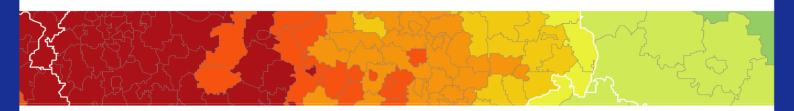


Inspire policy making by territorial evidence



The Geography of New Employment Dynamics in Europe

Synthesis Report

9.3.2018

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The Geography of New Employment Dynamics in Europe

Aims of the study and methodology

The aim of this study is to provide quantitative and qualitative evidence on the current employment dynamics within European countries and regions, highlighting the key trends and main drivers (territorial conditions and policy factors) of location preferences, with focus on the links between Knowledge Economies , new patterns of (high skilled youth) migration flows within and between countries and socio-spatial disparities. We consider this relationship to be a crucial underpinning of Cohesion Policies (CP) within the EU.

The following policy questions – outlined in the project's Terms of Reference (ToR) – have been addressed:

- Territorial Patterns of new employment dynamics: What are the territorial patterns of new employment creation in Europe? How are these patterns likely to evolve into the future, based on current orientations? What impact will recent trends have on the future development of Europe's regions?
- Determinants and Effects: How is the European policy focus on 'Knowledge Economy' sectors for investment, jobs and growth affecting the geographical distribution of new employment creation? What impact does this have for regional development and territorial cohesion?
- Policy lessons and recommendations: What are the key policy lessons for CP? What
 are the opportunities for lagging regions to capitalise on their place-based potential and
 emigrant skill base in order to capture spillovers, re-capture the lost skills base of
 emigrants and innovate in new sectors?

In addressing these policy questions, two main challenges were encountered.

The first related to the difficulty of precisely defining the Knowledge Economy (KE) and the consequent challenge of robustly measuring its role and evolution at territorial level. There is no established and definitive concept of 'Knowledge Economy' or 'knowledge workers' in the literature and multiple dimensions are used to measure a latent/notional concept. In this study, following a previous ESPON study (ESPON 2013b, p.3) we define the KE as an economy 'able to produce new knowledge from technologically advanced sectors and/or functions present in a territorial area and/or where knowledge is obtained through links (formal or informal) with other economies'. We consider three main criteria to categorise the features of the knowledge economy:

- knowledge-intensive sectors; e.g. science- based and/or high-technology sectors such as high-tech manufacturing and services; financial and business services, health, education, and recreational and cultural services;
- b) presence of high-level scientific institutions, and high education and skill levels of the population and workforce in a specific territory;
- c) investments in innovation and productivity at the firm, individual, and sectoral-level.

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The second and more important challenge related to data availability and quality. Data availability varies across the selected variables with respect to the time frame, the covered countries, and the territorial disaggregation. Very little data is available on Member States (MSs) for the period before joining the EU; in addition, data on the ESPON Partner Countries, the EU Candidate Countries and the Western Balkans Countries (Macedonia, Albania, Serbia, Montenegro, Bosnia Herzegovina, and Kosovo under UNSCR 1244/99) are partially or not at all included in the existing EU datasets. In addition, for many variables there is no availability of data at NUTS 3 level, and the revisions made in the NUTS classification system over time reduce the comparability of some data over time. NUTS classification system over time reduces the comparability of some data over time. Finally, no comparative data are available on migration flows between regions and territories. In order to address the data-related problems, we have implemented a harmonisation routine for the NUTS classification, as well as imputation mechanisms for missing data in those cases where the imputation would not introduce distortion and bias in the data.

The adopted methodological approach combined quantitative and qualitative research methodologies. A statistical analysis of inter-regional and international EU migration and trends in skills distribution and industrial structure provided a sound quantitative element of the research, while qualitative research in scenario analysis, policy approaches and six in depth regional case studies helped capture emerging policy innovation from local, national and EU levels to inform further policy development, in particular in relation to CP. Multi-disciplinary approaches were adopted, combining sociological and policy analysis approaches, with statistical and econometric modelling and data analysis (common in economic research), and spatial analysis and geographic information system (GIS) modelling (for the analysis of the spatial patterns of new employment trends).

