Visitors

Tourism is a major catalyst for regional development and a policy competency where local and regional policy makers have a significant role to play. It can be a major employment driver in non-urban areas and bring good quality jobs in everything from gastronomy to agrotourism to the creative and cultural domain. In light of the COVID-19 recovery, many countries have laid down strategies for supporting the resurgence of the tourism industry – strategies that require data to measure and monitor success and to design new policies where appropriate (OECD, 2021[22]). In that regard, using data to understand how regional assets translate into visitor attraction is essential.

In terms of what attracts visitors to places, some traditional drivers stand out. In a regional tourism study in Indonesia, evidence points to the importance of regional policy makers' prioritisation of the tourism sector as a key determinant of destination attraction (Bire, Conterius and Nasar, 2021[40]). In this Indonesian study, natural attractions outrank cultural attractions while infrastructure is considered more important than entertainment options or tour and travel services. While these factors are likely to vary across country and regional contexts, it illustrates the importance of key public services in facilitating the visitor experience. This is represented in the attractiveness methodology, which asserts the importance of the built environment in drawing not just talent and investors with longer-term orientations but visitors too, who may place a premium on the ease of mobility during their visit. A study of domestic tourism across China's provinces and cities between 2011 and 2018 adds to this, showing that, as the country's regions rapidly developed, the economy became a lesser predictor of tourism attraction (Ma, Yang and Zheng, 2022[41]). By 2018, the importance of environmental conditions (temperature, sunshine) and transportation (rail, traffic) emerged as complements to a region's economic development and in driving visitor numbers as well.

Methods and definition: Visitors

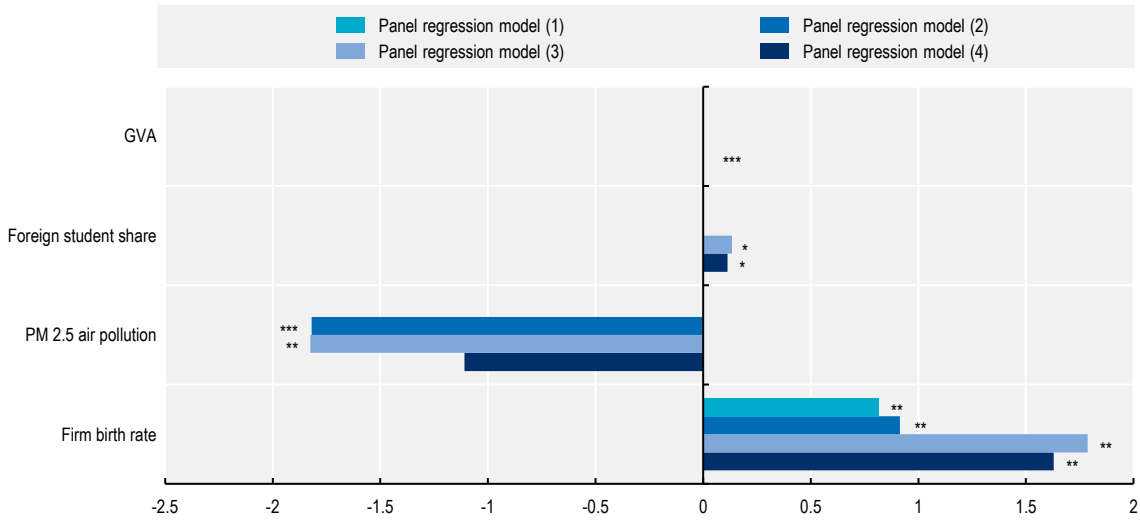
To consider both the volume and occupancy of regional tourism, the dependent variable for visitor attraction is constructed as a ratio of the number of overnight stays in tourist accommodation to the number of tourist accommodation beds. This explanation variable was constructed using 2 indicators, which are the number of overnight stays in tourist accommodation per 1 000 inhabitants and the number of tourist accommodation beds per 1 000 inhabitants. Such an approach enables us to consider both foreign and domestic visitors to the region and capture both tourism flows and capacity.

Summary of regression results

Presented in Figure 3.5 is a summary of regression coefficient results for visitor attraction. The detailed regression summary and tables from the technical analysis can be found in Annex A. As illustrated in the figure, the most attractive regions to visitors have a higher firm birth rate (i.e. entrepreneurship), tend to experience lower levels of air pollution (PM 2.5) and have a higher foreign student share, as was the case for the talent regression.

Figure 3.5. Regression coefficients for visitor attraction regression

Regression with ratio of the number of overnight stays in tourist accommodations to the number of tourist accommodation beds as the dependent variable



Note: The significance level is expressed as the stars added to each coefficient. The smaller p-value signifies higher statistical significance level: *p<0.1; **p<0.05; ***p<0.01.

Key drivers of visitor attraction

The results of panel regression analyses with time and region fixed effects assessing visitor attraction against the selected variables are presented in Annex Table A A.3. The results attest to the significance of entrepreneurship and innovation, a clean environment and education in boosting domestic and international tourism. The identified key drivers of regional visitor attraction are presented as the following:

- **Innovation and entrepreneurship: Firm birth rate** – Innovation and entrepreneurship help regions flourish with increased inflow and outflow of people, resources, knowledge and ideas. Regions with a burgeoning entrepreneurial economy are likely to become competitive destinations not only for talent and investors who are keen to be involved in emerging new firms but also for the

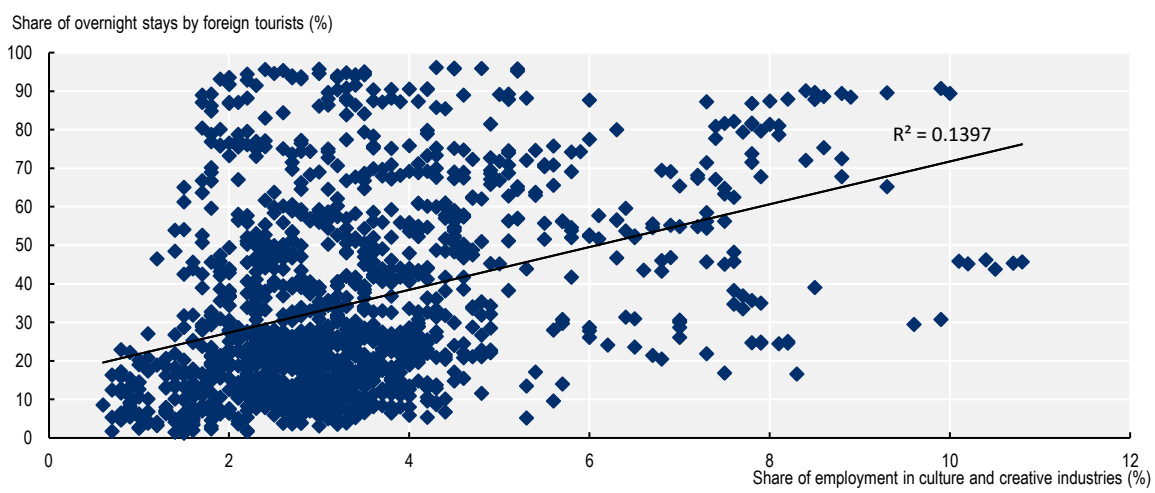
general visitor population who are drawn to the region's vibrant atmosphere. Indeed, firms are an integral part of tourism activity: across OECD regions, SMEs represent 85% of tourism businesses (OECD, 2022[42]).

- **Health and environment: Air quality and natural environment** – Good air quality – measured by levels of particulate matter in the air – and a well-preserved natural environment also attract visitors. It is therefore important to align tourism goals with sustainable regional development. Indeed, natural amenities are some of the key reasons for tourists to visit and explore regions, and several studies find clean air to be a driver for boosting tourism (Eusébio et al., 2021[43]; OECD, 2016[44]). The impact of air quality, and other environmental conditions that directly affect people's health, on tourism demand, should be taken into consideration by regional policy makers when developing tourism strategies.
- **Education: International students in higher education** – A higher share of foreign students can contribute to stronger tourism as students invite friends and family members to the region where they are studying and as visitors themselves. In fact, educational tourism is an important part of overall tourism, which ultimately leads to local development of the host regions (Tomasi, Paviotti and Cavicchi, 2020[45]). A clear example of this is the Erasmus+ programme which has mobilised over 10 million Europeans over the last 30 years. The presence of foreign students in regions can also be seen as a form of public diplomacy, strengthening the ties between the host and sending regions (Mulvey, 2020[46]). Ultimately, international students create bonds across places that promote intercultural exchange and encourage repeat tourism.

Exploring connections across attractiveness variables and families of regions

Looking beyond the links described above, we can also observe important connections between attractiveness variables. For example, Figure 3.6 shows a linear relationship between the share of employment in cultural and creative industries and overall tourism activity. While this relationship may appear obvious, it has implications for regional visitor attraction strategies, in that supporting firms and employment growth in this sector can have a residual effect of growing the international tourism market.

Figure 3.6. Correlation between international overnight stays and employment in cultural and creative industries



Note: Time series data were analysed spanning 2014 to 2021.
Source: OECD (2022 or latest available) Regional Attractiveness Database; (Eurostat, 2022[47]), Cultural employment by NUTS 2 regions (database), https://ec.europa.eu/eurostat/databrowser/view/CULT_EMP_REG/default/table?lang=en (accessed 1 December 2022).

Attractiveness strategies can also prove synergistic with regional development goals, such as innovation strategies. Time series data generated from the PCT reveal a linear correlation between patent applications per million inhabitants and the share of the foreign-born population among the working-age population (Figure 3.7). Attracting international talent can increase the innovation capacity of a region, as migrants are more likely to be entrepreneurs and indeed help foster FDI flows from their countries of origin (OECD, 2022[33]). In turn, it is essential for regional policy makers to embed a talent attraction dimension within their innovation strategies.

Figure 3.7. PCT applications and the share of the working-age foreign-born correlation

Note: Time series data were analysed spanning 2000 to 2018.
Source: OECD (2022 or latest available) Regional Attractiveness Database.

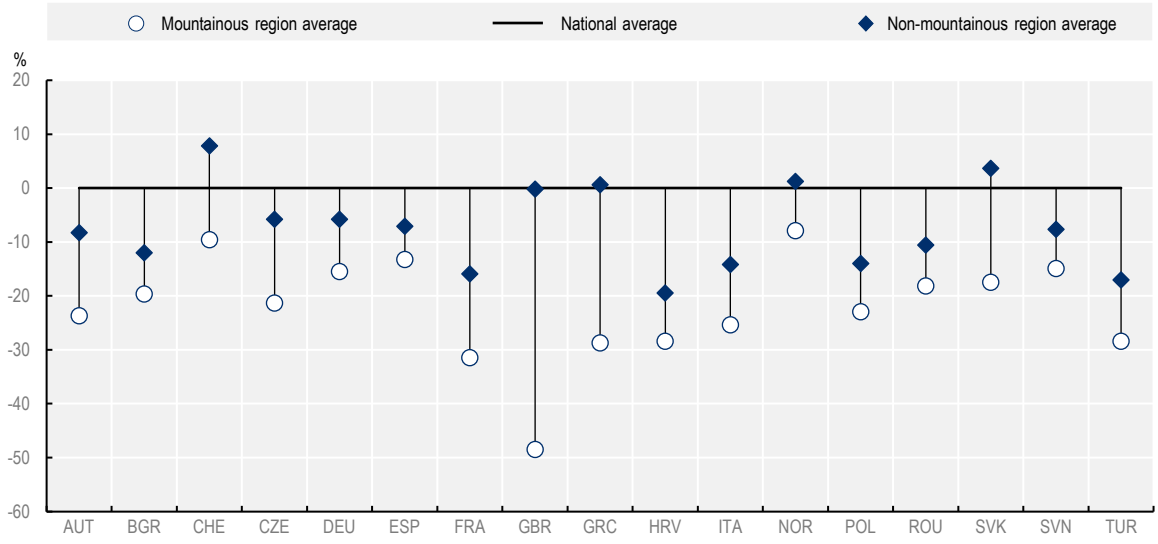
Identifying regional attractiveness linkages across families of regions

Further analysis can delve beyond geographical levels (e.g. TL2, TL3, as discussed) to zoom in on various regional classifications according to specific geographic characteristics that may translate into common regional development challenges and advantages. These could include looking at mountainous regions, border regions, island regions, metropolitan regions, capital regions, etc. However, physical characteristics are not a sufficient categorisation of regions, which can be categorised according to the specific structural challenges they face. Regions in a development trap generally struggle to attract interest because they are neither the lagging regions that traditional regional development policies target nor the metropolitan engines of national growth whose innovation dynamics must be preserved (Diemer et al., 2022[4]). Their development path shows a decline, or the fear of future decline, which can generate discontent among residents. Indeed, the European Commission (2023[48]) recently underlined the need to address their specific concerns. The attractiveness approach proposed here can help make these places more visible and respond to the need to rethink regional development policies to adapt them to this “family” of regions and to learn from the challenges they face and the dynamics that led them towards entrapment. A single strategy, even one as powerful as an investment in infrastructure, is not enough. Just as it is not enough to finance the inputs of innovation (i.e. more researchers, more investment in research). The multi-dimensional framework proposed here is a holistic approach with comparable indicators which can be monitored on a regular basis to uncover and adjust priorities where needed. Precisely, it helps these regions to attract what they miss: investors, talent and visitors.

Focusing on such families of regions and conducting quantitative analyses will help to better understand the different context, advantages and challenges they face when pursuing policies to enhance regional attractiveness. For example, early evidence suggests that European mountain regions may face particular regional attractiveness challenges (Flood, Ryu and Camus, 2022[49]):

- Mountain regions have on average 2.68 doctors per 1 000 inhabitants, which trails the European regional average of 3.37 doctors per 1 000 population.
- Mountain regions in Europe also tend to have relatively slow Internet download speeds, around 20.32% below their national average. The country-wise comparison of average download speed as a deviation from the national average is shown in Figure 3.8.

Figure 3.8. Mountain vs. non-mountain regions in terms of Internet download speeds



Note: Comparison of mountainous and non-mountainous regions in average download speed as a percentage deviation from the national average (2021 Q2). European TL3 region data were analysed and the mountainous region is defined as a region where 50% of the population lives in the mountains and 50% of the land surface is mountains.
Source: OECD elaboration based on Ookla.

From evidence to action

While evidence on "what works" for regional attractiveness is a promising place to start, regions need to integrate this evidence into policy decisions, thereby not only moving from evidence to action but also to monitoring and evaluating attractiveness policies. As demonstrated in the above analysis, important relationships are identified across the target groups with attractiveness assets (Table 3.1).

Table 3.1. Attractiveness drivers at the regional level

Investors	Talent	Visitors
Higher education institutions	International student share	Entrepreneurship
Internet access and speeds	Broadband Internet access	Environmental quality
Rail performance	Affordable housing	International student share
Access to flights		

Note: This is a non-exhaustive list of drivers; further analysis is likely to illustrate important relationships at different geographic levels and across families of regions. Descriptions of access to flights and rail performance are provided in Annex A.
Source: See results in Annex A.

Both regional development strategies and target-group location decisions are intertwined with the global environment – the more uncertain it becomes, the more essential it is to adopt a vision for regional attractiveness and tools to adapt strategies to evolving realities.

As explored in the following chapters, different assets matter to different sub-groups of investors, talent and visitors, which could be more precisely categorised as sustainable investors, young entrepreneurs or digital nomads, to name a few. What this evidence does suggest is that broad trends can be demonstrated about what matters most at the subnational level when analysing a large sample of regions, as was explored in this chapter. It shows that even when controlling for economic conditions, a host of other factors play an important part in the attractiveness equation, especially the physical and digital assets that regional decision makers can work to leverage and improve, even in the near term. Moreover, it offers specific indicators (see Annex Table A B.1) that can be embedded into regional development strategies to measure and monitor attractiveness. Some of the indicators were highlighted here through technical analysis and identified as key drivers to each target group of regional attractiveness. Regions with strong digital performance, better rail and air transport, and top universities located in the region appear to have a comparative advantage in attracting FDI. For talent attraction, affordable housing, fast Internet speeds and the share of foreign students are found to have an impact on their location choice. Finally, attracting visitors is shown to be influenced by an entrepreneurial regional economy, a higher share of international students and a cleaner environment as measured by air pollution levels. Unpacking some of the policies and levers will bolster these assets to make regions more attractive to investors, talent and visitors in the focus of Chapters 4, 5 and 6 respectively.

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4 International investment attraction

This chapter outlines the key global evolutions that have changed the landscape and capacity of regions to attract foreign direct investment in recent years. It presents evidence on what works for investor attractiveness and the role that regional and local actors can play in enhancing these factors to make regions more attractive to prospective investors. In addition, it discusses the role of investment attraction in delivering broader regional development goals such as achieving a green transition, supporting small and medium-sized enterprises (SMEs) and developing key infrastructure. Finally, a roadmap is presented to identify investment targets that contribute to a region's development goals and outlines steps to co-ordinate actors and policies to enhance regional attractiveness towards international investors.

Key messages

Investors prioritise good infrastructure and skills

- Across European Union and OECD regions, investments are facilitated in part by quality infrastructure, such as access to and quality of roads, rail and airports.
- Digital infrastructure (measured by access and speed) is especially important for firms operating in the services sector, as is the presence of quality universities, which signals to investors the presence of a skilled talent pool.
- But infrastructure alone is not sufficient to attract investment, as investors target areas with the skills they need.

Investors operate in an evolving global environment

- Regional investment attraction needs to consider the reconfiguration of global value chains (GVCs), talent location preferences and sustainable development to stand out in today's crowded and complex foreign direct investment (FDI) environment.
- For example, the investment in renewable energy as a share of investment in total energy-related FDI went from just under 10% in 2004 to around 90% by 2021 across OECD economies.

Numerous mechanisms exist to promote inward investment across places

- National and regional investment promotion agencies (IPAs) have proved effective in winning FDI projects to subnational locations, with a particularly important role in co-ordinating actors across sectors and across places and investment strategies to avoid domestic competition and promote balanced regional development.
- Another tested tool where IPAs are a key actor are Special Economic Zones (SEZs), which, if adequately designed and targeted to the local ecosystem, can be of particular benefit to lagging regions – especially when they benefit from greater land availability, which is essential for attracting FDI in manufacturing – and in boosting nascent and emerging sectors. However, for SEZs to be successful, good internal and external governance is essential to avoid potential negative externalities and displacement effects on the wider regional economy.
- Domestic SMEs are linked to FDI through diffusion channels (as collaborators and suppliers to foreign firms) and in doing so they act as drivers of new investment, signalling to prospective firms the potential added value of the regional enterprise ecosystem to their operations.
- As firms are increasingly searching for top talent, investments in education and skills development can signal the presence of a talent pipeline, while also boosting the region's innovation ecosystem.

Investment attraction provides greater benefits when embedded in regional development strategies

- Whether the region's goal is to navigate an industrial transition to net zero or to revitalise a distressed or lagging region, promoting foreign investment can serve these missions.
- When FDI attraction is a co-ordinated effort among actors it can lead to job creation, improve infrastructure networks, generate spillovers for local businesses and support regions through industrial transitions.

The evolving drivers of regional investment attraction

The investment location decisions of today's multinational enterprises (MNEs) are influenced by a host of factors that are context-driven with important spatial and sectoral differences. Creating a favourable local business environment and overcoming distance to suppliers and clients are important challenges cited by many OECD countries (OECD, 2022[1]). Additionally, the changing preferences of talent, increasingly flexible working arrangements and the overall labour market conditions have provided workers with a more front-seat role in deciding where they would like to work and live (IMF, 2022[2]) This is another dimension to which firms must pay attention: not where talent is today but where they would like to live tomorrow (OECD, 2022[3]).

While the location decisions for FDI are not constant, the historical determinants can shed light on what matters most to MNEs in choosing where to invest; however, it is important to balance this analysis with foresight on where current trends are reshaping the global investment landscape. Beginning with the existing drivers as evidenced in the literature, there is a clear indication of the core determinants: i) new market access, as measured by market size and purchasing power; ii) efficiency seeking, as captured by lower costs of doing business; iii) institutional quality and overall political and economic stability; iv) natural – and increasingly renewable – resources; and, finally, v) asset-driven factors, where a labour pool, technological cluster or other form of attractive assets will determine the decision to invest (Frick and Rodríguez-Pose, 2023[4]; ECB, 2018[5]). For regional policy makers, the fifth category – assets – signals an area where subnational policy competencies and the co-ordination capacity of regional actors can have significant influence. For regions, increasing global connectivity – as relatively independent actors in a complex global economic system – is in line with improving regional resilience. This role is especially pronounced given that the effects of globalisation have tended to favour a spatially hierarchical structure of economic development that has benefitted a few – often metropolitan and capital or natural resource-endowed – regions, within countries, contrary to the spatial convergence that economic theory professed globalisation would entail (Iammarino, Rodríguez-Pose and Storper, 2019[6]; Iammarino, 2018[7]).

In this context, and as illustrated in Chapter 3, the determinants of investor location decisions should be broadened to cover a larger range of policy areas, notably those under which regional actors have the capacity to measure and to improve – through targeted investments, for example in research and innovation and partnerships with local universities, upgrading road and rail and ensuring widespread access to fast Internet.

The reconfiguration of GVCs, through processes from reshoring to nearshoring and offshoring, has opened up new opportunities for regional investment attraction. As places look to recover and navigate the effects of both dwindling and burgeoning crises, the positioning of economies in global supply and value chains is being called into question. The "just-in-time" strategy, where fragmented supply chains are often far away from the home economy and designed to be low-cost and just-enough-stock, is losing ground in light of the shortages and delays that significantly disrupted the delivery of critical goods throughout much of the pandemic (Masters and Edgecliff-Johnson, 2021[8]). By moving production closer to home, economies are finding it possible to be both "just-in-time" and "just-in-case", paving the way for regions with lower capital costs – regions that have traditionally lagged – to become the new centres of industrial competitiveness and to foster more oversight on the sustainability of their value chains. However, as discussed in Chapter 2, evidence shows that, to date, macro-regionalisation has only occurred in certain sectors. On the whole, trade has tended to increase between macro regions, albeit partially explained by an increased dependency on China.

The premium placed by firms and governments on sustainability puts quality over quantity in terms of FDI attraction. Between 2004 and 2021, the share of renewable energy investment in total energy-related FDI went from just under 10% in 2004 to around 90% by 2020 across OECD economies (OECD, 2022[9]). FDI investments also comprise 30% of all renewable investments globally. To harness the benefits of the surge in FDI renewables investments – to both the benefit of the local climate and economy – regions need to

pitch their assets by illustrating both the environmental and policy landscapes that can facilitate green investments. Indeed, as resources from wind, sun and critical minerals become the most essential inputs for energy production, the outlook in terms of production for certain regions with said natural endowments improves (OECD, 2023[10]).

Talent location preferences are increasingly seen as drivers of investor preferences (Becker et al., 2020[11]). Firms are reacting to the demands of talent under the supposition that talent no longer chases jobs alone but also places, and firms must follow in their footsteps. Attracting investment and talent can be seen as synergistic strategies, where thinking of both as members of a regional community can support policy strategies that account for the needs and contributions of both. For example, there has been a recent trend of smart specialisation strategies (S3) across European regions to capitalise on regional comparative advantages and to identify emerging areas of growth. However, S3 strategies tend to exclude mention of how talent attraction and talent development will contribute to growth in emerging sectors. Given the demographic challenges faced by many regions, talent attraction is an essential component of any investment attraction strategy.

What works for investor attractiveness and export development?

A larger number of smaller projects

As illustrated in Chapter 3, the importance of physical and digital infrastructure points to larger concentrations of FDI projects and expenditure at the regional level. However, as presented, the effects vary when we look at capital expenditure versus the number of projects. The takeaway for regional FDI attraction policy is that more levers may exist to attract a larger number of smaller FDI projects than is required to entice large investments from MNEs that often choose locations either in or near metropolitan or capital regions. For example, Munday and Roberts (2001[12]) show that in Scotland and Wales, United Kingdom, while larger foreign affiliates spend more in absolute terms, smaller firms tend to be more embedded in the local economy with regard to supplier linkages with domestic firms; this embeddedness is an important part of making FDI more inclusive (Figure 4.1).

A role for investment promotion agencies (IPAs) in attracting regional investments

National IPAs play a strategic role as stewards of balanced regional FDI, fostering central-regional co-ordination to help level the playing field for FDI attraction. The OECD's survey on investment promotion and regional development finds that 92% of national IPAs have a mandate for regional development and 94% have referenced regional development within their overall strategy (OECD, 2022[1]). For example, in the United States, SelectUSA – housed within the U.S. Department of Commerce – is a federal government programme with a responsibility to promote and facilitate inward business investment. SelectUSA works closely with the U.S. and Foreign Commercial Services and entities across the government to facilitate job-creating business investment in the United States and raise awareness of the critical role that economic development plays across the United States. It provides clients with in-market services and on-the-ground expertise in more than 75 global markets and more than 100 locations throughout the United States. Since its inception in 2011, SelectUSA has facilitated more than USD 146 billion in client-verified investment projects, supporting more than 166 000 US jobs (U.S. Department of Commerce, 2023[13]).

