The Geography of New Employment Dynamics in Europe

Applied Research

Annex to Chapter 4
The Evolution of the knowledge economy employment dynamics: a qualitative scenario analysis

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Annex to Chapter 4 - The Evolution of the knowledge economy employment dynamics: a qualitative scenario analysis

The following section presents the approach and findings of the multi-stage scenario-building. This methodology was designed to explore the current and future supply and demand of highly-skilled (young) people within Europe over the next 10 to 15 years as well as employment patterns and migration flows within and between countries, and sociospatial disparities. The methodology involves the following sequential steps:

1. A Rapid Evidence Assessment (REA) to explore the current drives of the supply and demand of young highly-skilled EU migrants;

2. A series of exploratory scoping interviews with country experts to confirm/challenge these trends and explore their relative importance, influence and level of uncertainty in order to identify a shortlist of highly-impactful, highly-uncertain factors;

3. An online consultation with the country expert panel to select two factors from the shortlist of highly-impactful, highly-uncertain factors;

4. The drafting of four future scenarios for the supply and demand of highly skilled young people on the basis of these two factors; and

5. Validation of scenarios through a second and final round of interviews with the country expert panel exploring:
   a. How likely these scenarios might be as possible futures;
   b. What would lead to their emergence;
   c. What would be the implications for each country of expertise and Europe as a whole.
Step One: Literature review

This section presents the summary findings of a Rapid Evidence Assessment (REA). It was conducted to identify a subset of over 110 of the highest-quality academic and grey literature together with key policy documents. Publications provided evidence on the drivers of intra-EU highly-skilled youth mobility/migration in relation to new employment dynamics associated with the knowledge economy. The review focused on literature published post-2009 and studies were mapped using the STEEP (Social, Technological, Environmental, Economic, Political) thematic framework to ensure full coverage of key drivers. This literature review is the first step in the qualitative scenario building methodology. Findings were then discussed during an internal expert workshop which allowed researchers to validate the findings and identify a full suite of factors which influence the phenomenon under study: intra-EU mobility/migration of highly skilled young people, especially in relation to the knowledge economy spatial and employment dynamics.

1.1 Social Drivers/Trends

In general, young people’s choice of destination is influenced by a variety of social and economic factors, e.g. income differentials, better employment opportunities, geographical proximity, common or similar language, historical links, existing migrant networks and opportunities for intra-EU mobility (EUKN, 2013a). The rising educational attainment of younger cohorts together with the massive and rapid expansion of higher education (HE) across Europe over recent decades has resulted in an increasingly higher-skilled population – albeit with clear differences relating to, inter alia, demographic factors such as age, sectors, countries/regions (Riddell et al, 2014; Fries-Tersch and Mabilia, 2015; Cedefop, 2015 and 2016).

This substantially increases the potential pool of intra-EU movers where the higher skilled (young people) – especially among those from the EU-15 – are over-represented - a trend that has intensified following the 2004 and 2007 enlargements as well as the global financial crisis and its aftermath (Fries-Tersch and Mabilia, 2015; Austers, 2015; Cedefop, 2016; EUKN, 2913a). However, this trend is at risk of reversing due to the EU’s demographic ageing and low fertility rates which will result in decreasing youth cohorts – most likely to attend HE – with an average reduction of 23.3% in the 20-24 year age group by 2050 (Ritzen, cited in van Vught, 2009).

The European Commission’s labour mobility data suggests that women make up a greater proportion of post-2004 movers (Fries-Tersch and Mabilia, 2015; European Commission, 2014c). In relation to sending regions, some are characterised by gender selective migration. The gender imbalance that results from the high out-migration of young women in such regions can have a negative effect on the natural population growth and combined with low fertility rates can in the long-term increase the region’s vulnerability (ESPON, 2013b).
Urban centres act as key magnets for migration: in all Member States the direction of intra-EU mobility flow is typically from peripheral to capital city or large metropolitan regions (Eurofound, 2014; ESPON, 2013b). As has been argued, migration tends to reinforce regional disparities within countries with the most striking effects of emigration occurring at the rural level in the form of depopulation of rural areas (de Lima, 2014; EUKN, 2013a and 2013b).

The ESPON scenarios on the expected impact of demographic trends on regional and urban development between 2005 and 2050 – developed as part of the ESPON’s DEMIFER project – confirm the likely continuation of this trend (ESPON, 2010). Migration will continue to play a strong role in increasing regional disparities with affluent regions, including metropolitan areas in Eastern Europe gaining on migration and poor and peripheral regions losing out (ESPON, 2010; EUKN, 2013b).

Language and/or culture proximity are among the main factors that affect the choice of destination country (Eurofound, 2014; EUKN, 2013a; Barslund and Busse, 2014). Similarly, links with diaspora and/or social or family networks in the host country also play a key role. Indeed, there seems to be consistent and robust evidence of the so-called network effects: ‘high net migration in the past encourages/induces further net migration’ (Landesmann and Leitner, 2015; Barslund and Busse, 2014).

Anti-migrant attitudes and prejudices can present a key barrier to cross-border mobility, whilst tolerance and respect for diversity can support migratory tends (Van Gorp, 2009; Musterd and Gritsai, 2012). However, the literature suggests this is not a particularly prevalent issue for the highly skilled.

1.2 Technological Drivers/Trends

A number of technological trends relating, primarily, to growing and pervasive use of information and communication technologies (ICTs), including digital and Internet technologies, wider application of key enabling technologies (KET), including low carbon energy technologies, changes and innovation in technology associated with the organisation of production and work resulting in greater automation of production systems and work (especially routine, low-skilled tasks), emerge from the literature as factors of significant impact (UKCES, 2014; Schwarzwälder and Thode, 2014; IPPR, 2015; Cedefop, 2016).

Firstly, rapid technological change is underpinning the EU’s on-going and long-term structural change towards a knowledge-based economy which is inexorably linked to a growing demand for high-skilled labour (European Commission, 2014i and 2015a). Across all industries, the complexity of jobs is increasing and jobs are becoming more and more knowledge-intensive, while the average job is getting more demanding in terms of skills (Kyndt et al, 2013). This trend which is, inter alia, driven by greater use of and innovation in ICTs, is predicted to continue over the next ten years with an expected increase in demand for
high-skilled workers in Europe (Michaels et al., 2014; Mortensen and Vilella-Vila, 2012; Pierrard and Sneessens, 2008; Song, 2013).

Although the European economy is undergoing an ongoing and long-term structural change towards more knowledge-intensive products and services, such a transformation is neither uniform nor universal across all its sectors and countries/regions/territories. Not only do the latter vary considerably in the extent and way they have embraced the knowledge economy and innovation in their respective economic structures, but also the actual manifestation of the knowledge economy at territorial level, is quite diverse. This is critical given the unequal distribution of digital skills and associated high-tech employment across the EU’s regions which seems to hinder greater convergence of their respective economies. According to recent estimates, ‘it will take Europe’s lagging regions at least 60 years only to close half of the current gap between Europe’s lagging regions and its high-tech hubs.’ (Goos et al., 2015: 14).

Significantly, technological change in the form of automation is now increasingly likely to affect a wider (and more highly skilled) range of work tasks. As has been argued, thanks to technological advances in Machine Learning (ML) and Mobile Robotics (MR) which have allowed a wider range of more complex tasks to be computerised – the potential scope of automation has recently has expanded beyond routine work (Frey and Osborne, 2013). Indeed, according to some estimates, 54% of current jobs across the EU could be computerised (Bowles, 2014).

In general, the increased use of ICTs and knowledge diffusion and sharing has been identified as a ‘mega-trend’ which will change global framework conditions in Europe in the medium term future (Fischer-Kowalski et al., 2012). This has already generated rapidly rising demand for ICT skills, especially advanced digital skills and high-level ICT practitioner skills, in all sectors of the European economy which is set continue in the next decade: demand for workers with specialist digital skills is expected to grow by approximately 4% per year (European Commission cited in Berger and Frey, 2016).

Concerns about the environment and climate change are also acting as a driver for the development and use of new efficient, low-carbon, ‘green’ technologies and innovation with clear employment implications. For example, according to the European Commission, in 2012 the main low-carbon energy fields employed around 9 million people, a figure projected to double by 2030 (European Commission, 2016c).

1.3 Environmental Drivers/Trends

With the increasing impact of climate change being felt in regions across the world, certain countries (e.g. in Asia and Africa) may face bigger risks to health, water supply, agriculture, infrastructure damage and financial and other economic services (Harper, 2012). Crucially, climate change is expected to affect EU Members States as well where an increase in
floods, land degradation and drought could contribute to further intra-EU mobility, as well as from migration from neighbouring countries (European Commission, 2015c).

Gravitational theories of migration argue that migration flows increase with the size of countries and decrease with the distance between them (Beenstock et al, 2015). Indeed, geographical proximity is one of the main factors that influences the choice of destination country (EUKN, 2013a). Regional infrastructure, public transportation and commuting facilities, availability and/or affordability of housing are important factors that can attract or deter mobility. This is also linked to the emergence of ‘mega-regions’ as fundamental economic units and, as a result, as magnets for migration (EUKN, 2013b).

1.4 Economic Drivers/Trends

Understanding the motivation behind the movement of high-skilled young people is important, as economic migration is associated with the efficient allocation of human capital and influences economic growth, although there may be uneven distribution of economic gains across Member States. The free movement of labour can act as a significant factor in achieving labour market equilibrium and addressing several of the lasting effects of the financial crisis that continue to be felt in many EU countries.

For receiving countries, the economic benefits of attracting high-skilled young people are many, including positive fiscal and labour market effects and an inflow of human capital, which increases the long-term growth potential of an economy (EUKN, 2013a and 2013b; Tagger, 2015; Barslund and Busse, 2014). For example, data show that the post-enlargement mobility (2004-2009) produced an increase in the GDP of EU-15 of 1% in the long term; at the same time, EU migrants both positive contribution to the skill mix and fill labour shortages across the EU (Tagger, 2015). Moreover, as ESPON has highlighted, ‘migration can contribute to greater territorial cohesion in Europe by reducing regional disparities, labour shortages, help maintain economic growth in receiving regions and reduce unemployment in sending regions’ (ESPON, 2013b).

On the other hand, sending countries may find themselves suffering a ‘brain drain’ and caught in a damaging cycle, as their rural areas become depopulated and they fail to realise the benefits of investing in the education and training of their young people (Barslund and Busse, 2014). However, sending countries do also experience economic gains, for example, in the form of remittances, which can also bring extra capital.