The present final report summarises the main findings of the study and the evidence in response to the policy questions mentioned above, while more detailed analyses and additional tables and figures are presented in the annexes. In this summary, we summarise the main evidence for these policy questions

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Territorial patterns of the Knowledge Economy and new employment creation in Europe

Policy questions

- What are the territorial patterns of new employment creation in Europe?
- How is the European Policy focus on KE sectors affecting the geographical distribution of new employment creation?
- What impact does this have for regional development and territorial cohesion?

The quantitative analysis of data available at regional level underlines the following main patterns of the KE and new employment dynamics:

- The location patterns of the KE tend to increase territorial polarisation and to affect mobility patterns. KE activities tend to concentrate in technologically advanced regions and in capital cities, offering high levels of social capital, networks, technology, agglomeration of knowledge and good physical accessibility. Spatial proximity between companies, universities and research centres is key for KE and economic development. Physical and Information and Communication Technologies (ICT) infrastructures, as well as educational, cultural, and environmental assets increase proximity, and influence expectations on the profitability of investments in research and development (R&D), attracting new investments (including Foreign Direct Investments- FDI) in the KE. These areas are also increasingly attractive to young and highly skilled migrants for their higher standards of living and higher returns on human capital, and have shown a greater resilience during the crisis also thanks to spillover effects in other non-KE sectors and occupations. These areas can however be affected by the negative externalities of agglomeration (e.g. high congestion costs, high land and housing prices, pollution, crime etc.) and social integration problems, especially in capital cities and metropolitan areas experiencing massive migrant inflows.
- An increasingly uneven urban landscape is also emerging, with clusters of robust expansion in some capital cities, and areas of stagnant or declining population in other (medium-sized) cities, especially in 'Convergence Regions' in Southern and Eastern countries and in peripheral regions.
- Less developed and rural areas often lack both the infrastructure and the high skilled human capital needed to support knowledge dissemination and innovation. Less developed regions spend less on R&D, produce fewer patents, and have lower percentages of people with a higher education. Physical and human capital shortages deter private investors from investing in in these areas thus reducing opportunities for socioeconomic and employment growth. In addition, in the most peripheral and marginal areas certain services such as schools, health care, transportation or internet access risk

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- falling below the minimum level needed to make these regions attractive for young people, activating a negative circle of population and socio-economic decline
- Regions with a negative net migration rate can be defined as areas of departure or 'sending' regions, while regions with a positive net migration rate as areas of arrival or 'receiving' regions. The classification of EU regions as "sending" or "receiving" is dynamic in nature, since regions can change their status over time. Between 2004 and 2014, 60 regions (17%) switched from receiving to sending, while only 28 (8%) switched from sending to receiving.
- Growing regional socio-economic disparities are becoming a major contributing factor to greater intra-EU youth migration. The economic and financial crisis of 2008-09 and the associated Eurozone crisis have exacerbated these disparities, with dramatically increased youth unemployment levels being a major push factor for highly skilled young migrants. In contrast to previous recessions, the recent crisis hit highly skilled young people (graduates) as well, resulting in increased graduate mobility across the EU.
- Young, highly skilled, and specialised workers generally show higher mobility rates than other groups in the population, and are also more likely to move to regions with a higher level of GDP and incidence of KE as well as from rural to urban regions, in particular to capitals. On average, dynamic urban centres report high positive net migration, with capital cities showing the highest net migration rate. On the contrary, rural and intermediate regions show a negative net migration rate for young people. The economic crisis has increased the out-migration from rural and high unemployment areas, particularly among highly skilled young people, thus reducing the growth potential of these areas, in the absence of targeted policies.
- In receiving regions, young and high skilled immigration brings substantial net contributions to growth, through knowledge flows and local knowledge creation; but it is also associated with increased housing shortage, strains on the welfare system and public services and a possible downward impact on wages. However, in sending regions youth out-migration has a number of negative effects such as brain drain, depopulation, and impoverishment. With no human and financial resources to be invested in good quality education, transport, ICT and health services, these areas are not attractive for young skilled people/families and for KE firms. They also do not attract skilled migrants from outside the EU, but are often only first arrival or transit regions.