Ireland is another renowned country case for FDI, yet a lesser-known instrument used by IDA Ireland – the national body for foreign inward investment attraction – is its regionalised set of strategies to diversify investments beyond the Dublin area. IDA Ireland works directly with local authorities to outline the needs of prospective firms (e.g. housing, talent, land, natural resources) and identify a strategy to ensure firms can meet and exceed their needs in the select location. For example, IDA Ireland's regional property programme works with the regions to identify and invest in property solutions that ensure location choice

is not constrained by an absence of available, quality infrastructure – a tool critical to developing manufacturing clusters in the regions. The roadmap to create regional investment solutions is further outlined in the nine (Territorial Level 3 – TL3) Regional Enterprise Plans, which are an organising tool with action items assigned for enterprise ecosystem development that outline the roles played by a number of actors, including IDA Ireland but also local authorities, Enterprise Ireland, universities and the regional assembly, in attracting investment. For example, a key action item in the Mid-East Regional Enterprise Plan is to co-ordinate actors and investment in the screen and film sector to grow the region as a hub for international film production and related investment. This level of local co-ordination for attracting investment is indeed apparent across the country. The winning FDI strategy in the South-East sub-region shows that there is an argument to have co-existing subnational agencies working on investment attraction (and co-ordinating with national actors) (fDi Intelligence, 2023[14]). Another example of this is Business France, a national investment promotion agency with a regional policy, Team France Invest, where activities to facilitate regional investment – including actor co-ordination, territorial promotion, prospection and training – are carried out at the regional level (OECD, 2022[15]).

Across OECD countries, at least 72% of regions have their own subnational IPA while 92% have some form of subnational organisation – either economic development organisations or IPAs – which have investment promotion in their remit (OECD, 2022[1]). Evidence points out that these regional IPAs have a successful track record of attracting FDI, justifying their use as a policy tool. Indeed, less-developed regions across Europe have been shown to capture 71% more FDI – or USD 17 million per year and up to 102 jobs – with the presence of a subnational agency, when compared to those without one in operation (Crescenzi, Di Cataldo and Giua, 2021[16]). The findings suggest that this is particularly salient in knowledge-intensive sectors and for multinational firms that have less international investing experience. The reason for their success can be partially explained by their ability to support firms in overcoming institutional, legal and information barriers. For regional policy makers, this is critical as it offers a lever through which to attract innovative SMEs in emerging industries, in addition to larger firms looking for more cost competitiveness. Importantly, the authors point out that it is not enough to develop a horizontal non-sector specific FDI strategy (Crescenzi, Di Cataldo and Giua, 2021[16]). Instead, regional investment promotion should prioritise specific sectors and should not ignore the more “occasional players” in FDI as they will be more attracted by the regional investment ecosystem over which local and regional policy makers have considerable influence.

These examples and evidence show that as multiple actors covering overlapping geographies carry responsibility for investment promotion, there is a strong need for co-ordination mechanisms to ensure strategic alignment and deliver the best results. These processes can sometimes be complex and at times political. For example, when regional and national governments are represented by different political parties or hold divergent views on investment priorities, this makes national-regional co-ordination a greater challenge and increases the need for dialogue and co-ordination (Lewis and Whyte, 2022[17]). As discussed in Chapter 7, there exist multiple tools to address the challenges associated with multi-level governance for investment promotion, including establishing a key co-ordination role for the national IPAs that balances the needs and priorities of regional and local agencies in promoting their strategic priorities and working with MNEs and SMEs to promote balanced regional development.

IPAs are also instrumental actors in bridging cultural gaps between international firms and regional communities. The impact of cultural factors on FDI location decisions has been well documented over the years and across geographies: see, for example, Kapás and Czeglédi (2020[18]) and Lucke and Eichler (2015[19]). While geographic proximity and cultural affinity can ease the process through which FDI flows between regions, IPAs can prove particularly useful in situations where the cultural distance between the investor and the host region is larger (Iammarino, 2018[7]). To foster an inclusive investment environment, agencies can work with industry and civil society organisations to promote the diversity of the regional workforce and opportunities for work-community integration such as language training, cultural events and career fairs.

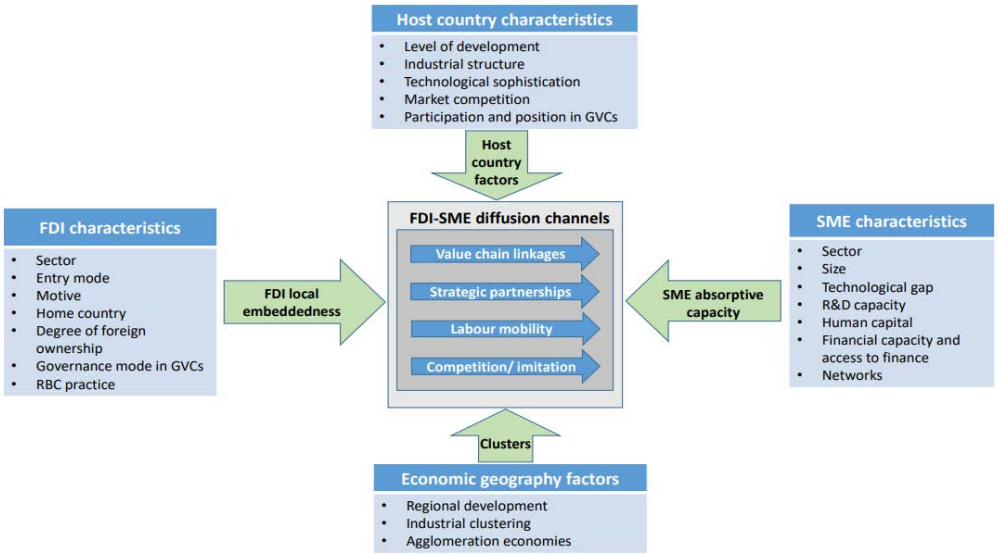
SME linkages as a beacon of attraction

The role of SMEs as attractiveness drivers themselves is an important asset for regional policy makers to leverage. Local firms can act as strategic partners for FDI firms through several channels, such as supplier linkages, labour mobility, innovation and competition. The economic geography influencing this FDI-SME relationship is indeed supported through clusters, as illustrated, but also on other region characteristics such as: natural resource endowments; the quality of regional infrastructure; regional quality of government; regional labour markets; and other attractiveness assets. Policy makers can support regional FDI-SME ecosystems to strengthen channels that benefit international and local firms alike (Figure 4.1).

Mobilising SMEs to support attractiveness, however, requires their direct involvement in investment attraction policies, for example through local chambers of commerce, public consultation and through their role as stakeholders and advisors to IPAs, and regional and national governments. Furthermore, as SMEs advocate for improvements in regional assets, like those mentioned above, this, in turn, creates a more attractive environment for attracting international investment. While FDI can be productivity-enhancing for domestic SMEs, there are also channels through which domestic firms can support the upgrading of FDI firms. One example of this is support for cluster policies that can formalise networks of indigenous firms in one or multiple sectors to both boost productivity and entrepreneurship and enhance attractiveness to investors in said sectors (OECD, 2022[20]).

Further work on SME density and investment attraction could explore the linkages through which firms are actors in the process of engaging foreign entities to locate in a region and if/how this improves positive spillovers. There is a prominent role for public actors to play in achieving this, as is already illustrated in many country cases. The Portuguese programme Startups Connecting Links aims to connect domestic start-ups in specific sectors or activities with foreign MNEs with a twofold objective: promoting collaboration between foreign and domestic businesses and favouring the entry of MNEs into the Portuguese market through mergers and acquisitions (M&A). The Spanish Investor Network, implemented through the Spanish Institute for Foreign Trade (ICEX) network of Economic and Commercial Offices abroad, aims to connect international investors with the domestic business fabric and facilitate contact between Spanish companies looking for capital and foreign investors (OECD, 2023[21]).

Figure 4.1. FDI spillovers on domestic SMEs: A conceptual framework



Source: OECD (2023[22]), "Enabling FDI diffusion channels to boost SME productivity and innovation in EU countries and regions: Towards a policy toolkit", Revised Concept Paper, OECD, Paris.

Cluster policies are another feature of the policy mix to promote regional innovation ecosystems that depend on strong ties between domestic firms and foreign investors. For example, Enterprise Ireland's Regional Technology Cluster Fund offers financial support to increase the number of clustering companies in Ireland and enhance collaboration between firms and regional knowledge providers, such as Ireland's institutes of technology (IoTs) and technical universities. The Swedish Agency for Economic and Regional Growth also runs a Cluster Programme to support selected cluster organisations that are prioritised in regional smart specialisation or development strategies (OECD, 2023[21]). These programmes illustrate the role of public actors as strategic connectors and knowledge brokers who can enable spillovers to take place by leveraging their local networks and, where possible, providing incentives and investments for domestic and foreign firms to exchange.

Export development

The relationship between FDI attraction and export development is well documented, with evidence across developed and developing countries suggesting a complementary relationship between inward FDI and export promotion (Sultan, 2013[23]; Chaisrisawatsuk and Chaisrisawatsuk, 2007[24]; Harding and Javorcik, 2012[25]). Indeed, already in 2014, the share of global exports of MNE affiliates stood at 31%; in other words, nearly one-third of global exports can be accredited to the foreign activities of MNEs (Crescenzi and Harman, 2022[26]). In the case of Portugal, Andraz and Rodrigues (2010[27]) demonstrate with evidence spanning a nearly 40-year period a univariate causal relationship between inward FDI and exports, with the effect flowing from the former to the latter. Importantly, these relationships are not fully explained by the exports of FDI firms themselves. Productivity spillovers, human capital formation and technology transfer brought about through FDI can lead to greater SME competitiveness and a higher propensity for SMEs to become exporters themselves (as depicted in Figure 4.1). Moreover, SMEs can indirectly contribute to export development through backward linkages, i.e. where the SME provides inputs to the exporting foreign affiliate. At the regional level, these spillovers and linkages manifest in different ways. The firms that benefit tend to be in the nearer vicinity to where the investment took place and the effects may in fact be negative in further-off regions, illustrating the need for national and regional stakeholders to co-ordinate attractiveness policies (Lembcke and Wildnerova, 2020[28]).

Promoting the exports and GVC integration of domestic firms is often a part of the mission of regional bodies. In Denmark, for example, regional Business Development Centres support SMEs that express a readiness to internationalise (EESC, 2018[29]). Experts from the centres provide free advice to firms on their internationalisation strategy. In Ireland, nine Regional Enterprise Plans at the TL3 level function as the guiding strategies for export-led economic growth with specific action items outlined to deliver sector and place-based outcomes (Government of Ireland, 2020[30]). Each plan is governed by a steering committee of industry and public sector representatives and aligns specifically the region's FDI targets with broad-based enterprise development at the regional level. As discussed above, this is another example of how SME upgrading and investment promotion can be mutually reinforcing policies that can foster regional ecosystems of entrepreneurship and investment but require significant attention from the regional government to come to fruition.

Aligning investment attractiveness with regional development goals

Attracting investments to drive the green transition

Attracting foreign investment is increasingly being seen as a vehicle to support the industrial transition of regions from traditional sectors with adverse environmental impacts to ones that are conducive to a green transition in regions. For example, the North Sweden Green Deal in the Upper Norrland region is the culmination of two local county governments that have come together to promote investments that enable

the region's transformation into a hub of a sustainable industry that appeals to both investors and talent (Utveckla Norrbotten, 2022[31]). This is described as a "new industrial strategy for Sweden", which aims to position northernmost counties as hubs of the global green transition and places where young, skilled talent with an environmental focus might want to live and work. To achieve this, municipalities like Luleå frequently engage businesses that have chosen to locate in the region to build a channel of public-private trust and to ensure that these businesses act as ambassadors for further investment in the region (Alm, 2022[32]). In Australia, the recently launched Net Zero Authority is mandated to support transitions across the country including through co-ordinating "programs and policies across government to support regions and communities to attract and take advantage of new clean energy industries and set those industries up for success" (Government of Australia, 2023[33]). Increasingly, governments are recognising the green transition as a window of opportunity for regions to achieve sustainable economic development and an opportunity to attract new residents and build a new regional brand. This, as evidenced in Australia and Sweden, requires a co-ordinated effort across levels of government and with the non-government sector to come to fruition.

Revitalising regions through investment zones

In Italy's southern regions (*Mezziogiorno)*, Special Economic Zones (SEZs) focused on the economic revitalisation of distressed areas have been established to attract investment that better balances regional development across the country. These eight zones illustrate the distinct regional advantages of their area. For example, two zones in the region of Sicily attract investment in important sectors like agri-food, nanotechnology and pharmaceuticals while also addressing much-needed infrastructure investments that modernise the island's logistic network (Regione Siciliana, 2023[34]). Rather than creating nodes of competition within a region, the zones are specialised in unique sectors and projects that cater to the local assets and labour markets and are co-ordinated by a designated special commissioner. Similarly, SEZs are considered an important investment attraction tool in Poland (Box 4.1).

Box 4.1. Special Economic Zones: The case of Poland

SEZs are an important tool for investment attraction in Poland but their success may depend on their governance

Poland's regions receive worthy praise for their ability to attract investment and develop clusters in increasingly higher-value-added segments of production. A famous example is the Katowice special economic zone in Poland, which has successfully transformed the *voivodeship* (region) into an investment attraction leader at the European level. It has regularly been awarded the best Free Zone of the Year in Europe award by fDi Intelligence and was scored as second best in the world in 2019. According to Arbolino, Lantz and Napolitano (2022[35]), out of 51 investment zones across Europe, Katowice has most successfully met its stated and total policy objectives, attracting significant FDI, generating infrastructure overlay and boosting regional gross domestic product (GDP).

However, the intended agglomeration effects of SEZs, whereby the entry of new firms and investment translates into the birth and growth of new and existing enterprises, has not been universally observed in the Polish experience. Analysing down to the local level of *poviats* (counties), Ambroziak and Hartwell (2017[36]) show that while the SEZs successfully reduced unemployment in the poorest regions, the overall number of business entities did not change between regions with an SEZ and those without. What the authors observe is a firm-based agglomeration effect with a few SEZ-based companies generating employment in the counties. While the effects on regional employment appear positive, the goal of achieving more balanced regional development is not fully met. Importantly, the authors point

out that the success of the SEZs depends largely on the local authorities' propensity to invest in the zone and to facilitate linkages between investors and regional entrepreneurs and markets.

Indeed, research indicates that the governance of Polish SEZs has a limited impact on their propensity to attract investment and create jobs in local areas. While the location of the SEZs remains the most significant determinant of their success, those that refrain from over-centralisation of decision-making and engage local and regional authorities in zone management appear to do better, even if located in a less attractive location (Dorożyński, Świerkocki and Dobrowolska, 2021[37]).

Similarly, evidence from Poland and many other countries shows that tax incentives also have little impact on FDI location decisions; however, they do exhibit some importance at the within-country level when investors have the option to choose among various SEZs (Ciżkowicz et al., 2021[38]; Frick and Rodríguez-Pose, 2023[4]).

Note: These findings were inspired by an OECD webinar hosted on the topic of "Enhancing the attractiveness of non-metropolitan areas: The role of SEZs". More information can be found at: www.oecd.org/regional/globalisation.htm.
Source: OECD (forthcoming[39]), "Enhancing the attractiveness of non-Metropolitan areas: The role of SEZs", OECD, Paris: Arbolino, R., T. Lantz and O. Napolitano (2022[35]), "Assessing the impact of special economic zones on regional growth through a comparison among EU countries", https://doi.org/10.1080/00343404.2022.2069745; Ambroziak, A. and C. Hartwell (2017[36]), "The impact of investments in special economic zones on regional development: The case of Poland", https://doi.org/10.1080/00343404.2017.1395005; (Dorożyński, Świerkocki and Dobrowolska, 2021[37]); Ciżkowicz, P. et al. (2021[38]). , "Why do some Special Economic Zones attract more firms than others? Panel data analysis of Polish Special Economic Zones", https://doi.org/10.18267/j.pep.763; Frick, S. and A. Rodríguez-Pose (2023[4]), "What draws investment to special economic zones? Lessons from developing countries", https://doi.org/10.1080/00343404.2023.2185218.

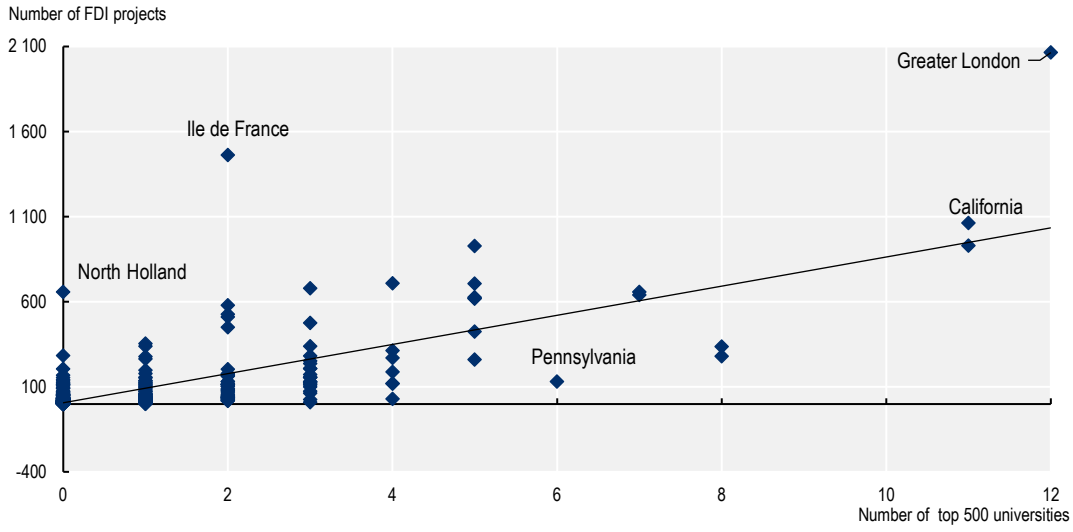
Paying attention to what matters most for investment attraction

As explored in Chapter 3 (and depicted in Figure 4.2), at the European and OECD level, educational institutions appear relevant as facilitators of FDI in terms of both capital expenditure and the number of projects. Universities act as a talent pipeline for prospective firms but, more importantly, they are central actors in the innovation ecosystem of any region. Industry-academic partnerships can lead to firm creation, patenting and other innovation outcomes at the regional level (OECD, 2022[40]). For instance, OECD evidence shows that, across the United States, the job creation intensity of FDI projects tends to be higher in states where research and development (R&D) spending by businesses is larger, reinforcing the importance of local and regional actors to build and support ecosystems that encourage innovation and collaboration among actors (OECD, 2022[1]).

The quality of Internet infrastructure – as measured by the digital download speed as a percentage deviation from the national average – also matters. Unsurprisingly, regions that invest in this infrastructure attract more greenfield projects. Firms are ever-more relying on quality digital connections for their business operations, with increasing demand coming from their talent who require stable Internet to facilitate hybrid and remote working schemes.

Finally, physical infrastructure in terms of road and rail is significant, especially when counting the number of FDI projects a region attracts. Road and rail allow for the ease of movement of people and goods to and from a region and are especially critical for SMEs that depend on these services to internationalise, moving their products to market.

Figure 4.2. Top universities as drivers of FDI to the regions



Source: Based on fDi Markets database (2017-22); (Round University Ranking, 2022[41]), World University Rankings, https://roundranking.com/ranking/world-university-rankings.html#world-2022 (accessed on 1 December 2022).

A roadmap for investment attraction and export development

The OECD has developed a tool, in the form of a roadmap for investment attraction and export development, to clarify and address the main co-ordination challenges faced by stakeholders involved in the development and implementation of investment attractiveness policies and to highlight good practice examples to address these challenges (OECD, 2022[15]). The roadmap aims to support the dialogue between stakeholders, including across levels of government, who are involved in enhancing the investment attractiveness of regions, and provides a checklist of five key steps for attracting international investors.

Step 1 – Identify and understand target(s)

- Identify sectoral prioritisation, alignment with overall regional development strategy and firm type.
- For example, looking to build a hub of green industry in Northern Sweden, the Norrbotten region targets firms active in sustainable industrial and manufacturing activities as a means of contributing to the region's image and success in sustainability: examples include a growing "green steel" cluster, renewable energy and critical minerals.
- To identify sectoral priorities, regions should look closely at the segments of GVCs to which they contribute and potential synergies across sectors within a region. For example, a prominent agricultural region with a growing appetite for investment in information technology (IT) services can market their region as ripe for investments in the rapidly-scaling agri-tech industry. This can support emissions reductions in that sector and create linkages between FDI and SMEs operating in the industry.

Step 2 – Map stakeholders and co-ordinate

- Identify the key players in investment attraction, noting that these are bound to change depending on the sector, region and the type of firm/investment. A successful regional strategy will depend

on the attractiveness assets that a region has – from its industrial base to its talent pipeline to the local quality of life – but it also requires co-ordination, collaboration and policy coherence.

- The conventional actors include local and regional government, IPAs (national and regional, if present) and industry representatives. However, as illustrated above, there is an important role to play for universities and research institutions, SMEs and firm clusters, each of which can entice firms by promoting the talent pipeline and innovation ecosystem that the region hosts.

Step 3 – Map assets and gaps

- Use the attractiveness framework to consider the cost and non-cost drivers that matter to foreign affiliates in their location decision. Indicators that monitor land and housing, for example, will be important to firms that are prospecting for greenfield project sites and that require attracting talent to live and locate in the region. Meanwhile, infrastructure performance is critically important for both the movement of goods and people. When performance is lagging in this dimension, regional investments are likely required to facilitate FDI. Special focus should be given to logistics infrastructure – from roads to ports to airports (as illustrated as essential in Chapter 3) – which is fundamental for attracting export-oriented foreign investors. Increasingly, the quality of digital infrastructure is prioritised, especially for firms operating in the service sector (e.g. IT, finance, business services).
- Every region has its gaps as far as investment appeal goes: focus on those for which the region can make measurable improvements and those that align with the overall regional development strategy. For example, the South-East (TL3/NUTS-3) region of Ireland's award-winning FDI strategy focuses on promoting the local entrepreneurial environment, its new university and its relative cost competitiveness compared to metropolitan regions to elevate its brand, despite the challenges in terms of transport infrastructure that the region faces.

Step 4 – Identify policy levers

- Several vehicles exist to attract foreign investment and not all require tax incentives or subsidising, despite these tools having their time and place.
- Smart specialisation strategies (S3), for example, are an effective way to regionally co-ordinate actors around a set of comparative advantages that the region either owns today or seeks to develop in the future. However, these should be accompanied by investment and talent attraction strategies that clearly define how the skills and funds required to bring these strategies to fruition will be attracted. Through S3, regions can lead a strategic vision that involves local and central government, industry and civil society in a process designed to develop key sectors, including through investment attraction. In the case of Region Norrbotten, the S3 strategy does just this, outlining key investments needed to create clusters around the region's sustainable industry and attractive quality of life (Region Norrbotten, 2020[42]).
- Special Economic Zones (SEZs) – in their variety of forms – can be instrumentalised, especially in the promotion of investments to regions that have tended to fall behind. Importantly, they need to be co-ordinated to limit potential crowding-out effects, which can be done by designing them for specific sectors that are either native to the area of the zone or altogether new to the region. They also should be based on attracting investment capable of generating linkages to local firms, thus embedding the investment in the local economic ecosystem. Recall that the best SEZs benefit not only from financial incentives – they focus on co-ordination and logistics, and foster linkages between foreign investors and local suppliers/markets (Frick and Rodríguez-Pose, 2023[4]).

Step 5 – Monitor and evaluate

- Investment attraction strategies require measurable performance indicators – often these are isolated to the amount of investment won and employment creation. While important, these are outcomes and not drivers of investment attraction. Indicators should be aligned with broader regional development strategies that reflect the evolving requirements of firms and talent in today's global environment. As illustrated in Chapter 3, important variables include but are not limited to: access and quality of flights and rail network; digital infrastructure; education and skills.
- As illustrated, broadband access but also download speeds, are of critical importance. So, too, are the quality and innovation of research institutions. Regions can work with universities to monitor the internationalisation of these institutions through, for example, the share of international students. On the digital front, regions should evaluate not only the number of households or localities with Internet access but the quality (e.g. fibre, speed) – of increasing value to firms competing in a digital world.
- If the goal is to promote inward investment in the R&D sector or in cultural and creative industries, regions can monitor the employment levels in these sectors as a share of total employment. Yet employment does not paint the fullest picture: to complement this, indicators that monitor output (i.e. patents, new businesses created) can confirm whether investment attraction has translated into investment creation.

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5 International talent attraction and retention

This chapter explores talent attraction and retention policies as a means for public authorities to meet regional labour and skills needs. It provides insights into effective strategies, emphasising the importance of tailoring approaches to specific territories and individual talent needs. Recognising the significance of non-work and non-pecuniary factors, it presents quantitative findings indicating that fast Internet speeds, affordable housing and hosting international students are effective levers for talent attraction and retention. Furthermore, it showcases examples of successful practices implemented at the subnational level that target specific talent groups, such as graduates and public servants. In conclusion, the chapter provides a six-step roadmap for regional governments to address co-ordination gaps and strategically position their region for talent attraction and retention in an evolving global landscape.

Key messages

Public authorities are taking steps to help employers attract and retain talent

- With accelerating labour and skills shortages in most parts of the economy, public authorities are increasingly investing in helping their employers attract and retain talent.
- Talent, which includes more than the rich and highly educated, increasingly chooses to live in places that fit its personal perceptions of an attractive living environment.

Attraction and retention strategies should be tailored to places and people

- Because all territories do not need the same talent, attractiveness and retention strategies should be place-specific.
- Because all talent does not desire the same things, attractiveness and retention strategies should be people-specific.
- The importance of retention strategies cannot be overstated, including as a lever to attract newcomers. People's first experience of a place plays a significant role in determining longer-term stays and their willingness to spread the word to others, meaning that soft landing schemes are key.