Perhaps the most significant factor influencing the migration decisions of all individuals is the existence of income differentials with the highest outflows taking place from those countries/regions with relatively low GDP per capita towards those with higher income levels and more employment opportunities (ESPON, 2013b; Eurofound, 2014; Landesmann and Leitner, 2015; EUKN, 2013a; Barslund and Busse, 2014). In general, East-West migration in the EU is motivated mainly by large income differentials and significantly different
employment prospects in that both the income/wage levels and work prospects are deemed better in Western/Northern Europe (EUKN, 2013a).

Another body of literature relating to the migration of high skilled young people within the EU cites levels of unemployment as a significant motivating factor for young people’s decision to move. The global financial crisis of the late 2000s and the ensuing rather anaemic economic recovery or rather stabilisation in most Member States hit young people all over the EU disproportionately hard, though with clear variations between countries (European Commission, 2015d). In contrast to previous recessions, the global financial crisis hit highly skilled young people (graduates) as well, resulting in increased graduate mobility across the EU (Eurofound, 2011a; Eurofound, 2014; European Commission, 2014c).

Indeed, data on immigration by previous country of residence confirms increased outflows from Southern to Northern Europe as a result of the recent financial crisis and ensuing higher unemployment in the South (Fries-Tersch and Mabilia, 2015; Eurofound, 2014; EUKN, 2013a and 2013b). A comparison of 2008 to 2013 confirms the continuation of two previously identified trends, namely (i) a fall in East-West migration and (ii) an increase of South-North migration (Fries-Tersch and Mabilia, 2015).

Levels of unemployment and income differentials tend to act as push factors for young high-skilled migrants; however, it is important to also consider pull factors, such as employer demand for migrant labour in order to address labour/skills shortages (Tagger, 2015; European Commission, 2016f; Eurofound, 2014). Job creation in knowledge-intensive sectors and its subsequent effect on intra-EU mobility and migration is closely related to jobs and skills mismatches within the wider labour market. For example, Bosetti et al (2012 and 2015) investigated the effect of skilled migration on innovation and their empirical analysis found that the pool of high-skilled migrants is associated with higher incidence of knowledge creation.

In general, there is great diversity in knowledge economy development pathways and trajectories of innovation across European regions together with significant variation in spatial patterns and trends for different aspects of the knowledge-based economy (Wintjes and Hollanders, 2009). Despite persistent regional disparities in terms of economic development between the EU-15 and EU-13, there are also indications that EU Member States, in particular Eastern and Southern European countries, are making progress in terms of upgrading the knowledge-intensity of their economies with clear implications for the labour market demand of highly skilled workers (European Commission, 2014a).

According to the literature, in addition to income differentials, generous state transfers and welfare systems or the availability and quality of public services can also, in some instances, encourage migration to particular countries (Landesmann and Leitner, 2015). Indeed, an issue of concern for a number of EU Member States is the possibility for welfare tourism that may be associated with intra-EU mobility (Eurofound, 2014; Barslund and Busse, 2014; EUKN, 2013a and 2013b). However, despite growing concerns of welfare tourism,
there is little evidence to suggest that the provision of welfare acts as an incentive for migration (Eurofound, 2014; Barslund and Busse, 2014; EUKN, 2013a).

Yet, in a number of EU countries, especially among the EU-15, there are growing concerns about the risk of social and wage dumping as a result of increased migration from Eastern European countries which tend to be less affluent and characterised by high(er) unemployment and lower income levels (Eurofound, 2014; EUKN, 2013a and 2013b; Tagger, 2015; Andrijasevic and Sacchetto, 2016).

### 1.5 Political Drivers/Trends

At present, one of the main factors influencing mobility within Europe relates to the current and – especially post-Brexit referendum – likely future configuration of the EU. The current high degree of uncertainty and, in some cases, political instability that the Brexit vote unleashed on both sides of the Channel are likely to affect the future shape of the EU and related policies, including highly skilled mobility. For example, the UK government is currently designing a number of immigration restriction policies, which involve putting in place mobility barriers aimed at controlling the influx of EU migrants (HM Government, 2017).

In general, every enlargement of the EU has produced an increase in migration movement and, consequently, given rise to lively, intense and, sometimes, acrimonious political and public debate about expected levels of intra-EU mobility and undesirable, or even, uncontrollable increases in migration flows between New and Old Member States (EUKN, 2013a; Eurofound, 2014; European Commission, 2014c; Tagger, 2015). This resulted in a number of governments considering measures to limit flows of EU citizens to their countries – or at least restrict access to specific public services and benefits to those who have contributed to the system (Eurofound, 2014; EUKN, 2013a).

Various researchers have analysed the importance of brain circulation and return migration policies (Wang et al, 2015; Kahn and MacGarvie, 2016; Petersen and Puliga, 2016; Weinar, 2014). One key objective of such policies is to either encourage the return of native talent that has fled abroad and/or stem or limit the brain drain that excessive immigration flows – especially of highly skilled migrants – may represent for the country/region of origin (Eurofound, 2014; European Commission, 2016f; Weinar, 2014; Barslund and Busse, 2014; OECD, 2013b; EUKN, 2013b).

Although there is no evidence of overall brain-drain effect across the EU, in the last decade – especially during and after the global financial crisis – the proportion of tertiary educated migrants has increased with obvious implications for the home countries/regions (Tagger, 2015; Barslund and Busse, 2014). Moreover, brain drain tends to affect more not only specific countries/regions but also specific sectors, notably the health sector (Tagger, 2015; EUKN, 2013a; Béorgey et al 2012; Eurofound, 2014).
The assessment and recognition of qualifications is a key element affecting the highly skilled migration within the EU. To this end, European institutions have over time introduced a raft of policies, programmes and instruments such as the European Qualifications Framework (EQF), the Lisbon Recognition Convention (LRC) and the European Credit Transfer and Accumulation System (ECTS) to support the EU-wide recognition and comparability of skills and qualifications and, ultimately, promote student, learner and worker mobility (European Commission, 2015e, 2016d,e,f and 2017b; Eurofound, 2014). Despite such efforts, a perennial barrier to greater intra-EU mobility has been low understanding and recognition of their skills and/or qualifications (European Commission, 2016e and 2016f; Eurofound, 2014).
2 Step Two: Expert scoping interviews

2.1 Country and expert identification

Following the submission and approval by ESPON of the Inception Report, eight Member States (from the submitted shortlist of 10) were selected to provide contextualised focus throughout the scenario-building exercise. This furnishes the research with a complete picture of regional and sectoral variation that can be found within a certain group of Member States (e.g. EU-15 vs. EU-13, Southern Europe vs. Northern Europe, etc.) and/or types of regions and which can then be generalised for others countries/regions with similar characteristics. The eight selected countries reflect distinctive types of skills systems, labour markets, and structure of the economy, with particular focus on the knowledge economy sectors, institutional frameworks, and intra-EU mobility patterns.

The selection framework sought to reflect links between the way knowledge economy is manifested in a particular country/region, new patterns of (youth) migration flows within and between EU countries and socio-spatial disparities, which is a key focus of this project. One key criterion was a group of countries that reflected both high rates of intra-EU emigration/outbound migration/mobility (sending countries/regions) and regions with high rates of immigration/inbound migration/mobility (receiving or destination countries/regions). This feature was considered alongside a suite of other country characteristics. Table 2.1 presents the agreed sample of countries and the associated justification for their inclusion. It presents a list of countries with different profiles not only in terms of intra-EU migration/mobility patterns, but also of size; geographical location; labour market participation rates (usually low in the EU-13 compared to the EU-15); urban as opposed to rural regions; more developed, transition and lagging regions; etc. The aim is to capture the great diversity of country/regional profiles and likely future employment dynamics.

<table>
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<tr>
<th>Countries</th>
<th>Country Justification for Scenario Building</th>
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<tr>
<td>Denmark</td>
<td>Denmark (together with Norway) has received the highest share of EU-28 movers during the past three years (over 20%). This reflects the fact that the importance Denmark (and Norway) as receiving countries of EU-28/EFTA movers has risen within the past ten years. For example, in Denmark, 70% or more of working-age EU-28 migrants came within the past ten years.</td>
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<tr>
<td>Estonia</td>
<td>Estonia is an interesting example of both migrations to other EU countries and return migration. Migration to other countries has been increasing among 15–24-year-olds. However, their emigration plans generally have a more temporary nature, in that they only intend to work abroad for a while and then return to Estonia. The main destination countries for temporary labour mobility in 2012 were Finland with 38.3% of migrants, followed by the UK (13.3%), Austria (6.5%), Norway (6.5%), Sweden (5.1%), and Russia (4.9%). The main host countries which Estonians have returned from are the UK, the Czech Republic, Hungary, Italy, Austria and Germany. About 40% of returnees come from the Czech Republic and the UK.</td>
</tr>
<tr>
<td>Germany</td>
<td>Germany (alongside the UK and Switzerland) is among the top three most popular destination countries for highly educated recent EU-28/EFTA movers. At the same time, alongside France, Poland, Romania and Italy it is also among the main countries of origin of highly educated recent EU-28/EFTA movers. The most important groups of EU migrants to Germany come from Poland, Romania, Bulgaria and Italy. Long-standing traditions of migration from Central and Eastern European (CEE) countries such as Poland and Slovenia have led to the existence of migration networks, while</td>
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Countries | Country Justification for Scenario Building
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**Italy** | Italy is among the main countries of origin of highly educated recent EU-28/EFTA movers. Despite the stable emigration of Italians pre- and post-crisis, the composition of emigrating individuals changed over this period. In particular, emigrating Italians are positively selected in terms of higher education and skills. Moreover, emigration is more likely among Italians who are above 25 years old, suggesting that emigration for study has been replaced by emigration for employment.

**Netherlands** | According to the European Social Survey (ESS), the Netherlands is among the destination countries which have received important migrant flows over the recent decades not only from within but also from outside Europe. However, in contrast with most other destination countries, in the Netherlands recent EU-28 movers are less likely (around -6 p.p.) to be employed when compared with nationals. Among recent active EU-28/EFTA movers from the Czech Republic, the Netherlands, Greece, Italy, Germany, the UK, Spain and France, those with a high education level make up the largest proportion.

**Norway** | Norway has comparatively a high share (70% or more) of working-age EU-28 migrants who arrived within the past ten years. Moreover, according to the ESS, Norway is among the destination countries which have received considerable migrant flows over the recent decades not only from within but also from outside Europe.

**Poland** | Among the CEE countries Poland is by far the largest sending country – indeed, post 2004 accession it became the most important source of migrant workers. It is among the top five countries with the highest rate (6.2%) of active, highly educated individuals as a proportion of its total population who have left within the past ten years. It is also among the top five countries with the highest overall rate (5%) of recent active EU movers.

