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# The Geography of New Employment Dynamics in Europe

Applied Research

## **Annex to Chapter 2** **The Definition and Geography of the Knowledge Economy**

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# The Geography of New Employment Dynamics in Europe

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# Annex to Chapter 2 - The Definition and Geography of the Knowledge Economy

## 1 Methodology

The aim of the literature review is to scope and summarise previous evidence to complement the review of ESPON research, from both academic and policy-oriented sources, on regional employment dynamics, the knowledge economy in Europe, and Cohesion Policy. On the basis of the literature review we refine the conceptual framework and develop an analytical model to describe the expected relationships between the different factors and variables, and the mechanisms driving the observed patterns, to be tested in the empirical analysis (econometric analysis and case studies).

The review covers the previous definition of the KE, and the indicators previously used to measure it. It also analyses the importance for the economic and social growth of countries.

The literature review also informs the rest of the project work through both the review of data sources, and econometric, statistical, and geographical methods used for the analysis of employment dynamics and regional differences.

The literature review has been conducted using a structured search protocol, with the aim of identifying the relevant research in a clear and replicable way. We have used three different online databases, Emerald, Sage Journals and IngentaConnect, which cover empirical and methodological research in economics, econometrics and the social sciences.

In order to identify relevant works to review we identified a number of keyword combinations to apply to the academic databases, covering the different topics of interest for the four tasks, as detailed above. Table 1.1 below includes the list of keywords selected.

Table 1.1: List of search items

Primary search terms		Secondary search terms		Tertiary search terms	
Europ* OR EU OR Western Balkans OR Cand*	and	Knowledge Economy			
	and	Brain drain			
	and	Cohesion Polic*			
	and	Circular Migration			
	and	Human capital	and	Migra* OR Mobility OR Movement	
	and	Econom*	and	Migra* OR Mobility OR Movement	
	and	Unemploy*	and	Migra* OR Mobility OR Movement	
	and	Lab*OR Employ* OR structural funds	and	Migra* OR Mobility OR Movement	
	and	High skill* OR skill distr*		Migra* OR Mobility OR Movement	
	and	diaspora	and	Differential growth	

Search terms were categorised between primary, secondary and tertiary search terms and used in different combinations, in conjunction with Boolean operators to construct tailored search strings and proceed in a systematic and replicable way.

Search was conducted on title and abstract fields of academic databases, excluding any works pre-dating 2009 to maximise the relevance of the findings, and to take into account the 2008 Global Financial Crisis and the effects on labour mobility.

We extracted the records resulting from all the keywords searches in EndNote format from the online database, and we exported the bibliographic references and the abstracts (where available) in Excel. We identified and removed duplicates within each database.

We obtained around 6,000 documents. After the first review of titles we excluded all works clearly not focused on labour migration or the knowledge economy, through a manual scrutiny of titles and journal fields, obtaining around 4,700 references. These references were then categorised in three main groups: the knowledge economy, labour mobility, and cohesion policy. The categorisation was carried out by searching the title and/or the abstract for knowledge economy, labour mobility, and cohesion.

A final selection was conducted through individual scrutiny, to retain only references strictly related to the topic, and to obtain a database for each category of between 35 and 40 references (see Table 1.2). The complete list of references is reported in Annex I. These references already constituted the basis for the Conceptual framework presented in Chapter 2, which will then be refined and finalised for the subsequent reports.

*Table 1.2: References Selection*

	<b>Keywords</b>	<b>After Categorisation</b>	<b>After Final Selection</b>
Knowledge Economy	Knowledge economy	182	37
Labour Mobility	Labour mobility; brain drain, diaspora	777	44
Cohesion Policy	Cohesion	827	36

## 2 Extended analyses on the definition and geography of the Knowledge Economy; Labour mobility and Diaspora, Territorial cohesion and EU Cohesion policy.

### 2.1 Definition and geography of the Knowledge Economy

In the KIT project (ESPON, 2013b), regions were classified as Technologically-Advanced Regions (TAR), Scientific Regions (SR), and Knowledge networking regions (KNR):

