The Geography of New Employment Dynamics in Europe

Executive Summary

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Aims of the study and methodology

The aim of this study is to provide quantitative and qualitative evidence on the territorial patterns of 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 their effects on socio-spatial disparities. We consider this relationship to be a crucial underpinning of Cohesion Policies (CP) within the EU.

A multidisciplinary research approach was adopted, combining sociological and policy analysis approaches, with statistical and econometric modelling and data analysis, and spatial analysis and geographic information system (GIS) modelling. The statistical and spatial analysis of inter-regional and international EU migration and trends in skills distribution and industrial structure was complemented with a qualitative scenario analysis and six in depth regional case studies.

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

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

- **The location patterns of the KE tend to increase territorial polarisation and to affect mobility patterns** as KE activities tend to concentrate in technologically advanced regions and in capital cities, which are also increasingly attractive to young and highly skilled migrants and have shown a greater resilience during the crisis also thanks to spill over effects in other non-KE sectors and occupations. On the contrary, less developed and rural areas often lack both the infrastructure and the high skilled human capital needed to support knowledge dissemination and innovation. 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.

- **Growing regional socio-economic disparities are becoming a major contributing factor to greater intra-EU youth migration.** The global financial crisis of 2008-09 has exacerbated these disparities, with dramatically increased youth unemployment levels being a major push factor for highly skilled young migrants, which show higher mobility rates.

- **Between 2004 and 2014, 60 European regions (17%) switched from receiving** (e.g. registering positive net migration rates) **to sending** (e.g. registering negative net migration rates), **while only 28 (8%) switched from sending to receiving.** 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. Based on these patterns of KE and migration territorial dynamics, four clusters of European regions were identified:

- **Cluster 1 - Highly competitive and KE-based regions**, including the largest metropolitan areas in Europe 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**, 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 while natural population change is moderately negative.

- **Cluster 3 - Less competitive regions with potential in the KE**, 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 pre-crisis years. They are also characterised by a high and growing old-age dependency ratio and are mostly “receiving” regions.

- **Cluster 4 - Less competitive regions with low incidence of KE**, largely in Mediterranean and Eastern European countries. On average, these regions present the lowest values for KE indicators and the worst labour market and socio-economic conditions. They also have declining population and have been severely affected by the economic crisis.

The crisis has worsened the position of a number of regions (particularly in Mediterranean countries and the UK), while only few improved their ranking (particularly in Germany). None of the least competitive regions of Cluster 4 improved its position.

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 global 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.
Expected future evolution of employment dynamics and role of the KE

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 is likely to have major and long-lasting effect on the future structure of employment in general and work organisation in particular. Regional disparities in adoption of new technologies and the skill level of the workforce 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.

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 these background trends, the two factors identified as the most critical for future trends are:

a. The continuing impact of the Great Recession on lagging regions; and

b. Political stability and social attitudes towards migrants.

These two factors were used to create 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 global 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.

‘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). This is a trend that can currently be observed in many parts of Europe. According to some experts 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.

‘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 scenario is likely to produce very high levels of labour mobility amongst highly skilled young Europeans, predominantly within the EU.

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.

According to all the identified scenarios, Brexit is going to be a major policy development that will affect labour mobility – albeit with different implications and depending whether the final deal with be for a ‘soft’ or ‘hard’ form of Brexit. 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 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.

**Policy approaches adopted at national and regional level**

Economic development policies at the European, national and regional level show an increased focus on supporting KE sectors and addressing the new patterns of highly skilled labour 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 strategy) is currently a prerequisite in order to receive funding from the European Regional Development Fund (ERDF) and all MSs have defined comprehensive plans of actions for its implementation at national and regional level based on the consolidation of existing sectoral strengths 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.

The six in depth regional case studies (Mecklenburg-Vorpommern and Berlin DE; Abruzzo -IT; Malopolska- PL; the North-East Region –RO; and London -UK) show rather successful KE strategies, strongly based on existing place-based assets, even though the approach adopted reflects the variable intervention capacity of local institutions and stakeholders. 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 (fiscal deductions, grants, services, etc.) to attract (high skilled) workers, companies or research centres. Incentives often support the promotion of clusters between universities and companies, in order 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, 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. Development strategies are 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, 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 Iasi in Romania. These policies provide a physical environment 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. An example is the slogan used by London to win the 2012 Olympic games and, more recently, London’s Mayor
campaign #LondonIsOpen. Berlin’s “poor but sexy” slogan for the city also contributed to Berlin’s image as an open and diverse city.

Ad hoc diaspora measures have also been implemented in some cases to steer the inflows of migrants and exploit the skills of emigrants. For examples, the UK government set selective immigration policies from non-EU countries, in order to attract high-skilled students, researchers and professionals. Romania, 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.

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 have 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 programming period, however, as underlined by Barca at the 7th Cohesion Forum, its potential is largely unexploited due to the lack of strong political commitment by the European leadership and political constraints.

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. The common features lie in a careful assessment of territorial resources as a basis for setting up specific knowledge economy strategies, exploiting existing local assets and resources (and sometimes weaknesses). This means that a ‘one-size-fits-all’ strategy does not exist; nor can it be recommended.

The availability of funding to support development strategies and the capacity of local institutions and actors to define and implement effective place based strategies are other important factors. Institutional capacity is particularly crucial for developing growth strategies based on the individuation and valorisation of existing assets and on multilevel institutional cooperation.

The policy suggestions for post-2020 Cohesion Policy emerging from the study are to:

- **Support increased focus on lagging regions and on employment and social policies,** to complement competitive and industrial ones. The European Social Pillar is a first step
in this respect, and Cohesion Policy 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;
  - **Providing services and infrastructures of general interest** in order to improve accessibility, connectivity and living and economic conditions;
  - **Fostering vertical and horizontal cooperation among stakeholders** as well as territories, through incentives, technical assistance, networking or the creation of formal structures;
  - **Adopting ‘diaspora strategies’** encouraging return migration and/or incentivising non-returning migrants to invest in the development of their region of origin, through economic support, the creation of knowledge networks and human capital investments, as well as social investments (infrastructures and services).

- **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 spill overs 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.** The introduction of new territorial instruments, such as the Integrated Territorial Investment (ITI), and the Community Local Led Development (CLLD), have 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.

- **Develop Cohesion Policy governance and implementation mechanisms to better support capacity building among local stakeholders as well as institutional multilevel and inter-regional networking and cooperation.**
ESPON 2020 – More information

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