Housing and broadband are of utmost importance to international talent

- Regions with access to fast Internet speeds, affordable housing and that host a higher share of international students are more attractive to international talent. These factors are fundamental to a region's development trajectory, showing that talent attractiveness strategies can be direct levers for regional development.
- Regional governments can follow the OECD six-step roadmap to design and implement effective strategies to attract and retain talent in the new global environment.

What is shifting the regional playing field for talent attraction and retention?

Skills and labour shortages

Human capital is widely considered fundamental for economic growth. Broadly defined as the stock of knowledge, skills and other personal characteristics that make people productive, it is a prerequisite for the proper functioning of businesses and public services (Égert, de la Maisonneuve and Turner, 2022[1]). Past levels of regional human capital are found to be key in explaining current regional disparities in innovation and economic development (Diebolt and Hippe, 2022[2]; Gennaioli et al., 2012[3]). However, shortages of adequate human capital – also referred to as labour and skills shortages – were already a problem across many parts of the OECD before the COVID-19 pandemic. The pandemic has only made the shortages far more evident (Business Europe, 2022[4]). Therefore, when considering territories' long-term resilience and recovery from the COVID-19 pandemic compounded by Russia's war of aggression against Ukraine, besides energy, commodities and inputs, the lack of workers with the right skills is proving to be the next great challenge facing countries and regions (Causa et al., 2022[5]).

Declining and ageing populations lead to a number of challenges for regions, including labour and skill shortages. Over the coming decades, the population is expected to decline in half of all OECD countries (OECD, 2022[6]). Declines of 10% or more in the working-age population have been forecast in 1 out of 4 European Union (EU) regions (EC, 2023[7]). Obstacles to human mobility across countries also explain these shortages. In the European Union, the rate of increase in those emigrating has decelerated in recent years, partly because companies and workers face barriers in hiring/taking up employment across borders, including lengthy and costly legal procedures, and a lack of easily accessible information (Business Europe, 2022[4]).

Labour and skills shortages are felt globally but rural, remote and underserved areas are being hit the most (EC, 2023[8]). Therefore, in several cases, intranational inequalities in human capital are larger than international ones (Diebolt and Hippe, 2022[2]). In Germany for instance, the eastern states are more heavily affected by shortages than those in the west, due to a high exodus of workers since 1990. In 2021, 27.7% of companies in the east (including Berlin) reported to be suffering from skills shortages (Volk, 2021[9]). In France, future recruitment difficulties should be particularly acute in southern and western regions: Brittany (42% of employment under increasing pressure by 2030), Pays de la Loire (36%) and New Aquitaine (33%) (Dares/France Stratégie, 2023[10]). Conversely, the Île-de-France region has the lowest proportion of jobs under increasing pressure (11%) due to its younger population. Any exacerbation of these territorial inequalities, risks provoking important economic, social and political divides.

All sectors are impacted by labour force shortages, albeit to a different extent. The sectors most affected include construction, accommodation and food services, manufacturing, retail trade, transport/warehousing, as well as leisure and hospitality (ELA, 2021[11]). The healthcare sector is also not immune, with projections indicating a global shortfall of 10 million health workers by 2030 (WHO, 2022[12]). In all cases, rural, remote and underserved areas are expected to experience the greatest shortages. In Canada, despite unemployment rates being historically low, many positions remain vacant, particularly in healthcare (Statistics Canada, 2022[13]). According to the U.S. Bureau of Labor Statistics (2022[14]), employment opportunities for nurses are projected to grow at a faster rate (9%) than all other occupations from 2016 through 2026. In Germany, more than 35 000 healthcare positions were unfilled at the end of 2021 (+40% within a decade). Faced with these shortages, the use of foreign workers is extensive. One in five practising physicians in Germany was born abroad, while since 2004, the share of foreign nurses in the Belgium capital city of Brussels has more than doubled. In France, the government is considering implementing a new multi-year residence permit called "Talent – medical and pharmaceutical professions"[1] to attract foreign doctors. Yet, the increasing reliance of foreign health workers may exacerbate health workforce shortfalls, particularly in poorer regions and as such precautions must be taken. In Greece for

instance, where there is a shortage of health workers, many choose to go abroad or into the private sector (Stroobants et al., 2022[15]).

Labour shortages exist at all skill levels, albeit to a different extent, and must be filled to ensure the sustainable development of countries and regions. For labour markets to return to pre-pandemic strength will require new workers of all levels, skills and diplomas, in a variety of sectors with structural shortages and associated technicalities (tourism, hospitality, information technology [IT], health, logistics, etc.). A lack of workers with relevant skills in the construction, energy, manufacturing and transport sectors, to name a few, could also risk holding back the green transition in places that would then fall behind (Kleine-Rueschkamp, 2022[16]; OECD, 2023[17]). In Copenhagen, Denmark, talent attraction is now defined as the driving force behind the green transition.

Redefining "talent" is essential to address staffing problems at the regional level. Currently, in the migration schemes of most OECD countries, talent relates only to highly educated people or entrepreneurs. However, changes to who are considered talent, are emerging for instance in Japan and the European Union. OECD work on talent attractiveness at the national level has focused on national immigration policy reforms and differentiates between three types of talented migrants: highly educated workers, entrepreneurs and university students (OECD, 2023[18]). Definitions focusing on individual intrinsic features are useful but are not fit for purpose for this current OECD work on Rethinking Regional Attractiveness, which is focuses on overall regional resilient and inclusive development and is not limited to positions requiring highly educated candidates.

For the purposes of this activity, talent is defined as anyone with skills corresponding to the needs of public and private, place-specific economic and social development strategies (Flood et al., forthcoming[19]). This approach factors in the evolving global environment and specific territorial needs. It enables a break away from the binary approach that sees people as low- or high-skilled, with diplomas from universities of varying quality, with low or high salaries, and enables a greater focus on local labour markets and the needs of communities. People with basic skills are essential to the smooth running of any economy, as highlighted by the COVID-19 containment. The COVID-19 crisis and the war in Ukraine should be seen in this light as an opportunity, or a wake-up call, that may provide the required stimulus at the policy and research levels to investigate further how this new dimension of human capital can shape future regional development in Europe (Diebolt and Hippe, 2022[2]).

The need to attract international talent

Two main strategies must be combined to bring more people into the labour market and effectively address labour and skills gaps: first, by (re-)engaging and training people who find themselves on the sidelines of the labour market, such as women, retired individuals and others; second, by increasing the labour force through immigration. Given that growing labour market needs cannot be fulfilled in the long term by mobilising the domestic workforce alone, focusing on attracting and retaining talent from abroad is essential (EC, 2023[8]). While this report supports countries and regions in that regard, training and developing the skills of the local workforce is also crucial.

Local governments have a role to play in attracting and retaining people. Central governments are responsible for granting foreigners the right to participate in the labour market and, as such, many are amending their legislation to facilitate their entry and are investing in schemes to validate their professional and educational qualifications. At the same time, local authorities have responsibilities in key areas such as childcare, education and social housing (OECD, 2022[20]) that allow them to develop – and many do – effective strategies to attract and retain newcomers (OECD, 2018[21]).

What do effective talent attraction and retention strategies look like? Because not all territories need the same talent and not all talent has the same requirements, strategies should be place- and people-based. First, a place-based approach ensures strategies build on the specific regional assets and opportunities

as well as actors of the territory they support. The heterogeneous location of labour and skill gaps, and the unique reasons for their existence, mean that a one-size-fits-all solution will not work (Eurochambres/Committee of the Regions/OECD, forthcoming[22]). Moreover, territorial instruments can help engage local actors – public sector as well as firms, non-governmental organisations (NGOs), civil society and residents alike – to identify and agree on the priorities to address and thus support better social cohesion and democracy by increasing ownership of policies and creating communities of common interest (EC, 2023[7]). This is key given that anti-immigration perceptions vary from one place to another (Charbit and Tharaux, 2021[23]) and have been found to drive away immigrants, including within the European Union (Di lasio and Wahba, 2021[24]) and that, overall, citizens increasingly question globalisation (OECD, 2022[25]). Second, a people-based approach will help policies focus on the needs of the talent the region would like to attract, identify under which conditions they are likely to relocate and propose tailored solutions. According to individual socio-demographic characteristics, the different components of attractiveness considered by the OECD will have different weights in localisation decisions. For instance, having good access to childcare services will be capital for families, while access to high-speed Internet will be decisive for remote workers.

Box 5.1 The role of culture in talent attraction

Culture and creative industries transform local economies and communities in various ways and foster talent attraction and retention. Cultural policies are thus increasingly being used to promote destinations and enhance the attractiveness of places. Culture can breathe new life into decaying neighbourhoods and culture-led investments have proliferated in cities and regions across the globe (OECD, 2022[26]). An often-cited example is that of the city of Bilbao, which experienced transformative regeneration after the Guggenheim Foundation opened a museum in the city (González, 2010[27]). Moreover, there is growing evidence that increased levels of cultural participation have positive effects on well-being and health as well as encourage social cohesion by supporting the integration and inclusion of marginalised groups (OECD, 2022[26]). Cultural hubs and policies to make culture accessible to all can therefore be decisive in attracting and retaining people – in particular women, students and highly educated people who tend to have higher levels of cultural participation (Schmutz, Stearns and Glennie, 2016[28]; Falk and Katz-Gerro, 2015[29]).

The city of St. Catharines, Ontario, Canada, is a promising case of a municipal-level initiative that supports arts and culture as a means of building more attractive and vibrant communities. Over the last decade, it has developed a strong cultural investment policy, recognising the important role that cultural activities and events can play in enhancing the quality of life for residents and attracting visitors to the city (City of St. Catharines, 2023[30]). While the town only has 140 000 inhabitants, it is home to several performing arts venues, various festivals and events and numerous public art installations that enhance the urban landscape. In 2023, the city launched its Culture Builds Community programme, designed to support local artists and cultural organisations, by providing funding for community-based arts and culture projects.

Source: OECD (2022[26]), *The Culture Fix: Creative People, Places and Industries*, https://doi.org/10.1787/991bb520-en; González, S. (2010[27]), "Bilbao and Barcelona 'in motion'. How urban regeneration 'models' travel and mutate in the global flows of policy tourism", https://doi.org/10.1177/0042098010374510; (Schmutz, Stearns and Glennie, 2016[28]). Falk, M. and T. Katz-Gerro (2015[29]), "Cultural participation in Europe: Can we identify common determinants?", https://doi.org/10.1007/s10824-015-9242-9; City of St. Catharines (2023[30]), *Arts, Culture and Events*.

Non-work and non-pecuniary factors, play an important role in attracting talent. In the wake of the COVID-19 pandemic and as developed countries increasingly rely on immigration as a source of workforce stability, there is a demand for a new assessment of the determinants of talent attraction, one that takes into account the evolving characteristics and aspirations of the global workforce that is more mobile and has more choice of where to locate (ICMPD, 2021[31]). The OECD has developed a tool presented in Chapter 3 to help regions identify the assets at their disposal to leverage for the purposes of talent attraction and retention. It considers more than 50 indicators to develop regional attractiveness profiles, covering 14 dimensions of attractiveness, across 6 domains (economic attraction, connectedness, visitor appeal, natural environment, resident well-being, land use and housing). Beyond the potential job opportunity itself, non-work and non-pecuniary drivers can be the deciding factors when considering employment options – particularly when job opportunities are equal. These drivers include access to high-speed Internet, affordable housing, natural capital, social cohesion but also the quality of public services (transport, health, and education), leisure activities and local cultural offerings (OECD, 2022[25]) (Box 6.1). Regions attractive to talent, visitors and investment appear to either host a higher share of international students or a top 500 university, suggesting a potential policy synergy between the internationalisation of education and attractiveness.

Moreover, the growth of teleworking in some professions is an opportunity for non-metropolitan territories with few job offers to attract new inhabitants. Indeed, increasing numbers of workers can live where they want, with companies like Airbnb, IBM, JP Morgan, PwC, Revolut, Salesforce, Siemens, Spotify, Walmart and Zillow, to name a few, having decided to go fully remote, thus making location decision less constrained by the workplace and mainly determined by regional well-being factors. Attracting teleworkers and their families will require significant investment in order to adapt to their needs, first and foremost to provide adequate digital infrastructures (e.g. broadband Internet and digital hubs) (OECD, 2023[32]).

The uneven impacts of climate change on regions can boost non-metropolitan territories' attractiveness. Urban areas may become less attractive as places to live as they tend to be warmer than their surroundings due to high building concentration, reduced ventilation and lack of vegetated areas (OECD, 2022[6]), exposing residents to both higher temperatures and more intense heatwaves than their rural counterparts. The intensity of this urban heat island effect varies across cities across the OECD, depending on the population size and the climate zone. Built-up lands in urban areas with a population size higher than 250 000 inhabitants are already, on average, 3°C higher than their surrounding area, which is almost twice that for urban areas with less than 100 000 inhabitants. Given heatwaves have significant health impacts and will continue to grow in frequency, intensity and duration, they could increase the attractiveness of rural areas, as people strive to resettle to milder climates (Marcotullio, Keßler and Fekete, 2022[33]).

What works for talent attraction and retention

In response to a lack of depth in the local talent pool, many private and public actors have developed proactive plans to attract and retain talent, with a particular focus on talent from abroad. This section presents six levers used by subnational authorities to target specific talent groups: graduates, women, the diaspora, remote workers, families and public servants. Quite often, strategies tackle only one or two of the domains of attractiveness identified by the OECD as driving attraction and retention (connectedness, natural environment or others). Yet multifaceted approaches addressing the various factors that influence location decisions are needed for territories to become places where people want to work, live and play. Moreover, the focus is often only on attracting new people and efforts to ensure the smooth reception and integration of those that come are overlooked. Yet people's first experience of the place plays an enormous role in their staying prospects and their willingness to spread the word to others. If they are happy, they will gladly communicate this to their peers, meaning that retention is becoming the new attraction (Andersson, 2023[34]).

Retaining graduates

Former international students are an important feeder of labour migration in many countries (OECD, 2022[35]). They benefit the local economy by starting businesses, taking on high-skilled jobs and adding to the talent pool. Over the last decade, OECD countries have implemented wide-ranging policies to retain international students after completion of their degree. In particular, international students can remain in the country upon graduation to look for a job in almost all OECD countries (OECD, 2022[36]). Some regions encourage students to stay after graduation by developing high-quality job opportunities, often in collaboration with other local actors. One such initiative is the Knowledge Transfer Partnerships (KTP) started by Dalarna University in Sweden in 2012 (OECD, 2023[37]). The KTP enable recent graduates to obtain one-two-year contracts with local small and medium-sized enterprises (SMEs) to carry out strategic development projects. It meets a real need since top reasons stated by international students for staying in Sweden after graduation are "long-term career opportunities" and "employment after graduation" (a high salary scores significantly low) (Future Place Leadership, 2022[38]). The programme is co-funded by the participating companies, the Swedish Agency for Economic and Regional Growth (via the European Regional Development Fund, ERDF) and the region in which projects take place. Given that a vast majority of KTP contracts lead to full-time recruitments, the programme has allowed to address labour shortages and to attract young talent to Dalarna County. The "Lombardia is research and innovation" law[2] implemented by the Italian region also aims to facilitate the entry of young talent, particularly researchers, into employment through better co-operation between companies that need innovation and the research sector, to prevent them from leaving the region (EU, 2018[39]). It should be noted that attracting students themselves is also a good way to establish a pipeline of talent to fill local needs following graduation.

Attracting and retaining women

It is critical to pay attention to the available levers to attract and retain women, considering their role in promoting the sustainable and inclusive development of places. In particular, recent OECD work has underlined their over-representation in jobs that are essential for societies to function smoothly. For instance, across OECD countries, over 70% of workers in education and over 75% in health and social work are women. This is particularly stark in long-term care, where women hold more than 90% of the jobs across OECD countries (OECD, 2023[40]). These "pink-collar" jobs proved vital during the pandemic but are often underpaid, undervalued and lack clear opportunities for career advancement. They face stark attractiveness challenges that must be tackled partly by focusing on quality-of-life aspects. In Europe, data reveal gender differences in out-migration trends from rural areas. More women leave rural areas to study in tertiary education compared to men and tend to not return (Șerban and Brazienė, 2021[41]).

To (re)attract and retain women, some non-metropolitan areas are taking steps to improve diversity and inclusivity, such as the city of Asheville, North Carolina, United States, which established a Women's Roundtable that brings together female leaders from various sectors to identify and address issues affecting women in the community, such as sexual assault and domestic violence. Providing opportunities for social and civic engagement can also help foster the diversity of voices being heard. The region of South Karelia, Finland, has implemented a programme called Women's Active Citizenship that provides training and support for women to participate in local government and decision-making. The city of Strasbourg in France has embarked on gender budgeting, with the aim of integrating this dimension into all policies in order to reduce gender inequalities. The approach is supported by the European Commission in the framework of a dedicated programme, in which Strasbourg participates, alongside five states and three *Länder*. The municipal administration is accompanied by international experts and financially supported for two years. In the field of citizen participation, the city has, for example, begun to offer childcare facilities at neighbourhood meetings, and has introduced equal opportunities to speak.

Attracting back the diaspora

Attracting members of the diaspora back to their home region can be critical for regional development and economic growth since people bring with them valuable skills, knowledge, experience and international connections. The implications are even more vital for rural areas. In Portugal, return migration has been found to increase the sustainable development of deprived areas through investments in the local/regional tourism industry (Santos, Castanho and Lousada, 2019[42]). Overall, historical patterns show that few people have moved to a new region they have no connection with, so targeting returnees might be the easiest way to bridge labour and skills shortages. Therefore, most of the world's top migrant-sending countries and many subnational authorities have policies encouraging the return of the diaspora, making this group one of the most targeted by attraction policies. Policies vary from providing financial incentives to initiatives to build a sense of community. For instance, the Romanian Diaspora Start-up programme co-financed by the European Social Fund provides grants to small-scale businesses registered by Romanians returning home (EC, 2023[8]). In co-operation with news channels and broadcasters, the Polish government has launched the "We are 60 million" campaign, to disseminate, through social media, radio and television, information about the benefits of returning to the country (Paavola, Rasmussen and Kinnunen, 2020[43]).

In Spain, a national Return Plan was approved in 2019 by the Spanish government but several initiatives to attract returning citizens started and continue at the subnational level. The Castilla-La Mancha government launched the first of its kind in 2017: the Return of Talent programme. It includes a job-finding website, a team of mediators to facilitate the return and the following three key strands: subsidies for employers hiring people coming back to the country; subsidies for the start of entrepreneurial activity; and a "return" passport opening a right to a grant covering expenses associated with the transfer from abroad. The first two subsidies are 20% higher when carried out in certain municipalities and priority areas. About 40 regional officers are dedicated to this policy within the central co-ordination team and in the employment offices of Castilla-La Mancha. Since its launch, 749 have applied, 332 have returned with a job and 18 with an entrepreneurial project. As for the Cantabria region, it engages and strengthens ties with its diaspora through *Casas de Cantabria* (Houses of Cantabria), whose multipurpose cultural spaces also organise exhibitions, concerts, film screenings, recreational activities and attend to any inquiries relating to the region (OECD, 2023[44]). In Italy, the Marche region is planning to support self-employment projects in the region conducted by returning talent and by offering incentives to businesses for hiring local-born workers living abroad.

Attracting remote workers

Attracting remote workers can have multiple benefits for regions. It can stimulate economic growth by bringing income into the area, increase diversity and the talent pool for employers and provide workers with a better work-life balance. Therefore, in 2022, 6 OECD countries and at least 22 non-OECD countries offered visas specifically for digital nomads (DNVs), which allow foreign workers to stay in the country and work remotely for a company abroad (OECD, 2022[35]). The growing flexibility to work and live from anywhere opens new opportunities for more rural communities to attract people sensitive to their assets (natural amenities, affordable housing, etc.) who might otherwise be deterred by a lack of jobs. For this to take place, the availability of high-speed Internet and/or coworking spaces is capital (OECD, 2023[32]).

Airbnb's new functionality allowing hosts to test their Wi-Fi speed and add the results on their listing page is a good illustration of remote workers looking for connected places. If many top digital nomad destinations are still in big cities, "nomad villages" are now starting to emerge, usually formed via a collaboration between local governments and one or more entrepreneurial organisations. The island of Madeira in Portugal quickly adapted to the increased mobility of workers, to target remote workers. Since 2021, they can apply to the Digital Nomads Madeira programme, launched as a pilot project, and obtain the right to live and work in Madeira for up to one year. The pilot brings together the local government, local hotels,

real estate, workspaces and car rental companies to offer newcomers a place to live, work and play. On the island, Digital Nomad Villages are being rolled out to serve as a one-stop-shop to help nomads settle. They get access to guidance on finding accommodation, free coworking spaces and join the social media group where events are posted every week. Since it opened, 4 670 nomads have arrived on the island. Algarve in another Portuguese region that has also been actively promoting itself as a remote work destination and has made related investments. However, the arrival of remote workers can lead to increased housing costs (as is the case in the city of Lisbon, for example), pressures on local infrastructure such as roads or public transport, and a weakening of the local culture leading to tensions between local residents and newcomers, and increased negative environmental impacts such as energy consumption, waste production and carbon emissions. There is therefore considerable interest in monitoring how newly implemented digital nomad visa schemes develop over time and assessing whether and how negative externalities should be mitigated by place-based policies.

Attracting and retaining families

An increasing number of attractiveness programmes focus on families that are a significant part of the economy, contributing to the labour force and consumer markets, creating job opportunities, expanding local tax bases and contributing to sustaining diverse communities, local events and volunteering. Families are also a direct way to maintain public services in a region suffering from out-migration since they tend to use a variety of available services (education, health including maternity, job services, etc.).

- Jobs for spouses. OECD research confirms the importance of designing attractiveness and retention strategies that consider the needs of the whole family (OECD, 2023[45]). Large metropolitan areas are often more attractive to dual-career couples because of the greater number of job opportunities. To tackle this issue, in France, the Family Support Programme from the Ministry of Armed Forces offers, among other services, military spouses job opportunities in various public sectors as well as internships and professional training to acquire new skills and improve their employability, thereby alleviating some of the challenges and uncertainties faced by military families due to frequent moves and deployments, and improving their quality of life (OCDE, forthcoming[46]). In Sweden, similar regional initiatives are available. For example, In Dalarna, private and public sector employers have joined forces (*Rekryteringslots*) to make recruitments more lasting and offer “job matching” for the entire family of the originally recruited employee (OECD, 2023[37]). Similarly, the Job-for-Both project, launched by a local development company Samarkand2015, offers language courses to partners of new foreign recruits, as well as individual coaching to help them find a job or start a business, speed dating opportunities with employers, and assistance with inter-cultural communication, etc. (OECD, 2023[37]).
- Safety for children. When thinking about moving somewhere, parents consider how safe and healthy the place is for their children. Therefore, regions and cities have implemented different programmes aimed at making communities safer for kids. The state of Oregon, United States, provides resources and funding to schools and communities to help them create safe and accessible routes for children to walk and bike to and from school.
- Health for all. Following the COVID-19 pandemic, migrants may also put more emphasis on the resilience and performance of health systems in their decision-making process, in particular families. The Lisbon metropolitan area has been active in improving the population’s satisfaction with health by building new Family Health Units and upgrading primary healthcare infrastructures and equipment. These projects will benefit more than 300 000 users and were supported by the 2014-20 EU funds (OECD, 2023[47]). Most centres also offer other services such as nutrition or psychology consultations. The province of Ontario, Canada, has implemented the Healthy Kids Community Challenge, which encourages communities to develop programmes and initiatives that promote healthy eating, physical activity and other healthy behaviours among children.

Attracting public servants

Public servants are essential to the development and delivery of any public programme or service, and for well-informed policies to be designed and implemented. Having a sufficient number of public employees with the right skills is, therefore, the backbone of regional growth and well-being, and thus can influence the attractiveness of places to other target groups. However, attracting and retaining public sector employees with the right skills has become increasingly challenging for most OECD countries (OECD, 2023[48]). This trend has been further exacerbated by the COVID-19 pandemic, affecting nearly all job categories. As a result, the Expert Group on Public Administration and Governance of the European Commission has identified the attractiveness of public administration as a top priority for 2023.

To prevent a lack of capacity that could compromise the delivery of services and regional attractiveness, many national and regional governments are taking action to attract and retain public sector workers. For instance, some governments are providing housing assistance, in the form of reserved housing, subsidised housing or down payment assistance to purchase a home. This can be particularly helpful in areas where the cost of living is high – e.g. South Korea, which has moved part of its administration outside of Seoul to reduce regional disparities and offers to house those who accept to relocate. In the United States, the city of San Francisco offers a programme called Teacher Next Door, which provides down payment assistance to public school teachers who agree to work in the city's public schools. In the northernmost part of Norway, tax reductions and a write-down of student loans have been tested, with temporary results. From 1 August 2023, a new instrument of free kindergarten will be introduced to gauge its attractiveness to young families (Norwegian Ministry of Local Government and Rural Affairs, 2023[49]). The Valencian Community in Spain launched the GenT Plan to attract and retain top-level Valencian researchers living abroad or starting their careers; all nationalities are however welcome. Researchers receive financial support to develop their R&D projects in Valencia's public universities and research centres, in addition to their wages. Since 2017, the region invested more than EUR 31 million and successfully attracted and retained 214 researchers (OECD, 2023[50]).