**UK** | The UK has become a prime destination of European workers. This followed the UK government’s decision in 2004 to open its labour market to mobile workers from new EU Member States in Central and Eastern Europe. Immigrants arriving in the mid-2000s (particularly from the new EU member states) have tended to be younger and better educated than nationals. The fact that the UK’s economy continues to grow reasonably quickly in relation to other European countries together with dominant role in financial services (as well as skills shortages in highly skilled sectors such as engineering, bio/nano and green technology and the National Health Service) and its flexible labour market have all acted as a key pull factor for highly skilled young migrants from the EU. Indeed, the UK has been by far the most popular destination of highly educated recent EU-28/EFTA movers. The widespread use of the English language as a second language also means migrants are attracted to the UK because they have the necessary language skills. Moreover, the fact that large migrant communities (e.g. CY, EL, PL, PT) already exist makes it easier for new migrants to settle. In addition, UK universities attract large numbers of students from the EU who stay and work during and after their studies. The UK hosts a much larger share of EU-28 movers who arrived less than ten years ago.

Once the eight countries were agreed, a total of 40 relevant national experts were identified on the basis of their country-specific expertise in labour market dynamics, skills development and youth migration. Table 2.2 presents the country experts who have agreed to be involved in the scenario building exercise together with their short profiles.
### Table 2.2: List of Selected National Experts

<table>
<thead>
<tr>
<th>Countries</th>
<th>Name of National Expert</th>
<th>Profile of National Expert</th>
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<tbody>
<tr>
<td>Denmark</td>
<td>Professor Bent Greve</td>
<td>Labour, welfare and tax expert with research experience in (i) welfare state and welfare society analysis; (ii) social and labour market policy, including labour market dynamics; (iii) financing the welfare state, including tax and benefits policy; (iv) the EU - especially in relation to welfare policies. As part of the foresight exercise of the EU-wide NEUJOBS project, he contributed to the 2015 Report ‘Green, Pink &amp; Silver - The Future of Labour in Europe’, published by CEPS and looking at the shape, size and character of the labour markets of tomorrow, including employment forecasts both in specific sectors, such as transport, energy and healthcare and for specific groups in the labour force, notably women, the elderly and migrants. He is based at Roskilde University.</td>
</tr>
<tr>
<td>Estonia</td>
<td>Professor Raul Eamets</td>
<td>Raul Eamets is professor of macroeconomics at the University of Tartu. Currently he is Head of the Institute of Economics and Chairman of the Council of EuroCollege at the University of UT. He is also director of the PhD Programme at the faculty of Economics. He has been short-term research visitor at Birkbeck College (London), IZA, CERGE-EI (Prague) and CLS (Aarhus). His main interests are in the area of labour market flexibility; labour market flows; mobility and migration especially in relation to post-2004 East to West migration, return migration policies, the economic impact of migration for both the sending and receiving countries; the role of trade unions in transition countries; education economics; flexicurity; industrial relations; employment protection and employment policies. His publications include articles in Post-communist Studies, European Journal of Industrial Relations, Transfer and Baltic Journal of Economics.</td>
</tr>
<tr>
<td>Germany</td>
<td>Dr Nicola Düll</td>
<td>Dr Nicola Düll is co-founder and managing partner of Economix Research &amp; Consulting. The focus of her research lies in the analysis of labour markets and labour market policies in the EU, the OECD area and emerging economies, inequalities and the functioning of welfare systems in Europe, education and training systems, demographic development and international migration, labour mobility, evaluation of the European structural funds, employment relations and human resources management, local economic and labour market development. She is the German correspondent for the European Employment Policy Observatory (EEPO). From 2012 to 2015 she was a visiting professor at the University of Applied Sciences Munich and adjunct lecturer at the Munich School of Political Sciences. From 2008-2010 she worked as a senior economist at the OECD and from 1996 to 1999 at the Munich-based Institute for Economic Research (Ifo - Institut für Wirtschaftsforschung).</td>
</tr>
<tr>
<td>Italy</td>
<td>Professor Claudio Lucifora</td>
<td>Labour market and skills expert. He was the national expert for Italy for the Cedefop’s low-skilled adults project which involved a scenario building exercise and is also one of the Scientific Advisors for the ESPON project. He is Professor of Economics at the Università Cattolica in Milan and his research interests are in the field of labour economics, education and health economics. He has published books on skills and the phenomenon of low-skilledness, low pay employment, the economics of education and the shadow economy, as well as articles in refereed journals on: trade unions, unemployment and labour market institutions income mobility and</td>
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<th>Countries</th>
<th>Name of National Expert</th>
<th>Profile of National Expert</th>
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<tbody>
<tr>
<td>Netherlands</td>
<td>Professor Marc van der Meer</td>
<td>His research covers the analysis of VET systems and their role in school-to-work transitions, labour markets, social pacts and collective bargaining, labour market reform, labour mobility, European policy, policy learning and organisational innovation. Until 2009, he was Associate Professor at the Amsterdam Institute for Advanced Labour Studies. He is chair of the Netherlands’ Labour Relations Association. He co-authored the July 2014 National background report for the Netherlands as part of the OECD review: Skills beyond School. In September 2012, he was invited to attend as an expert the European High-Level Meeting on Skills Anticipation in Adult Learning, which was held as part of an initiative sponsored by the European Commission and coordinated by the ILO. He is now based at the University of Tilburg’s Research Institute for Flexicurity, Labour Market Dynamics and Social Cohesion (Refl ecT).</td>
</tr>
<tr>
<td>Norway</td>
<td>Dr Christer Hyggen</td>
<td>Dr Christer Hyggen is a Sociologist and a Senior Researcher at the Norwegian Social Research Centre (NOVA) where he works on youth unemployment, youth labour market dynamics, transition from youth to adulthood, social/cultural capital of young people and the processes of marginalization. He is currently appointed Research Coordinator for research on youth unemployment in the Nordic countries by NORDBUK, the Nordic Children’s and Youth Committee funded by the Nordic Council of Ministers. As part of the core team of STYLE, the current European Commission’s 7th Framework Programme’s 4-year research project on youth unemployment in the EU, he is co-leader of Work Package 6 on Youth-related Migration/Mobility between EU-28/EFTA countries.</td>
</tr>
<tr>
<td>Poland</td>
<td>Dr Ewa Slezak</td>
<td>Dr Ewa Slezak is a Reader at the Cracow University of Economics. Her research interests lie in intra-EU mobility and migration – especially high-skilled migration –, the welfare state, social exclusion, ageing society and youth in the labour market. She has participated in a number of research projects, including those co-financed by the European Commission, dealing with information society, informal work, social economy, evaluation and support to the elderly financed under 5th and 7th Framework Programme, INTERREG IIIIC and IVC. She is a member of ESPAnet.</td>
</tr>
<tr>
<td>UK</td>
<td>Kenneth Walsh</td>
<td>National labour market expert for the European Commission’s European Employment Policy Observatory (EEPO). He is a labour economist with over 25 years’ experience of research and consultancy in the fields of employment, labour markets, learning and skills. He specialises in Policy Evaluation, Labour Market Information and Analysis, and European Labour Market Policy. He is the Head of the UK-based Training and Employment Research Network (TERN)</td>
</tr>
</tbody>
</table>

### 2.2 Approach

The findings from the literature review were distilled into five sets of drivers/trends, further explored and clarified in an internal workshop with the project team. The factors set out in Table 2.3 formed the basis of a semi-structured discussion guide for the telephone interviews with the eight country experts. The interviews looked to cover the main social, technological, economic,
environmental and political trends which are likely to have a significant impact on current and likely future new employment dynamics and job creation, first in general high-level terms and then unpacking some key issues. They also explored the potential likelihood of the development of these trends.

Table 2.3: STEEP factors for first round of interviews

<table>
<thead>
<tr>
<th>Domain</th>
<th>Drivers/Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Educational attainment; gendered migration patterns; networks and diaspora;</td>
</tr>
<tr>
<td></td>
<td>dependency ratio and population ageing; language proficiency; attitudes</td>
</tr>
<tr>
<td></td>
<td>towards migrants and migration; rural to urban migration trends; cultural</td>
</tr>
<tr>
<td></td>
<td>vitality.</td>
</tr>
<tr>
<td>Technological</td>
<td>Rapid technological development; established technological hubs; extent of</td>
</tr>
<tr>
<td></td>
<td>innovation; quality connectivity; e-learning technologies; automation.</td>
</tr>
<tr>
<td>Environmental</td>
<td>Climate change; awareness of and support for environmental issues; demand</td>
</tr>
<tr>
<td></td>
<td>for green skills; growth of agrotourism and bio/organic business; continental</td>
</tr>
<tr>
<td></td>
<td>positioning of countries/regions; proximity of labour markets and business;</td>
</tr>
<tr>
<td></td>
<td>proximity to travel hubs.</td>
</tr>
<tr>
<td>Economic</td>
<td>Income differentials; levels of employment/unemployment; jobs and skills</td>
</tr>
<tr>
<td></td>
<td>mismatch; job creation in knowledge-intensive sectors; smart specialization;</td>
</tr>
<tr>
<td></td>
<td>job quality; mechanisms of finding work and moving jobs; tax laws and</td>
</tr>
<tr>
<td></td>
<td>business regulation; employment protection legislation (EPL); access to public</td>
</tr>
<tr>
<td></td>
<td>services; structures of national/regional economies; remittances; continuing</td>
</tr>
<tr>
<td></td>
<td>impact of the global financial crisis and Eurozone crisis; globalization.</td>
</tr>
<tr>
<td>Political</td>
<td>Configuration of the EU; the innovation agenda; workforce development; intra-</td>
</tr>
<tr>
<td></td>
<td>EU skills recognition; demand for cheap labour; historical traditions of</td>
</tr>
<tr>
<td></td>
<td>inwards/outward migration; attractiveness of home migration policies; political</td>
</tr>
<tr>
<td></td>
<td>environmental and discourses.</td>
</tr>
</tbody>
</table>

Interview data was then subject to impact-uncertainty mapping, following the approach of Störmer et al (2014). This involves ascertaining and then plotting the relative levels of uncertainty about the development of drivers against the size of impact that those drivers may have.

2.3 Findings

The increased intra-EU labour mobility over the past 15 years combined with a number of other major developments such as the global financial crisis and its aftermath combined with tight fiscal consolidation and ensuing (adverse) impact on public services in many EU countries elevated the issue of free movement of labour at the top of the EU policy agenda, not just at the European level but also in several Member States. That said, compared to lower-skilled migrants, asylum seekers and refugees or non-EU migrants, anti-migrant sentiments are relatively infrequently directed towards highly-skilled European migrants. It is expected that any increase in protectionism, tariffs or quotas would have a relatively small effect on this cohort, if at all.