Based on these patterns of KE and migration territorial dynamics, four typologies of European regions were identified through a cluster analysis, according to their potential for the KE, as well as their economic and labour market conditions, and population and migration dynamics:

 Cluster 1 - Highly competitive and KE-based regions, with 35 regions, including the largest metropolitan areas in Europe (e.g. London, Paris-Île de France, Région de Bruxelles

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- Capitale, Berlin, Oslo, Stockholm, etc.) and showing the highest and growing values of KE indicators, as well as the best labour market and socio-economic conditions in the EU. These regions showed a strong resilience during the crisis, registering improvements (or very small declines) in all indicators since the mid 2000's.
- Cluster 2 Competitive and KE-related regions, with 54 regions, especially in Northern and Continental countries and some Northern Italian regions. Compared to the previous cluster, these regions have been more negatively affected by the crisis particularly in relation to youth labour market conditions. On average, these regions show an increasing population due to immigration (although to a lower extent than regions in cluster 1) while natural population change (e.g. the difference between birth and death rates) is moderately negative and the old-age dependency ratio is higher compared to the regions in cluster 1.
- Cluster 3 Less competitive regions with potential in the KE, with 110 regions, especially in Mediterranean countries and the UK. These regions present values slightly worse than average for most indicators related to the potential in KE and labour market conditions. However, they show an improvement in KE indicators compared to the precrisis years. They are also characterised by a high and growing old-age dependency ratio and are mostly "receiving" regions (with a positive crude rate of net migration).
- Cluster 4 Less competitive regions with low incidence of KE, including 83 regions, largely in Mediterranean and Eastern European countries. On average, these regions present the lowest values for KE indicators and the worst labour market and socioeconomic conditions. They also have declining population (due to a negative crude rate of net migration and of natural change), and have been severely affected by the economic crisis.

The comparison between these regional clusters before and after the crisis, shows that the crisis has worsened the position of a certain number of regions, while only few improved their ranking. Forty one (41) regions (particularly in Mediterranean countries and the UK) have worsened their position between the pre-crisis (2004-2007) and the post-crisis (2012-2015) periods, moving either from cluster 2 to cluster 3, or from cluster 3 to cluster 4.

A multivariate analysis of the changing relationship between the KE territorial patterns and regional migration shows that the **strength of the relationship between the KE and migration rates has increased after the crisis**: regions with a more developed KE experienced higher net immigration rates following the crisis. It seems that the crisis has, arguably, pushed more highly skilled migrants towards areas with higher standards of living and where the KE is more developed, and thus where the returns to human capital are greater. The economic and financial crisis of 2008-09 and the Eurozone crisis also seem to have modified the impact of other factors on migration, reducing the role of some pull factors, such as GDP per capita, and increasing the role of some push factors, such as the unemployment rate.

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Expected future evolution of employment dynamics and role of the KE

Policy questions

- How are territorial patterns of new employment creation likely to evolve in the future, based on current policy orientation?
- What impact will recent trends have on the future development of Europe's regions?

In order to answer to these policy questions, a scenario analysis was carried out based on (i) the statistical evidence emerging from the quantitative analysis; (ii) an extensive literature review; and (iii) qualitative interviews with country experts who were involved in a quasi-Delphi process.

According to both existing evidence and expert views, by 2025 nearly half of the expected new and replacement vacancies within the EU will be for highly qualified workers who will continue to move across Europe. Income differentials combined with differences in living standards between regions will remain the primary driver of economic migration. Affluent regions will be net migration beneficiaries over peripheral regions, increasing existing regional disparities. Despite some economic convergence, the East to West migration trend will continue, albeit at a slower pace.

On the labour demand side, the so-called 'fourth' industrial revolution (i.e. automation, robotics, artificial intelligence, the Internet of Things) is likely to have major and long-lasting effect on the future structure of employment in general and work organisation (and associated tasks) in particular. Regional disparities in adoption of new technologies and the skill level of the work force will further advance regional differences. In particular, those regions where unskilled labour is relatively abundant are likely to be disproportionately affected by skill-biased technological change. At the same time, on the labour supply side, the European population will shrink and age. Workforce growth will be far behind the previous decade, and in some Eastern, Southern and Central European regions it will even significantly decline. Certain sectors will be particularly exposed to labour shortages (e.g. science, technology, engineering and maths –STEM – and finance).

Educational attainment and the overall supply of highly skilled young people will rise in both relative and absolute terms. Nevertheless, some **mismatch between skills and jobs is likely to persist**, not least because the relatively poor performance of the education and training systems in many EU countries/regions. Highly skilled youth workers will continue to move from rural to urban districts, rapidly and massively expanding metropolitan areas. Young female migrants will continue to move more than men, most often for family and/or employment reasons, leading to low fertility rates in sending regions that, in the long-term, may damage these regions' resilience to meet labour market needs and demographic challenges.