Aligning talent attraction and retention with regional development goals

The analysis presented in Chapter 3 reveals that regions with access to fast Internet speeds, affordable housing and home to a large share of international students are more attractive to foreign workers. These factors are also fundamental to a region's development trajectory, showing that talent attractiveness strategies can be direct levers for regional development. By attracting and retaining talent, regions can create a virtuous circle of talent attraction, sustainable and inclusive economic growth, and quality of life for all residents. To do this, talent attraction and retention policies must be considered an integral part of regional development policies. "Talent proofing" can help ensure that all regional development policies are aligned with talent needs and realities.

Digitalisation: Access to broadband Internet

Talent is attracted to regions with fast Internet speed. Good Internet access facilitates teleworking, supports social connections, access to job opportunities, public and private goods and services, such as telemedicine, and human capital development (OECD, 2020[51]). The importance of access to Internet access to people's localisation decisions is also indicative of the spreading trend of remote working culture, which slowly began before the pandemic and accelerated with COVID-19.

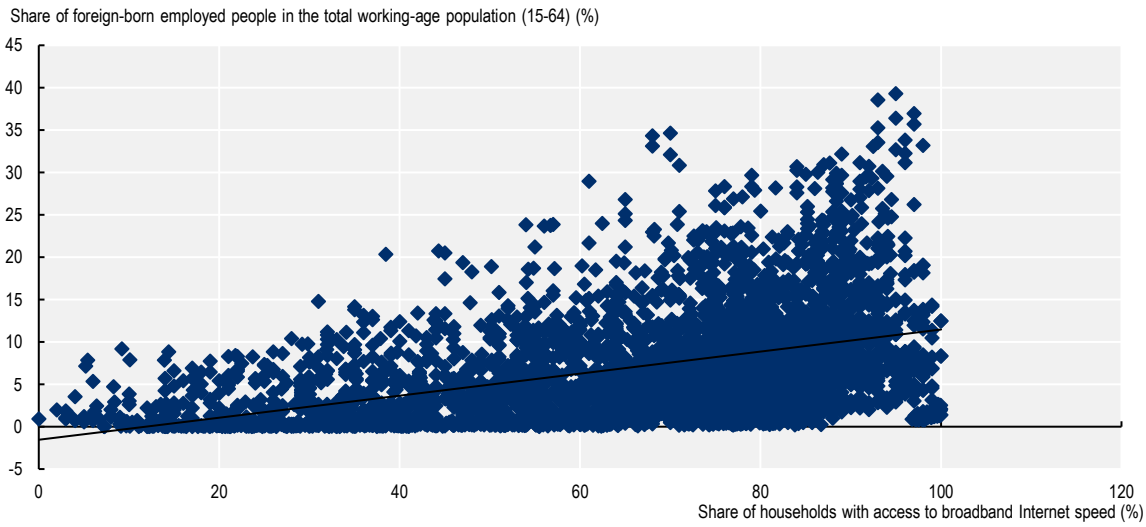
At the same time, fast Internet speed is important for regional development and leads to increased productivity and growth, helps create jobs and boosts the local economy. Regions with strong information and communication technology (ICT) infrastructure can thus position themselves as attractive destinations to talent but also to firms, investors and visitors. This is why enabling access to quality and affordable

digital infrastructure is increasingly important both for economic growth, attractiveness and retention (OECD, 2022[52]).

Since 2010, the share of households with high-speed Internet access has risen markedly in almost all OECD countries, with important differences within countries. In 2018, over 80% of households in 29 OECD countries had access to broadband Internet services. Inside countries, the differences in high-speed Internet access between urban and rural areas are often large, as well as between mountainous and non-mountainous regions (see Chapter 3). Download speeds over fixed networks are thus, on average, 31 percentage points below the national average in rural areas and 21 percentage points above in cities (OECD, 2021[53]). The digital transition will continue to affect regions differently and rural areas could slip behind due to poor digital infrastructure, which may also lead to missed opportunities from teleworking.

By investing in digital infrastructure and encouraging the adoption of digital tools, regions will position themselves for sustainable and inclusive development based on talent attractiveness and retention. Non-metropolitan regions, on average less dynamic and most in need of newcomers to mitigate the impacts of demographic decline, have much to gain in this regard (OECD, 2022[6]). Indeed, as shown by Figure 5.1, there is a positive correlation between the share of households with access to broadband Internet speed and the share of foreign-born employed people in the total working population (talent). Digitalisation can be a significant driver for non-metropolitan development. Central governments have a responsibility in making sure the required infrastructure investments are made in all parts of their country.

Figure 5.1. Share of households with broadband Internet vs. share of international talent



Note: Time-series data were analysed spanning from 2003 to 2020.
Source: OECD (2022 or latest available) Regional Attractiveness Database.

Housing: Affordability

Affordable housing helps attract talent and has numerous benefits for residents and territories, yet it poses an increasing challenge. Housing offers security and protection, privacy, space and rest and determines one's access to healthcare, education, digital infrastructure and labour market opportunities (OECD, 2021[54]). Housing markets have wide social, economic and environmental implications, including social cohesion, residential and intergenerational mobility and the transition to a low-carbon economy. However, housing has become less affordable over time in most OECD countries, particularly in urban areas where demand is high and supply is constrained (Bétin and Ziemann, 2019[55]). Those urban areas are often relatively attractive, meaning high housing prices mirror in some cases a region's attractiveness, but, in

time, start to form a bubble and potentially lead to a crowding-out effect. Inside countries, differences are wide. In Spain for instance, real house prices in 2019 were about 50% lower compared to 2007 in Navarra but only 15-20% lower in the Balearic Islands, Ceuta and Melilla (Fraisse and Pionnier, 2020[56]). Housing price heterogeneity may prevent the mobility of households to certain parts of countries and exacerbate existing inequalities. This calls for place-based solutions.

High housing costs in cities and assets of suburban areas are driving some people to places where land and housing are more affordable. As a result, physical urban space is growing faster than the population: the overall built-up area around the globe has increased 2.5 times over the last 40 years, while the population has increased 1.8 times (Moreno Monroy et al., 2020[57]). Such urban sprawl has a price. Rural areas may lose agricultural land to new housing, also affecting fragile ecosystems. People may have less access to public services and transport, and longer commutes to work by car, with implications for greenhouse gas emissions (OECD, 2018[58]). To ensure the sustainable and inclusive development and attractiveness of territories, governments must boost access to affordable, environmentally-friendly housing while keeping the consumption of resources (e.g. land, energy, water) low, for all to enjoy sufficient green space, safe transport and good amenities (Box 5.2).

Regions are best placed to design and implement housing policies. While national governments play a key role in providing the overarching legal framework, regions are better placed to understand and help forecast the needs of local governments, and hence identify local administrative and regulatory barriers, build synergies and monitor the impacts of housing policies which are local (they change where people choose to live, work and study). This underscores the need for regions to have the necessary financial and human means and for effective co-ordination to exist across levels of government, as Chapter 7 will develop.

Box 5.2. Expanding housing supply without building more

Empty housing is a long-standing issue in OECD countries. Among those for which data are available, Hungary, Japan and Malta record the largest share of vacant dwellings, at over 12% (OECD, 2022[59]). Rural areas generally have more vacant dwellings than urban areas, except in Portugal where the difference is small. By co-ordinating the right actors at the right scale, vacant properties can be made available without having to build more, thus reducing land use conflicts and negative environmental impacts. The *Hej Hemby* project launched by two municipalities in Norrbotten, Sweden, with the aim of creating livelier and more attractive village lives, successfully increased the housing occupancy rate through free support for houses and landowners, buyers and renters (OECD, 2023[45]). It also highlights the region's assets by marketing the Arctic way of life in Sweden and abroad, partly by getting newcomers and locals to testify about quality-of-life stories. Introducing vacancy taxes on unoccupied buildings is another tool becoming increasingly popular among legislators to tackle housing shortages, with details varying.

These types of initiatives are particularly key to attracting and retaining youth. Instead of sticking around the places where they are born and raised, young people are often attracted to experience the "bright lights" of big cities. Several non-metropolitan EU regions thus face the intense departure of their young and skilled workforce (OECD, 2022[6]). Various structural challenges hamper youth attraction and retention in these areas, including scarcity of services, Internet connection, lack of transport and declining housing affordability in rental markets (Shucksmith et al., 2021[60]; Șerban and Brazienė, 2021[41]). With typically lower income and wealth and a greater likelihood of being employed in unstable or informal jobs than older groups, far fewer young households own their homes than their older counterparts, and are thus more exposed to rising prices (OECD, 2022[61]). **B**etween 2005 and 2020, rent prices increased faster than general inflation in all but two OECD countries (Greece and Japan) and by more than a third faster than consumer price inflation in Estonia, Iceland and Ireland (OECD,

2022[62]). In response, countries and regions have developed plans to foster rural youth's access to housing, for instance by offering grants to those looking for their first home, flagging affordable housing as a condition for the return of youth to their home regions or by giving specific loans for the construction and reconstruction of housing (Șerban and Brazienė, 2021[41]).

Source: OECD (2022[59]), *Housing Stock and Construction*, https://www.oecd.org/els/family/HM1-1-Housing-stock-and-construction.pdf; OECD (2023[45]), *Rethinking Regional Attractiveness in the Norrbotten County of Sweden*, https://www.oecd.org/regional/globalisation.htm; OECD (2022[6]), *OECD Regions and Cities at a Glance 2022*, https://doi.org/10.1787/14108660-en; Shucksmith, M. et al. (2021[60]), "Rural Lives: Understanding financial hardship and vulnerability in rural areas", Rural Policy Centre; Șerban, A. and R. Brazienė (2021[41]), "Young people in rural areas: Diverse, ignored and unfulfilled", European Union-Council of Europe Youth Partnership; OECD (2022[61]), *Housing Taxation in OECD Countries*, https://doi.org/10.1787/03dfe007-en; OECD (2022[62]), "No home for the young?", https://www.oecd.org/housing/no-home-for-the-young.pdf.

Education: International students in higher education

Finally, Chapter 3 suggests that foreign talent will be more open to locating in a region with an already substantial number of international talent – in this case, students. This might be the case because regions home to a large share of foreign students will likely have in place support structures and services for foreigners, and local communities with positive perceptions and attitudes towards foreigners, both of which facilitate their arrival and integration into the regional economy and society (OECD, 2018[21]). Furthermore, a higher share of foreign students can also create a network of contacts that foreign talent seeking to settle in the region can leverage when looking for housing, employment, etc. Therefore, universities play a magnetic role in the attraction of talent. This phenomenon seems to be particularly observed among knowledge workers who are highly mobile, tend to respond less to monetary incentives alone and value being surrounded by highly educated individuals (Florida, 1999[63]).

One instance highlighting the role of universities in attracting foreign talent is the Technical University of Cluj-Napoca in Romania, which is establishing a hub for scientific competitiveness and professional training in hydrogen technologies applied to electric transportation (ENIHEI, 2022[64]). Another example is Berlin, which has become a hub for start-ups and technology companies, partially due to the openness of its universities and their success in attracting international students and researchers. Finally, Luleå University of Technology in Northern Sweden is at the centre of the region's green industrial revolution and plays a crucial role in attracting talented workers to the region through its various initiatives and collaborations including research opportunities, industry collaborations and networking events (OECD, 2023[45]).

However, it is important to note that high-speed Internet, housing and universities alone are not sufficient to attract and retain talent. The responsibility lies with institutions as well as companies in the region to provide opportunities and amenities that make an area appealing to talent in the long term. Without such opportunities and amenities, talent is less likely to arrive and more likely to leave a region.

A roadmap for regional talent attraction and retention

The OECD has developed a tool to clarify the main challenges affecting the ability of regions to attract and retain talent and to highlight best practices to address these challenges**.** It aims to support the dialogue between and the action of the different actors, across levels of government, who are involved in the design and implementation of regional attractiveness policies. It is, in effect, a roadmap to assess and respond to co-ordination challenges for regional attractiveness based on dialogue between stakeholders.

Step 1 - Identify and understand target(s)

- The first step is to identify the type of talent needed in the region, based on a data-driven approach, and to understand what it wants.
- **Tools and methods to address this challenge**
  - Create information-sharing networks among employers (private and public) and the region to collect data on current and future labour and skills needs.
  - Support actors able to produce frequent local demographic forecasts (university research centres and statistical offices).
  - Interact with your target group, when possible, through surveys, to understand what drives their location decisions.
- **Examples of good practice**: In the United Kingdom, the Working Futures quantitative assessment provides data on future labour and skills needs in the four UK nations and nine English regions, by industry, occupation, qualification level, gender and employment status, with the objective to inform policy development and strategy around skills, careers and employment. It is produced by the Warwick Institute for Employment Research and Cambridge Econometrics. In Quebec, Canada, the regional investment and development council, Quebec International, identifies companies' needs. Sweden developed a new communication and brand strategy after surveying 7 000 international students in Sweden and discovering that the two main factors determining the choice of Sweden were the Swedish lifestyle and its education system.

Step 2 – Map assets and gaps

- Once regional talent attractiveness needs are identified, it is necessary to examine how best to meet them. This requires conducting an analysis of the region's strengths and weaknesses, which will serve as a common reference to draw up and monitor the various strategic documents involved in regional attractiveness.
- **Tools and methods to address this challenge**: The OECD regional attractiveness compass serves as a powerful tool for diagnosing the attractiveness of a region to investors, talent and visitors (Chapter 3); (OECD, 2022[25]).
- **Example of good practice**: The OECD compass has been successfully used by 25 regions.[3] Ireland's Regional Development Monitor[4] collates a range of socio-eco-environmental indicators to present how each region performs in its objectives. The information and data visualisations are easily accessible and understandable, and regional stakeholders are encouraged to use them.

Step 3 – Identify stakeholders and improve co-ordination

- Once the most relevant sectors to invest in are established, identify stakeholders influencing regional attractiveness to talent, as well as their interactions with each other.
- **Tools and methods available to address this challenge**: Institutional mapping of policies to attract talent across levels of government. The OECD provides a checklist for effective multi-level governance of attractiveness policies in Chapter 7.
- **Example of good practice**: See OECD (2022[65]) for the Institutional Mapping of Talent Attractiveness Policies in France.

Step 4 – Identify and fund policies to attract talent in regions

- Based on the identification of a region's assets (Step 2), select policies most important to prospective employees (access to health services, affordable housing, etc.). Analyse the different available funding sources for each policy (European Union, national, regional, private, etc.)
- **Tools and methods available to address this challenge**: Set up a Technical Committee on Attractiveness to select policies and funding sources (including EU funds experts when relevant).
- **Example of good practice**: The North Sweden Green Deal is an initiative to attract new workers to northern Sweden to meet the extreme demand shocks caused by new industrial establishments (OECD, 2023[45]). The project is run by Region Norrbotten and Region Västerbotten and equips municipalities to attract and take care of potential immigrants.

Step 5 – Cohesive and consistent territorial marketing

- How regions are perceived from the outside is important for attracting talent. However, while regional websites for attracting investors and visitors are numerous, those aimed at all foreign talent are rather non-existent. Moreover, marketing strategies are not only oriented towards external targets but also help strengthen the internal dialogue between regional development actors.
- **Tools and methods available to address this challenge**: Bring together the local actors concerned so that they agree – on the basis of the regional assets identified (Step 2) – on a common identity and on a coherent brand to be put forward in a consistent manner on all communication channels.
  - *Lexical semantics*: agree on keywords to highlight the region's main assets (access to nature, sense of community, etc).
  - *Foreign language translation*: agree on the languages in which to translate the websites (focus on target markets). Access to online information is a main gateway to the territory for foreign talent.
  - *Visual identity (logo and slogans)*: branding allows public actors to promote their territory on a national and international scale. Territorial brands also help to create added value to locally produced goods and services.
- **Example of good practice**: Copenhagen Region's investment council (CopCap) talent attraction team's digital branding strategy.

Step 6 – Monitor and evaluate

- Select and track clear, robust and measurable indicators – ideally involving all regional stakeholders, including civil society and the private sector – to better understand the effects of talent attraction and retention strategies and adjust them as needed. Indicators should be aligned with broader regional development strategies that reflect the evolving requirements of firms and talent in today's global environment.
- **Tools and methods available to address this challenge**
  - Select, monitor and integrate indicators suggested by the OECD in relation to future strategies that are to be developed.
  - Integrate the economic, social and environmental impact indicators of these strategies to ensure that they contribute to the local, inclusive and sustainable development of the territories.
- **Example of good practice**: See OECD (2022[65]) for indicators to monitor foreign talent and high-demand sector attractiveness policies.

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[4] See https://rdm.geohive.ie/.

6 International visitor attraction

While the potential benefits of tourism from a regional development perspective are evident, having a clear understanding of key levers for visitor attraction is critical to ensure development is both inclusive and sustainable, and the benefits of the visitor economy are spread beyond traditional destinations and outside peak periods. This chapter explores the issues shifting the regional playing field for visitor attraction and identifies a range of key drivers of regional attractiveness, including an entrepreneurial economy, good air quality and a pristine natural environment, as well as a high share of foreign students. Furthermore, it highlights the need to align visitor attraction strategies with wider regional development goals. It concludes by providing a roadmap for visitor attraction, clarifying and addressing the main co-ordination challenges faced by stakeholders involved in the development and implementation of visitor attractiveness policies and highlighting good practice examples to address these challenges.

Key messages

Megatrends are providing opportunities to rethink the attractiveness of tourism regions

- The acceleration of the digital transition provides regions with the opportunity to attract remote workers and "digital nomads" by ensuring the availability of high-speed Internet access and the provision of co-working spaces or remote working hubs.
- Demographic change requires destinations to adapt to emerging markets. As the population ages, tourism regions can enhance their attractiveness to older visitors by providing ready access to healthcare and accessible accommodation and attractions.
- The impacts of climate change are increasing demand for sustainable tourism options and providing destinations and regions with the opportunity to leverage their environmental and sustainability credentials.

A range of factors influence the attractiveness of regions to visitors

- An entrepreneurial economy, good air quality and a pristine natural environment, as well as a high share of foreign students all act as drivers for a stronger visitor economy.
- Providing innovative and creative tourism products building on local strengths can help spread the benefits of the visitor economy beyond traditional destinations and outside peak periods.
- Leveraging cultural authenticity and natural assets can help regions stand out from the crowd and provide unique experiences for visitors. If well managed, tourism can help to maintain local natural and cultural heritage, as well as Indigenous traditions, art and culture.
- High-speed Internet and quality transport infrastructure are increasingly expected by visitors. Developing information and communication technology (ICT) and transport infrastructure will not only improve accessibility and attractiveness to visitors but also contribute to reducing intra-regional disparities.

Aligning visitor attraction and regional development goals is key

- When based on an evidence-based analysis of key strengths and gaps, such as that provided by the OECD's regional attractiveness compass, regional tourism strategies can provide an overall framework to enhance visitor attractiveness.
- As reinforced by the COVID pandemic, an over-reliance on tourism within the regional economy, combined with a lack of diversity in the visitor mix and product offering, present significant risks for regional and local destinations, including increased vulnerability to external shocks.
- Many tourism regions and businesses face challenges to attract and retain staff. Improvements in employment practices and providing access to workforce skills development can both enhance the attractiveness of the sector to potential staff and improve the visitor experience.
- Adopting an integrated policy-industry-community approach with effective co-ordination mechanisms will help to align visitor attractiveness policies with regional development goals.

What is shifting the regional playing field for visitor attraction?

As one of the largest, fastest and most consistent growth sectors in the world economy over the last six decades, tourism's ability to create jobs and a source of export revenue and domestic value-added is well recognised. In this context, traditional tourism regions view the sector as a key pillar of their economic development strategies, while others often seek to support their economic growth by better leveraging the visitor economy – which extends beyond core hospitality and transportation sectors and encompasses direct visitor spending as well as indirect and induced economic activity that stems as a result (Tourism Economics, 2023[1]). While the potential benefits of tourism from a regional development perspective are evident, having a clear understanding of key levers for visitor attraction and potential impacts and trade-offs associated with tourism development at the regional level is key to achieving more inclusive and sustainable regional development.

The impact of COVID-19 on global tourism in the first quarter of 2020 was both overwhelming and immediate, with asymmetric and highly localised consequences experienced between and within countries and regions. After an estimated 60% decline in international tourism in 2020 (OECD, 2020[2]), the recovery to date has remained uneven. For example, a rapid return of domestic tourism, pent-up demand, combined with pre-bookings and unused travel vouchers helped to boost recovery in 2022, which resulted in some destinations experiencing stronger than expected growth in visitor numbers. Many, however, continue to struggle to fill job vacancies following an exodus from the sector during the pandemic.

The impact of the COVID-19 crisis, compounded by the consequences of Russia's war of aggression against Ukraine continues to impact consumer preferences and business structures, accelerating existing trends (e.g. digitalisation) and leading to the emergence of new behaviours (e.g. momentum around domestic tourism). Overall, expectations for tourism recovery have been delayed, with domestic tourism now expected to recover by 2023 and international tourism not expected to return to 2019 levels until 2025 or beyond. This is due in part to the continuing uncertain economic and geopolitical outlook stemming from the war in Ukraine and energy market developments, and significant financial vulnerabilities, all of which have potential implications for the tourism sector (OECD, 2023[3]; 2022[4]).

Despite this, the pandemic has served to reinforce the significance of tourism as an economic force and a provider of livelihoods, raising public awareness at both the destination level as well as at the highest levels of government. However, it has also underlined the fragility of the sector, which is highly fragmented and interdependent, with a heavy reliance on micro and small enterprises. Furthermore, it has shown that tourism development can be imbalanced, leading to an over-dependence on the sector in some regions and economies. Increased economic reliance on tourism, lack of diversity in the visitor mix and product offering and lack of integration of tourism into wider economic development present a significant risk for regional and local destinations, particularly those where consistent tourism growth in the past has created expectations of future growth and a focus on targeting high-growth international visitor markets. During the pandemic, places where international tourism accounted for a significant share of economic activity (including in the meetings, incentives, conventions and exhibitions [MICE] sector), experienced a sharp decline in the visitor and wider economy, a decline that hit faster and lasted longer than for regions and destinations with a more balanced product and market mix.

In rethinking the attractiveness of tourism regions, national and subnational governments will need to consider the longer-term implications of these crises, address the various opportunities and challenges presented by existing megatrends (e.g. climate change, the digital transition, and demographic change) and consider the most appropriate product and market mix to deliver a resilient, sustainable and inclusive visitor economy.

Megatrends provide opportunities to rethink the attractiveness of tourism regions

The acceleration of the digital transition is providing opportunities for the sector

The fast pace of technological advances has been a game changer for tourism businesses, presenting new opportunities for small and medium-sized enterprises (SMEs), which are able to market directly to customers, both domestic and international via online travel agencies (OTAs) or social media outlets. Furthermore, as a result of the pandemic, a major evolution in the workplace is the increased acceptance and often expectation that employees can work "remotely" for extended periods of time. This allows greater flexibility for people to stay and work in locations on a regular (remote workers) or more transient basis (digital nomads), where they can combine work and leisure activities, which may only be limited by the difference in time zone with the main office. For destinations, particularly those in non-metropolitan and rural areas, which may be less dynamic but offer a higher quality of life, attracting remote workers is one way to mitigate the impacts of demographic decline, by attracting newcomers to spend time and money on accommodation, food and entertainment.

For destinations to be attractive to these emerging groups of remote workers, there is an expectation that high-speed Internet access will be readily available at destinations. To leverage the potential benefits, regions can create co-working spaces or remote working hubs to ensure that expected facilities are available. Co-working spaces afford users the opportunity to explore and enjoy natural and cultural assets in the surrounding area. Examples include the Northern and Western Region of Ireland and the Marche region of Italy, which are seeking to attract "digital nomads" as a way to help spread the benefits of the visitor economy and tackle tourism seasonality. The aim is to revitalise historic centres in rural and remote areas by improving healthcare supply as well as digital infrastructure and services, and by enhancing underutilised buildings of historical and artistic value to create places for shared and remote work. When located along and promoted as part of existing tourism routes (driving, cycling, riding, walking), "hub routes" have the potential to generate critical visitor spending and create jobs, beyond major urban centres.

The digital transition can also provide innovative tools to help address the challenge of workforce shortages now faced by many regions, including in the tourism sector. The Arctic regions of Sweden have not been immune to these challenges, where an innovative co-lab[1] was created in Norrbotten, utilising advanced artificial intelligence (AI) technology to attract more employees for SMEs, including in the tourism sector (OECD, 2023[5]).

Demographic change requires destinations to adapt to emerging markets

Changing global demographics will continue to impact visitor demand in coming years. As a result, destinations need to adapt to cater to the needs, preferences and demands of emerging markets, and stand out as an attractive option to a wider range of visitors. From a tourism perspective, demographic changes are considered a key driver of future consumer demand leading to new trends and opportunities for businesses to adapt and thrive (Li et al., 2020[6]). For instance, as the middle class grows in emerging economies, these parts of the world will play an increasingly important role as source markets for tourism in developed economies. Furthermore, as the population ages, there will be a growing demand for more accessible and senior-friendly travel options. Older travellers are also seeking safe and secure destinations with comfortable and convenient accommodation, transportation and activities.