Both the 2004 and 2007 enlargements – but especially the former – together with the global financial crisis and its aftermath increased intra-EU mobility: while prior to the crisis the dominant migration pattern was from East to West, as result of the recent financial crisis and ensuing higher unemployment in the South, there is also now increased migration from South to North. However, there are signs that East-West migration is falling or at least stabilising. For
example, although the number of Polish migrants living in another EU country is still relatively high, it is not growing – an indication that Polish migration has entered a new, ‘mature’ phase. At the same time, reflecting improved domestic economic conditions there has been increased return migration to both Estonia and Poland.

Certain drivers of highly-skilled youth migration have significant impact, but their future development is also fairly certain and stable. For example, language proficiency significantly shapes the destinations of young migrants. Languages which are more widely spoken or ‘easier’ to learn – notably English – create a bigger pull, whilst those which are less prominent and deemed ‘harder to learn’ (e.g. Danish, Norwegian) can dampen the level of incoming migration since the number of migrants proficient in these languages is limited. For example, it is not by accident that, until the Brexit referendum, the UK had become a top destination country for EU migrants, attracting over one-third of recent activity. At the same time, common or similar language is one of the main factors that affect the choice of destination country, as exemplified by high migration flows, for example, between Estonia and Finland.

Similarly, the level of cultural proximity and/or vibrancy in regions is a clear and critical pull for this cohort who tends to gravitate towards urban areas with many opportunities for social activities. This urban-rural split combined with declining rural and growing urban populations is set to continue. Ageing populations are a feature across Member States and, whilst some national experts interviewed for the scenarios feel that East-West migration is slowing, it is expected to remain at a certain level and, therefore, leave Western regions better equipped to handle demographic challenges. Peripheral, rural and post-industrial regions are likely to continue to suffer from the demographic ageing and declining populations. In contrast, the capital region effect, i.e. the pull effect associated with the increased employment opportunities found in capitals and some of their surrounding regions is set to continue.

There are furthermore a number of regional-specific dynamics emerging which influence how the phenomenon of intra-EU high-skilled (youth) mobility associated with the manifestation of the knowledge economy is played out ‘on the ground’. For example, there were clear differences associated with a country/region’s technological innovation potential, with the Netherlands and Estonia presenting vibrant fora for technological development, whilst in Italy there is a shortfall of financial investment, stunting expansion and progress in relation to knowledge economy sectors. Similarly, it was felt by the experts consulted that, amongst Nordic regions, a particular negative impact of travel infrastructure was manifested through the rather insufficient links between culturally vibrant city regions where jobs are concentrated and remote/rural ones with fewer job opportunities.

In general, it appears there are a sub-set of factors which may have a significant influence over the shape of highly-skilled youth migration in years to come, and which have an uncertain development trajectory. These five highly-impactful, highly-uncertain factors comprise:
• Continuing impact of the global financial crisis on lagging regions (including levels of unemployment/inactivity, precarious employment and/or under-employment, wages, etc.) resulting in growing (regional) disparities;
• Political (in)stability of countries/regions and the rise in support for far-right and/or populist parties, some of which express strong anti-EU and/or anti-migration as well as more protectionist (as opposed to free trade) sentiments;
• The future development of Cohesion Policy;
• Stability of the EU and its likely future configuration;
• Implications of Brexit.
3 Step Three: Online consultation and scenario development

3.1 Approach

An online survey was built and administered to eight country experts to identify which of the above shortlist of highly-impactful, highly-uncertain factors and trends that can be considered as the most important, and on the basis of which the qualitative alternative scenarios of supply and demand will be developed. Based on the methodology used for this scenario building exercise, highly certain factors were deliberately excluded, such as those relating to demographic (e.g. demographic ageing) and technological factors (e.g. rapid technological change in the form of the ‘fourth’ industrial revolution linked to further automation, robotics and artificial intelligence as well as the ‘Internet of things’). These factors were instead drawn together into an overarching ‘background story’ which can be taken as describing a relatively predictable and expected trajectory which cuts across all four scenarios.

In the online survey, country experts were asked to distribute a total of 15 points across the five highly-impactful, highly-uncertain factors identified through the first round in any fashion they deemed most appropriate. Experts were also offered an opportunity to provide some discursive commentary to elaborate on their views.

As shown in Figure 3.1: Scenario Matrix below, the two highest-scoring factors identified were used as axes of the scenario matrix to help the research team develop four different scenarios for the future supply and demand of highly skilled young migrants in Europe. The scenarios build on all data collected as part of this study(literature review, three rounds of expert interviews, including feedback via the online consultation) and draw on the insight of the project’s scientific advisors with migration expertise. Our approach follows a similar approach to that of Störmer et al (2014). Care was taken to ensure that the scenarios were concise, rich, of similar length and of the same level of detail and description to reduce bias. Both the scenarios (and the background story) were drafted with the principle in mind that each should be clearly understood without requiring laborious engagement with research material whilst, at the same time, aiding discussion and elaboration.

Each scenario paints a picture of how drivers relating to highly skilled intra-EU mobility – especially among young people – may interact. The scenarios outline imagined combinations of developments along key dimensions of uncertainty. They do not attempt to predict developments or even present realistic accounts of possible futures. Instead, they seek to provide the basis for thinking about possible mobility implications of specific developments for young highly-skilled EU migrants. They are described at a broad level of generalisation intended to prompt discussion without foreclosing too many options. A high level of generality is also required because how developments play out is likely to vary between different countries and regions. Each of these has distinctive combinations of skills systems, labour markets, economic models and structures and institutional frameworks. They also profess very different magnitudes, trends, profile/characteristics and causes of highly-skilled youth migration.
3.2 Findings

Table 3.1 details the aggregate findings of the second round of online expert consultation across the eight selected Member States. The two factors identified as the most critical were:

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

Table 3.1: Results of online expert consultation scoring

<table>
<thead>
<tr>
<th>Country</th>
<th>Continuing impact of global financial crisis on lagging regions</th>
<th>Political stability and attitudes towards migrants</th>
<th>Stability of the EU and its current configuration</th>
<th>Brexit</th>
<th>Future development of Cohesion Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>B</td>
<td>-</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>D</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>F</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>H</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>31</td>
<td>22</td>
<td>17</td>
<td>15</td>
</tr>
</tbody>
</table>

These two factors were used to create four scenarios (see Figure 3.1: Scenario Matrix):

1. ‘Barren Wastelands’: A scenario of low and/or uneven growth, where political regimes are highly unstable and anti-migrant attitudes proliferate;
2. ‘Hardship and Harmony’: A scenario of low and/or uneven growth but with relative political stability and consensus and public and policy support of migration;
3. ‘Fortresses of Treasure’: A scenario of high and/or even growth, with a high degree of political instability and distrust and vilification of migrants; and
4. ‘The Warmth of 27 Suns (and one Moon)’: A scenario of high and/or even growth with good political stability and welcoming, positive and inclusive attitudes towards migrants.
Figure 3.1: Scenario Matrix

1. Hardship and Harmony
   - Politically stable, inclusive policies, migrant-inclusive attitudes
   - Low and uneven growth

2. The Warmth of 27 Suns (and one moon)
   - Politically unstable, protectionist policies, anti-migrant attitudes
   - High and evenly-distributed growth

3. Barren Wastelands
   - Low and uneven growth

4. Fortresses of Treasure

Source: IES elaboration - Derived from expert consultation
4 Step Four: Validating and applying scenarios

4.1 Approach

A briefing note was compiled for country experts, comprising all four scenarios, preceded by a ‘background story’. The background story laid out a number of broad trends affecting the supply of and demand for highly-skilled youth migration which can be taken as given for the next 10-15 years in the EU. The trends contained in this background story cut across all four scenarios and act as a backdrop to their likely development. Country experts were given the opportunity to review this ahead of the third and final round of consultation. Final interviews were semi-structured and conducted via telephone. The interviews explored each scenario in turn, exploring the opportunities, threats and implications of each with regards their country specifically and Europe as a whole. More specifically, the conversations with national experts aimed to identify:

- Overall likelihood of each scenario;
- The contextual factors and driving forces that would lead to each scenario emerging in their country of expertise and Europe as a whole;
- The outcomes, consequences and implications of each scenario;
- Which scenario they felt was the most accurate.

In addition, country experts could comment on the content and specification of the scenarios, and suggest amendments and adjustments, where appropriate. These have been reflected in the final scenarios detailed below.

Please note that, despite attempts to contact all experts a number of times and over a number of weeks for the third and final round of interviews, we were, to date, unable to secure input from Poland for the scenario validation and application exercise. The findings are presented with the caveat that this position is missing from analysis.
5 Findings

5.1 The background story

Across Europe, a number of broad trends affecting the supply of and demand for highly-skilled youth migration can be taken as given for the next 10-15 years. They form the backdrop for all four future scenarios presented below.

According to the European Commission, nearly half of both new and replacement vacancies in the EU will require high qualifications by 2025. However, there will be marked country differences in terms of how such employment dynamics will be manifested at national, regional and territorial levels. The economic disparities between Eastern and Western Member States which emerged after the 2004 enlargement will persist, as will differences in unemployment rates between euro area countries, including those in Southern Europe such as Italy. Differences in income and youth employment rates between sending and receiving regions will, therefore, remain the primary driver of economic migration. Young people will continue to move for (interesting, fulfilling) work and, potentially, large increases in relative earnings as well as more and better career progression opportunities.

Affluent regions will be net migration beneficiaries compared to peripheral regions, meaning migration will, on the current trajectory, increase regional disparities. Despite some economic convergence, the East to West migration trend will continue, albeit at a slower pace, reinforcing regional imbalances.

Educational attainment will continue to rise as more young people progress to further and higher education, bolstered by policy efforts focussed on general up-skilling and reduction in under-achievement (and early school leaving). As a result, the gap in levels of education between EU-15 and EU-13 movers will narrow and the overall supply of highly-skilled young people will rise in relative and absolute terms. Nevertheless, some degree of 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.

Young female migrants will continue to move more than men, leading to low fertility rates in sending regions which, in the long-term, may damage these regions’ resilience to meet labour market needs and demographic challenges. Despite policy drives to improve gender balance and representation, there will also be persistent disparities in Knowledge Economy sectors and occupations which are already gender-biased.

The European population will continue to shrink and age: people live longer and fertility rates drop, affecting the dependency ratio. Across the EU, the rate of workforce growth will be far lower than the previous decade. Some Eastern, Southern and Central European regions will experience a serious decline in their labour force as precarious demographic balances combine with high out-migration. Certain sectors will be particularly exposed (e.g. STEM, finance,
healthcare) and there will be a societal shift as young people will, increasingly, work and care for older generations.