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Spatial hierarchies dominated by the power of large metropolitan areas are more pronounced in the EU-13 and are likely to remain so. Urban centres will house emergent technological hubs with high demand for highly skilled workers.

Established social networks, professional networks and diaspora will still attract new movers trying to select a destination because they support acclimatisation, job-seeking and socialising. Unevenness of proficiency in European languages will remain. Lastly, the '**cultural vitality**' and the degree of diversity of regions will continue to influence the choices of young highly skilled migrants.

Finally, there is currently a high degree of uncertainty on Brexit. The implications of heavily-curtailed movement of labour is likely to have a substantial adverse impact on all regions of the UK, but it will be particularly negative for London (as a leading KE, high-tech and financial services hub) and the UK's science and innovation industries. Meanwhile, the impact of Brexit on the EU is likely to be relatively less pronounced.

Based on this background trends, the two factors identified as the most critical for future trends are:

- a. The continuing impact of the global financial crisis on lagging regions;
- b. Political stability and social attitudes towards migrants.

These two factors were then used to create the following four scenarios.

'Barren Wastelands' scenario: Envisaging a deep, systematic and pervasive recession and accompanying political turbulence, this scenario was deemed more relevant for Mediterranean regions (e.g. Italy) and EU peripheries (e.g. Balkan countries). The likely outcome of this scenario would be the intensification of a 'two-speed' Europe: wealthy cities, regions and countries pitted against quasi-wastelands comprising regions most affected by the economic and financial crisis of 2008-09, with poorer prospects and high debt. Demand for high skilled work would most likely be lower under this scenario, but still present. Historical regional dynamics would persist. Young EU migrants with in-demand skills from better-performing regions may still be selective in their decisions, and look for destinations where they would feel welcomed and have the quality of work and life they want. For example, young highly skilled Spanish or Italian migrants may look to France or Germany as an alternative to a post-Brexit Britain. Particularly acute anti-migrant attitudes could lead to an increase of under-employment of movers in lower skilled roles - in a way, continuing the current trend, especially among EU-13 movers. Any restrictive policies that may be adopted under this scenario would focus on lower skilled migrants who tend to compete with domestic workers and are unlikely to have a major impact on the intra-EU mobility of the highly skilled.

'Hardship and Harmony' scenario: Low or no economic growth, as a result of the continuing impact of the economic and financial crisis of 2008-09 and Eurozone crisis, is considered a plausible outcome in a number of countries (i.e. EE, DE, DK, NL, NO). Overall, experts agreed with the possibility of low or no economic development, given that this is a trend that

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can currently be observed in many parts of Europe. Some experts expected that there would be regional variation in that this scenario was more likely to occur in Northern and Western Europe than Eastern Europe. Moreover, throughout the Mediterranean countries, several elements of this scenario were considered likely, such as slow growth, weak job creation and little or no investment in skills.

'Fortresses of Treasure' scenario: Envisaging positive but uneven job and GDP growth as nations move away from recession. This was considered a likely scenario in which large (transnational) organisations based in prosperous metropolitan centres (e.g. Amsterdam, Berlin) would be particularly attractive to young highly skilled migrants, given the cultural vibrancy of the surroundings and opportunities for wage and career progression. FDI has, indeed, been found to have a positive impact on regional innovation capabilities, as a channel of knowledge spillovers. Other employers would instead experience (severe) difficulties in finding the skills they need, and skills mismatch may intensify, with the UK at particular risk. Under this scenario, even isolated recovery may improve domestic demand: more opportunities at 'home' diminish the power of economic push factors. However, lower mobility could lead to relative 'deskilling' and skills obsolescence of the highly skilled as sending regions may be less able to utilise skills they have retained. Attitudes towards migrants could harden in disaffected areas excluded from growth. However, movement of highly skilled young migrants would not be curtailed by harder internal EU borders. Any immigration policy related intervention - aside from the unknown quantity of the UK post-Brexit - is unlikely to affect highly skilled young EU migrants. Instead, although anti-migrant sentiments would primarily be directed towards lowerskilled movers, wider anti-migrant attitudes may dent confidence and motivation to move among the highly skilled.