Evidence suggests that in Europe, the over-65 age group spend a greater proportion of nights travelling domestically (66%), compared to those aged 15-64 (55%), and accounts for nearly a quarter (23%) of total tourism nights spent for private purposes by European Union residents. As a market, they also tend to make longer trips (6.6 nights versus 4.9 nights) and are more likely to travel outside of peak seasons, thus contributing to reducing the problem of seasonality in destinations (Eurostat, 2021[7]). As such, it is clear that the over-65 age group offer a potentially lucrative and growing market for those regions able to attract them to visit either domestically or from abroad (including longer, off-peak stays). For example, the Ministry

of Tourism, Industry and Commerce of the Canary Islands Government, through the Canary Islands Tourist Board, has launched an action plan to attract "senior-plus" tourists, people over 55 years old who want to spend a long vacation. Similarly, the Valencian Community region offers a Social Holidays Programme [2]to provide opportunities for the elderly to spend their holidays, particularly in off-peak periods, getting to know and enjoy the Valencian Community, encouraging social and cultural exchanges, and promoting active ageing.

However, with nearly half of those Europeans aged 65+ who did not make tourism trips mentioning health reasons, there are certain steps that can be taken from a policy perspective to ensure older tourists feel as comfortable when visiting tourism regions away from home, including providing ready access to healthcare and accessible accommodation and attractions.

The impacts of climate change are increasing demand for sustainable tourism options

Tourism has a complex relationship with the environment as, more than many other sectors, it both impacts and is highly dependent upon the quality of the natural environment. Accelerating climate impacts have negative consequences for tourism, especially in low-lying coastal areas and mountain areas. It also leads to the increased risk of natural disasters, which are expected to become more prevalent. Adaptation measures are required for a resilient tourism sector, while tourism also needs to play its role in mitigation efforts to achieve net zero targets (OECD, 2022[4]).

In response, travellers are increasingly seeking ecofriendly and sustainable travel options, which is forcing the industry to adapt and become more environmentally responsible. This does, however, provide destinations and regions with the opportunity to leverage their environmental and sustainability credentials to differentiate themselves in an increasingly crowded marketplace. This includes reducing carbon emissions (by promoting longer stays and providing low-emission transport options), conserving natural and cultural resources (by targeting visitors with a greater appreciation of the natural environment and cultural experiences rather than mass tourism) and supporting local communities (through better destination management) (EC, n.d.[8]). For example, water scarcity is a pressing issue in the Algarve region, particularly during summer when the high demand for water for agriculture and human consumption is compounded by increased demand in the peak tourism season. In response, the region is exploring alternative sources and techniques, such as desalination and water reuse, to adapt to the increased demand and the impact of climate change on water availability. At the same time, there is always a risk of negative impacts from tourism if visitor numbers exceed the carrying capacity of the local environment and community, and as such it needs to be carefully managed.

Potential trade-offs associated with tourism development at the regional level

While the impact of megatrends provides a range of opportunities to rethink the attractiveness of tourism regions to international visitors, it is also worth noting potential trade-offs and negative externalities associated with tourism development.

Despite tourism's potential as a driver for positive change, it is also clear that for many tourism regions and destinations, tourism growth in recent years has been economically, socially and environmentally unbalanced, often the result of rapid and unplanned growth in visitor numbers, or when tourism "success", measured by increased visitation or expenditure, was seen as the primary objective. Such an approach can result in a range of negative impacts. For example, overcrowding and congestion of tourism-related infrastructure – often referred to as overtourism – can lead to the degradation of natural and cultural capital, inflation of rental accommodation and real-estate prices, which can squeeze locals out of traditional residential areas or lead to a shortage of available land for residential purposes, as experienced in the Balearic Islands (OECD, 2023[9]). All of this can lead to a loss of identity and authenticity for destinations, negatively affecting not only the visitor experience but also the environment and host communities upon which tourism so clearly depends (OECD, 2020[10]).

Finding a balance between environmental, economic and social impacts remains elusive yet critical for regions to transition toward a more sustainable and resilient tourism sector. As such, there is a need to move towards a model of tourism development where "success" is judged not by the number of tourists but by the positive impacts that visitors can provide at the destination level and the benefits delivered to local economies, communities (including Indigenous peoples) and the environment. For example, Destination Canada is working closely with Canadian provinces and has adopted a "high-value guest" approach that prioritises higher spending visitors that value nature, engage with the locals, are less time-sensitive and are eager to explore lesser-known areas and engage in cultural exchanges. This approach is at the crux of Destination Canada's new strategy, which looks at tourism through the lens of "wealth and well-being". Targeting visitors with a higher propensity for return travel leads to greater returns and higher contributions to gross domestic product (OECD, 2022[11]).

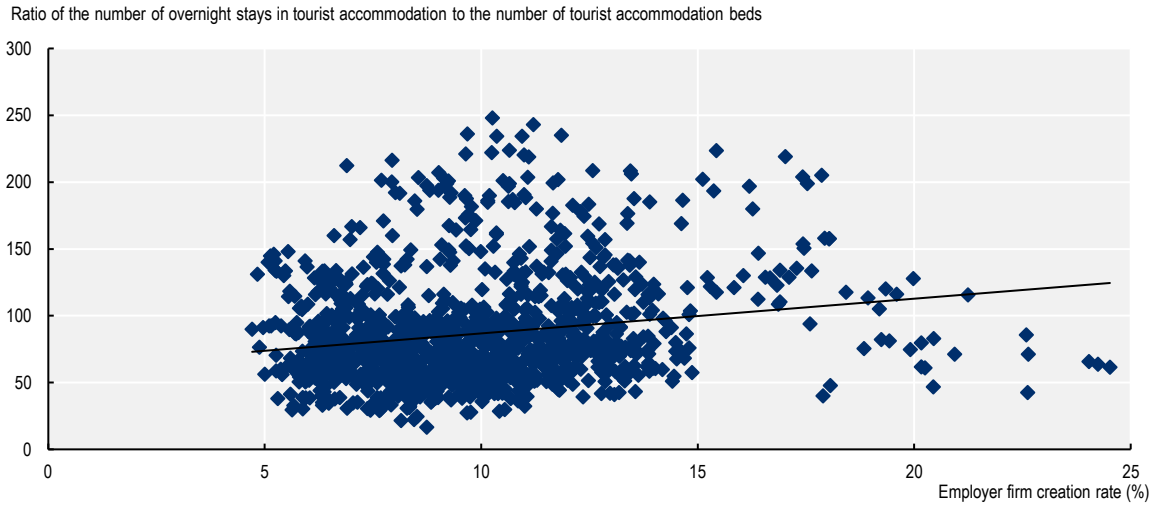
Taking steps to understand and then improve the attractiveness of regions to international visitors, while being mindful of potential trade-offs, can have the spillover effect of also improving the attractiveness of regions as places to live, work and invest (discussed in more detail in Chapters 4 and 5).

What works for visitor attractiveness

Chapter 3 highlights a range of factors that may influence visitor attractiveness and boost both domestic and international tourism in regions, including:

- **Good** air **quality and a pristine natural environment**, which are features influencing destination attractiveness – a result that, while perhaps not surprising, highlights the need to align tourism development with sustainable regional development more broadly.
- **An entrepreneurial economy** (represented by the employer firm creation rate), which is also likely to be attractive not only to talent and investors eager to be involved in emerging or new firms but also those drawn to visit such places on business trips and leisure tourists wishing to experience the vibrant atmosphere and society often linked to these creative environments (Figure 6.1). Therefore, supporting entrepreneurship policies could be seen as not only a useful lever to attract investors and talent (including students) but also visitors.

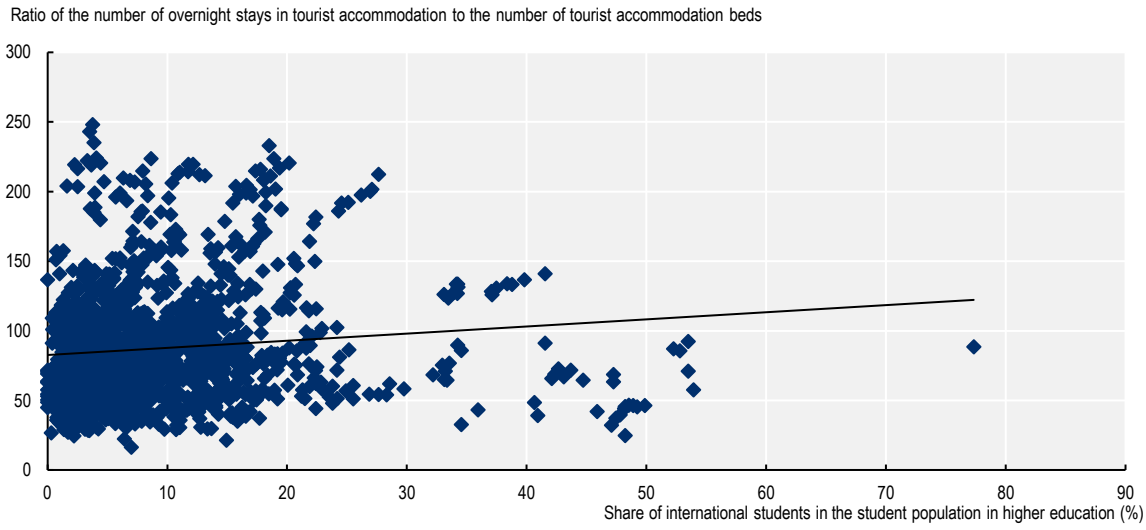
Figure 6.1. An entrepreneurial economy as a driver for visitor attractiveness



Note: Time-series data were analysed spanning 2008 to 2020.
Source: OECD (2022 or latest available) Regional Attractiveness Database; (Eurostat, 2022[12]) *Business demography by size class and NUTS 3 regions* (database), https://ec.europa.eu/eurostat/databrowser/view/bd_size_r3/default/table?lang=EN (accessed 1 December 2022).

- A **higher share of foreign students** can also contribute to a stronger visitor economy, as in addition to typically being tourists themselves (when they stay in a location away from home for less than 12 months at a time), students are also promoters of the place they live on social media, while friends and family members often visit the city and region where they are studying (Figure 6.2). Policies to help universities stand out in a crowded international marketplace and increase the share of foreign students could include partnerships with foreign universities, participation in international university networks, communication strategies to attract foreign students and opportunities for work experience with local businesses. Such approaches could be important levers to help enhance the attractiveness of universities to foreign students, with flow-on benefits to the visitor and wider economy.
- The relationship between the **share of employment in cultural and creative industries** and international tourism activity, while not unexpected, has implications for regional visitor attraction strategies, such that regions that support firms and employment growth in this sector tend to have a flourishing tourism sector.

Figure 6.2. Share of foreign students as a driver for visitor attractiveness



Note: Time-series data were analysed spanning 2011 to 2020.
Source: OECD (2022 or latest available) Regional Attractiveness Database; (Eurostat, 2022[13]) *Nights spent at tourist accommodation establishments by NUTS 2 regions* (database), https://ec.europa.eu/eurostat/databrowser/view/TOUR_OCC_NIN2/default/table?lang=en&category=tour.tour_inda.tour_occ.tour_occ_n, (accessed on 1 December 2022) ; OECD elaboration of the (EETER, 2020[14]) European Tertiary Education Register (database), https://www.eter-project.com/data-for-download-and-visualisations/database/ (accessed on 1 December 2022).

Regional policy makers understand that tourism can be an asset when looking to enhance economic development and promote the region's unique characteristics to the world. However, not all regions are endowed with an entrepreneurial economy, standout natural capital or world-class tertiary institutions. Below is a selection of opportunities for regions to enhance their tourism sector and attractiveness to international visitors observed in our work with regions to rethink regional attractiveness.

Providing unique experiences to spread the benefits of the visitor economy

Diversifying the tourism product to provide options for visitors beyond traditional destinations with high visitor flows and outside of peak periods, is an approach employed by many regions seeking to spread the benefits of the visitor economy to new and emerging destinations. Such an approach can serve the dual

purposes of tackling overcrowding in popular existing destinations/attractions (with the associated impacts on the delivery of services), whilst also playing an important, stimulating role for economies in non-metropolitan and rural areas within regions. Approaches employed to achieve a more geographically and temporally diverse and inclusive tourism sector include thematic tourism (gastronomy, wine, natural and/or cultural heritage, etc.), community-based and Indigenous tourism, niche and regional festivals and events, development of tourism clusters and regional tourism incubators, and tourist routes (road, bicycle, walking, pilgrimage, etc.) (OECD, 2020[10]).

For example, Latvia is taking steps to increase the competitiveness and export capacity of the tourism sector through the development of new, innovative and creative tourism products utilising a tourism cluster system. The programme will support eight tourism clusters: four thematic clusters (MICE, health tourism, cultural tourism and nature tourism) and four regional clusters. The programme is co-financed with European Regional Development Fund (ERDF) funding of EUR 6.5 million (OECD, 2022[4]). Tourism Ireland, via the International Programming Ireland Fund, provides funding to selected producers of high-quality international programming that feature or are made on the island of Ireland. Now in its third year, Tourism Ireland seeks to build on the success of previously supported projects to profile Ireland's landscapes, heritage and living culture (Tourism Ireland, 2023[15]). The impacts of screen tourism can be significant, with the Game of Thrones series alone attracting an estimated 1 in every 6 out-of-state visitors to Northern Ireland in 2018 and injecting over GBP 50 million into the local economy. Throughout its entire production, the series injected over GBP 251 million into the Northern Ireland economy (Tourism Northern Ireland, 2021[16]).

Providing options for visitors outside of peak periods can also have benefits for tourists. Prices for flights, accommodation and attractions are often lower during off-peak periods, making travel more affordable, while smaller crowds are often conducive to a more authentic experience of the local culture (OECD, 2022[4]). Such approaches were employed by several of the regions participating in the current project on rethinking regional attractiveness in the new global environment. In addition to examples provided in Box 6.1, others include: **Cascais**, located 25 km from Lisbon in Portugal, which is targeting visitors, digital nomads and remote workers by offering assistance with visa application, navigating business start-up regulations and even finding suitable workspaces. Such campaigns can serve the dual purpose of tackling overcrowding in popular existing destinations such as the city of Lisbon, whilst also playing a stimulating role for the economies in less well-known destinations; **Campania** in Italy, which is seeking to reduce congestion in the most crowded areas such as Naples and the Amalfi Coast and reduce seasonality by encouraging slow and sustainable forms of tourism building on natural and cultural assets including local gastronomy; while the **Balearic Islands** in Spain have introduced a Better in Winter campaign to promote tourism activities (e.g. gastronomy, sport, cultural tourism) during the off-season to support local economies.

Box 6.1. Regional initiatives to spread the benefits of the visitor economy

Marche, Italy – Redevelopment of villages and historic centres to support sustainable tourism

Marche launched an important measure to tackle the challenge of redistributing tourists more evenly throughout its territory. Although endowed with important and impressive natural landscapes and cultural attractions, inner areas of the region welcome only 2.6% of total arrivals. The regional government approved a financial endowment of EUR 7.8 million, in addition to European funds (around EUR 75 million in 2023) for sectoral interventions, to revitalise historic centres and develop sustainable tourism. Foreseen interventions include improving healthcare supply as well as digital infrastructure and services in rural and remote areas. The region is seeking to support initiatives to enhance underutilised buildings of historical and artistic value to create places for shared and remote work, and also

accommodation structures, including through innovative models, such as the "Spread hotels". The latter consists of several buildings, which are located within the perimeter of the same historic centre. This regional law matches the objectives of the national programme for the requalification of villages funded with National Recovery and Resilience Plan (NRP) funds, having 2 lines of action: i) EUR 420 million designated for pilot projects in each Region or Autonomous Province (the selected pilot project in Marche is the Montalto village); and ii) EUR 580 million for at least 229 villages selected through public tender (OECD, 2023[17]).

Southern Region, Ireland – Corridors to develop less-visited parts of the region

The Wild Atlantic Way is a coastal tourist route in Ireland and one of the longest-defined coastal routes in the world. Running along the country's western coastline from Malin Head, the northernmost point of the island, to the port of Kinsale in the southwest. This tourism development project aims to bring more tourists to the west side of Ireland and develop little-visited areas. With an investment over a decade, the Wild Atlantic Way improved the visibility of the route of interest and developed 159 points of interest, Through the development of a brand identity, the route increased visitor numbers along all of its parts and reinforced the strengths and characteristics of all of the areas located along the west coast, while offering visitors a compelling reason to visit. In 2015, a follow-up programme to the Wild Atlantic Way, Ireland's Ancient East tourism corridor, was launched to unify the region as a marketable tourism destination and deliver an extra 600 000 overseas visitors and increase visitor revenue (OECD, 2023[18]).

Source: OECD (2023[17]), *Rethinking Regional Attractiveness in the Italian Region of Marche*, http://www.oecd.org/regional/rethinking-regional-attractiveness-in-the-italian-region-of-marche.pdf; OECD (2023[18]), *Rethinking Regional Attractiveness in the Southern Region of Ireland*, http://www.oecd.org/regional/rethinking-regional-attractiveness-in-the-southern-region-of-ireland.pdf.

Supporting the promotion of cultural authenticity and natural assets

Cultural authenticity and natural assets are important tools for regions to leverage in their efforts to attract international visitors. When built upon broad stakeholder engagement and sustainable development principles, tourism can raise awareness of cultural and environmental values, and help finance the protection and management of protected areas and sensitive sites. Tourism can also play an important role in demonstrating the economic value of environmental and cultural heritage conservation and the authenticity of a destination, primarily through the level of activity that it can stimulate in the local, regional and national economy (OECD, 2021[19]).

Developing cultural attractions such as museums, art galleries and historical sites can attract visitors who are interested in learning about a destination's culture and heritage. Cultural heritage protection and management must be placed at the centre of cultural tourism policies and planning. Well-managed cultural heritage tourism enables communities to participate in the visitor economy, while maintaining their heritage, social cohesion and cultural practices (ICOMOS, 2021[20]). For instance, in the Spanish region of Cantabria, the government aims to establish a cultural hub, with projects like Espacio Pereda, a culture centre which will be inaugurated in 2024 and will benefit from over EUR 85 million of investment and more than 1 000 private art pieces from the Santander Bank Foundation. Another example is the project for the construction of the new Prehistory Art Museum (MUPAC), which would be co-financed by ERDF funds.

In many countries, tourism also plays an important role in promoting and maintaining Indigenous traditions, art and culture, which are typically major attractions for visitors. In turn, tourism represents a major source of revenue for many Indigenous communities. For example, Haida Gwaii in **British Columbia**, Canada,[3] is a prime example of Indigenous communities having agency over tourism in their region. The number of visitors who can visit the region is fixed and visitors are expected to contribute to the local communities and environmental sustainability, which in turn offers an opportunity to have a truly authentic visit to a

picturesque Pacific island protected by Indigenous peoples. As for the region of **Norrbotten** in Sweden, it is seeking to promote its unspoiled landscapes and vibrant Sámi culture to develop nature and experience-based tourism activities for the benefit of local communities (OECD, 2019[21]).

Improving regional connectivity through information and communication technology (ICT) and transport infrastructure

Quality ICT and transport infrastructure providing access beyond urban centres are increasingly expected by visitors. Developing infrastructure such as roads, ports and airports in regions, as well as access to high-speed Internet, will not only improve accessibility but contribute to reducing intra-regional disparities. Improved transport infrastructure and public transport services not only play a significant role in attracting and distributing tourists beyond major transport hubs but also in improving the quality of life for local residents. For instance, the National Association of Mexican World Heritage Cities created a voluntary network for promoting local business in Mexican World Heritage Cities with an online platform that connects and supports SMEs promoting regional tourism and increases local businesses' digital presence; this strengthens inland tourism beyond beach tourism, which is already well developed (UNESCO, 2021[22]; OECD, 2023[23]). Furthermore, it promotes the distribution of socio-economic benefits flowing from tourist expenditure (e.g. incomes, jobs), while tourism growth can also help to generate additional funding for the development and maintenance of transport systems, public spaces and cultural attractions, which all contribute to the attractiveness of destinations (OECD, 2021[19]). As seen in Chapters 3, 4 and 5, improved infrastructure can also increase access to education, healthcare and other services, making the region more attractive to talent and investors.

However, it is important to ensure that transport modes are well managed and do not inadvertently exceed the carrying capacity of local communities. For example, in 2021, due to concerns over the number of cruise ships and tourists visiting in peak periods, the regional government of the Balearic Islands signed a five-year agreement with the Cruise Lines International Association (CLIA), validated by the national authorities, to limit the number of cruise ships calling at the port of Mallorca, becoming the first and only region in Spain to do so. In 2023, the number of visitors will be limited to 8 500 passengers and 3 cruise ships per day. Limiting the volume of passengers that generally disembark for short periods of time will provide an opportunity to improve the tourist experience, relieve pressure in the city's historic centre and benefit local residents. Taking steps to ensure that visitor flows are more in line with the island's carrying capacity will also contribute to mitigating environmental impacts and better addressing long-term sustainability on the island.

Aligning visitor attraction with regional development goals

Economic diversification is key

The pandemic highlighted that those regions more dependent on the tourism sector as an economic engine, and in particular those heavily dependent on inbound tourism (including leisure, business and MICE), were more likely to be negatively affected by the crisis and for longer. A lack of economic diversification is often associated with increased vulnerability to external shocks that can undermine prospects for longer-term economic growth (OECD, 2019[24]). As such it is imperative that tourism is treated as only one component of a diverse regional economy and policy makers need to ensure that visitor attraction strategies are pursued within the wider context of relevant city, regional and national economic development strategies, and in close co-operation with industry and local communities.

Tourism strategies can provide a visitor attractiveness framework

Tourism strategies are central to providing strategic direction and maximising the positive contribution of tourism to a region's prosperity and well-being. When based on an evidence-based analysis of key strengths and gaps, such as that provided by the OECD's regional attractiveness compass (outlined in Chapter 3), regional tourism strategies can provide an overall framework to enhance visitor attractiveness, highlighting policy priorities, investment needs, mechanisms for stakeholder collaboration and benchmarks to monitor, adapt and evaluate regional attractiveness policies. For example, the regional strategy for tourism in **Sicily**, Italy, has three long-term objectives: lengthening the tourism season, reducing territorial disparities and enhancing sustainability. Connecting regional tourism strategies to wider government priorities can also help to minimise policy conflicts and provide an opportunity to leverage investment and programmes that may not be targeted at tourism alone.

Enhancing tourism job attractiveness and workforce skills to enhance the visitor experience

Following an exodus from the sector during the pandemic, many tourism regions and businesses continue to face challenges in attracting and retaining staff, which is leading to ongoing workforce shortages and impacting the visitor experience in many destinations. Workforce shortages have also been exacerbated by longstanding issues impacting the ability of the sector to attract and retain workers (e.g. unsociable working hours, job insecurity, salary levels and career prospects). Increasing labour demand in general is making it difficult for tourism to compete for the required workforce in a competitive global job market. Implementing initiatives to make the sector more appealing to prospective employees, including improving skills levels, enhancing qualifications, supporting training opportunities and developing innovative recruitment initiatives, can help to encourage talent into the sector. Selected country examples to enhance workforce skills and the visitor experience are outlined in Box 6.2.

Box 6.2. Initiatives to enhance workforce skills and recruitment

- **France**: A communications campaign in 2022 targeted young people aged 16-25 years looking for a job or undergoing professional retraining, with a budget of EUR 8 million. The campaign aims to strengthen and perpetuate jobs and skills in the sector to improve the attractiveness of tourism employment. An amplification mechanism is also planned by mobilising all of the local institutional players, including schools, training institutions, employment centres, prefectures, regions, professional federations and the private sector. This initiative was renewed in 2023 with the organisation of the Week of Tourism Professions in early April and the support of the Ministry of the Economy. It aims to raise awareness among young people, middle and high school students of opportunities in the tourism sector.
- **Ireland:** The Employer Excellence initiative was launched by the Irish National Tourism Development Authority (Fáilte Ireland) in September 2022. The new initiative will provide tourism businesses with a competitive edge as they recruit and retain staff in a highly competitive employment market. It will help to drive improvements in employment practices across the industry and provide businesses with tailored action plans and a trusted symbol that denotes a rewarding and appealing workplace. Additional initiatives include the creation of a learning hub to provide free high-quality, self-directed learning courses to upskill staff and build business capability.
- **Portugal:** The *Programa Formação+Próxima* (local based training programme) was implemented in January 2022 and aims to train 75 000 professionals over 3 years, free of charge and adapted to the local needs of each municipality throughout the territory. The

programme will implement upskilling and reskilling processes that contribute to adding value to the local business fabric and their respective territories and functions as an instrument to attract talent, including qualifying people from other sectors or unemployed people. Content will be adapted to the diversity of tourism companies and the sector's future needs.

Source: OECD (2022[4]), *OECD Tourism Trends and Policies 2022*, https://doi.org/10.1787/a8dd3019-en.

An example of a national initiative to help the recovery of the sector following the COVID-19 pandemic is the Travel, Tourism and Outdoor Recreation programme in the United States. As of September 27, 2022, the U.S. Economic Development Administration (EDA) programme had invested USD 750 million in American Rescue Plan funding to support communities across every state and territory in the United States where the travel and tourism sector had been hard hit by the COVID-19 pandemic, to make it more equitable, competitive and resilient. The programme was delivered in two parts: i) state grants totalling USD 510 million, to help states quickly invest in marketing, infrastructure, workforce and other projects to rejuvenate safe leisure, business and international travel; and ii) competitive grants, totalling USD 240 million across 126 projects, to help communities that have been hardest hit by challenges to the travel, tourism and outdoor recreation sectors invest in infrastructure, workforce or other projects to support the recovery of the industry and economic resilience of the community in the future.

In the State of Washington, for example, the Port Angeles Waterfront Center, in partnership with Peninsula College, received USD 1 million to train workers for high-paying, high-demand jobs in the Olympic Peninsula's rapidly growing travel and tourism industry and to enable a rural region whose rich natural resources are now threatened by climate change to attract visitors to the area and diversify its economy in a growing and sustainable sector (U.S. EDA, 2023[25]).