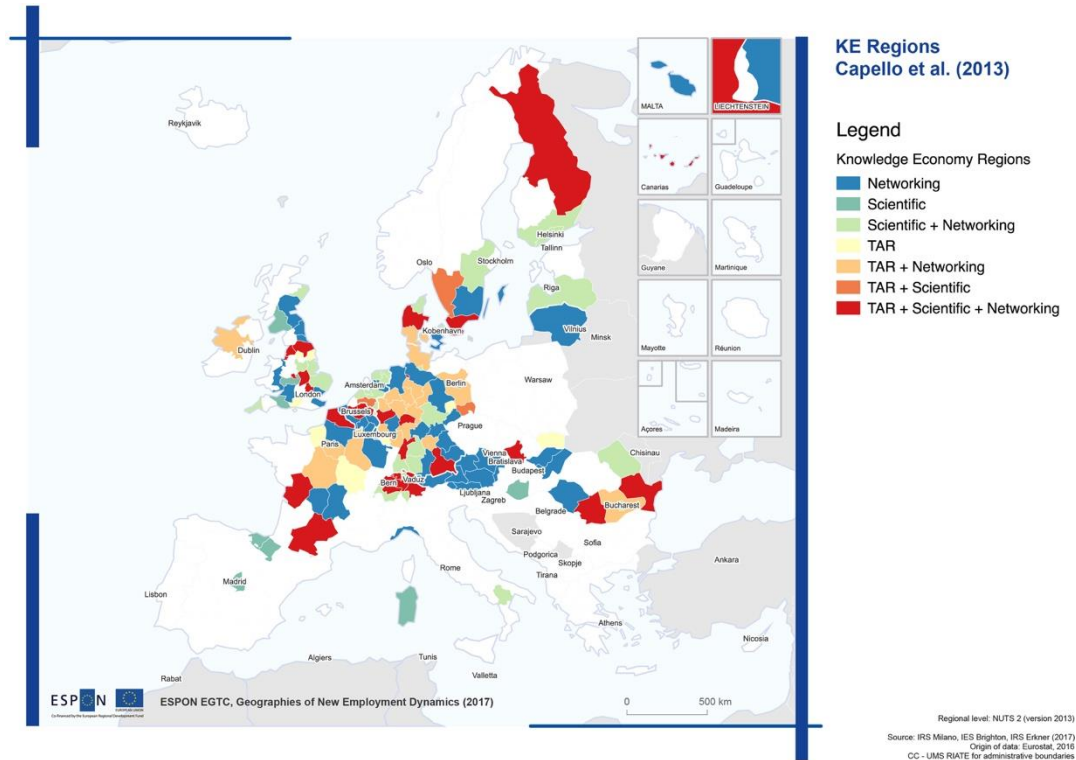
- **Technologically-Advanced Regions (TAR)** are those regions with a simultaneous specialisation in both medium-high tech manufacturing and knowledge-intensive services. The KIT project identifies 71 regions in Europe: 21 in Germany, 13 in the UK, eight in France, five in Belgium, four in Switzerland, three in Sweden, two in Finland and Denmark, and one each for Italy, Norway, Slovenia, and Slovakia.
- **Scientific regions (SR)** are defined as those regions with higher than average research activity and higher than average high-quality human capital. The KIT project clusters 74 'scientific' regions<sup>1</sup>, 30 'research intensive' regions, and 52 'human capital intensive' regions. The majority of the 74 'scientific' regions belong to EU-15. 'Research intensive' regions are concentrated in territories characterised by a manufacturing productive specialisation (i.e. Northern Italy, German regions), while 'human capital intensive' regions are mainly in the North of Europe. Most of the regions, 126, do not present any specialisation in knowledge activities, and these are mainly located in the peripheral territories of Europe.
- **Knowledge networking regions (KNR)** are those regions in a strategic position to access extra-regional ideas in the production of innovation. This knowledge flow can take place through informal, non-intentional, and serendipitous patterns of knowledge interactions between regions located in spatial proximity (henceforth “informal linkages”) and/or through formal, intentional, and conscious relations based on networks or non-spatially mediated mechanisms (“formal linkages”) (Capello et al., 2013). Networking regions are concentrated in the centre of Europe as well as in Scandinavian countries, whereas non-interactive regions mainly belong to the new member states (NMS) and some specific regions in South European countries (such as the whole of Portugal and

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<sup>1</sup> The level of research activities is measured through four indicators: the R&D expenditure per capita; the percentage of employees in R&D; the number of patents per capita for all economic sectors; and the number of patents per capita for the subsample of high-tech sectors. A composite indicator is next calculated as the unweighted average of the re-scaled scores for all indicators within the respective dimension. The human capital stock in a region is measured by means of the following indicators: the percentage of the population employed in the education sector; the share of the population that has attained at least a university degree; and funding per capita in the activities of the 5th Framework Programmes. A composite indicator is next calculated as the unweighted average of the re-scaled scores for all indicators within the respective dimension. Regions showing values greater than zero for both indicators are considered scientific regions, while those showing values less than zero for both indicators are defined as regions with no specialisation in knowledge activities. Regions showing values greater than zero for the human capital indicator but less than zero for research activity are labelled human capital intensive regions and finally regions with values greater than zero for research activity and less than zero for the human capital indicator are classed as research intensive regions.

Greece, most of Spain, except the north-east area, and the south of Italy). This provides evidence of a clear core-periphery pattern in the geographical distribution of the regions that, in one way or another, rely on external sources of knowledge for the development of innovation.

Map 1.1: The Knowledge Economy in Europe



Source: ESPON (2013b)

## 2.2 Labour mobility and Diaspora

### Push factors

Push factors are all those characteristics that cause workers to leave. The most important push factors are generally identified in the literature as the conditions of the labour market, the differential in employment rates between regions and countries, and the institutional environment.

The labour market conditions are one of the most important push factors for migration. In particular, factors such as low wage profiles, high unemployment rates, and low economic development have been identified as key drivers in the decision to relocate (Thaut, 2009). Regional disparities in economic performance are reflected in employment dynamics – even if they not fully explain the mobility pattern. In general, it is widely accepted that regional disparities in employment performance can be persistent, with particular regions consistently performing better or worse due to the deeply entrenched structural characteristics of their economies and labour markets. The recent OECD Regions at Glance series (2013a) reveals



that around 42 per cent of OECD GDP and employment and population growth over the past 15 years are largely due to the 10 per cent of top performing regions (OECD, 2013a). As shown in early work by Castles and Cossack (1972) the integration of foreign workers into the labour market is shaped by political-economic interests that stretch beyond mere economical explanations.

Differentials in employment rates drive people from regions/areas with fewer opportunities towards places with good/higher employment opportunities. In the EU, northern and central European regions show the highest employment rates, particularly in Germany, the Netherlands, Austria, Sweden and the UK, while the lowest are found in the southern regions of Spain and Italy, as well as in one or more regions in Belgium, Hungary, Malta, Poland and Romania (Najman et al., 2013). Observed regional disparities in employment rates seem to be mostly driven by the capacity of regional labour markets to generate new jobs (OECD, 2013a) as well as its regulatory setting. This may activate a vicious circle in depressed high unemployment regions that tend to experience large out-migration flows that are likely to further penalise their socio-economic perspectives, as often those who emigrate are the more skilled and younger cohorts of the working age (Najman et al., 2013).