'Warmth of 27 Suns (and one moon)' scenario: Implying an inclusive, high growth scenario and skills investments amongst all MSs. This scenario is considered most likely in clusters of more prosperous MSs, which typically collaborate closely (e.g. 'core' regions, Scandinavian states). Yet, positive growth and skills investments may also emerge in some peripheral regions and countries (e.g. Estonia). Conversely, countries that are currently struggling economically are unlikely to experience the same level of intensive growth (e.g. Italy, Greece, and Portugal). This inclusive growth scenario would require substantive political will for the forging of a stronger Union. There would also need to be clear signs of growth in productivity, GDP and wages over the next three to five years, to inspire the level of consumer and investor confidence, which would support the momentum of positive economic change. The scenario would also need effective policies for integrating people into the labour market and effective education and training policies. This scenario is likely to produce very high levels of labour mobility amongst highly skilled young Europeans, predominantly within the EU. While lagging and peripheral regions may suffer, some countries, (e.g. Norway) may find it much harder to recruit the skills they need due to barriers such as geography, weather, language, a compressed wage structure, lower wage progression and a high cost of living. Others, like Estonia, may lose highly skilled young people to other Northern European countries

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that can offer higher wages. As a result, these countries would be unable to grow as fast. However, a clear upward growth trend within Eastern and Southern European countries (reducing the wage gaps with wealthier regions) may reduce high skilled youth migration, allowing such regions to capitalise on their national investment in skills.

All these scenarios seem to be in line with some of the main trends highlighted by the quantitative analysis of current territorial patterns of KE and employment, although the implications vary between the different scenarios.

For example, highly skilled young people will continue to be highly mobile and move from less prosperous and (under)developed regions to more affluent areas where the KE is more developed. However, the future implications for the increased East to West/South to North migration of highly skilled young people vary depending on the specific scenario and on how free they will be to move under each scenario. For example, under the 'The Warmth of 27 Suns (and one Moon)' scenario of inclusive but differentiated growth, country experts anticipated very high levels of labour mobility amongst highly skilled young Europeans. In contrast, under the 'Fortresses of Treasure' scenario, the mobility of highly skilled young migrants would decrease to some degree, while the 'Hardship and Harmony' scenario – associated with sluggish growth – would, according to the experts, have a limited impact on the mobility of highly skilled young people.

Brexit is going to be a major policy development that, under all scenarios, will affect such mobility – albeit with different implications and depending whether the final deal with be for a 'soft' or 'hard' form of Brexit. Whatever the final deal, there is widespread agreement that Brexit and its implications for free movement of labour is likely to have a substantial adverse impact on London and its future as a leading KE region, high-tech and financial services hub and a prime destination of highly qualified EU migrants. A number of sectors that employ both highly and low-skilled workers (as well as medium-skilled ones) are expected to suffer pronounced skills and labour shortages due to Brexit.

In contrast, the rest of the EU is likely to be less adversely affected. Under all scenarios, it is assumed that highly skilled young migrants may choose countries such as France or Germany or new destination areas as an alternative to a post-Brexit Britain. Highly skilled young people may also have more job opportunities in their country/regions of origin. This may be facilitated by EU funding to less prosperous regions for both basic and research infrastructures that can support the development of KE, as the case studies on the North-East Romanian Region, Malopolska and Abruzzo highlight.

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Policy approaches at national and regional level

Policy questions

- What are the key policy lessons for Cohesion Policy?
- What are the opportunities for lagging regions to capitalise on their place-based potential and emigrant skill base?

In order to address these policy questions we carried out a comparative analysis of recent policy approaches adopted at the national and regional level to support the KE and labour mobility, as well as six in depth case studies to assess the specific place-based strategies adopted in regions representative of the different clusters presented above.

Economic development policies at the European, national and regional level show an increased focus on supporting KE sectors and addressing the new patterns of high skilled worker mobility. These policies are largely supported by the European Structural and Investment Funds (ESI Funds).

A Research and Innovation Strategy for Smart Specialisation (the so-called RIS3) is currently a prerequisite in order to receive funding from the European Regional Development Fund (ERDF). All MSs have defined comprehensive plans of actions for the implementation of national and regional Smart Specialisation Strategies based on the consolidation of existing sectoral strengths through investment in key 'enabling technologies', as well as on supporting new innovative industries or activities in collaboration with companies, universities and research organisations.