Highly-skilled young migrants still move from rural to urban districts, rapidly and massively expanding metropolitan areas. Spatial hierarchies dominated by large metropolitan areas are more pronounced in the EU-13 and are likely to remain so.

Technological hubs will be predominantly urban with a significant demand for highly skilled hires. Partly driven by increasing prominence and innovation of ICTs (e.g. key enabling technologies) and the green economy (e.g. low carbon/renewables, bio/organic), growth in job complexity and knowledge-intensity is expected to continue in the short to medium term, increasing the demand for high-skilled workers in Europe. In general, the so-called ‘fourth’ industrial revolution encompassing technological advances linked to further automation, robotics and artificial intelligence as well as the ‘Internet of things’, is expected to have major and lasting effects on the future structure of employment in general and work organisation (and associated work tasks) in particular. The shift of employment towards knowledge-intensive activities (e.g. in high-tech industries and technology-based services) has been faster in the EU-15 than in the EU-13, but the gap is narrowing. However, employers will find it challenging to recruit these specialisms from the local working age population. Regions where unskilled labour is relatively abundant are likely to be disproportionately adversely affected by skill-biased technological change (SBTC).

Although income and productivity in the EU-13 is slowly catching up with the EU-15, a wide gap will persist in terms of technology, knowledge-intensity, and innovation potential. Differences between NUTS-2 regions are expected to persist reflecting, inter alia, current disparities in adoption of new technologies among regions.

Certain factors will reproduce socio-spatial disparities between regions. Established family hubs, professional networks and diaspora are a draw for new movers trying to select a destination: an existing structure to support migrants’ acclimatisation to their new home, job-seeking and socialising. The unevenness of European language proficiency will remain, biased by the dominance of English and other prominent European languages in school curricula, ‘attractiveness’ of certain languages for adult learners and the perceived difficulty of different languages. As a result, Western and Central European languages will continue to dominate at a greater rate than Eastern or Nordic languages. Lastly, the ‘cultural vitality’ of regions influences the choices of young highly-skilled migrants who invariably choose to move to somewhere with greater and easier access to social activities, a vibrant nightlife and diverse cultural scene.

Finally, there is currently a high degree of uncertainty surround the Brexit vote, including whether the result will be a ‘soft’ or ‘hard’ form of Brexit. The implications for free 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 knowledge economy, high-tech and financial services hub) and the UK’s science and innovation potential.
5.2 Barren Wastelands

The Barren Wastelands scenario assumes that European countries and regions experience poor economic performance as a result of the continuing impact of the global financial crisis and Eurozone crisis. GDP growth is sluggish and highly uneven, job creation stalls and investment in skills is greatly reduced. National and regional populations experience intense economic inequality and wealth polarisation. The scarce opportunities that exist are concentrated in wealthy metropolitan centres and regions which have historically attracted human capital. Although weak economic performance is widespread, it is much more severe in poorer regions. In particularly, economically ‘weaker’ regions exhibit high unemployment coupled with low labour force participation and labour demand. However, regional cohesion policy interventions mitigate intensifying disparities far beyond 2017 levels.

Political instability, protectionism and isolationism abounds, meaning that policies and legislation are characterised by ad-hoc, knee-jerk reactions, driven more by populist (most likely, anti-migrant) sentiment. Anti-migrant attitudes harden as migrants are blamed for strains to public services, housing shortage, labour market competition and depressed wages. Persistent unemployment, discrimination and poverty are linked to wider social unrest where minority and migrant groups are typical targets. Where possible, countries pursue protectionist policies for their domestic labour force and actively restrict immigration, leaving employers short of the required labour and skills, less competitive and, in some cases, seeking to re-locate. A lack of political leadership and growing inequalities has created a political climate detrimental to the free movement of labour within the European Union, with restrictions to mobility, greater immigration and border control. Stricter limits are placed on access to welfare for EU citizens living and working in other Member States. Common rules for labour mobility and access to regulated professions across the EU-27 are harder to agree, meaning free movement of workers and services is not fully guaranteed.

International experience and qualifications are devalued in favour of recruitment from the local labour market. However, with little investment in skills, employers in knowledge economy sectors find it hard to locate the right people domestically. Demand for highly skilled young people persists at a restricted, skills-based level. Key sectors of the economy decline as global competition for highly skilled workers, coupled with the political climate, means skilled, young people are less willing to move to places where they feel unwelcome and unable to carve out a long-term future.
Overall likelihood of the scenario

The majority of country experts (DE, DK, EE, NL, NO, PL, UK) thought the likelihood of the ‘Barren Wastelands’ scenario was very low, probably the least likely of all four scenarios, or as unlikely as ‘The Warmth of 27 Suns (and One Moon)’. The exception was Italy, where the current high level of uncertainty and change together with a precarious economic situation made the scenario a possibility. Experts were particularly doubtful whether a deep, systemic and pervasive recession of the magnitude of the global financial crisis would emerge uniformly across Europe over the next 10 to 15 years.

In countries such as the UK, the Netherlands, Denmark, Norway and Germany – Western and Northern regions which have enjoyed relative economic success and better post-recession buoyancy – the scenario was felt particularly unlikely. It was deemed less so for poorer-faring Mediterranean regions such as Italy and peripheral counties surround the EU, such as the Balkan states. In this respect, some experts feared that a ‘two-speed’ Europe could be taking shape – with high growth in some core countries and only sluggish growth in the EU periphery. Therefore, lagging regions could experience many of the dynamics depicted in this scenario and elements of a highly negative future could emerge. However, experts believed that wealthy hubs, cities and regions have been protected against the harshest impact of the global financial crisis and so would likely remain prosperous even under the extreme levels of economic deprivation forecast by such a scenario. In contrast, Southern regions (i.e. Italy) and Baltic States (i.e. Estonia) as well as some Balkan States which have not had the same level of post-recession growth were felt to be more vulnerable to the negative economic implications of a ‘Barren Wastelands’ scenario.

Further, the extent of political turbulence suggested by the scenario was questioned by some experts. One highlighted that more affluent regions in Northern and Western EU Member States have relatively high living standards, which limits public and political will for systemic change to the status quo at European or national levels level. In other words, there is an general awareness and acceptance (with some exceptions) that mobility of highly-skilled young EU migrants, free trade and globalisation have benefitted Western and Northern EU societies, despite negative repercussions on some groups in the labour market, e.g. the unskilled and the low-skilled. This perception was seen as fairly monolithic and stable. For example, facets of the background story were certain to continue (e.g. caring for an ageing population) and, therefore, countries will require a critical mass of highly-skilled young people (but also lower skilled for the provision for personal care to the elderly). It is unlikely that any individual EU Member State can meet this demand for a large number of healthcare workers from their local working age population.

Country experts also commented that the emergence and popularity of right-wing, anti-migrant rhetoric, so prevalent throughout 2016 and the earlier part of 2017, did not translate into political successes in recent elections (i.e. France, the Netherlands) as had been forecast. As a result, whilst prominent xenophobic and anti-migrant discourses could be a plausible feature of the EU
landscape in 10-15 years, experts did not believe that this could realistically translate into successfully-contested elections and concrete national and supra-national policies that would adversely affect the supply of and demand for highly-skilled young migrants. The exception would be if, the UK aside, other Member States decided to leave the EU and so would no longer necessarily have to subscribe to the principle of free movement of people.

In summary, the likelihood of such a scenario emerging systematically throughout all EU countries and regions was particularly low, and country experts could not foresee a future where highly-skilled youth migration would be curtailed by policy intervention to any considerable extent. Likewise, the generally stability of democratic processes was expected to continue as there had not yet been systematic evidence of populism or anti-migrant discourses leading to systemic change at national levels. Further disparities between lagging regions and wealthier centres leading to sustained pockets of deprivation at the sub-national level was seen as more plausible. However, some (potentially potent) level of anti-migrant discourse associated with highly uneven economic performance between regions was seen as credible.

**Drivers leading to its emergence**

Country experts emphasised that for the ‘Barren Wastelands’ scenario to emerge there would need to be a strong, sustained and all-encompassing economic collapse. This would need to manifest not just in EU peripheries and lagging regions, but also in some of the bigger EU countries. This economic crisis would most likely be global in nature rather than originating from the EU. It could intersect with other socio-political and geo-strategic issues such as conflict in the Middle East. Moreover, within and across Member States, an insurmountable political impasse would need to emerge which prohibits integration, collaboration and cohesion, leading to a complete loss of faith in the European project and widespread criticism of European integration.

Simultaneously, anti-migrant rhetoric would have to both strengthen and gain greater credence and currency among domestic populations. It would need to reach far broader tranches of national populations than it currently does, and convince both right- and left-wing voters that strengthening borders would bring about economic prosperity. This would include social groupings which have traditionally been open to and welcoming of fairly high levels of migration. This would need to be done so effectively that the anti-migrant sentiment translates into conclusive and considerable political gains and election results. Some country experts posited that the issue of terrorism can possibly contribute to such an outcome, although they further commented that concerns which link incoming migration to terrorism have more or less abated, thus diluting the potency of such a factor.

However, some country experts highlighted how some of the necessary conditions which preclude this scenario are a feature of current, contemporary European labour markets and life experiences, although not pervasive enough to lead to a ‘wholesale’ emergence of the ‘Barren Wastelands’ scenario. For example, unequal distribution of wealth and economic inequality can be observed in many sub-national regions (e.g. rural Netherlands, northern UK). Some regional
disparities have produced clear differences between urban and rural election results, leading to the rise of certain political parties and discourses in rural regions which tend to emphasise anti-globalisation/anti-migrant sentiments together with a more protectionist stance. In some respects, there are therefore pockets where anti-migrant attitudes, often associated with economic marginalisation embody experiences reflected in this scenario. Similarly, sluggish recovery, weak job creation and low investment in skills (and R&D as well as knowledge economy sectors) are present in certain Member States e.g. southern Mediterranean countries. Wherein this case, there are now additional financial constraints (e.g. as a result of the EU’s Stability And Growth Pact) such as reaching maximum deficit spending levels and limited flexibility for countries with high sovereign debt. If initial signs of recovery do not materialise, a similar (although perhaps weakened) scenario could emerge in these contexts, if combined with a lot of political instability in lagging regions.

**Implications**

A number of country experts highlighted that the ‘Barren Wastelands’ scenario – at least at a pan-European level – was particularly unlikely. With this caveat, country experts anticipated a high degree of highly-skilled youth labour mobility and far greater job competition across the EU. Demand for high skilled work will not be abolished because of a recession, but it might obviously be at a lower level. Country experts highlighted that only in the most extreme of cases will unemployment of highly-skilled young people increase at a significant level across the EU – it would more likely be concentrated in certain regions (e.g. Italy, Estonia).