The results from the Global Governance Programme e-survey<sup>2</sup> have shown that the quality of institutions and the cultural environment depends on how strongly corruption and nepotism are embedded into the institutional setting.

Interestingly, Dennett (2014) has shown that while outflows are significantly determined by disparities in the economic status of countries, and in the labour market perspectives, relatively small changes in the magnitudes of these differences, such as a one decile increase in the inequality rank of countries, can significantly reduce the migratory flows, due to the fundamental importance of economic and labour market factors for the migration decision. Therefore, policies addressing these inequalities might represent a key factor for the reduction of high skill out-migration.

### **Pull factors**

Pull factors are all characteristics of the receiving areas that incentivise workers to relocate, e.g.: economic reasons and factors (standards of living), personal networks (entry points and opportunities), and the social context. Actually, research has shown that these factors have a relatively larger impact on emigration rates than push factors (Docquier and Rapoport, 2012).

Key pull factors are the differences between wages, unemployment rates, and working conditions (Blanchflower and Shadforth, 2009, Dobson, 2009). Indeed, immigrants have been shown to be particularly responsive to expected unemployment rates, to labour market differentials, and the possibility of employment in positions of responsibility (Schündeln, 2014;

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<sup>2</sup> <http://globalgovernanceprogramme.eui.eu/survey/>

Global Governance Programme survey, 2013<sup>3</sup>). Interestingly, highly skilled migrants are attracted to places that present substantial differences between high and low-skill (Docquier and Rapoport, 2012). Also, other authors identify differences between GDP and population size as relevant to explain migration flows (Gilpin et al., 2006)

Furthermore, changing labour dynamics have been identified as an important factor: there has been an increase in foreign labour demand in hosting European regions – mainly related to the increased availability of flexible types of work, and an increasing shortage of native manpower for these jobs (Peixoto, 2009; Thaut, 2009). Additionally, a decline in the ratio of working age population to the overall country's population has increased the demand for immigrant workers (Thaut, 2009). Firms consider foreign high-skilled workers as perfect substitutes for nationals, and are willing to pay the additional costs, such as moving costs, for hiring foreign workers (Epstein et al., 2009).

However, economic reasons are not the only attracting factor; others are:

- Personal and family networks (Dobson, 2009) .
- The cultural and institutional environment, such as meritocracy, and diversity (Verwiebe (2014), the Global Governance Programme of the EUI, 2013).
- The existence of international recruitment agencies and employment websites (Dobson, 2009).
- A high Human Development Index score and average life satisfaction.
- The existence of established exchange programmes that ease the access to institutions and pave the way for later professional migration in certain segments of the labour market

Blanchflower and Shadforth (2009) have shown that the propensity to migrate is more highly correlated with these measures than with GDP. Migrants tend to select their destination based on their skill level (Geis et al., 2011), and are attracted to regions with strong R&D sectors ESPON, 2010a).

Spatial factors are also important for the decision to migrate: migrants tend to select countries that are close to their place of origin, and are particularly likely to move if their country shares a border with an EU country (De Simone and Manchin, 2012, Docquier and Rapoport, 2012, Granato et al., 2015). And, last but not least, immigration policies of the destination countries are an important factor for the destination choice (Vasile, 2014). Studies from the school of the New Economics of Labour Migration (NELM) suggest that migration can act as a risk reduction strategy for households: the decision of an individual to migrate depends on the perception of risk among a larger network of actors. With globalisation, the existence of transnational networks have become conspicuous and, together with the banking sector

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<sup>3</sup> <http://globalgovernanceprogramme.eui.eu/survey/>

liberalisation, the reduction of transport costs, and the dissolution of the regulatory frameworks on the labour markets, increased the labour mobility across Europe.

### **Migrants' characteristics**

Romanians are the largest single national group (20 per cent) from all working-age EU-28/EFTA movers across the EU-28 Member States. They are followed by Polish (14 per cent), Italian (9 per cent), Portuguese (8 per cent) and German (5 per cent) citizens (Canetta et al., 2014).

Generally, young people are geographically more mobile than older groups and, as such, are significantly overrepresented among the movers, often dubbed as 'young drain'. For example, in the EU the share of those aged 20-29 who have moved is about three times the proportion in the general population<sup>4</sup>. This is true for all Member States except the UK: the share of young people who leave the country is usually double the share in the national population. Young people also differ from other migrants with regards to the migration drivers: they are less likely to move for only social or economic reasons (Verwiebe, 2014).

However, as mentioned earlier, there is considerable variation in intra-EU migration (both in terms of inbound and outbound migration). While 0.5 per cent of young people in the EU-28 and EFTA average had left their own country in 2012, five countries had a much higher share of young people leaving: the outflow was 2.9 per cent for Lithuania, 2.2 per cent for Ireland, 1.9 per cent for Latvia and 1.7 per cent for Iceland (Canetta et al., 2014). In absolute terms, more than 50 per cent of EU-28 citizens aged 15-34 who left their country of citizenship for another EU/EFTA or third country in 2012 came from Poland, Romania or the UK (Canetta et al., 2014). As has been argued, this pattern may have a double demographic cost for the sending country/region/territory: young people of working age leave, raising their children abroad, which, in turn, makes re-settling in the country of origin less likely (European Commission, 2016c). What was planned as short-term mobility could turn into a long-term perspective and bear the collective risk of persistent patterns of out-migration from certain regions.