Effective multi-level governance and co-ordination are critical

Due to the interlinked nature of the sector, effective multi-level governance – between and across different levels of government, industry and civil society – with the necessary institutional capacity, is critical. Adopting an integrated policy-industry-community approach with effective co-ordination mechanisms across levels of government and between stakeholders will help to align visitor attractiveness policies with regional development goals (see Chapter 7).

A roadmap for visitor attraction in the new global environment

The OECD has developed a tool, in the form of a roadmap for visitor attraction, to clarify and address the main co-ordination challenges faced by stakeholders involved in the development and implementation of attractiveness policies, and to highlight good practice examples to address these challenges. The roadmap aims to support the dialogue between stakeholders from the tourism sector and the action of the different actors, including across levels of government, who are involved in enhancing the attractiveness of regions.

The roadmap for visitor attraction includes five concrete steps to address multi-level governance issues and support dialogue between stakeholders. It also highlights the need to link visitor attraction policies to related policy areas, such as investment, employment, innovation, local development, SMEs and entrepreneurship, and the green transition, to enhance not only the benefits for local communities and opportunities for visitors but also ensure that all relevant parties are involved in the co-ordination process.

Step 1 – Inventory and mapping of the touristic assets and their accessibility

- Take steps to understand the unique characteristics of the region by mapping the touristic assets and their accessibility to provide an overview of strengths and weaknesses. Careful consideration of the potential risks, gaps and trade-offs is essential to have a clear understanding of how best to achieve the region's potential.
- **Tools and methods available to address this challenge**
  - *Portray the region's assets and infrastructure at the territorial level* – from natural attractions like mountains, parks and beaches, to cultural attractions like museums and historical sites, and universities, and existing transportation and connectivity options like airports, ports, train stations and digital connections.
  - *The OECD regional attractiveness compass serves as a powerful tool for diagnosing the attractiveness of a region to investors, talent and visitors* (mentioned in Chapter 3).

Step 2 – Rethinking the regional strategy for visitor attraction

- Develop a regional tourism strategy that is aligned with any national strategy, adapted to environmental, demographic and technological megatrends and aims to provide the most appropriate product and market mix to deliver a resilient, sustainable and inclusive visitor economy.
- **Tools and methods available to address this challenge**
  - *Identify more precisely the target:* types of visitors the region would most like to attract (seniors, families, youth, students, digital nomads, international, domestic, etc.) and for what purpose (leisure, business, adventure, cultural, medical, educational, volunteer sports, religious, culinary, etc.).
  - *Identify the infrastructure and service needs:* in order to ensure that your region can accommodate the needs and expectations of visitors, it is important to invest in facilities, equipment and overall infrastructure needed. This could also include safety measures and the supply of public and private sector services. Having a clear image of public service capacity is essential to identify strengths as well as gaps. Measuring both the infrastructure needs and the supply of public services can lead to a more efficient use of resources and inform decision-making of visitor attractions. From a private sector perspective, improvements in employment practices and providing access to workforce skills development can both enhance the attractiveness of the sector to potential staff and improve the visitor experience.
  - *Identifying the cost/benefit of tourism development options in the region associated with key targets and activities:*
    - *Clarify investment and services costs* to propose new activities in the region and estimate spending from visitors to measure the cost-benefit of tourism development.
    - *Assess the potential economic and socio-cultural impacts*, such as job creation, services exports, cultural exchanges and increased pride in the territory, as well as conservation of local cultural heritage, versus potential negative externalities associated with unplanned or overtourism, for example the overcrowding and congestion of tourism-related infrastructure, the degradation of natural and cultural capital, inflation of rental accommodation and real-estate prices, all of which can lead to a loss of identity and authenticity for destinations.
    - *Evaluate the environmental impacts of the different options for tourism development* as tourism is responsible for a large share of air and road traffic and consumption of energy (transportation, tourist infrastructure, etc.), adding further to the emissions of greenhouse gases and acidifying substances. Tourists consume not only energy but several other local, non-renewable resources like water (EC, 2002[26]). Policy makers should consider the

variety of infrastructure solutions (for tourism transport, housing, and leisure) and measure their environmental impact to be sure they select the most resilient ones.

- *Selecting tourism development priorities in terms of places and tourism activities:* diversifying the tourism product to provide options for visitors beyond traditional destinations with high visitor flows and outside of peak periods can serve the dual purpose of: i) tackling overcrowding in popular existing destinations/attractions (with the associated impacts on the delivery of services); ii) playing an important, stimulating role for economies in non-metropolitan and rural areas within regions.

Step 3 – Institutional mapping for coherent visitor attractiveness strategy co-ordination

- An integrated, whole-of-government approach, linking visitor attraction policies to related policy areas, such as investment, employment, innovation, local development, SMEs and entrepreneurship and the green transition, is essential to enhance benefits for the local community and opportunities for visitors and to ensure that all relevant parties are involved in the co-ordination process.
- **Tools and methods available to address this challenge**
  - *Produce the institutional mapping of "who does what*" to help all stakeholders involved in visitor attraction situate their partners (real or potential ones), including government agencies at the local, regional and national levels, non-governmental organisations, private sector entities and community organisations.
  - *Identify co-ordination and capacity gaps* to effectively implement the strategy for visitor attraction.
  - *Implement multi-level governance and co-ordination mechanisms*, involving the private sector and local communities to address these gaps and facilitate the convergence of each stakeholder action.

Step 4 – Promoting the region to visitors through cohesive territorial marketing

- Consideration of the region's assets (Step 1), targets and priorities (Step 2) can inform the development of a cohesive territorial brand and marketing strategy to provide a unified image for the destination that speaks to the identified target group(s), mobilises all stakeholders (identified in Step 3) and can profile the region on relevant social media/websites.
- **Tools and methods available to address this challenge**
  - *Digital presence*: an online presence is essential to reach visitors directly as they evaluate potential destination choices and then as they gather detailed information on their destination of choice. This "front office" should provide access to information from different actors in the "back office" contributing to the visitor attractiveness of the region.
  - *Foreign language translation*: access to information in other languages, and in particular English, is a primary gateway to the region for foreign targets (visitors including investors and talent).
  - *Visual identity*: branding allows public actors to promote their territory on a national and international scale. The development of territorial brands also helps to create added value to locally produced goods and services.
  - *Developing a cohesive territorial marketing strategy* is also an opportunity for dialogue and consensus building among regional attractiveness stakeholders and can be used to build effective relationships based on common references and objectives.

Step 5 – Monitor and evaluate the visitor attractiveness strategy

- Select and track key metrics to better understand the effects and impact of visitor attraction strategies, not only on the visitor economy but also inclusive and sustainable regional development more broadly.
- **Tools and methods available to address this challenge**
  - *Monitor selected indicators* in a regular, transparent and inclusive way.
  - *Integrate the economic, social and environmental impact indicators* of these strategies to ensure that they contribute to the local, inclusive and sustainable development of the territories. These tools can provide, for example, data on job creation, tax revenue and environmental impact that informs the situation in the region.

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Notes

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7 Multi-level governance and co-ordination mechanisms to support regional attractiveness

Making a region attractive depends on many stakeholders from across levels of government, policy sectors and different types of organisations (business, academia, civil society, etc.). In this multi-level governance context, regional authorities are key actors, to the extent they have the right skills, resources and capacities to design and implement long-term attractiveness strategies, engage in productive dialogue with non-governmental partners and interact effectively with higher and lower levels of government. A common challenge is to transform attractiveness into a shared project, thereby mitigating wasteful competition among territories and reconciling competing development objectives while ensuring equitable public investment. This chapter presents a roadmap designed to help public officials address governance gaps in pursuit of regional attractiveness.

Key messages

Effective co-ordination is key to bridge multi-level governance gaps

- Building effective regional attractiveness ecosystems depends on the co-ordination of many actors from different policy sectors, different levels of government and different types of organisations (business, academia, civil society, etc.).
- In this context, for a territory to be attractive, several multi-level governance gaps that may arise between relevant actors – e.g. information, funding, scale, capacity, participation, policy, transparency and, above all, objective setting – need to be bridged.
- Effective multi-level governance of regional attractiveness policies is also necessary to avoid zero-sum or even pure waste competition between places within the same country and to deliver quality balanced public investment, especially in infrastructure.

Regional authorities have a critical role to play in attractiveness policy

- Regional authorities are well placed to become effective hubs for attractiveness policy, as:
  - They can exploit potential synergies and mitigate competition and negative externalities between different parts of their territory.
  - Their various and often increasing number of competencies allow them to bring together relevant stakeholders in cross-sectoral working teams that can break down sectoral silos, identify attractiveness synergies and trade-offs, agree on strategic orientations and develop effective attractiveness strategies for the benefit of all.
  - They can facilitate the involvement of sub-regional partners from public, private and civil society organisations in regional attractiveness policies.
- However, to successfully carry out their task, regional authorities need to have the appropriate skills, resources and capacities, to collect and analyse data, develop strategic foresight, foster and maintain regular contact and trust relationships with businesses, associations and civil society, and design and implement strategies that coherently encompass the economic, social and environmental dimensions.

Tools are available to help regions overcome multi-level governance and implementation challenges

- The regional attractiveness compasses proposed in this report are tools that support dialogue among stakeholders at all levels to identify policy priorities, clarify needed trade-offs between different regional attractiveness levers (e.g. in relation to land use) to address potential conflicting objectives and monitor, adapt and evaluate public action.
- Regions can mobilise a variety of mechanisms (e.g. contracts) to foster multi-level co-ordination between partners across levels of government (national, regional and local).
- The OECD proposes a Roadmap for Effective Multi-level Governance of Attractiveness Policies to help policy makers identify challenges that might affect the ability of attractiveness policies' stakeholders to co-ordinate among themselves and to highlight ways to address these challenges.

Regional attractiveness is a multi-dimensional phenomenon that depends on a high number of actors. The OECD's methodology considers more than 50 indicators to develop regional attractiveness profiles, covering 14 dimensions of attractiveness, across 6 domains (economic attraction, connectedness, visitor appeal, natural environment, resident well-being, land use and housing). As such, attractiveness policy is a "policy of policies". The cross-cutting nature of the regional attractiveness paradigm means effective design and implementation of strategies to enhance it will have to bring together a multitude of actors, from different sectors (infrastructure, education, housing, industry, etc.), from different levels of government (local, regional, national) and different types of organisations (private, public, academia, civil society, etc.).

Multi-level governance is the way that responsibility is spread vertically among different tiers of government and horizontally across multiple administrations and non-governmental actors. It characterises actors' relationships of mutual dependence and thus calls for and requires effective co-ordination. Without co-ordination at the right level, attractiveness policies risk generating negative externalities for other territories, zero-sum competition between territories, missing out on potential economies of scale and scope, or increasing territorial disparities. This can make regional attractiveness unlikely to be inclusive and sustainable overall. In this work stream, co-ordination concerns the management of cross-cutting issues that go beyond the frontiers of traditional policy sectors and administrative organisations and require coherent policy responses across scales. This surpasses the basic exchange of information among autonomous organisations. Rather, it involves the use of co-ordination mechanisms. These are initiatives governments introduce to facilitate joint, participative decision making and the pooling of resources to achieve collective policy goals that encompass – and exceed – the priorities of individual actors or agencies (McNamara, 2012[1]).

Regardless of the institutional context, regions are typically in a privileged position to design and implement attractiveness and retention policies, including by co-ordinating the relevant stakeholders. First, regions are at the intersection of national and local levels of government and close to businesses and civil society. In addition, key attractiveness policies, such as economic development and infrastructure, depend on competencies which are largely and increasingly allocated to their level of government (OECD/UCLG, 2022[2]). With the right capacities and institutional quality, they can play the role of a "hub" in the complex network of multi-level and multi-sector co-ordination necessary to design and implement effective attractiveness policies. Regional attractiveness policies do not only require synchronous co-ordination between different actors. They also require adjustment over time, based on the impacts of evolving megatrends such as the digital transition, climate and demographic changes and in some cases external shocks. They also require monitoring and evaluation, through economic, social and environmental indicators that measure their impact on attractiveness but also on inclusive and resilient regional development at large.

Why the regional level?

According to subsidiarity principles, a degree of independence should be guaranteed to a lower authority when a policy decision only impacts its local constituencies. Therefore, attractiveness policies cannot only depend on municipal decisions. First, because the strong attractiveness of one locality can lead to negative externalities such as congestion, consumption of natural resources or pollution, which risk negatively affecting neighbouring territories. Second, the strong attractiveness of one territory can also open opportunities to enhance the attractiveness of neighbouring territories by providing access to a dynamic local job market, good quality public services and infrastructure, etc. Therefore overall, local authorities should not compete but rather take a broader regional perspective and work together to avoid negatively impacting each other and better promote their region and the complementarity of their own assets. However, exploiting potential synergies between different parts of the same region is rarely a spontaneous process and requires appropriate incentives for co-operation to take place at the relevant scale; abundant literature can be quoted about inter-municipal co-operation or urban-rural linkages (OECD, 2023[3]; 2023[4];

forthcoming[5]). With regard to regional attractiveness, it is important to emphasise the key role of metropolises as engines for regional attractiveness and the need to identify appropriate ways to ensure that their success can benefit surrounding areas. The more attractive these large urban areas are to talent and visitors, the less affordable housing often becomes for inhabitants and newcomers. The scarcity of (affordable) land in metropolitan areas is also an obstacle to investment attraction in manufacturing. Developing partnerships with less dense peripheral areas – contributing to improving their connectedness with transport and digital infrastructure and containing any harmful impacts on the environment – can create mutual benefits and enhance the attractiveness of the region as a whole.

Regional authorities can play an active role in enabling regional synergies, as observed in this OECD project on rethinking regional attractiveness. In many Spanish regions, the regional government has taken steps to strengthen horizontal co-ordination through the creation of a second level of local administration (inter-municipal bodies called *comarcas*). In Cantabria, the reform provides for the creation of a total of ten *comarcas*, associating several municipalities with the aim of providing adequate and cost-effective public services in the region (OECD, 2023[6]). Some regional governments work to address disparities between large urban areas and territories at their periphery, for example the metropolitan area of Lisbon and the Tagus Valley in Portugal (OECD, 2023[7]), the Eastern and Midland Region in Ireland, which includes the Dublin metropolitan area, as well as the Mid-East and Midland Regions – parts of which form part of the Dublin functional urban area (FUA). While the Mid-East forms part of what is deemed the "core region", benefitting from spillovers from Dublin (of investment, talent and visitors), the Midland Region is not benefitting at all from the diffusion of economic activity from Dublin and thus comes as one of the regions in Europe with the highest development trap intensity – which is surprising in what has been by some margin the most dynamic country in the European Union (Diemer et al., 2022[8]).

The Regional Spatial and Economic Strategy (RSES), co-ordinated by the Regional Assembly, outlines how collaboration among regional and local authorities, and across the border with Northern Ireland, can transform the Midland Region into a "gateway", well connected to the rest of Ireland's regions and Northern Ireland via the Dublin-Belfast Corridor. The co-ordinating role regions can play is also well exemplified in relation to attracting visitors, who, being mobile, can benefit several municipalities within a region. Such an approach is, for instance, adopted by the region of Algarve in Portugal, which uses the popularity of the city of Faro as a destination to promote its hinterland to visitors (OECD, 2023[9]). Similarly, the Valencian Community region in Spain intends to complement and attenuate the attractiveness of its "*sol y playa*" (sun and beach) assets with a variety of cultural and environmental amenities in currently lesser-known areas of the region (OECD, 2023[10]). Moreover, many regional government partners to this project also actively help harmonise infrastructure and services across local borders and prevent fragmentation of investments and projects, such as those linked to European Union funds.

The subsidiarity argument also justifies allocating attractiveness competencies to the regional level in the context of active co-operation with the central/federal level. While the macro drivers that significantly attract investors, talent and visitors are not region-specific (such as security for private investment, national labour and environmental regulations, customs; large infrastructure networks, etc.), regional competencies relevant to the development of attractiveness continue to increase. Indeed, about two-thirds of countries globally have increased the power of regions over the last 50 years (OECD, 2022[11]), in many cases including responsibility for the delivery of core services and infrastructure, many of which play a central role in regional attractiveness such as education, social protection, health, economic development or the environment (OECD/UCLG, 2022[2]). In Sweden for instance, since 2019, the 21 regions with elected regional councils, traditionally responsible for health and social services, have been devolved additional responsibilities for regional development and thus attractiveness. Through Ireland's Local Government Act of 2014, the three Irish Regional Assemblies were established to deliver a regional and spatial economic strategy that outlines a core vision and long-term strategy for the territory, which cover a wide range of attractiveness objectives.

Regional authorities are highly involved in the processes of building attractive regions and are at the right scale to bring together relevant stakeholders in cross-cutting working teams that can break down sectoral and policy silos, agree on strategic directions and draft effective attractiveness strategies for the benefit of all. Regions are thus generally in charge of proposing regional strategies for inclusive and sustainable development (resulting from consultations of local and non-governmental partners) that serve as a prioritisation tool for co-funded investment (e.g. with national government and/or supported by European funds). The regional commitment is also a powerful guarantee of continuity in the action in favour of attractiveness and inclusive development – as exemplified by the case of Wales in the United Kingdom (Box 7.1).

Box 7.1. Stronger regional voices – A pillar of Prosperity for All

As part of its economic action plan to boost productivity and tackle geographical disparities, the Welsh government (United Kingdom) has decided to devolve more decision-making responsibility to its three regions, including with regard to investment. The action plan entitled Prosperity for All commits to an inclusive and regionally focused model of economic development, building upon the distinctive opportunities and challenges of each region and enhancing existing cross-government work with the regions. This shift towards a regional model of economic development illustrates that regions are well placed to play a role in co-ordinating development and attractiveness policies.

To address regional disparities and ensure wealth and opportunity spread to all Welsh regions, the government aims to develop a robust and clear governance model and appoint three Chief Regional Officers in North Wales, Mid and South West Wales and South East Wales, who will represent the regions in government, feeding back local intelligence. They must provide leadership, co-ordination, planning and alignment within the region, including by bringing partners together to develop and deliver regional business plans that identify regional priorities and opportunities.

Source: OECD (2020[12]), *The Future of Regional Development and Public Investment in Wales, United Kingdom*, https://doi.org/10.1787/e6f5201d-en; Welsh Government (2019[13]), *Prosperity for All: Economic Action Plan*; OECD (2016[14]), *OECD Regional Outlook 2016: Productive Regions for Inclusive Societies*, https://doi.org/10.1787/9789264260245-en.

Regional-level co-ordination facilitates the participation of subnational partners from public, private and civil society organisations (CSOs) in regional attractiveness policies. Because of their competencies and proximity to citizens, regions – more so than national actors – can build relations with those non-governmental actors that provide services essential to attracting and retaining mobile targets (real estate operators, language schools, banks, CSOs, etc.). For example, under the smart specialisation strategy (S3), the regional authorities of Centro, Portugal, encourage the creation of collaborative laboratories at the local level and a regional mobilisation programme to promote interaction between business associations and higher education institutions (OECD, 2023[15]). In the Swedish county of Norrbotten, under the North Sweden Green Deal co-ordinated at the regional level, the local University (Luleå University of Technology), various municipalities and the local destination management organisation (Swedish Lapland Visitors Board) work together to enhance the attractiveness of the region (OECD, 2023[16]). In France, the Industrial Territories policy (*Territoires d'industrie*) aims to strengthen the inclusive and sustainable reindustrialisation of specific territories by mobilising national, regional and local stakeholders including from the private sector. Its governance is based on a local, elected official-industry pairing, with steering by the regions together with active support from the state (OECD, 2023[17]). The regional level presents opportunities for the development of dynamic debates, trust-building and the evolution of reciprocal working relationships between centres and peripheries and among public and private stakeholders. If policy responses are to offer long-term regional resilience, they must also take into account the evolving

preferences of target groups. Regions also need the tools and capacity to do so (surveys, public consultations, polls, etc.).

Regional-level co-ordination is important to develop digital platforms and physical one-stop-shops that offer information and guidance to talent and investors at all stages of the arrival process. Finland's national Talent Boost strategy, for instance, largely relies on regions becoming official "talent hubs". This co-operation service model is based on regions co-ordinating various sectors and actors including municipalities, employers, non-profit associations and universities, in order to create simple paths to help international talent settle and integrate into Finnish life. Onboarding websites and one-stop-shops offer a soft landing for companies and individuals who can quickly focus on non-administrative issues and help promote the territories they cover in an integrated and cohesive manner. Moreover, the Strategic Development Plan of the Special Economic Zone in Campania, Italy, has simplified administrative measures by introducing a digital one-stop-shop, facilitating access to information for prospective investors and obliging all stakeholders to co-ordinate in the back-office building of this tool (OECD, 2023[18]). Such platforms have become an important part of successful attraction and retention strategies and benefit from a regional approach to effectively cover all sectors. Many regions have thus become points of contact for prospective companies, talent and visitors.

Regional authorities are at the right scale to find the policy synergies and trade-offs that attractive policies entail. As the OECD attractiveness compass clearly shows, attractiveness policy is about enhancing synergies and addressing difficult trade-offs between different attractiveness levers and potentially contradictory individual objectives and targets. Across regions participating in the OECD Rethinking Regional Attractiveness project, such trade-offs have for instance been identified in relation to land use: between the expansion of industries and that of touristic activities, as well as between built land for industrial investment, housing and biodiversity preservation. Facilitating the consensual approach towards attractiveness priorities and strategies benefits from shared reference, such as the one proposed in the OECD regional attractiveness compass methodology. For the different stakeholders to converge in adopting shared objectives and strategies for the attractiveness of their region, it is also necessary to rely on dialogue and trust between the actors. Different types of mechanisms set up within the regions and with their partners can help, as described in this chapter. For instance, in a tripartite agreement, the regional government of the Balearic Islands (the *Govern*) together with the Balearic Islands Port Authority (which is a public body of Puertos del Estado, a public business entity dependent on the Spanish Ministry of Transport, Mobility and Urban Agenda and which manages the five ports of general interest of the Balearic Islands) and the Cruise Lines International Association (CLIA) have signed an agreement with the aim of regulating the arrival of tourism cruise ships in the city of Palma, which were negatively impacting biodiversity and local communities' well-being. This agreement, which sets a maximum number of passengers and boats per day, is unique in the country and illustrates regions are well positioned to solve conflicts linked to attractiveness trade-offs (OECD, 2023[19]).

The importance of co-ordination across levels of government

Effective multi-level co-ordination of regional attractiveness policies is necessary to avoid competition between areas in the same country. Regional authorities are well placed to design and implement attractiveness policies for their region, however not without the assistance of national governments and local authorities and actors. The diversity of initiatives at the regional level can lead to a lack of clarity and, to some extent, competition between regions. The lack of national initiative for attracting talent has for example led several regions in Sweden and elsewhere to feel compelled to launch their own initiatives, both for promotion and hosting, despite the limited money available and sometimes the lack of expertise. Such an approach risks duplication of effort, inconsistent external marketing and a lack of clarity and dispersion of the regional offer. Public resources are also wasted on creating similar parallel efforts and structures. As a result, regions in Denmark that felt they were becoming each other's competitors in

attracting talent instead of working for the best interests of Denmark came together to ask for national support and clear mandate. In 2019, a joint and co-ordinated national effort, called State of Denmark, was created. It aims to market the whole of Denmark as a career destination. Funding for these joint efforts is provided by the European Commission (European Social Fund, ESF) and the Danish government (Andersson, 2022[20]). The State of Denmark is, in turn, part of a larger public-private partnership called Talent to Denmark, within which 30 national organisations, such as Work in Denmark, regions, companies and networks, are included. Moreover, without national co-ordination, investment attractiveness strategies risk being at best barren. At worst, they can considerably aggravate territorial inequalities (Box 7.2). The state thus has a role to play in setting national guidelines and providing a system of arbitrage among regions to ensure that all regional attractiveness strategies comply with the overall national goals and that they do not generate zero-sum or pure waste competition.

Box 7.2. Vertical co-ordination to avoid domestic competition over foreign direct investment (FDI)

National investment promotion agencies (IPAs) can act as stewards of regional investment attraction

Without national co-ordination, investment attractiveness strategies risk becoming ineffective. They can even polarise territories. Therefore, in a large majority of countries, there are national IPAs, with many having a growing territorial concern. Considering the often-complex institutional architecture involving national and subnational agencies involved in investment promotion and facilitation, maintaining a good relationship with peers is key to achieving successful results. IPAs can have different modes of co-ordination, which are determined by their geographic, economic and institutional contexts. These relationships can consist of:

- **Collaboration**, where national IPAs and subnational bodies work together to achieve a result or produce something jointly (e.g. sharing information, co-ordinated activities).
- **Complementarity**, where national IPAs and subnational bodies bring different qualities that are improved or accentuated by the relationship (e.g. exploiting synergies, ensuring mandates and activities reinforce each other).

The nature and the quality of these relationships also depend on the different subnational entities, whether they are IPAs, economic development organisations (EDOs) or local authorities. Results from an OECD survey on investment promotion and regional development show that IPAs in the OECD tend to have good relationships with subnational entities overall, particularly with subnational IPAs and EDOs, but that there is considerable scope for improvement (OECD, 2022[21]). There is often greater complementarity than collaboration, reflecting the different roles national and subnational bodies can play in relation to foreign investors. It also suggests that working jointly is more complex than conducting complementary activities. Collaboration with local authorities is the weakest relationship overall.