Differences between countries and the difficulties in finding work and being welcomed in the core EU regions could drive young highly-skilled migrants towards relatively small, well-functioning economies like Norway, Switzerland and Austria and larger, established economies such as Germany. In addition, traditional migratory routes (e.g. Spain to Germany, Estonia to Finland) would most probably re-emerge in cases where receiving countries offer greater job opportunities. There would also likely be greater movement from lagging regions (e.g. in Italy and Estonia) to third countries such as the United States or Australia. Historical regional differences within countries would also re-emerge and/or intensify, for example the South East of the UK performing better than other regions. Although the UK would be somewhat isolated from the EU post-Brexit, an EU-wide collapse would still damage the UK labour market and skills system.

Choices to migrate would not only be influenced by where job opportunities are. Young EU migrants with in-demand skills from better-performing regions may still be selective in their decision whether and where to move. The description of young Danes was representative of the wider characterisation of young highly-skilled EU migrants: A cohort which values good jobs, stable income, family life, work-life balance, a sense of place and personal freedom. Where possible highly-skilled young EU migrants would not seek jobs in regions where these qualities of life would be at risk. For example, young highly-skilled Spanish or Italian migrants may look to alternative better-performing regions such as France or Germany as an alternative
to a post-Brexit Britain. Some experts also highlighted that one may expect to see greater outflows of highly-skilled young migrants to non-EU countries such as the United States, Canada and Australia, particularly from poorer-performing regions, provided that receiving regions’ immigration regimes can effectively accommodate such migratory inflows.

Country experts felt it was highly unlikely that any policy measures would be introduced in the EU which would significantly curtail the levels of highly-skilled EU youth migration. National governments would likely be much more focused on restricting lower-skilled migration where there is more competition with the local labour force. By dint of both their age and their skill level, highly-skilled young migrants were expected to fare relatively well. They would predominantly remain employable and benefit from an ability to adapt. However, particularly acute anti-migrant attitudes could lead to an increase of under-employment in lower skilled roles – in a way, continuing the current trend, especially among EU-13 movers. This would have negative implications for traditional sending regions which would invest in education only to see these skills move away and then become obsolete due to lack of use. However, such devaluing of skills is unlikely to be very likely for the young highly-skilled, because of their lower labour market vulnerability and highly valued contribution to knowledge economy sectors. Highly-skilled young EU migrants are further protected due to the greater incidence of individual migration for specific career goals/job roles (as opposed to the clustering of lower skilled workers e.g. Polish workers in Norwegian refineries).

### 5.3 Hardship and Harmony

The Hardship and Harmony scenario assumes that European countries and regions experience low or no economic growth as a result of the continuing impact of the global financial crisis and Eurozone crisis. There is weak job creation, and little or no GDP growth or investment in skills. Lagging regions especially struggle to foster economic prosperity. As a result, migratory flows are pulled towards urban centres which house the majority of employment opportunities. However, free movement of people is enshrined as a key driver of future growth and prosperity. Political leaders promote it as a way to kick-start productivity, innovation and growth, address intra-EU skill and job mismatch and maintain public services. There is political stability in Member States, driven by strong leadership and robust economic plans to promote growth, in part, through full labour mobility.

There is neither the political ability nor public appetite to restrict migration. Public confidence in governments’ ability to manage migration is high and the economic net contribution of migrants is clear, particularly in the context of the demands of the EU’s ongoing demographic ageing and growing older population. Particular emphasis is also placed on the contribution of highly-skilled migrants to national economies, innovation and knowledge economy sectors such as high tech sectors (e.g. computers, electronics and aerospace) and knowledge-intensive service sectors, (e.g. education, culture, health).
Highly-skilled migrants, with sought-after expertise, are able to locate work in emergent knowledge economy sectors which face specific skills shortages. There is persistent demand in labour-intensive and/or specialised sectors such as health and social care as well as IT. However, migration patterns are uneven, mirroring existing spatial disparities and economic inequalities within (and between) Member States and regions. Spatial disparities are exacerbated, and worse-performing regions suffer from significant levels of brain drain.

**Overall likelihood of the scenario**

The likelihood of the ‘Hardship and Harmony’ scenario was assessed by the experts as a generally plausible outcome for the EU in the next 10-15 years. In most countries, including Denmark, Germany, Norway, the Netherlands and Estonia, this scenario was considered to be relatively likely, whereas for others, including the UK and Italy, certain aspects of this scenario were considered to be highly unlikely. In the case of Estonia, the scenario was considered to be unlikely for Eastern European countries, where anti-immigrant sentiment is strong. However, the relevant expert believed it to be a likely scenario for Northern and Western European EU Member States.

Overall, many experts agreed with the possibility of low or no economic development that formed part of the Hardship and Harmony scenario (i.e. Denmark, Germany, Norway, Netherlands, Italy). This is a trend already observed in parts of the EU, with many EU Member States experiencing some positive growth albeit at a slow and steady pace and at a muted level. Experts tended to believe that continuing at this rate was more likely. This is, partly, due to the fact that when countries have experienced high levels of economic growth in the past, it is more difficult to sustain this momentum. In addition, an intense contraction or subsequent recession similar to the global financial crisis is unlikely. The UK expert felt that it was implausible to suggest that there would be a slump in terms of economic development across the EU. This reflected the broader view of experts who expected a version of the scenario to be characterised by slow and steady growth and did not necessarily perceive this to be associated with stagnation. Whilst differences in economic development and GDP growth persist, both are picking up and he expected to see modest positive growth over the next 10-15 years across Europe.

Within the context of Italy, and more widely throughout the Mediterranean countries, several of the ‘Hardship and Harmony’ scenario’s elements were considered likely, such as sluggish growth, weak job creation and little or no investment in skills. However, there are signs of recovery from the global financial crisis and Eurozone crisis throughout Southern Europe and there are many indicators that this growth will speed up. In Italy, unemployment is falling, labour market participation is growing and investment is growing, which suggests that, rather than low or no economic growth, stronger economic growth is a possibility for Italy within the next 10-15 years. These signs of recovery are also occurring in other Mediterranean countries, suggesting that economic stagnation is unlikely. However, there is concern over the extent to which this growth is dependent on Italy’s levels of deficit spending. The EU is not willing to allow further
flexibility for countries with high levels of public debt, in which case, the current level of public spending will not be possible in coming years for Italy. As such, it may be that these initial signs of recovery will not materialise in the face of reduced public spending, and Italy, along with other Southern European countries, will experience low or no economic growth in the next 10-15 years.

There was some divergence in opinion with regard to political stability within Europe over the next 10-15 years in relation to the ‘Hardship and Harmony’ scenario. Many felt that the ‘Harmony’ aspect of this scenario was realistic, given that freedom of movement is an essential aspect of the EU and several experts commented that fundamental reform would be required for this to be undermined. However, the Estonian expert felt that it was difficult to reconcile both the ‘Hardship’ and ‘Harmony’ aspects of this scenario occurring simultaneously, as poor economic development is often associated with political instability, whilst the ‘Hardship and Harmony’ scenario assumes that political systems throughout the EU are stable. However, the Dutch expert commented that there is evidence of past trends of low or no economic growth which has occurred without restrictions on migrants being put in place. Therefore, economic stagnation is not necessarily a precursor for political instability and the ‘Hardship and Harmony’ scenario may be plausible. Furthermore, the Norwegian expert felt that political instability and anti-migrant sentiment are not as prominent as we are led to believe by the media and right-wing political discourses. Indeed, he felt this was related to the fact that people are more educated, more inclusive and less fearful of migration than the media portrays.

The expert interviews highlighted that perceptions of political instability differ significantly between Southern/Eastern Europe and Northern/Western Europe. There is instability in Italy, Spain and Greece, meaning that the ‘Harmony’ aspect of this scenario is more unlikely there. Populist anti-migrant sentiment is growing, meaning there may be a tendency ‘to build fortresses’ in regions and countries characterised by political instability – often associated with a stagnant economy, depressed labour market (and wages) and falling living standards. In the case of Italy, it was hard to imagine political leaders agreeing to greater EU integration and towards a two-speed Europe. The Franco-German alliance is no longer the main driver for European reform, as there are other large Eastern European countries, such as Poland, that have different views regarding wider European cohesion. However, given the recent election of Emmanuel Macron in France and some obvious signs of re-invigoration of the French-German close alliance, this is likely to change, especially if Angela Merkel is re-elected in September 2017 – as most polls currently predict. On another note, within the context of Estonia, anti-migrant sentiments are strong and this is the case throughout much of Eastern Europe. These attitudes are firmly entrenched and constitute a legacy of the former Soviet Union where the notion of diversity – ethnic, national, cultural – was not as widespread as in Western Europe. The Estonian expert believed that these attitudes are slowly changing, and these anti-migrant feelings are not shared amongst the liberal and educated population; however, it will be several generations before the Harmony aspect of this scenario is a reality for many Eastern European countries.
Drivers leading to its emergence

Country experts highlighted that for the ‘Hardship and Harmony’ scenario to occur, stable development of the Euro and Eurozone accompanied by stable international development is required. Several experts felt that Europe is already on this path with some muted levels of economic growth and recovery. Furthermore, the majority of experts felt that there was public appetite for EU-wide migration/mobility and a growing awareness that intra-EU migration of the highly-skilled can drive economic prosperity.

Brexit still remains an unknown factor. How this scenario could play out for the UK specifically is very much dependent on the outcome of the Brexit negotiations and the nature of the UK’s relationship with Europe in years to come. If the UK achieves a relationship status with the EU that is similar to that of Norway, i.e. ‘Soft’ Brexit, this scenario will certainly have some negative consequences in terms of economic stagnation. On the other hand, if a so-called ‘Hard Brexit’ occurs, and the UK forges stronger trading links with countries such as Canada, China and the US, the UK may be isolated to an extent from poor economic growth within the EU. However, this presupposes that the international economy remains strong and, in the event that Europe is suffering, this will likely be linked to poorer economic development within the wider international economy. In any case, post-Brexit, the UK economy is expected to take a hit that will be relatively more severe than the EU, although views about its severity, depth, extent and duration vary.

Some experts suspected that in 10-15 years’ time, the UK will still be tied to the EU economy and have strong trading partnerships. In this case, problems affecting the EU will impact on the UK’s own economic development. A strong working relationship between the UK and EU post-Brexit will certainly allow for the ‘Harmony’ aspect of this scenario to develop. In general, for freedom of movement to persist, good understanding and good regulation is required.