Most MSs have launched ambitious **strategies to improve their R&D&I and ICT systems**, increasing public spending and providing incentives for private investment. In addition, given the importance of EU funds, some MSs are promoting a greater efficiency in the use of EU funds for research and innovation.

A number of countries are supporting the **circulation of knowledge**, with measures to support students studying abroad, the participation of researchers and experts in interregional and international research programmes, and the regulation of intellectual property rights.

Some measures are also specifically planned to **attract high skilled workers** both from EU and non-EU countries. Few countries are implementing actions to facilitate the labour market and social inclusion of high skilled migrants.

All MSs are also investing in the upgrading of **education levels and KE-related skills** with measures to improve the quality of higher education and training, and increase access to tertiary education and lifelong learning, in some cases with specific measures to support STEM/ICT skills.

National and regional strategies to motivate the return of skilled workers living abroad or to support diaspora centred strategies are instead less widespread. Some Southern

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and Eastern EU countries, characterized by a consistent workers' outflow, are implementing specific strategies either to incentivise the return of (high skilled) emigrants, and /or to create networks involving their high skilled migrants abroad. Very little attention is instead given to other forms of diaspora strategies, e.g. incentives to attract diaspora's financial and/or human resources to support local companies (SMEs) and/ or projects by non-governmental organisations (NGOs), or social infrastructures.

The six in depth regional case studies well illustrate the strategies adopted both in highly competitive and KE-based metropolitan areas (**London and Berlin**), and in less competitive regions with different levels of socio-economic conditions, KE potential and migration patterns according to the regional classification adopted in the study: **Mecklenburg-Vorpommern (DE)**, **Abruzzo (IT)**, **Malopolska (PL)**, and the North-East Region (RO).

All six cases show rather successful KE strategies, strongly based on existing place-based assets, even though the approach adopted has been different, also reflecting the variable intervention capacity of local institutions and stakeholders. These strategies provide useful indications for regional and Cohesion policies.

In four out of six cases (Abruzzo, Molopolska, Berlin, North-East Region of Romania), the adopted approach is based on the provision of **monetary or non-monetary incentives**, such as fiscal deductions, grants, services, or other incentives to attract (high skilled) workers, companies or research centres. **Incentives often support the promotion of clusters between universities and companies**. The regular and close interaction promoted under the 'cluster' scheme is expected to improve cooperation among actors that were not cooperating before.

A second strategy, well represented by the Mecklenburg-Vorpommern strategy for the health and wellness sector, can be referred to as an 'oasis-strategy' insofar as it focuses only on the most successful, vibrant and growing sectors of the region. To achieve this common goal, the sector's stakeholders are incentivised to work together, in order to foster innovation and promote economic development.

A third place-based strategy occurs in the case of very remote areas with rather low potential of attracting resources from abroad. In this case, development strategies can be oriented towards 'building a magnet', i.e. attracting highly skilled workers by exploiting some 'unique' resources of the territory. This is well illustrated by the Abruzzo case study, where the Gran Sasso Science Institute leveraged on the existence of one of the world's top four laboratories of particle physics (housed inside a tunnel formerly built as part of a freeway), and various university-based research groups, to create a centre of excellence attracting students and teachers from Italy and abroad.

A fourth strategy option is **building KE opportunities through urban development.** Examples of this strategy can be found in Berlin, London, and in the city of lasi in Romania (the most important of the North-East Region). These policies provide a physical environment

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facilitating cooperation between science and industry and the perception of opportunities for young professionals to work in innovative businesses in regenerated and/or newly developed areas.

A fifth option, most suitable for well-established KE economies, is **branding**. As an example, the slogan 'the world in one city' has been used by London to win the 2012 Olympic games and more recently, London's Mayor campaign #LondonIsOpen to show that London . After the Brexit referendum - is still aiming to remain open for business and welcoming diversity. Berlin's "poor but sexy" slogan for the city also contributed to Berlin's image as an open and diverse city.

Other policy options aim to steer the inflows of migrants and exploit the skills of emigrants with ad hoc diaspora measures. For examples, the UK government set **selective policies** to steer its high migration flows from non-EU countries, in order to **attract high-skilled students**, **researchers and professionals**. Romania, among the EU countries with the highest out-migration rates, recently tried to exploit its **diaspora**, providing financial incentives for the set-up of non-agricultural businesses in urban areas by Romanian emigrants to encourage return migration.