Young people are also more likely to move from rural to urban regions (Styczynska and Zaman, 2013a), in particular to capitals (ESPON, 2010a; Lennert et al., 2010). Better educational infrastructures in urban areas push many young people to leave rural areas. Recent estimates of interregional migration flows in Europe have been proposed using a spatial interaction modelling framework (Dennett and Willson, 2013). The estimates show the importance of the 'capital city effect', although it is not universal for all origins and destinations. However, the migration flows are not always directed to urban centres: intermediate and rural regions have a positive migration inflow of elderly nationals (Styczynska and Zaman, 2013a). As it has been argued, this points to the urbanisation of young people (aged 15-40) and the peri- or counter-urbanisation of higher age groups. The

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<sup>4</sup>[http://ec.europa.eu/eurostat/statistics-explained/index.php/Migration\\_and\\_migrant\\_population\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Migration_and_migrant_population_statistics)

only exception is Italy, where peri-urbanisation is observed for all age groups (van der Gaag et al., 2012, Styczynska and Zaman, 2013a). Therefore, the experience of the regions can be defined as 'polarised' (Deas and Hincks, 2013). Here, the analysis of migration patterns is an indicator for ongoing socio-demographic changes on different regional scales. The economic specialisation of certain places could enhance regional socio-economic imbalances through a demographic selection process, with young people moving to areas with higher employment rates and availability of jobs, and older people moving to quieter, rural areas. This is likely to increase future disparities.

The high mobility of young skilled workers is further related to the transnational nature of the labour market for high skilled workers, the transferability of their skills and the fact that high skilled individuals are more prone to look for professional opportunities at an international level. Given the growing importance of the knowledge economy and the global competition for talent and knowledge migrants, the mobility of high skilled and knowledge workers has increased, especially among young people, in IT services, but also in other knowledge-based sectors like finance, health and education, culture and creative industries. Indeed, in many places now data mining jobs for Big Data analysis have become a new, even if precarious, segment of the labour market for the highly skilled. Universities are increasingly competing to attract high profile students and professors, companies are adopting strategies to manage the demand and supply of highly skilled labour (Ahrend, 2012), and countries, regions and cities are also increasingly competing for talent on an international scale.

For instance, in the UK, the majority of EU immigrants are young, relatively well educated, with no dependants, and make few demands on the welfare system (Dobson, 2009), while tending to be highly skilled and specialised (Vasile, 2014). Workers in the knowledge sectors tend to be more mobile than average, due to the higher premiums they receive in their contracts (Englmaier et al., 2014). However, there is also evidence of a trade-off for migrants between likelihood of employment and job quality: in countries where their chance of employment is similar to nationals (such as Spain and Italy), they are penalised in terms of the skills level of jobs (Reyneri and Fullin, 2011). Often, highly skilled migrants end up in low-skill jobs, mainly due to a lack of language skills, they are very mobile in their destination job market, and they tend to look for progression opportunities, not only in economic terms. This has been documented, for instance, for Polish and Lithuanian workers in the UK (Parutis, 2014).

Those who recently migrated are also highly likely to move back to their country of origin: the probability of moving back to the state of origin within a year is 13 per cent, and the probability of moving to another location is 15 per cent (DaVanzo, 1983; Dustmann, 2003).

Immigrants remain more mobile even in their host country: they are more likely to become internal migrants than the native population. This is due to the fact that their migration costs have been estimated to be much lower than for natives (Schündel, 2014). A special group of migrants have been identified as 'back-and-forth' or circular migrants: workers who move

temporarily abroad for seasonal work, and then return to their country of origin (Vasile, 2014). This behaviour has been observed particularly in Eastern Europe, e.g. Poland. The main factors related to the decision to move abroad only temporarily are the high costs of moving with family and relatives, the seasonal characters of some jobs with contracts limited in time, and the disparity in wages and prices (Fihel and Grabowska-Lusinska, 2014). These migrants 'deactivate themselves', i.e. they do not engage in working activities, once they return to their home country, to be able to work abroad when the opportunity arises (Fihel and Grabowska-Lusinska, 2014).

### **Consequences on the context of arrival**

Up to now, little has been known about the implications of these new mobility patterns in terms of EU-wide internal regional disparities. A sound analysis of current intra-EU migration patterns (e.g. by age, gender, education level, region of origin and region of arrival, period of stay) is needed to understand which regions receive population due to which reasons.

Independent of the underlying factors and the highly positive migration rates; skilled migrant inflows have been found to generally be beneficial to the receiving areas, either regions or cities: it increases the world growth rate (Kim et al., 2010), and has a positive correlation with inward investments, since migrants' networks help to reduce transactions costs, reducing contractual and informational barriers (De Simone and Manchin, 2012). Furthermore, recent evidence by Dustmann and Frattini (2014) shows that EU immigrants bring a substantial net contribution to some economies, such as the UK, with higher contributions in terms of taxes paid than benefits and transfers received, while they tend to rely more on the welfare state than natives in other countries, such as Norway (Bratsberg et al., 2014).

Labour mobility trends also affect the size and composition of the working age population across regions. Although population ageing is common to all European regions, EU countries record both growing and declining regions in terms of the size of their working age population, with the latter growing faster in predominantly urban regions than in others (Styczynska and Zaman, 2013a). In the majority of urban regions across the EU, migration (especially of young people aged 15-34) is the main source of this growth. Migration can offset the effects of an ageing population in EU-15 Countries (Dobson, 2009), both increasing output and the pool of tax payers.

However, migration might also have some damaging consequences on the receiving regions as well. For instance, (Dobson, 2009) identified the possible occurrence of housing shortages, constraints on welfare systems, transport and national health systems.