Implications

Many of the experts perceived the implications of the ‘Hardship and Harmony’ scenario to be positive and that high-skilled young Europeans will continue to migrate, both within Europe, as well as to countries outside the EU, such as the US and Canada. Young high-skilled Danes will benefit from this scenario, as they will continue to travel and move abroad in order to seek opportunities, as they have been doing for quite some time. It was also expected that, post-Brexit, some high-skilled young Italians, as well as other Southern (and Eastern) Europeans, would leave the UK to return to their countries of origin, or perhaps move to other EU countries, including Germany and France. In the event of the ‘Hardship and Harmony’ scenario occurring, both Denmark and Germany were believed to continue on their current path of slow but steady economic growth and relatively low levels of unemployment. This was critical for countries (e.g. Denmark) whose economies are tightly enmeshed with international trade.

Although this scenario is characterised by poorer economic development, it does not imply the same negative economic outlook as posited by ‘Barren Wastelands’. Experts generally felt that
the scenario would, therefore, not particularly impact the ability of high-skilled individuals to migrate. For example, the Dutch expert emphasised the high demand for high-skilled migrants in the Netherlands, particularly in major cities. Historically, due to skills gaps, demand in larger cities for high-skilled migrants has persisted even through times of uneven or low growth, highlighting the continuing need for these individuals and their (higher) skills sets.

It is difficult to comment on the impact that this scenario could have for the UK, given that there is so much uncertainty regarding Brexit. However, there would presumably be a fall in employment, and a fall in the demand for young people, as well as other age groups.

5.4 Fortresses of Treasure

The Fortresses of Treasure scenario assumes that, on aggregate, European countries and regions have positive job and GDP growth as nations move away from recession. There are some welcome but vulnerable signs of emergent growth in some historically underperforming regions, in part driven by large organisations regaining confidence to invest outside traditional urban centres. However, growth is mainly present in traditional, wealthier centres. Economic recovery is fragile and very patchy. National governments come under persistent pressure to focus on prioritising benefits for their own citizens and addressing existing inequalities and spatial disparities. Freedom of movement of workers is seen as a threat to economic growth by those living outside wealthy and prosperous hubs. Economic arguments stressing the benefits of migration have failed to convince those who continue to experience poverty, disadvantage and poor education levels. Political instability in regions and peripheries is driven by hardened, populist sentiment which has convincingly cast migrants as the root cause of economic hardship and growing inequality in a globalised economy. As a result, countries come under pressure to harness emergent growth and jobs to the benefit of the domestic labour force and control borders.

Governments capitalise on the growth in key knowledge economy sectors, but restrict access to and recruitment in their labour markets as well as training provision and funding to the domestic workforce to improve employment prospects for ‘natives’. With a persistent discourse around tighter immigration control, employers are provided with government-funded incentives to invest in skills. Regional authorities are encouraged to invest in regeneration in order to attract domestic workers to lagging regions.

Life for potential young migrants is relatively comfortable at home and there is less desire to move to a hostile environment (in other regions and/or abroad) where their contribution is not valued. Although international opportunities may still present themselves, some lagging regions in Europe are better able to retain their highly-skilled youth in a context of lower labour mobility. As a result, socio-spatial variance is reduced to some extent and traditionally ‘sending’ regions are better able to capitalise on the skills of their domestic workforce.
Overall likelihood of the scenario

Country experts suggested that economic elements of the ‘Fortresses of Treasure’ scenario are plausible, as current projections suggest that there will be uneven growth in the EU over the next 10-15 years. However, the trends detailed in this scenario were not seen as sustainable in the long-term. The situation would present serious challenges to maintaining a stable and productive workforce to support growth. In other words, if such a scenario emerged, it would most likely be a transitory and unstable phase directly following a period of low or negative growth. It could not continue for any substantial amount of time because the patchy signs of recovery would not withstand the level of isolationism and protectionism associated with this scenario.

The plausibility of the ‘Fortresses of Treasure’ scenario is supported by a probable unequal and asymmetrical distribution of wealth and job opportunities at both the territorial and organisational levels. Larger organisations would most likely be able to particularly benefit from (and foster) such a scenario. They hold the power and money to lobby national governments and sponsor work permits for third country nationals for their own commercial interests, which could lead to patchy, inaccessible pockets of wealth.

Core regions and metropolitan centres are likely to remain the primary location of opportunities and job vacancies which could foster political instability in both the EU peripheries and rural regions. The same disparity could be seen between clusters of European regions such as the Baltics for example where Estonia may grow faster than old Western EU economies and fare better than its neighbours. Political instability would be more prevalent in those areas which struggle to obtain economic growth.

Attitudes towards migrants could certainly harden, most prominently in disaffected areas which may feel excluded from the growth that they observe in neighbouring regions, large cities or within large employers and some better-performing SMEs. Historical trends also play a part, as for example in Estonia, where anti-migrant attitudes are arguably so embedded that it is unlikely they would dissipate in the short- or medium-term.

Country experts highlighted that countries may look to curtail the movement of low-skilled migrants so that these do not compete with the domestic work force. However, it was seen as far more unlikely that highly-skilled young EU migrants’ mobility would be restricted, unless other Member States decide to leave the Union. Firstly, given the primacy of freedom of movement, there would need to be a complete structural and ideological overhaul both within Member States and at EU level (including the EU Treaties and EU institutions as well as the Single Market and its four freedoms) before borders became less permeable for the highly-skilled. Secondly, it was felt particularly unlikely in a context of emergent growth. Regions would need to attract greater numbers of highly-skilled migrants to meet knowledge economy demands, capitalise on job and investment opportunities and tackle unevenness of growth. There would, therefore, be particularly strong counter-arguments in play as regards to the creation of harder borders amongst Western and Northern European regions.
Drivers leading to its emergence

Country experts highlighted that for the ‘Fortresses of Treasure’ scenario to emerge, there would most likely be some (somewhat uncertain) growth in the international economy and relative stability at the national level in most EU Member States. These would be the necessary preconditions for any growth to be present in wealthier regions. Capital cities in Western and Northern Countries such as Amsterdam and Berlin, and other large metropolitan centres would need to continue to grow and prosper. In other words, wealth and job opportunities would remain concentrated in historical metropolitan/urban centres and hubs, i.e. the greatest demand for (highly-skilled) labour would remain in its current uneven distribution across European countries and regions.

Outside these centres, the picture would necessarily appear quite different. Dynamics of economic unevenness and political instability would continue to play out and intensify at the regional level. In particular, this would be driven by national and supra-national failures to solve the structural problems of lagging regions over the preceding years. Some evidence of this trajectory is already observable. For example, the Netherlands has not implemented national policies to address shrinkage in the lagging regions in a systematic way since the 1960s and 1970s after they failed to make a difference to the underlying disparity. Instead, skills and growth in lagging regions are tackled via proliferating public-private partnerships between vocational education providers and private sector companies. As a result, companies are able to significantly benefit by targeted investment in skills, leading to ‘cathedrals in the desert’.

Without good social protection and economic redistribution, a growing resentment would build in lagging regions over the intervening 10-15 year period. Disaffected communities may develop a great mistrust and disbelief in trickle-down economics, and begrudge the observable wealth ‘fenced off’ from them. However, for this scenario to emerge, this resentment would also need to be a fertile breeding ground for populist anti-migrant sentiment. Although populism has proved unsuccessful in some recent elections (e.g. in Austria, France and the Netherlands), it is likely to continue as a feature of political discourse. Its success would be measured by the level of public belief in various anti-migrant myths and discourses that it promulgates such as ‘welfare tourism’, the impact of migration on public services, international terrorism, instability in the Middle East and the refugee crisis (and the EU/national response to it), for example.

If populist, anti-migrant attitudes flourished, this could lead to a retrenchment of the domestic population (particularly older people and low-skilled members of the workforce) against free flows of people from lagging regions and Member States with greater economic challenges (e.g. Italy, Eastern Europe). Nonetheless, anti-migrant attitudes are more likely to be targeted at third country nationals and low-skilled workers who are perceived as a greater ‘threat’. Anti-migrant sentiments may, therefore, be less of a disincentive to move for highly-skilled than it would be for lower-skilled movers. However, they can still play a part, as recent evidence from young Estonian migrants suggests that some young highly-educated emigrants choose to move away from places with strong anti-migrant attitudes; in this case, the cultural norms have made...
such places less attractive as a destination for highly-skilled youth. Similar trends were discussed for young highly-skilled Danes.

The situation for the UK is less clear, given the fact that its future relationship with the EU is currently unknown. If freedom of movement is not replaced with a low-friction, low-bureaucracy alternative (e.g. under some form of soft Brexit), the country may struggle to attract enough highly-skilled young people and be unable to capitalise on growth opportunities on its own. This is particularly likely if there is not substantive investment in high-level skills for the domestic population over the next few years. A close working relationship with the EU (even with some restrictions to immigration) would bring benefits to the UK. However, without a real investment in medium- and high-levels skills, and improvements in productivity, a strict and heavily-regulated application process would damage growth in this country.

Implications

Most country experts felt that, under this scenario, there would be slightly lower mobility of highly-skilled young migrants, primarily due to two factors: (i) anti-migrant attitudes dissuading young movers from migrating, and (ii) opportunities in sending regions which may be better able to retain more domestic youth. Migration flows are expected to follow the most prominent current trends.

Firstly, countries which have typically not experienced particularly strong migration (e.g. Denmark) or have found it hard to attract young migrants (e.g. Norway) may find that little changes. Highly-skilled young migrants are more likely to choose typical/familiar destinations which are more attractive, or remain in the sending regions to make the most of job opportunities there. It will be harder for employers in these regions to find the skills they need, because Europe’s labour force is less mobile. In short, the already significant EU-wide skills mismatch may intensify further.

Current ‘sending’ regions (e.g. Italy, Eastern Europe) are less likely to have widespread pockets of wealth and job opportunities than traditional ‘receiving’ regions. There will, therefore, be some persistent out-migration flows. However, migration levels may be lower than in other scenarios, as even isolated recovery may help to improve domestic demand, increasing the likelihood that the domestic young workforce can find a job in their country of origin. With more opportunities at ‘home’ for highly-skilled young migrants, economic push factors for young movers in many regions may be less potent. Some highly-skilled migrants from traditionally ‘sending’ regions may still want – or need – to move, for example, for experiencing a spell of living and working abroad or family reunification. However, there may be alternative career options that can be pursued domestically because of their (higher) skills which will be in demand in their own country/region. Concurrently, there is a risk that lower mobility could lead to a relative deskilling and skills obsolescence of highly-skilled young migrants as sending regions may be less able to utilise they skills they have retained.
The highest demand for highly-skilled young migrants would remain in certain familiar areas and a rather small pool of familiar destinations (e.g. large capital cities, core EU regions). As a result, the concentration of job opportunities in a number of metropolitan/urban centres and hubs typically lead to rising housing and other living costs, pushing the domestic labour force out to peripheries. Knowledge economy hubs will become significantly more expensive, making long-term residency more difficult. There may be associated pressures on infrastructure and utilities due to higher migration inflow. Large (transnational) organisations based in prosperous and protected metropolitan centres (e.g. Amsterdam, Berlin) would be particularly attractive to young highly-skilled migrants moving for work, given the cultural vibrancy of the surroundings and opportunities for career progression (as well as relatively higher wages).