Key policy lessons for Cohesion Policy and policy implications

The geography of post-crisis employment dynamics and the unbalanced spatial distribution of employment opportunities are having significant territorial impacts with important implications for the EU's future Cohesion Policy. According to recent estimates, at least 60 years will be needed for lagging regions to close half of the current gap with high-tech hubs (Goos et al, 2015).

Growing differences in the performance of local economies and labour markets demand greater attention to the territorial dimension in the EU's growth strategies. EU policies should acknowledge the growing territorial inequality in terms of job and economic development opportunities, and develop diversified growth approaches according to specific territorial features. In lagging and peripheral rural regions there is a need for improved infrastructures and services of general interest, trans-regional and transnational cooperation as well as public-private cooperation to ensure inclusive growth and improved quality of life.

Cohesion Policy might have, and indeed is having, an important role in this respect, as regional specificities need place-based, integrated, multi-fund and multi-sited strategies. A "place-based approach", has been adopted for the current 2014-2020 CP programming period, however, as underlined by Barca in his Keynote speech at the 7th Cohesion Forum held in June 2017, its potential is largely unexploited due to the **lack of strong political commitment** by the European leadership and the constraints preventing the European Commission from fully playing the role of "fair and impartial spectator" required by this approach.

Some **key policy lessons** emerge from the case studies on the patterns and opportunities to attract or retain a high skilled workforce and promote KE sectors.

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The common features of these cases lie in a careful assessment of territorial resources as a basis for setting up specific KE strategies. In addition, other common characteristics include the availability of funding to support development strategies and the capacity of local institutions and actors to define and implement effective place based strategies. Specifically:

- In all the selected case studies, well-recognized universities and research centres
 represent a common contextual factor for the development of KE-related
 strategies, together with a well-trained workforce; education and training policies
 appear to be complementary so as to grow and steer KE-related knowledge sectors.
- Good transport and ICT connections and good environmental and living
 conditions are also among the most common factors. They can represent a preexisting asset or a goal to be achieved by targeted policies and investments: e.g., both
 in the North-East Romanian Region and in Malopolska, large amounts of EU funds
 have been dedicated to building basic infrastructures (airports, highways, etc.).
- All cases show that KE-related strategies have been based on existing assets and
 resources (and sometimes weaknesses) of the territories analysed. This means that
 a 'one-size-fits-all' strategy does not exist; nor can it be recommended to look for one.
 For example:
 - London and Berlin hold an exceptional 'KE-related endowment' acting as a pull factor for high-skilled migrants. The two cities provide outstanding opportunities for education and work. Nevertheless, their remarkable position can be challenged by changes in the political or socio-economic environment: e.g. Brexit in London or rising housing costs and related processes of marginalisation in Berlin. Thus, despite their remarkable position, both cities continue to invest in policies to steer migration flows and support strategic economic sectors, or (as in the case of Berlin) to provide for large urban redevelopment projects.
 - In case of very remote areas (e.g. Abruzzo), development strategies can be based on the exploitation of some 'unique' resource of the territory, or by building an attracting environment attract people from abroad.
- Among the mechanisms underpinning the different strategies identified, the most common is to provide incentives (i.e. funding and other incentives) and/or foster the perception of opportunity of different actors to invest in specific activities (such as, innovation of products and processes).
- In most cases, KE strategies have aimed at fostering cooperation among actors of different types (especially universities and SMEs), through financial incentives (funds) and sometimes technical assistance and networking services provided by dedicated agencies or structures (the 'innovation poles' in Abruzzo) which foster regular interactions among actors.

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Institutional capacity is a crucial factor. All the case studies count on institutions
and stakeholders at the national and/or local level able to develop a growth strategy
based on the individuation and valorisation of existing assets and on multilevel
institutional cooperation. In many cases, regional development agencies or other
local public/public-private bodies have further supported the implementation of such
strategies.

These factors are strongly consistent with the **territorial keys identified in the EU 2020 Territorial Agenda**: promoting polycentric and balanced territorial development; encouraging integrated development in cities, rural and specific region; promoting the territorial integration in cross-border and transnational functional regions; ensuring global competitiveness of the regions based on strong local economies; improving territorial connectivity for individuals, communities and enterprises; and managing and connecting ecological, landscape and cultural values of regions.