The literature has found very little evidence of a negative impact on wages and unemployment due to migrant inflows (Lemos, 2014), and some studies have found migration to decrease inflation, natural rate of unemployment, and interest rates (Blanchflower and Shadforth, 2009, Dobson, 2009). However, there is some evidence of an increase in the fear of unemployment, which then has a downward impact on earnings (Blanchflower and

Shadforth, 2009). It also changes the structure of the labour market, with an increase in flexible and precarious jobs available (McDowell et al., 2009), and both a crowding out and a race to the bottom effect (Dobson, 2009). Podrecca and Rossini (2015) have shown that the combination of migration flows and foreign direct investments (FDIs) can change the options available to both workers and firms, and can exert a downward pressure on wages as a result.

International migration can also affect interregional migration trends, at least in the UK (Hatton and Tani, 2005): the higher migration is from other countries, the lower the migration rate is from other regions in the country.

### **Consequences on sending regions**

Emigration has been found to have a negative effect on economic growth of the sending regions (ESPON, 2010a), and unskilled migration in particular can be detrimental for the world growth rate (Kim et al, 2010). In terms of the impact on the labour market, emigration causes problems for recruitment and retention in firms (Dobson, 2009; Vasile, 2014), and can exacerbate the structural employment deficit (Vasile, 2014). It has also been linked to labour market shortages, demographic pressures, and a reduction in available skills and 'brain drain' (Thaut, 2009). External recruitment to fill skills gaps does not usually provide the desirable level of professional capacity and qualifications, due to a lack of knowledge of the local language, and this is likely to affect productivity and quality of work (Dayton-Johnson and Pfeiffer, 2009).

Highly skilled workers tend to be more mobile than low skilled ones, and this migration tends to increase difference in regional unemployment rates, as Granato et al. (2015) have shown in the case of Germany. As a consequence, the relative stability of low skilled workers might increase regional disparities and unemployment (Carlsen et al., 2013).

While the immigration of high skilled workers is often regarded as an important positive factor in the development of the knowledge economy (through knowledge flows and local knowledge creation) in the hosting region and country, it may have negative effects on the country of origin when this emigration becomes permanent, resulting in the so-called brain drain effect (see for instance Jałowiecki and Gorzelak (2004) for an analysis of Poland). Potentially, it could become a destabilising force that further contributes to the skill mismatch and the impoverishment of those countries/areas where the outflow of high skilled young people is not compensated by brain circulation or return of skills and remittances (Goldin et al.; 2011, Pritchett, 2006). The outflow of (young) high-skilled migrants may thus have significant long-term implications for a country's economic growth potential and competitiveness (Triandafyllidou and Gropas, 2014). The debate on the role of so called 'brain-drain', i.e. the outflow of highly-skilled workers to countries with better work opportunities, is well documented in the literature, and had already started in the late 1960s. The consequences of the brain drain effect in fields such as medicine are particularly relevant

for less developed countries, resulting in a lack of suitable workers and the concurrent slowing down of regional/country development.

Europe's migration history shows evidence for this more critical view of the effects of brain drain as well: either 'cathedrals in the desert' (centres of knowledge industry in structurally weak environments with no spillover-effects) were created, or the regions of emigration lost their most active and skilled working age population with distorting effects on their whole socio-economic setting. A prominent example for this is southern Italy.

Furthermore, the economic conditions of regions and real wages might be more determined by the unemployment rates in the leading regions, rather than by the local conditions (Brunello et al., 2001). This, together with out-migration flows, might aggravate the labour market situation in regions that are already less developed.

However, sending regions might also partially gain from emigration. Indeed, sending countries can benefit from migration through remittances (Kim et al., 2010; Thaut, 2009), and can obtain relief on the downward pressure on wages, reducing competition and increasing opportunities for those who do not emigrate (Thaut, 2009). Also, short-term emigration can increase the human capital and skill stock (Dobson, 2009), and can favour the access to knowledge networks, in particular through returning migrants (Gibson and McKenzie, 2014).

Policies to cope with the issues underlined are based on two main goals: first, to increase institutional stability and the economy, and second, to encourage return migration after migrants have increased their human capital (Thaut, 2009).

In recent years, there has been a growing attention to the ways the diaspora of high skilled people can support the development of their home country. Boyle and Kitchin (2013) list the different ways by which high skilled emigrants can contribute to their country of origin: from providing economic support either through remittances or direct investments or diaspora tourism; to the creation of knowledge networks and providing support for human capital investments; to social investments in charitable organisations or public goods, that can support vulnerable population; to advocacy and diplomacy. The recognition of this potential contribution has led many out-migration countries to develop specific 'diaspora strategies' to tackle the brain drain issue. The term 'diaspora', once used to define populations that were in danger of violence and physical extinction with a common intellectual or religious centre, e.g. Jews or ethnic minorities, in the past decade has been watered down to include all those living outside their country of origin. The previous main characteristics for the identification of diaspora phenomena, such as dispersion, homeland orientation, boundary maintenance and colonial ties, are no longer relevant for the definition. Indeed, the term is currently used to define people living abroad who organise themselves loosely in communities. These groups are extremely important for the objectives of migration policies, since they often contribute to their countries of origin in various ways, such as through the creation of knowledge networks and remittances.

In conclusion, labour mobility in Europe is affected by a range of factors in both sending and receiving countries, in particular the differences in economic conditions and opportunities, but also by the cultural, institutional, and social environment. The new migration trends show that migrants tend to be young and highly skilled. In particular, young people tend to move either abroad or towards urban centres, while elderly people move towards rural ones for retirement. Highly skilled migrants look for places that can match their skill endowment, and can offer them job and career opportunities. These flows have been shown to be beneficial for the development of the knowledge economy, and even for the receiving countries, even if some issues, such as housing shortages and public services pressures, have been underlined. Conversely, sending countries are more likely to be negatively affected by the outflows of young and high skilled migrants, which can contribute to a further impoverishment of these areas.