The IPA of Costa Rica, CINDE, has adopted an innovative approach to national-regional co-ordination by establishing a specialised division for investment promotion outside of the Greater Metropolitan Area. This unit works with several constituencies in the community, including municipalities and private-public development agencies as well as academia and training institutions. These networks will be critical for CINDE in the implementation of their new law on Strengthening of Territorial Competitiveness for Attracting Investment Outside the Greater Metropolitan Area which, among other incentives, expands the use of the country's Free Trade Zone Regime (*Zonas Francas*) across its territories.

Source: OECD (2022[21]), "The geography of foreign investment in OECD member countries: How investment promotion agencies support regional development", https://doi.org/10.1787/1f293a25-en; OECD (2023[22]), "OECD webinar: Enhancing the attractiveness of non-Metropolitan Areas: The role of Special Economic Zones", https://www.oecd.org/regional/globalisation.htm.

Inclusive and resilient territorial attractiveness depends on quality public investment, especially in infrastructure, which requires good co-ordination between the different levels of government. Good quality and accessible railroads, roads and telecommunications, both within and leading to the region, are fundamental for attracting international targets. Investments in these physical infrastructures are among the most shared responsibilities between different levels of government and therefore require good co-ordination between them. For instance, subnational governments are generally responsible for local roads and transportation infrastructure, while higher levels of government generally manage investments with significant externalities. Vertical co-ordination mechanisms will help align objectives between all public stakeholders and bridge a series of information, financing and capacity gaps that impede efficient use of investment resources. As illustrated in Box 7.3 by the case of France's ultra-high-speed broadband strategy (*Plan très haut debit*, PTHD), infrastructure investments co-ordinated at the national level can help reduce territorial inequalities, makes it possible to invest at the right scale, internalise the positive and negative impacts, and implement the complementary measures needed to make the most of public investment.

Box 7.3. The key role of subnational governments and multi-level co-ordination in France's ultra-high-speed broadband strategy

In 2013, the French state launched its PTHD strategy to connect 100% of households and businesses by 2023. The plan has reached its main goal, largely thanks to good co-ordination and co-operation between local authorities, and the state and private operators within the framework of a national scheme, according to its recent evaluation.

The plan sets national objectives, the implementation of which is entrusted to local authorities. To enable them to carry out their missions, the plan provides for investment in the qualification of local authority staff. Specific structures have been created to pool certain resources, ensure territorial co-operation and develop the expertise of public agents. The country has been divided into two distinct types of zones:

- **Private intervention zones** (10% of the national territory, 57% of the population and nearly 3 600 municipalities), which also include co-investment zones. These are the most densely populated areas.
- **Public intervention zones**, covering the least dense and rural areas (90% of the national territory, 43% of the population), where infrastructure investments costs are higher than expected profits and where public initiative networks are thus deployed at the initiative of local authorities supported by the state, through public-private partnership projects under concession contracts signed between local authorities and private actors (construction companies, network operators and infrastructure investment funds).

The Digital Agency co-ordinates all broadband deployment projects, ensuring that the initiatives of private operators and local authorities are consistent and complementary. It works closely with private operators (such as Orange, SFR or Bouygues Telecom) and local authorities in order to facilitate the implementation of fibre optic deployment projects. It also co-ordinates public funding (state, European Union, local authorities) to support very high-speed broadband deployment initiatives in less dense areas. Finally, it plays a role in monitoring the deployment of the plan by regularly evaluating the progress of projects and ensuring that commitments made by all players are respected.

Source: France Stratégie (2023[23]), "Infrastructures numériques et aménagement du territoire : impacts économiques et sociaux du plan france très haut débit"; OECD (2019[24]), *Making Decentralisation Work: A Handbook for Policy-Makers*, https://doi.org/10.1787/g2g9faa7-en; OECD (2019[25]), *Effective Multi-level Public Investment*, OECD, Paris.

Unforeseen shocks with local impacts often require changes in the allocation of responsibilities and thereby effective intergovernmental co-ordination. This variability in the allocation of competencies over time and space requires a high degree of fluidity in the relationship between levels of government. For instance, while the COVID-19 pandemic was global in scale, its course and impacts differed across places – depending on local characteristics such as settlement density, mobility patterns, demography and economic activity. For example, compared to interior regions, the public finances of coastal regions in Italy and Spain suffered an intense blow due to travel restrictions and closure of hotels, thereby reducing tourist attendance, one of their main sources of subnational revenue (OECD/UCLG, 2022[2]). This pushed countries to change the distribution of competencies between different levels of government (OECD, 2022[26]). For instance, who was responsible for healthcare services varied a lot, with recentralisation being twice as frequent as decentralisation in OECD and partner countries (OECD, 2020[27]). Therefore, the pandemic put to the test countries' multi-level governance frameworks. Highly decentralised systems were stressed by significant co-ordination challenges, while highly centralised systems experienced a lack of flexibility and room for manoeuvre to experiment and fight the pandemic consequences at the local level. In health terms, more decentralised health systems seem to have fared better during the pandemic (Rodríguez-Pose and Burlina, 2021[28]; OECD, 2021[29]).

It re-emphasised that in all cases, pre-existent vertical co-operation mechanisms must exist so that, whatever the mode of governance and the policy area, it remains possible for all actors to carry out tasks, overcome obstacles and/or achieve shared objectives. This is important not only to enable adaptation and response to immediate needs arising from crises but also to ensure future capacity to do so and enhance the resilience of regions' attractiveness.

In a context where good co-ordination is vital, governments have developed a wide range of mechanisms to help bridge information, capacity, fiscal, administrative or policy gaps between national and subnational governments. These mechanisms can range from "hard" to "soft" instruments. They include, for example, financial incentives to support co-operation between levels of government, co-financing mechanisms, joint investment strategies, the use of conditionalities in the allocation of funds, dialogue platforms or specific instruments such as contractual agreements (Box 7.4).

Box 7.4. Contract between central/federal government and a region

Regional attractiveness objectives cannot be achieved through a plethora of separate project- or sector-specific agreements. Rather, a holistic approach is required that integrates the various components of the sustainable and inclusive attractiveness strategy into a single overarching mechanism tailored to the region. Multi-purpose and multi-year contracts between the state and the region for regional development are largely used in OECD and non-OECD countries. Contracts are arrangements that reorganise the rights and duties of governments, other than by way of the constitution. They define mutual obligations of the parties, e.g. central government and region, which have to agree on: an assignment of rights decision among the parties (Authority); a distribution of contributions, including funding, human capital, assets, etc. (Mutual duties); and mechanisms that guarantee the correct implementation of each party engagement and solve disputes (Enforcement).

Contracts can potentially address all multi-level governance gaps with just one mechanism. They can engage stakeholders at various levels of government in clear shared objectives, while allowing implementation to be flexible and public action to be tailored to the (sometimes still unknown) challenges of tomorrow, boosting the resilience of the action. Moreover, in a context of political distrust, contracting can facilitate transparency and adherence to national and territorial policies, by making visible who commits to responding to citizens' and business needs. The three steps of successful contracts are the following:

- **Consultation**: The aim of this phase is to establish priorities and policies, identifying key assets in the region and assess regional development needs, as well as potential impacts on different categories of stakeholders. During this phase, the central government and the region come together to discuss how they can jointly contribute to shared policy objectives. These shared objectives require joint diagnosis through agreed indicators, prior consultation and engagement of stakeholders.
- **Negotiation and signature**: The aim of the negotiation and signature phase of the contracting process is to obtain a formal agreement between the state and the regional authority and to prepare for the implementation of the contract. This phase usually has three stages: discussion, determination of financial contributions and mutual commitments, and agreement on the implementation schedule.
- **Monitoring and evaluation**: The aim of this phase is to guarantee the effectiveness of contracts by ensuring, on the one hand, that the commitments of contractors are credible and verifiable and, on the other, that the performance of the mechanism and the delivery of the expected results are assessed. Monitoring in particular allows to adapt the contractual commitments and their achievement to evolving circumstances without losing sight of the major structural objectives for the long term. To this end, this step should involve a number of operational stakeholders, such as local, provincial or other subnational institutions, as well as businesses, associations, private actors, civil society, donors or non-profit organisations, including international organisations.

Source: Charbit, C. and O. Romano (2017[30]), "Governing together: An international review of contracts across levels of government for regional development", https://doi.org/10.1787/ff7c8ac4-en; OECD (2007[31]), *Linking Regions and Central Governments: Contracts for Regional Development*, https://www.oecd.org/gov/linkingregionsandcentralgovernmentscontractsforregionaldevelopment.htm; OECD (2023[32]), "Les contrats entre niveaux de gouvernement: Un outil pour la régionalisation avancée au Maroc", https://doi.org/10.1787/c29ad0fa-fr; OECD (2023[33]), *Les Régions dans le Nouvel Environnement Global : de la Crise à la Résilience. Le cas de Tanger-Tétouan-Al Hoceima*, OECD, Paris, https://www.oecd.org/countries/morocco/les-regions-dans-le-nouvel-environnement-global-de-la-crise-a-la-resilience-le-cas-de-tanger.pdf.

What capacities do regions need to carry out attractiveness policies successfully?

Regional public servants must have access to objective and subjective data at the most granular level possible and be data literate. If regional policy makers are to move beyond broad equity-efficiency, sustainability-efficiency or core-periphery perspectives to identify a fine-grained mix of policy and investment priorities relevant to specific places, they need to know what is happening on the ground and in all relevant sectors. Actions can involve, for example, complementing investment innovation support for firms in a region with measures to strengthen local capabilities and skills, and developing tertiary and vocational education to match enterprise demand (Ferry, 2021[34]). Regions also need in-depth data on their industries' position in global value chains (GVCs) to identify their strengths and weaknesses and to pinpoint the specific support firms located in their territory need – in particular in terms of innovation and

scaling. The local risk of industrial stagnation or "over-specialisation" also underscores the importance for public actors to hold the keys to help local industries diversify by attracting appropriate complementary investment and make the most of their interaction with research centres and universities. Finally, ensuring regional public servants have the capacity to collect and analyse subjective data, for instance through surveys or public consultations, is also crucial for policies' relevance, political acceptance and social cohesion.

In a rapidly evolving world, not regularly revising policies to attract and retain talent, visitors and investors can lead to a quick deterioration in the relative attractiveness of a region – particularly if other regions with similar conditions are adopting policies flexible enough to adapt to changes and challenges. The global competition for mobile targets is growing with talent and multinational enterprises being increasingly able to choose the best destination for themselves. In this competitive environment, the position of regions constantly needs to be reassessed and attractiveness policies adapted accordingly. For instance, overlooking many regions' efforts to succeed in their digital transition and the related increasing importance of access to high-speed Internet for talent and visitors will tomorrow discredit any attractiveness policy. The same is true of other global trends such as the green transition. This underlines the importance for regional governments to be able to actively update the policy framework in order to remain competitive and, therefore, have: i) strategic foresight capacities to anticipate systemic changes and quickly produce data; ii) solid co-ordination mechanisms allowing for frequent and easy consultations of all stakeholders; and iii) appropriate framework to navigate these changing waters with an "integrated information" compass, taking into account the diversity of attractiveness drivers, such as the one proposed in this report.

The capacity of regions to establish a dialogue with non-state actors, including civil society, is key. Where there is little capacity to co-design, jointly analyse the costs and benefits, and consult the public, there is a risk that policies will not achieve their objectives and may even have deleterious effects on residents and their perception of the benefits of globalisation (Arregui Coka and Rausch, 2020[35]). Regions must be able to develop and maintain regular contact and trust relationships with businesses, associations and overall civil society. This will improve the quality of policies, increase accountability, build trust in governments and help overcome potential opposition to policies as well as smooth and better understand "geographies of discontent", directly linked to the increase in disparities between more dynamic, often metropolitan and less dynamic, often rural, territories (Dijkstra, Poelman and Rodríguez-Pose, 2020[36]). Trust relationships between public authorities, civil society and businesses are increasingly crucial to ensure the proper development of territories, in a context where many and varied "conflicts of use" emerge in relation to the different priorities of regional attractiveness and their local impact. For example, the decision to install a factory, a warehouse, a tourist or transport infrastructure, even if it provides jobs, cannot be implemented without the support of the population, which may fear the impact on the environment, particularly in terms of the use of water resources and the loss of biodiversity. This type of situation can lead to very localised tensions in terms of space allocation. Without a good relationship between the different actors and in view of the acceleration of climate change, the number of tensions is likely to increase. Regions must therefore be able to anticipate these localised challenges and put in place mechanisms for listening, consultation and collective decision making in terms of territorial attractiveness.

Identifying and addressing multi-level governance gaps for effective regional attractiveness policies

The challenges multi-level governance poses are characterised by the OECD as eight gaps to which public actors are invited to pay particular attention (Charbit, 2020[37]). This approach to characterise specific challenges of a variety of public policies is here adapted to regional attractiveness policies (OECD, 2022[38]). These issues are presented in Figure 7.1.

Figure 7.1. Multi-level governance gaps

Objective gaps

- Different rationales can be an obstacle to the adoption of convergent targets among the different attractiveness stakeholders. Regarding land use, the following are examples of divergent objectives: limit urban expansion and its negative eco-socio-environmental consequences; ensure access to housing; develop new economic activities, including tourism. In northern Sweden, the Sámi use the same area for reindeer herding as new housing, expanding forestry, tourism and industry. In many cases, no formal consultation platform exists for actors to clarify their objectives and find compromises. Another example is the potential divergence between national promotion agencies and regional ones to attract foreign investment prospects.

Information gaps

- Information gaps arise when, intentionally or not, information is not shared effectively and sufficiently among the various actors in attractiveness. One illustration is the limited awareness among national policy actors that slow issuance of permits (building, environmental, etc.) may mean that local authorities are missing important windows of opportunity for attracting investment. Another common case is the failure to take environmental impacts into account when deciding on the best location for any investment. Besides, region partners of this work flagged that national recovery and resilience budgets are being allocated directly by central governments to industries or municipalities without mobilising regional knowledge.

Policy gaps

- Dialogue and exploitation of cross-sectoral synergies between different attractiveness policies, as opposed to a silo approach, is at the heart of this work since it can improve the impact of implemented strategies by taking into account the multi-dimensional nature of regional attractiveness. For example, the following synergies are not always well identified and leveraged: between investor attractiveness strategies and business tourism strategies; between talent, visitors and students; between investment in good broadband access and the attraction of talent, visitors and investors (see Chapter 4).

Capacity gaps

- Lack of human, knowledge (including technical aptitude, ability to develop strategic plans or to interact well with others) or infrastructural resources, can challenge the design, implementation and evaluation of attractiveness policies. For instance, in various regions, there is a lack of public services offered in English to meet the needs of visitors or foreign talent and their families partly due to the lack of bilingual staff. Moreover, a large majority of subnational governments report lacking the capacity to design adequate infrastructure strategies and to assess, upfront, the long-term impact of public investment (OECD, 2019).

Fiscal gaps

- Fiscal gaps refer to the difference between subnational authorities' revenues and the required expenditures for them to meet their responsibilities. It indicates a direct dependence on higher levels of government for funding and for a fiscal capacity to meet obligations. For instance, in Sweden, municipalities are responsible for planning land use, including the development of the housing stock, but many lack the necessary budget, which causes lack of housing in several places.

Transparency and accountability gaps

- The clear assignment of responsibilities and transparency regarding the action taken by public actors in regional attractiveness policies is essential to guarantee their integrity, enable the accountability of actors to citizens, ensure follow-up and evaluate their impact.

Participation and mobilisation gaps

- Participation and mobilisation gaps arise when public actors do not communicate with and involve non-governmental actors. When it comes to attractiveness, the implication of businesses is in particular crucial, as well as support from civil society. Citizens and business engagement is important both for improving the quality of policies and increasing accountability and trust in governments. In some cases, local communities and businesses, for example, do not feel sufficiently consulted by regional tourism agencies in the development of the regional brand strategy for tourists.

Administrative gaps

- As previously underscored in this chapter, policies adopted at the wrong scale risk creating negative externalities for other territories, zero-sum or even pure waste competition (Box 7.2), losing the potential benefits of economies of scale and scope, or creating territorial disparities (Box 7.3).

A roadmap to bridge governance gaps in pursuit of regional attractiveness

The OECD has developed a tool to provide policy makers suggestions and international examples to overcome the main gaps presented in Figure 7.1, which affect the ability of stakeholders involved in the development and implementation of attractiveness policies, to co-ordinate their activities (OECD, 2022[39]). It aims to support the dialogue between and the action of different actors across levels of government involved in regional attractiveness policies. It is, in effect, a roadmap to assess and respond to co-ordination challenges for regional attractiveness based on dialogue between stakeholders.

Roadmap for effective multi-level governance of attractiveness policies

Step 1 - Adopt convergent objectives

- **Self-assessment question**: Is there a mechanism for information-sharing and converging the objectives of public decision-makers in terms of attractiveness?
- **Tools and methods to address this challenge**
  - Developing *institutional mappings* of "who is doing what" to make sure all relevant actors are part of the discussion is the essential first step.
  - *Strategic and regular committees* for the coherence of local, regional, national (and European) strategies, with sufficient time for consultation and negotiation between the different stakeholders.
  - *Contractual measures and/or conditionalities* (e.g. green, social, strategic, etc.) regarding access to finance (Box 7.4)
- **Examples of good practice**
  - Smart Specialisation Strategy Platform – S3/S4.[1]
  - In *Ireland*, a Network of Regional Skills Fora was created as part of the central government's National Skills Strategy to provide a *shared platform for actors in the regional education, employment and training sectors* to work together to meet the skills and talent needs of the region.
  - The *Danish co-ordination model for talent attraction*, primarily because the regions, with support and funding from the national side, have built up a common model.
  - In the Community of Valencia in Spain, a *Strategic Committee on Territorial Policy* comprising regional authorities, civil society members and the private sector, aims to align the vision and priorities among the public and private sectors. This committee was established as part of the Territorial Governance strategy 2010-2030,[2] whose objective is to develop innovative formulas of territorial governance and facilitate co-ordination among the three Valencian provinces. The strategy focuses on four pillars: i) public-private partnerships; ii) evaluation of policies and projects; iii) management and decision-making systems; and iv) accountability (OECD, 2023[10]).
  - In Centro, Portugal, the *Schist Villages Network* is part of the Programme for the Economic Enhancement of Endogenous Resources (PROVERE) and has established a platform for inter-municipal co-operation to foster effective communication between public and private entities (OECD, 2023[15]).

Step 2 – Address information asymmetries

- **Self-assessment question**: Are there common databases and tools for sharing information between different stakeholders?
- **Tools and methods to address this challenge**
  - Agree on *specific attractiveness indicators* and then group the data produced on a shared regional platform, which will function as a "one-stop-shop for territorial data".
  - Set up *information desks* to gather useful information between levels of government and private actors at a regional level (e.g. between regional government services, "deconcentrated" services – the regional representation of state agencies – representatives of civil society and local authorities).
  - Strengthen the *presence and role of regional authorities in national discussions on attractiveness.*
- **Examples of good practice**
  - Regional data observatories (on employment, land, biodiversity, etc.):
    - The French National Agency for Territorial Cohesion's Territorial Observatory and its interactive mapping site GEOT.[3]
    - Dataviz tool of the *Banque des Territoires* (for example: for the Territories of Industry,[4] for the Cœur de Ville[5] programme).
  - Information desks:
    - In Cantabria, Spain, the *Digital Innovation Hub* was created with the vision of becoming the point of reference for digital transformation in the region and serving as a meeting point between the supply and demand of technology, to unify access to resources for innovation and support the digitalisation of administrations and companies, with special attention to small and medium-sized enterprises (SMEs) and micro-SMEs. The hub aims to be part of the initiative Digitising European Industry, promoted by the European Commission.
    - *Invest Lisboa***,** Portugal, is a *one-stop-agency* created through a partnership between the City Council and the Portuguese Chamber of Commerce to provide information and assist companies, investors and entrepreneurs looking to invest or set up their business in the city of Lisbon (OECD, 2023[7]).

Step 3 – Strengthen the coherence of cross-sectoral policies

- **Self-assessment question**: What co-ordination mechanisms are in place to identify and take advantage of possible cross-sectoral synergies between several regional attractiveness and policies?
- **Tools and methods available to address this challenge**
  - *Inter-ministerial committees* on country attractiveness involving representatives of infrastructure, environment, tourism, economy, social and territorial development, together with representatives of regional authorities.
  - *Regional attractiveness committees* for inclusive and sustainable development, involving representatives of local and national levels together with businesses and civil society representatives, considering all attractiveness targets (investors, talent and visitors) to identify priorities, synergies and trade-offs in their action.
  - *Contractual measures* encompassing different attractiveness policy fields to be dealt and monitored across levels of government.

- **Examples of good practice**
  - In Spain, the *Interterritorial Council for Internationalisation* aims to serve as a permanent framework for collaboration between the different agents involved in the internationalisation process. Representatives from the autonomous communities, the Spanish Confederation of Business Organisations (CEOE), the Spanish Chamber of Commerce, the State Secretariat for Trade and the Spanish Institute of Foreign Trade (ICEX) aim to strengthen collaboration in the promotion of the internationalisation of Spanish companies and the attraction of investment to the country.
  - In Algarve, Portugal, the *Regional Coordination and Development Commission* (CCDR Algarve) is working to advance a multi-level governance model with the 16 municipalities to attract talent, investors and visitors. An integrated and intersectoral approach was put in place by the CCDR Algarve to co-ordinate the preparation of the *Algarve 2030 Strategy* and the Action Plan to Diversify Algarve, including close co-ordination with municipalities through the Intermunicipal Community of the Algarve (CIM-AMAL) (OECD, 2023[9]).

Step 4 – Strengthen the capacity of regional and local actors

- **Self-assessment question:** What are the human and technical capacities available to the regions for the implementation of attractiveness policies?
- **Tools and methods available to address this challenge**
  - *Management and staff mobility*.
  - *Language training* and *engineering support*.
  - *Sharing experiences* between regions.
- **Examples of good practice**
  - *France's ultra-high-speed broadband strategy* (*Plan très haut debit*, PTHD) presented in Box 7.3 includes a budget for training civil servants to enable them to carry out their missions.
  - To support public administration, the *Capacity Italy programme* has been implemented to provide specialised expertise and technical assistance to public entities at all stages of the implementation of investments related to the National Recovery Plan, as well as *the Capacity for Cohesion programme*, to help public administrations manage European Union structural funds (OECD, 2023[40]).

Step 5 – Mobilise all available financial sources in a consistent way

- **Self-assessment question:** Are all of the available funds mobilised by subnational authorities for the implementation of attractiveness and policies at the territorial level? Do the regions have sufficient financial resources to carry out the attractiveness policies that fall within their competency?
- **Tools and methods available to address this challenge**
  - *Contract schemes*, including commitments or even financial transfers.
  - *Mutual financial commitments* (creation of own funds and participation of financial institutions).
- **Examples of good practice**
  - New *EU Territorial Cohesion Policy 2021-2027*[6] and making budgets more flexible.
  - The financial and tax concessions supporting the attractiveness of *Special Economic Zones* in South Italy regions include national instruments co-financed by regional resources and instruments with direct regional competency financed through the European Regional Development Fund (ERDF) and ESF.

Step 6 – Ensure transparency of public policy roles and practices

- **Self-assessment question:** Is there a mechanism for assessing and assigning responsibility for attractiveness and internationalisation policies (including to the public)?
- **Tools and methods available to address this challenge**
  - OECD recommendations for the implementation of a rigorous procedure for public policy evaluation (Box 4.4).
  - The OECD Recommendations on Open Government (OCDE, 2016[41]; 2017[42]).
  - Mobilising the European Quality Index (EQI)[7] of subnational governments to promote regional attractiveness to investors and talent.
- **Examples of good practice**
  - The OECD Observatory of Public Sector Innovation (OPSI).[8]
  - Strategic Committee (COSTRAT) for the attractiveness of the Grand Est Region in France, by crossing sectoral and territorial dimensions through the involvement of all stakeholders (OECD, 2022[39]).

Step 7 – Involve non-governmental stakeholders

- **Self-assessment question:** Who are the private actors and civil society concerned by attractiveness policies? Have their opinions been incorporated into the design, implementation and evaluation of attractiveness policies? Do they participate in and help monitor regional attractiveness strategies?
- **Tools and methods available to address this challenge**
  - Encourage *citizen participation* in the development, monitoring and evaluation of regional strategic plans and integrate the results into strategic documents.
  - Include in strategic documents actions to *support the development and reinforcement of regional networks* (arrangement of sponsorships, informal meetings for attractiveness actors, incentives for the development of multi-actor initiatives, etc.).
  - *Invite land/logistics/tourism/academic actors to participate* in existing discussions and contribute to strategic decisions on regional attractiveness. Consulting the following actors would benefit the quality of policies and the actors themselves:
    - Land actors: sustainable management of land resources (e.g. rehabilitation of brownfield sites) and development of economic land.
    - Logistics actors: strengthening the attractiveness of a regional industry.
    - Tourism actors: the attractiveness of the sector's investors and researchers (via business tourism), the sustainable management of tourist flows and the emergence of new, more sustainable forms of tourism.
    - Academic actors: the attractiveness of talent in relation to regional innovation strategies and the development of new strategic GVCs.
- **Examples of good practice**
  - The recovery strategy implemented by the Occitanie Region in France.[9]
  - The plan for the relocation and security of agri-food and health supplies in the Wallonia region of Belgium.[10]
  - The 2019 T-25 strategy in Norrbotten, Sweden, between employers and Luleå University, aimed at attracting 25 000 skilled workers over 5 years, notably by securing employment for spouses of recruits and by increasing graduate retention (OECD, 2023[16]).