Therefore, the policy suggestions for post-2020 CP emerging from the study are the following:

- Increased focus on lagging regions and on employment and social policies, to complement competitive and industrial ones. The creation of the European Fund for Strategic Investments (EFSI) allows for an even stronger focus of post-2020 CP on the new challenges of social and territorial cohesion. This requires a stronger and clear political commitment by all EU institutions and adequate resources. The European Social Pillar is a first step in this respect, and as suggested by Barca CP could support the implementation of the Social Pillar by backing social inclusion projects throughout Europe.
- Support lagging regions in:
 - Valorising existing local knowledge and assets to make places attractive for living (e.g. cultural and natural heritage; or economic, financial, infrastructural, scientific assets; or low cost of living; or cultural and creative context; or local knowledge and craftsmanship; etc.);
 - Providing services and infrastructures of general interest (e.g. healthcare, education and training, transportation, ICT and digitalization) in order to improve accessibility, connectivity and living and economic conditions;
 - Fostering vertical and horizontal cooperation among stakeholders (especially public institutions, universities and SMEs), as well as territories, through incentives, technical assistance, networking or the creation of formal structures (such as the 'innovation poles' in Abruzzo, or the BioConValleyGmbH in Berlin);
 - Adopting 'diaspora strategies' encouraging return migration (as in the North Est region in Romania), and/or incentivising non-returning migrants to invest in the development of their region of origin through economic support (e.g. with remittances, direct investments, diaspora tourism), the creation of knowledge networks and human capital investments, as well as social investments (infrastructures and services).

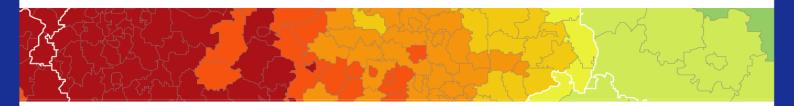
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- Strengthening urban-rural linkages and finding pro-active solutions. A possible way
 is to focus on functional regions and on integrated cross-region and cross border
 cooperation in order to promote spillovers between urban and surrounding areas, and to
 support targeted measures for second tier cities and rural areas.
- Tailoring measures implies also the capacity to find "new" solutions when tackling territorial problems. For example, interventions addressing migration and depopulation could adopt a more pro-active approach, incentivising return migration or adopting diaspora measures to facilitate the investment from high skilled diaspora communities in local development, as well as improving connectivity and cultural/social services (for example, child care) to attract new families. The quality of institutions at the local level is particularly important for place based CP to be effective. In this respect, the introduction in the current programming period of ex ante conditionalities, requiring the presence of appropriate regulatory and policy frameworks, and sufficient administrative/institutional capacity, has acted as an important incentive for the development of comprehensive and targeted strategies and action plans at the regional and local levels. The introduction of new territorial instruments, such as the Integrated Territorial Investment (ITI), and the Community Local Led Development (CLLD), have also strengthened the participation of local stakeholders in decision-making. However, there is still little experience, especially at the regional and local level in lagging regions on how to exploit local assets and potentials through the use of innovative and knowledge based enablers, and often regional strategies show weaknesses in their design and implementation.
- Cohesion Policy governance and implementation mechanisms should therefore better support capacity building among local stakeholders as well as institutional multilevel and inter-regional networking and cooperation The question is how to design a more effective shared governance and management system and to support the strategic and administrative capacity at local and regional level as well as promote the involvement of private investors. Capacity building could be promoted through:
 - A multi-level governance framework, with clearly defined roles among the different levels of governance and public and private stakeholders. The urban regeneration programmes presented in the Berlin and lasi cases, as well as in the Meckelnburg case, provide useful insights in this respect, showing how national, regional and local authorities and actors were effectively involved in the design and implementation of complex integrated strategies.
 - Providing technical assistance to local institutions and stakeholders and supporting the exchange of experiences for institutional learning. Local actors (especially NGOs and SMEs), particularly in peripheral and rural areas often operate on a micro-scale, with poor capacity in terms of project design and management.
 - Improving data collection and availability as well as monitoring and evaluation tools.
 The study has underlined the lack of comparable data at the NUTS 3 level, as well as

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on the annual mobility flows of individuals. This lack of data restricts one's capacity to better understand mobility patterns across European areas, while the lack of monitoring and evaluation tools on the territorial effects of implemented policies restrict institutional learning.

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ESPON 2020 – More information

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