## **2.3 Territorial Cohesion and EU Cohesion Policy**

### **Territorial Cohesion**

Territorial cohesion is a multidimensional concept developed within the European Cohesion Policy framework. It refers to the process of reducing existing socio-economic, environmental and territorial disparities and ensuring a more balanced development between and within all regions of the European Union, enabling their inhabitants to take full advantage of their location's assets (European Commission, 2008a)

Although an implicit territorial Cohesion Policy has always been on the agenda (Faludi, 2009), and the territorial dimensions were included in the Amsterdam Treaty in 1997 as an additional dimension of cohesion, it is since the 2000s that territorial cohesion has become an explicit priority in European policy making. The development of a territorial dimension in European policies has been a long process of intergovernmental cooperation in spatial planning (Böhme et al., 2015), starting with the publication in 1999 of the European Spatial Development Perspective (Committee on Spatial Development, 1999), which supported an EU role in spatial planning, reinforced the territorial dimension of EU policies and led to the creation of the European Spatial Planning Observatory Network (ESPON) with the aim of producing territorial data and knowledge (Faludi, 2009). In the mid-2000s the Third Cohesion Report (European Commission, 2004a) discussed some aspects related to territorial imbalances in the EU, and a Territorial Agenda for the European Union (TA) was elaborated in 2004. The concept was then re-launched in the Green Paper on Territorial Cohesion (2008a) and included in the Lisbon Treaty in 2009 as one of the three main pillars of the EU Cohesion Policy. The following Barca Report advocated a 'place-based' integrated approach to the designing of regional development policies (Barca, 2009).



In May 2011, a revised Territorial Agenda 2020<sup>5</sup> underlined the need to include a territorial cohesion focus in the Europe 2020 strategy in order to achieve its smart, sustainable and inclusive growth objectives and to integrate the territorial dimension within different policies. However, the dramatic challenges related to the long lasting effects of the 2008 crisis, border security, and the refugee crisis, reduced the political attention to 'territorial' cohesion in the political debate. According to some commentators (Jouen, 2016), the creation of the European Fund for Strategic Investments (EFSI)<sup>6</sup>, aimed at attracting private capital for investments in strategic projects, should reduce the pressure on Cohesion Funds for investments in competitive areas and support a greater focus on social and territorial cohesion.

The 2004 and the 2007 enlargements considerably widened the development gap between the richest and poorest regions, slowing the path of the regional catching-up process started from the 1980s to the mid-1990s (European Commission, 2004a). Moreover, the economic and financial crisis had a differentiated effect on Europe's regions, weakening social, economic and territorial cohesion within the European Union and within Member States, and further reducing the convergence process (Milio et al., 2014). The recent widening in regional disparities called for a stronger emphasis to be placed on access to services, functional geography, territorial analysis and sustainability, as explicit objectives of cohesion policy.

Within this framework, in the period 2007-2013 territorial cooperation became the third objective of the Cohesion Policy, based on the experience of the Interreg programme in its three (cross-border, trans-national, interregional) strands of cooperation (Celata and Coletti, 2015). This objective has been confirmed in the reformed Cohesion Policy for the programming period 2014-2020, with a specific focus on cooperation and macro-regional strategies. Indeed, the regulation proposed a specific frame for cooperation programmes – European Territorial Cooperation and EGTC - designed for the multi-country context in which cooperation activities take place. The proposed Territorial Agenda of the European Union 2020 also confirms that specific attention be paid to territorial cooperation at external borders and to the experience of European macro-regional strategies.<sup>7</sup> Focus on the coordination of European policies and their territorial impact has been increasing in the last decade. New tools to coordinate policies have been launched, such as Community-Led Local Development (CLLD)<sup>8</sup> and Integrated Territorial Investment (ITI)<sup>9</sup>. At the same time, there are more actions

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<sup>5</sup> Ministers responsible for Spatial Planning and Territorial Development (2011) Territorial Agenda of the European Union 2020, agreed on 19th May 2011 at Gödöllő, Hungary. Available at: [http://www.nweurope.eu/media/1216/territorial\\_agenda\\_2020.pdf](http://www.nweurope.eu/media/1216/territorial_agenda_2020.pdf) (Accessed 10 May 2016).

<sup>6</sup> <http://www.eib.org/efsi/what-is-efsi/index.htm>

<sup>7</sup> [http://www.nweurope.eu/media/1216/territorial\\_agenda\\_2020.pdf](http://www.nweurope.eu/media/1216/territorial_agenda_2020.pdf)

<sup>8</sup> European Commission (2014a).

<sup>9</sup> [http://ec.europa.eu/regional\\_policy/it/information/publications/reports/2015/scenarios-for-integrated-territorial-investments](http://ec.europa.eu/regional_policy/it/information/publications/reports/2015/scenarios-for-integrated-territorial-investments)

at local and regional level designed for a territory-based approach and more integrated development actions (Böhme et al., 2015).

Finally, although the 2014-2020 reform has introduced a reduction in the overall amount of resources dedicated to less developed regions, the new regulations have enforced a stronger alignment between the strategies of EU co-funded regional development programmes and the growth priorities of the EU strategy Europe 2020 (European Commission, 2010e)

As a spatial principle, territorial cohesion is a comprehensive and holistic concept that crosses various fields of EU policies and ‘extends beyond the notion of economic and social cohesion by both adding to this and reinforcing it’ (European Commission, 2004b, p. 27). It is thus a complex notion, and a commonly agreed and operational definition easily understood and measurable is still lacking despite the academic debate on this concept (Wishlade et al., 2011). Some ESPON projects (3.2 (Biot et al., 2006), and TERCO (Gorzalak et al., 2013)) have attempted to identify its main dimensions and to elaborate a methodology to effectively measure the territorial cohesion of a given territory through appropriate indicators.