- The French *Territoire d'Industrie*[11] programme and Team France Export involve the Chambers of Commerce and Industry, including during the monitoring and evaluation phases.
- The province of Quebec, Canada, has developed a unique talent attraction model focused on international recruitment trips where delegations of employers travel to different target markets to attract candidates. These are managed operationally by the regional investment and development council, Quebec International (QI), with the support of the provincial government, the cities and municipalities, and the federal state.

Step 8 – Adopt policies at the relevant territorial scale by going beyond administrative boundaries

- **Self-assessment question:** Are there incentives to adopt policies at the right scale by involving those responsible for the various territories concerned in the definition and implementation of attractiveness policies and do they overcome rigid administrative boundaries?
- **Tools and methods available to address this challenge**
  - Localised *mapping* (who are the actors in the territory and how do they interact with each other?).
  - Evaluation *of positive and negative externalities* from urban areas on neighbour rural places in the region.
  - Co-ordinated *attractiveness strategies with neighbouring territories* (territories of the same region, regions of the same country or border regions) to agree on shared objectives, investment priorities and the monitoring of related policies with indicators on territorial inequalities and their evolution.
- **Examples of good practice**
  - Interreg European co-operation programmes.[12]
  - The project for common tourism in the Vanilla Islands.[13]
  - *Visit Dalarna* website and campaign putting forward regional assets to tourists and local ones (OECD, 2023[43]).
  - The *Green Deal Site Visits*, organised within the framework of the North Sweden Green Deal project by Region Norrbotten, Sweden, where students from Luleå University can visit each of the county's municipalities for a day to make contacts and learn about work possibilities (OECD, 2023[16]).
  - In 2021, Portugal and Spain created a cross-border tourism sustainability strategy between them, containing tourism supply plans, mechanisms of governance and financing to make the measures effective, including the necessary participation of local entities, regions and autonomous communities. With the aim to dissociate the idea of the border as an area of transit, turning it into a unique, quality, not overcrowded destination that is, above all, authentic.

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Notes

[1] See https://s3platform.jrc.ec.europa.eu/about-us.

[2] See https://www.upv.es/contenidos/CAMUNISO/info/U0672564.pdf.

[3] See https://www.observatoire-des-territoires.gouv.fr/outils/cartographie-interactive/#c=home.

[4] See https://public.tableau.com/views/DataVizTerritoiresdIndustrie/Accueil?:showVizHome=no.

[5] See https://www.banquedesterritoires.fr/dataviz-coeur-de-ville.

[6] The new EU Cohesion Policy 2021-2027 foresees a change in the rules for the allocation of funding, which will now be common to all eight funds supported by the policy. For example, more flexibility in

programming has been introduced to allow for easier adjustments in the event of changing challenges and economic situations (https://ec.europa.eu/regional_policy/2021-2027_en).

[7] See https://www.gu.se/sites/default/files/2021-05/2021_4_%20Charron_Lapuente_Bauhr.pdf.

[8] See https://oecd-opsi.org/guide/open-government/.

[9] See https://deliberations.laregion.fr/Docs/AssembleePleniere/2020/11/19/ANNEXE/P0963.pdf.

[10] See https://developpementdurable.wallonie.be/alimentation/appel-projets-relocalisation.

[11] Inter-municipal programme for industrial support in areas with a strong dependence on industry.

[12] See https://www.interregeurope.eu/.

[13] See https://www.vanilla-islands.org/association-iles-vanille/.

Annex A. Technical analysis

Foreign direct investment (FDI)

Table A A.1. Regression results: Foreign Direct Investment

By dependent variable (column) and independent variables (row)

	Number of greenfield projects (coefficient)	Total capital expenditure of greenfield investments (coefficient)
Model (1): Education– OECD + EU TL2 regions (n = 369)		
EDU_TOP500_UNIVERSITY	120.96***	3.781***
Model (2): Education and digital infrastructure – OECD TL2 regions (n = 300; 266 for capex)		
EDU_TOP500_UNIVERSITY	124.7***	3.064***
DIG_DOWNSPEED_NAT100	1.33*	56.88*
GDP_PC_REAL_PPP	0.004***	0.02
Model (3): Education and transportation infrastructures – EU + UK (n = 179)		
EDU_TOP500_UNIVERSITY	89.51***	2 657.21***
ACCESS_RAILWAY_EC	17.05***	235.0323
ACCESS_FLIGHT_EC	0.177***	-1.95
GDP_PC_REAL_PPP	0.001	0.0370

Note: While the traditional measure of FDI is total capital expenditure, the number of FDI projects is also considered as another way of measuring FDI, which can shed light on how lagging regions can attract relatively smaller-sized projects.
The significance level is expressed as the asterisks added to each coefficient. The smaller p-value signifies higher statistical significance level: *p<0.1; **p<0.05; ***p<0.01.

In the above table, regression analysis is conducted using different regional samples due to the lack of data available regarding train and flight accessibility when including non-European Union (EU) OECD regions. Hence, the analysis is split into three parts: i) a first study covering OECD and EU Territorial Level 2 (TL2) regions; ii) a second study on OECD regions, plus Argentina (due to their participation in the Rethinking Regional Attractiveness community of practice); and iii) a final analysis on EU countries for which the European Commission has produced an indicator of train and flight accessibility and proximity on Eurostat.

In the first instance, correlation coefficients using the dependent variable and the attractiveness database are conducted, along with a literature review, to get a first idea of which variables should be the subject of further exploration. All of the selected variables are significantly correlated to both the number of FDI projects and the amount of foreign-owned capital expenditures; however, the magnitude of correlation varies across indicators. In the selected variables, two are significantly correlated (>0.4) with the number of FDI projects and the sum of capital expenditures: universities and the flight and railway performance indicators, namely edu_top500_university, access_flight_ec and access_railway_ec.

For the three subsamples presented in Table A A.1. , the analysis has been done with the two variables of interest: i) the number of FDI projects; and ii) the amount of capital expenditures to check the consistency of the results.

Depending on the model, all things being equal and on average, one additional university ranked in the world's top 500 ranking would have brought to a region between 90 and 125 more new FDI projects and between USD 2 657 and USD 3.781 million of additional capital expenditure in greenfield investments.

Then, for the OECD (plus Argentina) subsample, digital connectedness appears to attract foreign investment but the power of the relationship slightly edges down. A 10% increase in the download time from fixed devices (expressed as a percentage of the national average time) would have led, on average and all things being equal, to 13 additional new projects and USD 569 million of foreign capital expenditures. Once the control variables are added, the coefficients are still statistically significant showing little variance.

Regarding the EU countries' subsample, after universities and research and development (R&D), the main drivers of FDI are train and flight accessibility. Utilising the EC's passenger rail performance indicator, a measure of accessibility and proximity (calculated as the population within 90-minute travel over the population within a 120-km radius x 100), a 10pp increase in rail performance would have led to 171 additional foreign investment projects. Similarly, 100 more daily passenger flights accessible within 90-minute drive would have added 17 new projects. However, the statistical evidence is not clear when FDI is represented through the amount of foreign capital expenditures.

Talent

The first indicator entered into the stepwise model with time and region fixed effects is the share of international students in the student population in higher education (eter_stu_for_sh), which produces a statistically significant and positive coefficient (1). This shows that the higher share of foreign student population has a positive impact on regional talent attraction (Table A A.2)

An indicator of digitalisation is then added to the panel regression with the first independent variable (2). The share of households with broadband Internet access (bb_acc) exhibits a positive and statistically significant coefficient. This shows the importance of digitalisation for regions to attract talent.

In the third model (3), gross domestic product (GDP) per capita is added as a control variable and the behaviour of the first two variables with its addition is observed. While bb_acc stays relatively stable and continues to have a statistically significant coefficient, the coefficient associated with the international student variable (eter_stu_for_sh) is no longer significant. This could be attributed to an omitted variable bias that underestimates the coefficient.

Moving on from the stepwise panel regression with two-way fixed effects to the time-lag model, 2017 and 2018 data are used for the aforementioned three independent variables. The time-lag model considers the time it takes for the independent variables to affect the dependent variable and a one-year lag is considered. Similar results are shown in the time-lag model as in the panel regression model. The coefficients of bb_acc are statistically significant and the p-value of bb_acc is still less than 0.05, just as in the panel regression.

Finally, the housing affordability variable (afford_h) is added to the time-lag model (5). The data for this variable were only available as the average over 2016-20 and the average over the 2017-21 period (individual yearly data are not published). Thus afford_h could not be inserted into the panel regression but only into the time-lag model. Indeed, afford_h exhibits a statistically significant and positive coefficient, which conveys the importance of housing affordability in attracting and retaining talent. On average and all other factors being equal, a 10% increase in the share of the population satisfied with housing affordability translates into a 1.8% increase in the foreign-born share of foreign-born employed people in the total

working-age population (15-64). The coefficient of GDP per capita was positive in the two-way fixed effect panel regression (3) but negative in the time-lag regression (5), perhaps because GDP per capita is positively correlated with many other variables, thus potentially resulting in omitted variable bias. One limitation of afford_h is that it is a subjective indicator of the share of people satisfied with housing affordability in their region. Nevertheless, the link between housing prices and talent attraction is discovered from this analysis, which can open a new series of relevant discussions.

Table A A.2. Regression results: Talent

By dependent variable (column) and independent variables (row)

	Dependent Variable: the share of foreign-born employed people in the total working-age population (15-64)				
	Panel regression model (1)	Panel regression model (2)	Panel regression model (3)	Time-lag model (4)	Time-lag model (5)
ETER_STU_FOR_SH	0.0173** (0.0088)	0.0165* (0.0097)	0.0117 (0.0105)	-0.3211 (0.333)	-0.4300 (0.353)
BB_ACC		0.0221** (0.0105)	0.0200** (0.0101)	0.1725** (0.079)	0.1368* (0.080)
GDP_PC_PPP			0.0001** (4.31e-05)	-0.0006 (0.000)	-0.0010** (0.000)
AFFORD_H					0.1786** (0.086)
Fixed effects	Region, Year	Region, Year	Region, Year	None	None
Number of observations	1 546	1 455	1 455	186	186
Covered regions and features	389 EU and Turkey regions	389 EU and Turkey regions	389 EU and Turkey regions	186 EU and Turkey regions	186 EU and Turkey regions
Covered time periods	2011-19	2011-19	2011-19	2017-18	2017-18 (see note)

Note: The significance level is expressed as the asterisks added to each coefficient. The smaller p-value signifies higher statistical significance level: *p<0.1; **p<0.05; ***p<0.01
The dependent variable was constructed by multiplying the TL2 regional foreign-born employment rate and the foreign-born participation rate indicators from the OECD Regional Attractiveness Database
Regarding the covered time periods for the last time-lag model, 2017-18 data were used for all variables in model (5) except afford_h, whose data were available as two time periods: 2016-20 average and 2017-21 average.

Visitors

A stepwise panel regression is applied with time and region fixed effects to control for the potential variation in tourism drivers across the large sample of regions and the ebbs and flows over time (Table A A.3). As a first step, the firm birth rate (empent_b_ra) is regressed. empent_b_ra is found to have a positive coefficient with strong statistical significance in its univariate model (1) with the dependent variable, the ratio of the number of overnight tourist stays over the number of accommodation beds in the TL2 region.

The second variable to be added to the model is the air pollution variable (air_pol_t), defined as the average level of pm2.5 in micrograms per cubic metre (μg/m³) experienced by the regional population. Both empent_b_ra and air_pol_t exhibit significant coefficients in the second model (2). The firm birth rate indicator remains positive, while the air pollution indicator exhibits a negative relationship with the tourism-dependent variable. This means that the higher firm birth rate and lower air pollution will attract more visitors per accommodation bed.

The share of international students in the student population in higher education (eter_stu_for_sh) is then added to the panel regression. The coefficients of air pollution and firm birth rate indicators both remain stable and statistically significant, and the newly added foreign student share variable shows a positive and significant coefficient.

Table A A.3. Regression results: Visitors

By dependent variable (column) and independent variables (row)

	Ratio of the number of overnight stays in tourist accommodation to the number of tourist accommodation beds			
	Panel regression model (1)	Panel regression model (2)	Panel regression model (3)	Panel regression model (4)
EMPENT_B_RA	0.8147** (0.0334)	0.9140** (0.4035)	1.7872** (0.0109)	1.6283** (0.6804)
AIR_POL_T		-1.8199*** (0.6203)	-1.8247** (0.8391)	-1.1090 (0.7573)
ETER_STU_FOR_SH			0.1335* (0.0806)	0.1131* (0.0671)
GVA_IND_TOTAL				0.0012*** (0.0004)
Fixed effects	Region, Year	Region, Year	Region, Year	Region, Year
Number of observations	1 276	1 276	1 065	1 065
Covered regions and features	168 EU regions	168 EU regions	160 EU regions	160 EU regions
Covered time periods	2008-20	2008-20	2011-20	2011-20

Note: The significance level is expressed as the stars added to each coefficient. The smaller p-value signifies higher statistical significance level: *p<0.1; **p<0.05; ***p<0.01

Finally, the regional gross value-added (gva_ind_total) is added as a control variable. With the new addition of gva_ind_total, eter_stu_for_sh maintains a similar level of statistical significance and a positive coefficient positive. While the coefficient of air_pol_t stays negative as in every previous model, it loses its statistical significance with the inclusion of gva_ind_total. Although this could have been caused due to an underestimation of the coefficient, for now, there is not enough evidence to conclude that air_pol_t exhibits a causal link with the tourism-dependent variable. In the case of empent_b_ra, the coefficient remains positive and with strong statistical significance as before, a result that leads to the conclusion that the firm birth rate is the strongest driver of tourism among the three aforementioned independent variables. On average and all other variables being equal, a 1% increase in the firm birth rate leads to a 1.6% increase in the ratio of the number of overnight stays in tourist accommodation to the number of tourist accommodation beds.

Annex B. Attractiveness indicators

Table A B.1. Attractiveness Indicators

	Dimension	Description	Indicator	Investors	Talents	Visitors	Source/Periodicity/ Latest year available/Coverage
Economic attractiveness	Economy	This dimension provides an insight into the level of wealth and economic performance of the region, as well as its capacity to have a diversity of industrial activities.	GDP per capita (in USD, constant purchasing power parity, PPP)	x	x		OECD Regional Database; annual; 2020; OECD regions (TL2, TL3)
			Gross value-added per worker (in USD, constant PPP)	x			OECD Regional Database; annual; 2020; OECD regions (TL2)
			Economic diversity of employment by 10 economic sectors	x			Inverse OECD calculation of the Herfindahl Index based on sectoral employment data by place of work; annual; 2020 OECD regions (TL2)
	Innovation and entrepreneurship	The innovation dimension looks at the region's ability to provide a favourable environment for entrepreneurship and research.	R&D total personnel (% of total)	x	x		Eurostat and OECD Regional Database; annual; 2019; EU regions (TL2)
			Patent Cooperation Treaty (PCT) patent applications (per million residents)	x	x		OECD Regional Database; annual; 2018; OECD regions (TL2)
			Birth rate of employer enterprises	x	x		Eurostat; annual; 2019; OECD regions (TL2)
			Subjective: Share of the population who think that their city or region is a good place for people to live for people starting new businesses (%)	x	x		Gallup World Poll; multiannual; average 2017-21; OECD regions (TL2)
	Labour market	Labour market indicators help potential investors and talent assess the dynamism of the labour market.	Employment rate (15-64 years old)	x	x		OECD Regional Database; annual/quarterly; 2021; OECD regions (TL2)
			Youth employment rate (15-24 years old)	x	x		OECD Regional Database; annual/quarterly; 2021; OECD regions (TL2)
			Employment rate of immigrants	x			OECD Regional Database; annual; 2020;

	Dimension	Description	Indicator	Investors	Talents	Visitors	Source/Periodicity/ Latest year available/Coverage
			compared to the native population as a difference (%)				OECD regions (TL2)
Visitor appeal	Tourism	This dimension covers both the region's tourism infrastructure and its popularity with foreigners.	Number of tourist accommodation beds (per 1 000 inhabitants)	x			Eurostat; annual; 2021; EU regions (TL2)
			Number of nights spent in tourist accommodation (per 1 000 inhabitants)	x			Eurostat; annual/quarterly; 2020; EU regions (TL2)
			Share of overnight stays by foreign tourists (%)	x			Eurostat; annual/quarterly; 2019;EU regions (TL2)
	Cultural capital	This dimension highlights the role of cultural heritage in attracting talent, visitors and tourism-related FDI (like accommodation) in the region. All these elements are essential for a dynamic tourism sector and the promotion of quality of life.	Share of employment in culture and creative industries (%)	x	x	x	Eurostat; 2021; EU regions (TL2)
			Number of United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritages Sites		x	x	World Heritage Sites UNESCO; 2019; OECD regions (TL2)
Land use and housing	Land	The land dimension assesses the pressure on agricultural and industrial land in the region.	Built-up area (% of total land area)		x	x	OECD Regional Database; 2019; OECD regions (TL2)
			Land prices (euro per hectare)		x	x	Eurostat ; annual ; 2021 ; EU regions (TL2)
			Evolution of land prices 2019/2020 (%)		x	x	OECD land prices database; 2019-20; OECD regions (TL2)
			Total change in of land cover converted to artificial surfaces 2004-19 (%)		x	x	OECD Regional Database; 2004-19; OECD regions (TL2)
	Housing	The housing dimension highlights the availability of housing in relation	Housing expenses as a share of households disposable income (%)	x	x		OECD Regional Database; 2020; OECD regions (TL2)
			Subjective: Share of population without enough money for housing (%)	x	x		Gallup World Poll; multiannual; 2017-21 average; OECD regions (TL2)
			Subjective: Share of population	x	x		Gallup World Poll; multiannual;

	Dimension	Description	Indicator	Investors	Talents	Visitors	Source/Periodicity/ Latest year available/Coverage
		to the quality of life for residents, visitors and investors.	satisfied with affordability of housing (%)				2017-21 average; OECD regions (TL2)
Resident well-being	Social cohesion	Social cohesion is an important measure of the vitality and shock resilience of a region. It can indicate to a potential investor, resident or visitor such things as the safety of the area and the general well-being of the local population.	Number of intentional homicides per 100,000 population	x	x	x	OECD Regional Database; 2021; OECD regions (TL2)
			Subjective: Share of the population that feel safe walking alone at night (%)		x	x	Gallup World Poll; multiannual; 2017-21 average; OECD regions (TL2)
			Poverty rate after taxes and transfers (national poverty line 60% of national median income)		x		Eurostat and OECD Regional Database; 2021; OECD regions (TL2)
			Voter turnout in general elections (in % of registered voters who voted)		x		OECD Regional Database; 2019; OECD regions (TL2)
			Quality of Government Index	x	x		European Quality of Government Index, EC; 2021; EU regions (TL2)
			Subjective: Share of population satisfied with the opportunities to meet people and make friends in the city or area where they live (%)		x	x	Gallup World Poll; multiannual; average 2017-21; OECD regions (TL2)
			Subjective: Satisfaction with life as a whole (from a scale from 0 to 10)		x		Gallup World Poll; multiannual; average 2017-21; OECD regions (TL2)
	Education	The education dimension assesses the region's ability to reach out internationally through education but also measures the accessibility of institutions for younger people.	Share of international students in post-secondary student population (%)	x	x		OECD calculation based on ETER data; 2019; EU regions (TL2)
			Share of the population with tertiary education (%)	x	x		OECD Regional Database; 2021; OECD regions (TL2)
			Number of universities in the World's top 500 QS ranking		x		World University Rankings; 2021; OECD regions
			Proximity to primary education establishments (km)		x		Access and Cost of Education and Health Services joint EC-JRC and OECD report (2021); 2011; EU regions (TL2)
			Proximity to secondary education institutions (km)		x		Access and Cost of Education and Health Services joint EC-JRC and OECD report (2021); 2011; EU regions (TL2)
	Health		Air pollution (average level in µg/m³ experienced by the population)		x	x	OECD Regional Database; 2020; OECD regions (TL2)

	Dimension	Description	Indicator	Investors	Talents	Visitors	Source/Periodicity/ Latest year available/Coverage
		The health dimension considers issues of access to health services, potential health risks and satisfaction with these services, which are of great importance to those seeking to settle.	Number of doctors per 1000 inhabitants		x		OECD Regional Database; 2019; OECD regions (TL2)
			Subjective: Share of the population satisfied with the availability or quality of healthcare (%)		x		Gallup World Poll; multiannual; 2017-21 average; OECD regions (TL2)
			Proximity to hospital cardiology services (km)		x		Access and Cost of Education and Health Services joint EC-JRC and OECD report (2021); 2011; EU regions (TL2)
			Proximity to maternity and obstetric hospital services (km)		x		
Connectedness	Digitalisation	The rapid development of teleworking as a result of the COVID-19 crisis has increased the need for access to fast and stable Internet connections. But in order to reap the benefits of digitalisation, access to digital infrastructure must also be accompanied by the adoption of digital technologies and a minimum of digital skills and thus improve the digital attractiveness of regions.	Share of households with access to very high internet speed (%)	x	x		OECD Regional Database; 2020; OECD regions (TL2)
			Share of fibre optic coverage of buildings (%)	x	x	x	Data updated on the basis of the OECD Regions at a Glance 2020 publication; 2020; OECD regions (TL2)
			Average download speed from a fixed device (national value=100)	x			OECD calculation based on Ookla database; 2021 Q2; OECD regions (TL2)
			Facebook Social Connectivity Index	x	x		OECD calculation based on data from the Facebook Social Connectivity Index.
	Transportation	The transport	Subjective: Share of individuals		x		Gallup World Poll; multiannual; average

	Dimension	Description	Indicator	Investors	Talents	Visitors	Source/Periodicity/ Latest year available/Coverage
		dimension measures the region's offerings in terms of quality transport networks and various modalities.	satisfied with the quality of public transport (%)				2017-21; OECD TL2 regions
			Daily number of passenger flights accessible within 90 minutes by car	x	x	x	European Regional Competitiveness Index 2019; 2016; EU regions (TL2)
			Population that can be reached by rail (within 90 minutes) per 100 nearby inhabitants (within 120km radius)	x		x	European Regional Competitiveness Index 2019; 2014; EU regions (TL2)
			Population that can be reached by road (within 90 minutes) per 100 nearby inhabitants (within 120km radius)	x		x	European Regional Competitiveness Index 2019; 2016; EU regions (TL2)
Natural environment	Environment	Environmental indicators help visitors and talent to understand the quality of the environment and importance given locally to environmental preservation efforts.	Subjective: Share of the population satisfied with efforts to preserve the environment (%)		x	x	Gallup World Poll; multiannual; average 2017-21; OECD regions (TL2)
			Share of municipal waste recycled (%)		x	x	OECD Regional Database; 2020; OECD regions (TL2)
			Greenhouse gas emissions produced by the transport industry (tonnes of CO2 equivalent per capita)	x	x	x	OECD Regional Database; 2018; OECD regions (TL2)
			Share of renewables in electricity production (%)	x	x		OECD Regional Database; 2019; OECD regions (TL2)
	Natural capital	Natural capital is important for attractiveness in that those wishing to move to, invest in or visit a region value the quality of the local environment for the activities they carry out.	Tree cover rate (% of total area)		x	x	OECD Environmental Database; 2019; OECD regions (TL2)
			Evolution of the surface area of tree cover 2004-2019 (%)		x	x	OECD Environmental Database; 2004-19; OECD regions (TL2)
			Share of protected areas (%)		x	x	IUCN and UNEP-WCMC (2017), the World Database on Protected Areas (WPDA)

Annex C. Dependent variables

Table A C.1. List of Dependent Variables and Sources for Regression Analysis

Covered dimension	Name of the variable	Indicator	Source
Foreign direct investment	nb_projetcs	The number of foreign direct investment projects over the 2017Q1-2022Q3 period	OECD calculations based on *Financial Times* market database; 2022
Foreign direct investment	capex	The sum of foreign capital expenditures received by the region over the 2017Q1-2022Q3 period	OECD calculations based on *Financial Times* market database; 2022
Talent attraction	TAL_emp	The number of foreign-born employed people as a share of the total working-age population (15-64)	OECD calculations based on OECD Regional database
Visitor attraction	TOU_bed	The ratio of the number of overnight tourist stays to the number of tourist accommodation beds	OECD calculations based on Eurostat

OECD Regional Development Studies

Rethinking Regional Attractiveness in the New Global Environment

The *Rethinking Regional Attractiveness in the New Global Environment* report highlights lessons learned from multiple regional case studies from five EU countries (Ireland, Italy, Portugal, Spain and Sweden), additional work with Latin American and Caribbean regions, and a series of webinars and one-on-one dialogues on rethinking regional attractiveness. The OECD's innovative multidimensional approach to assessing regional attractiveness considers global engagement beyond international connections and economic factors alone. The methodology considers more than 50 indicators to develop regional attractiveness profiles covering six domains of attractiveness: economic attraction, connectedness, visitor appeal, natural environment, resident well-being, and land-use and housing.

The report helps regional and national policy makers to understand how individual regions fare in a new global environment that continues to deal with the impacts of the COVID-19 crisis, compounded by the consequences of Russia's war of aggression against Ukraine and existing megatrends – all of which produce asymmetric impacts within and between countries and regions – and identify the policy levers available to enhance their attractiveness to the international target groups of investors, talent, and visitors. It also considers the need to co-ordinate across levels of government, across policy fields, and with private stakeholders, and highlights good practices to implement regional attractiveness policies.

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