Secondly, although anti-migrant sentiments would mainly be directed towards lower-skilled movers, this would still, to some degree, affect the attitudes and motivation of higher-skilled movers thinking about where they want to work and live. The was observed in the Netherlands when young Turkish migrants chose to move back to Turkey or on to the United States when faced with rising Islamophobia and negative, unwelcoming attitudes. Hostility in some destinations could contrast quite starkly with opportunities elsewhere. With rising growth in the international economy – and therefore opportunities in the United States, Canada, Australasia as well as in countries such as China and India – there may be competition from outside the EU from countries where young migrants feel they will be more welcomed.

Although, under this scenario, there may be some limited restriction to movement of lower-skilled workers, any policy intervention – aside from the unknown quantity of the UK post-Brexit – is unlikely to have implications for highly-skilled young migrants or place additional costs on them to move around the EU. It is the wider attitudes and discourse which may dent their confidence to move. The UK may be in a different position, as greater restrictions to highly-skilled migration are a possibility – such as those currently in operation for highly qualified third country nationals. If labour is restricted without substantive domestic policies focussed on investment in necessary skills in relation to its key sectors, including its knowledge economy sectors, it could be exceedingly difficult for UK industries to fill jobs at all skills levels. A severe skills shortage may emerge and the country could begin lagging behind economically.

### 5.5 The Warmth of 27 Suns (and one Moon)

The Warmth of 27 Suns (and one Moon) scenario assumes that Europe collectively experiences intensive and inclusive growth and job creation, achieved and supported through the greater integration and inclusion of nationally diverse workforces. A political consensus is reached across countries and regions around free movement of labour, inclusive migration policies, greater co-operation and pervasive collaboration. The one exception may be the UK whose fortunes are dependent on the actual form (‘hard’ or ‘soft’) of any eventual Brexit deal. Greater growth has spurred significant technological and social innovations which, in turn, expands the need for highly-skilled young migrants in an ever-diversifying and specialised range of
occupations. European economic hubs and clusters have become more adaptive and are able to create more jobs.

Growth has become much more even, as lagging regions begin to catch up with wealthier regions, although some disparities still exist. There is more disposable income, meaning that individuals and employers have more resources to invest in human capital development commensurate with the needs of the knowledge economy in the form of higher degrees, higher vocational qualifications and greater levels of continuing professional development. As a result, young highly-skilled migrants have more developed and specialised skills to meet the needs of the European labour market – which is servicing an EU economy which is increasingly moving towards innovative, high value added activities, products and services. This reflects the EU’s on-going and long-term structural change towards a knowledge based-economy which is inexorably linked to a growing demand for high-skilled labour. Unrestricted labour mobility allows employers to have more success in filling hard-to-fill vacancies, while economic growth supports greater efforts to utilise the skills of both EU and third country nationals.

The native labour force working in knowledge economy sectors and beyond are more used to collaborating in diverse teams. There is greater mutual trust and appreciation for the young migrant workforce as they reflect diverse customer bases and encourage innovation and creativity. Smart specialisation leads to the creation of new regional hubs, new diasporas emerge, and traditional migratory patterns operate alongside migration flows in new, non-traditional directions. Migration flows remain high, but a commitment to workers’ rights and the economic inclusion of all communities ensures that economic growth benefits society at large in a more even-handed way, including reducing regional disparities.

Overall likelihood of the scenario

Country experts agreed that the ‘The Warmth of 27 Suns (and one moon)’ scenario was the most preferable, and the one which policy makers should strive to achieve. However, experts believed that this scenario is rather improbable as the speed and magnitude of growth is unlikely to be identical amongst all EU Member States and economic prosperity would not be evenly-distributed across the EU.

Growth will almost definitely be more intensive in certain regions. Stronger trends of economic growth are more predictable within certain clusters of better-performing Member States (and/or regions) which typically collaborate closely (e.g. ‘core’ regions, Scandinavian states). Country experts suggested positive and even growth may be driven by greater consumer demand and confidence to spend. In these regions, dimensions of the scenario such as higher disposable income, greater higher education participation and investment in higher degrees then become very plausible. Positive growth and skills investment of this nature may also emerge in some individual peripheral regions and countries (e.g. Estonia). Conversely, countries which have been through economic restructuring and are currently struggling economically are unlikely to experience the same level of intensive growth (e.g. Italy, Greece, Portugal). The scenario
would, therefore, probably not be realised uniformly across the EU and certainly not reach its full potential over the next 10-15 years.

Expert interviews offered a more plausible version of this scenario where there is positive growth and greater collaboration in currently buoyant regions; in these regions growth is also more evenly-distributed. However, in lagging regions some level of inequality will still exist, although perhaps with less of a gulf between poorer- and better-performing regions. Growth is more likely to be slow and steady, rather than rapid. It may also be tempered as economies adapt to technological development and associated restructuring of production processes, work organisation and job roles/tasks. The position of the UK in this spectrum is unclear, although there are some unconfirmed suggestions that a post-Brexit deal may be more positive and pragmatic for both the UK and the EU than envisaged in early 2016. However, as mentioned earlier, however, the UK economy is expected to take a hit post-Brexit under any scenario, although views about its severity, depth, extent and duration vary.

Country experts were in definite agreement that freedom of movement of labour within the EU is completely fundamental – Brexit notwithstanding. The only event that may lead to a major shift in labour mobility would be the exit of other Member States from the EU, although results from recent elections undermine the likelihood of this outcome. The situation for the UK regarding jobs for EU workers is far more uncertain. In a ‘good deal’ scenario (e.g. ‘Soft’ Brexit), the UK could benefit from growth within the EU and be able to access the skills it needs. Alternatively, the absence of a customs union agreement could benefit the 27 Member States (for example, if building of aerospace wings returned to mainland Europe), but will be highly negative for the UK. By and large, country experts did not expect the impact of Brexit to be particularly negative on the EU, regardless of the outcome of the Brexit deal negotiations.

Drivers leading to its emergence

The inclusive growth scenario suggested by ‘The Warmth of 27 Suns (and one Moon)’ would require a substantive amount of political will to make clear strides towards the forging of a stronger and closer Union. This would need to take place not just at the EU level, but also within and across the various smaller coalitions of European integration (e.g. Benelux, Scandinavia) and in peripheral regions (e.g. Estonia). For this to be successful, the much-discussed wave of populism (combined, in many cases, with anti-EU rhetoric) would not only need to recede, but also translate into election results which establish opportunities for progressive policy-making. Crucially, this would need to exist not just in larger dominant economies such as France and Germany, but also in other large and medium EU economies (e.g. Poland), which are at present more politically suspicious of closer EU integration. There would, therefore, need to be a relatively rapid shift in dominant political ideologies and directions of policy-making in a number of countries, most notably in Eastern Europe (e.g., Poland, Hungary, Czech Republic, the Baltics).

Furthermore, employment policy would need to be effective. There would need to be large social investment in education, research and technology and highly structured skills policies –
which would currently be a challenging task for some regions with high debt, budgetary constraints and insufficient resources to invest in skills development (and/or R&D) (e.g. Italy). The scenario would also need to be preceded by low unemployment rates across Europe, therefore, requiring effective policies for integrating people into the labour market. This could be particularly critical in reducing anti-migrant attitudes – a critical precondition for the emergence of this scenario. Better employment prospects would incentivise currently vulnerable countries to promote, support and tolerate greater freedom of movement so that labour supply and demand is more balanced across the EU, particularly if domestic populations are educated to a level where they would be able to take full advantage of new job opportunities associated with the knowledge economy.

There would also need to be clear signs of growth in productivity, GDP and wages over the short- and medium-term, i.e. the next three to five years, to inspire the level of consumer and investor confidence which would support the momentum of positive economic change. If productivity increases, wages will increase, thus creating the necessary structural changes for currently peripheral economies (e.g. Estonia) to converge with Western and Northern Europe.

**Implications**

Generally, under the ‘The Warmth of 27 Suns (and one Moon)’ scenario, country experts anticipated very high levels of labour mobility amongst highly-skilled young Europeans, predominantly within the EU. Young movers would be able to make the most of smoother migration journeys and a fuller range of employment and career development opportunities. However, migrant workers are less likely to unionise, so higher youth labour mobility may post risks for domestic workers’ rights and collective representation.

Given that country experts believed that levels of growth would not be consistent across the EU, there would be clearer benefits in certain contexts. In the case of Denmark, the ‘The Warmth of 27 Suns (and one Moon)’ scenario would be positive for both highly-skilled young Danes and the country as a whole, as even with greater out-migration, there would be a sufficient supply of highly-skilled young people from elsewhere in the EU coming into the country. In addition, the high level of economic growth would be beneficial for an economy so integrated with international trade: the country would likely continue with stable economic growth, a high employment rate and stable political and democratic development. Similarly, Germany would most likely benefit in attracting high-skilled individuals, as it can offer them have higher earnings and better career opportunities than Eastern European countries.

Other countries may not benefit so clearly from high intra-EU mobility. With greater choice and more options for young people under this scenario, Norway may find it much harder to recruit the skills it needs due to barriers such as geography, weather, language, a compressed wage structure, lower wage progression and a high cost of living. For example, for the highly-skilled, the wage premium of moving to Norway is relatively low because of the country’s compressed wage structure. The cost of living is also high as are work pressures, while there are fewer opportunities for wage progression. Similarly, if the whole of Europe is performing strongly,
Estonia will most likely still have lower wages, so it may lose its highly-skilled young people to Northern European countries, particularly Finland. Countries struggling to attract or retain highly-skilled young people would be unable to grow substantially or quickly.

If there was a clear upward growth trend within Eastern and Southern European countries, resulting in a reduction in the earnings potential gap, young people from these countries may choose not to move, allowing such regions to capitalise on their skills investment as well as the creativity, energy, dynamism and innovation potential of their highly skilled youth. In other words, if their own economies are growing, potential highly skilled young migrants may be able to find better jobs at home, leaving Western and Northern regions looking elsewhere to recruit.

Provided that the UK sufficiently invests in education, this scenario could be very positive for young UK nationals, but without substantial skills funding and/or a low-friction Brexit deal, young highly-skilled British people are unlikely to be able to prosper.
ESPON 2020 – More information

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