Medeiros (2016) analyses the different definitions adopted in the institutional and academic debate. The former relate to the EU Treaties’ policy goals of promoting a more balanced, sustainable, and socially accessible EU territory. The latter (shown in Table 2.1) identify the main dimensions of this concept. The widest definition is that of Medeiros (2014), who claims that territorial cohesion should consider not only the economic and social dimensions of cohesion, ‘but should also cover components associated with the environmental sustainability, the territorial governance/cooperation, and the morphologic polycentricity’ (Medeiros (2016), p.19).

*Table 2.1: Proposed definitions of Territorial Cohesion in the scientific literature*

<b>Source</b>	<b>Definition</b>
Camagni (2008)	Territorial Cohesion may be seen as the territorial dimension of sustainability - beyond the technological, the behavioural and the diplomatic dimensions.
Faludi (2004), (2006), (2007), (2013)	Territorial cohesion also relates to sustainability, good governance, the need to strengthen a more balanced and polycentric urban system, and to encourage territorial cooperation and networking
Molle (2007)	Territorial Cohesion can be seen as a situation whereby people and firms are not unduly handicapped by spatial differences in access to basic services, basic infrastructure and knowledge.
ESPON 2.2.1 (Nordregio et al., 2005)	Territorial cohesion is seen to address the potential, the position and the relative situation of a given geographical entity. It can be analysed and operationalised at various geographical levels or scales, i.e. at the micro, meso or macro levels.
ESPON INTERCO (Gorzalak et al., 2013)	<ul style="list-style-type: none"> <li>- Smart growth in a competitive and polycentric Europe.</li> <li>- Inclusive, balanced development and fair access to services.</li> <li>- Local development conditions and geographical specificities.</li> <li>- Environmental dimension and sustainable development.</li> <li>- Governance and coordination of policies and territorial impacts.</li> </ul>
Medeiros (2016)	Territorial Cohesion is the process of promoting a more cohesive and balanced territory, by: (i) supporting the reduction of socioeconomic territorial imbalances; (ii) promoting environmental sustainability; (iii) reinforcing and improving the territorial cooperation/governance processes; and (iv) reinforcing and establishing a more polycentric urban system.

*Source: Adapted from Medeiros (2016), p. 8.*

The lack of a clear conceptualisation of territorial cohesion is affecting the Cohesion Policy debate. In particular it is difficult to assess whether the EU goal of territorial cohesion is either referred to as an additional EU general goal, which goes beyond social and economic cohesion, or if it can be understood as an expansion of the previous goals, by encompassing and including them in a broader EU goal (Medeiros, 2016). In addition, the lack of a measurable definition of territorial cohesion makes it difficult to identify appropriate indicators and attempts to quantify or measure territorial cohesion trends are scarce (Medeiros, 2016).

More specifically, policies for territorial cohesion should involve:

- The recognition of the territorial context diversity and its specificities.
- The definition of the potential of a region in relation to integrated development strategies and making use of territorial specificities.
- Allowing for an adequate access to infrastructure and services.
- A continuous upgrading of governance processes.

The Cohesion Policy and other EU Programmes have traditionally allocated large amounts of funding to investment in regions identified as falling behind, and in many countries and regions the European Structural Fund has gradually become the main financial source to tackle regional development issues. In particular, the new Member States have greatly benefited from investments made through Cohesion Policy.

However, it is important to stress that the objective of territorial cohesion is more than a mere redistribution of funds to the poorest Member States and regions, but rather a coordination of national and regional policies – by formulating guidelines and principles - and common economic policies and financial instruments (Moussis and Wallström, 2008).

### **Cohesion Policy**

The EU Cohesion Policy is ‘a development policy aiming at improving the conditions for sustainable growth and jobs, well-being, and quality of the environment in the EU regions and at strengthening the integration of regional economies’ (European Commission, 2012c). The Cohesion Policy aims to obtain convergence, competitiveness, and cooperation between EU regions, through investment in lagging regions (Dotti, 2015).

The eleven thematic objectives for the period 2014-2020 are strongly linked to the Europe 2020 strategy, as shown in Table 2.2.

Table 2.2: Cohesion Policy thematic objectives

1. Strengthening research, technological development and innovation	5. Promoting climate change adaptation, risk prevention and management	8. Promoting sustainable and quality employment and supporting labour mobility
2. Enhancing access to, and use and quality of, information and communication technologies	6. Preserving and protecting the environment and promoting resource efficiency	9. Promoting social inclusion, combating poverty and any discrimination
3. Enhancing the competitiveness of SMEs	7. Promoting sustainable transport and improving network infrastructures	10. Investing in education, training and lifelong learning
4. Supporting the shift towards a low carbon economy		11. Improving the efficiency of public administration

Source: European Commission (2014k)

The main financing instruments are the European Regional Development Fund (ERDF), the European Social Fund (ESF), and the Cohesion Fund (CF). Each fund supports all Thematic Objectives, but has some main priorities for the allocation of its budget (see Table 2.3). In recent years, cohesion policy has also strengthened urban policy related instruments to support innovative actions<sup>10</sup> and the establishment of an Urban Development Network (UDN, (European Commission, 2014b).

Table 2.3: Cohesion Policy Funds

Fund	Priority topics
ERDF	TOs 1 to 4: Innovation and research, digital agenda, support for SMEs, low-carbon economy and the associated horizontal principles; + cross border cooperation projects
ESF	TOs 8 to 11: Employment, social inclusion and poverty reduction, education and training, improving Pas efficiency
CF	Green growth, sustainable development, and connectivity in MSs with a GDP below 90% of the EU average

Source: adapted from Dijkstra (2014)

The implementation of the policy is based on a multi-level governance structure and on the principle of partnership (Dąbrowski, 2014): the projects need to be realised in a partnership between the EU Commission, the Member States, and the relevant other institutions, such as local governments or private organisations (Batory and Cartwright, 2011).

This policy is one of the most important EU policies, in terms of both public relevance and financial dimensions: it constitutes the main investment tool of the EU, and it has been allocated a total budget of EUR 351.8b for the current programming period, equivalent to 32.5% of the EU budget. It has been especially meant to contribute to European sustainable development, by strengthening the European regions, reducing regional imbalances and promoting territorial cohesion and the coordination of European Union policies (Farole et al., 2011).

<sup>10</sup> A number of the thematic objectives supported by the European Structural and Investment Funds (ESI Funds) have urban-specific investment priorities and require that a minimum of 5 per cent of the ERDF resources allocated to each Member State be invested in the implementation of integrated strategies for sustainable urban development.

## **Other EU programmes addressing labour mobility**

### **EaSI programme and EURES axis**

The Employment and Social Innovation (EaSI) programme, managed directly by the European Commission, is a financing instrument designed to promote high quality and sustainable employment, and combat poverty and social exclusion by means of adequate social protection and improved working conditions.<sup>11</sup> The EaSI programme has among its objectives the promotion of geographical mobility and the development of an open labour market, which are managed under the EURES axis (18 per cent of the total budget).<sup>12</sup> It also aims to strengthen the European job mobility network (EURES) that provides information, guidance and recruitment/placement services to employers and each European citizen wishing to take advantage of freedom of movement for workers.

### **Europass**

In 2003, the European Commission prepared a proposal for a single framework for the transparency of qualifications and competences (Europass<sup>13</sup>), which was adopted by the European Parliament and the Council in December 2004. The aim of Europass is to help citizens communicate their skills and qualifications effectively when looking for a job or training; to help employers understand the skills and qualifications of the workforce; and to help education and training authorities define and communicate the content of curricula.

### **Erasmus +**

The already existing Erasmus programme, promoting the internationalisation of European higher education institutions and individuals, has been continued under the Erasmus+ programme<sup>14</sup>, launched in 2014 with an increased emphasis on quality, impact and accessibility. The programme aims to contribute to the Europe 2020 strategy as well as the aims of ET2020, the EU's strategic framework for education and training and the objectives of the EU Youth Strategy 2010-2018.

The Erasmus Impact Study (Brandenburg et al., 2014) and its follow-up assessments at the level of European regions and countries (CHE Consult, 2016) analysed the effect of student mobility, staff mobility and intensive programmes. At individual level, the study demonstrated the value of student mobility for personal development, career prospects and social life, as well as the value of staff mobility for improving competences and knowledge of good practices. At the institutional level, the study showed that student and staff mobility is instrumental for the internationalisation and modernisation of higher education institutions. This included building new contacts, increasing quality of mobility, improving cooperation with

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<sup>11</sup> <http://ec.europa.eu/social/main.jsp?catId=1081>

<sup>12</sup> <http://ec.europa.eu/social/main.jsp?catId=1083&langId=en>

<sup>13</sup> <https://europass.cedefop.europa.eu/>

<sup>14</sup> [https://ec.europa.eu/programmes/erasmus-plus/about\\_en](https://ec.europa.eu/programmes/erasmus-plus/about_en)

partner institutions and leading to cooperation projects between them, experimenting and developing new methods, increasing quality and relevance of teaching and learning and enhancing internationalisation at home.

### **Youth on the move**

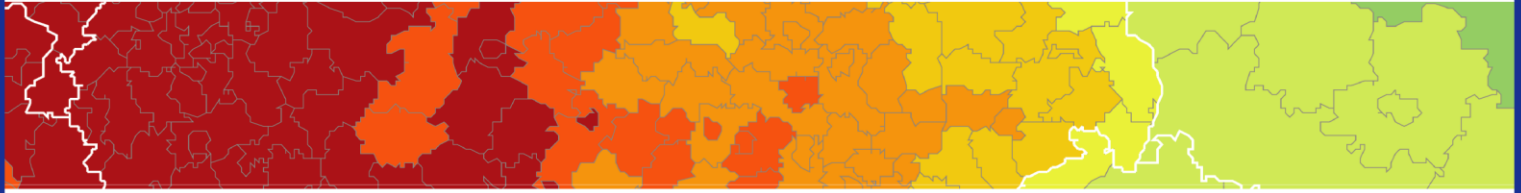
Launched in 2010 as part of the Europe 2020 strategy<sup>15</sup>, it consists of a comprehensive package of policy initiatives on education and employment for young people in Europe, aimed at improving young people's education (by reducing the number of early school leavers and increasing the level of tertiary education attainment) and employability (by reducing youth unemployment and increasing the youth employment rate in line with the wider EU target of achieving a 75 per cent employment rate for the working-age population). These objectives have been addressed by making education and training more relevant to young people's needs; encouraging more of them to study or train in another country, and encouraging Member States to simplify the transition from education to work. Youth on the Move targets and related measures have been taken into account for the adoption of the ESF programmes for 2014-2020.

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<sup>15</sup> COM(2010) 477 final.

### **3 Literature Review fiches**

See Excel File



### **ESPON 2020 – More information**

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