



Deliverable report for

YOUNG_ADULLLT

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Cross-national and Cross-regional Report Quantitative Analysis

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1. Description of task

Task 4.1: Develop a framework for the collection and analyses of quantitative data (months 9-13)

Developing a framework for the collection and analyses of quantitative data involves identifying and selecting relevant sources and dimensions of labour market and education/training at international/national (macro) and regional levels. The framework will also address issues of data quality, reliability and validity necessary for its implementation and for analysing the results. In order to create synergies, this task will draw from insights and experiences of previous research and methodological guides (e.g., COE, 2005; Iacovou et al., 2012; ISS, 2008) and focus on the following dimensions:

- The socio-economic dimension (indicators: national youth work structures, youth work in the regional settings, qualification, no formal qualification, migrants, and types of occupation);
- The labour dimension (indicators: employment/ unemployment rate, youth unemployment rate, job quality levels, precarious forms of employment level; temporary or involuntary part-time contract levels);
- The education, training and learning dimension (indicators: access to education, schooling form, drop-out rates, early school leavers, literacy levels, level of official language teaching, access to communication technologies education, young population having completed compulsory education, population having completed high education level, access to participation in lifelong learning);
- The Social dimension (indicator: national LLL policies for young adults) The data collection will be gathered according to gender, age, and other relevant differentiation criteria. Role of participants: WP leader (UGR) and core teams (GU, UNIVIE) develop and circulate the research framework and provide grid for the reporting to national participants, who read, review and give feedback on the framework developed by the WP leader.

Task 4.2: Obtaining specific information and data collection (months 13-17)

The purpose is to obtain and analyse comparable information and data compiled by international organisations such as the EU (Eurostat general and regional indicators, and surveys: Labour Force Survey, EU-SILC, European Social Survey, Adult Education Survey) and the OECD (Education at a Glance, OECD Skills Outlook with results of the Survey of Adult Skills - PIAAC, OECD Employment Outlook 2013). The analyses will allow for contextualised comparison of the different national cases. Role of participants: National partners use the framework developed by the WP leader and core teams to collect and prepare all relevant data for analyses.

Task 4.3: Conduct analyses of statistical data on the specific living conditions of young adults in the regional settings (months: 17-19)

This task involves the analysis of statistical data on the specific living conditions of young adults in the regional settings in relation to LLL. It also includes interpreting data according to standards of living conditions of young adults in the countries. Each national research team will be guided by the question as to the meaning of data on youth unemployment/ employment, educational levels, and qualification formal/non formal, in the specific contexts. Role of participants: Each partner conducts the analyses at national and regional level according to the WP framework, producing national briefing papers with national and regional data sets, brief descriptive analysis and contextualisation of data.

Task 4.4: Cross-national and Cross-regional Report Quantitative Analysis (months: 20-21)

Based on the comparative analysis of National Briefing Papers, further analyses of data sets are conducted and a cross-national and cross-regional report with main findings and conclusions produced. Role of participants: The WP leader and core team national teams produce a Cross-national and cross-regional report with main findings and conclusions; national teams read, comment and give feedback.

2. Description of work & main achievements

The overall objective of the WP4 focuses on the interplay at macro, meso and local level between Life Long Learning (LLL) policies, young people's living conditions and country and region specific contexts in promoting or deterring growth and social inclusion. Research concerning this WP involves: 1) developing a framework for analysing quantitative data on the specific living conditions of young adults in regional contexts; 2) collating and analysing the data from international data sources 3) conduct the analysis and writing the national reports; 4) producing a cross-country cross-regional reports.

In order to attain these objectives the work involving WP4 for the first year concentrated in developing a working paper proposal with the theoretical approach and work to be developed by national partners. Different versions of the working paper were first discussed with the core partners (UNIVIE & UG) and the Coordinator (WWU) and later with the rest of partners. After taking into account the feedback received from all partners, the final version of WP4 proposal has been used as the guidelines.

To facilitate the attainment of the different objectives of the WP4 national reports two milestone activities were set. All partners had to conduct them and upload their pieces of work on the internal project server used by the Consortium. UGR and UNIVIE teams were providing a work-in-progress example of the work to be done for each milestone activity and providing individual and general feedback to all partners for each activity. The three milestone activities referred to the three objectives mentioned above: 1) interpreting and solving doubts about the data collation; 2) evaluating the young adults living conditions across different regional units and country, and, 3) assess and complement the data quality provided by international data sources.

These milestone activities were used as a starting point to write the first draft of the national reports. All partners submitted a first draft of the national reports at the end of July 2017. The UGR team provided feedback by mid-August. Each national partner introduced the feedback as deemed appropriate and submitted the final submission of the national report by mid-October, so that the UGR team could work on Deliverable 4.1.

Presentations and further discussions on the work to be done and the organisation by milestone activities took place during the consortium meetings in Porto (November 2016) and in Granada (June 2017), as well as in the coordination meeting with all empirical WPs within the project in Barcelona (January 2017).

After having completed, these steps the core team developed composite indicators for each dimension of young adults living conditions and on the base of this and the results of the national report produced a cross-country, cross-regional report. Presentations and further discussions on the international report took place during the consortium meetings in Genova (November 2017).

3. Deviations from the Workplan

There were no deviations in the work plan, a slight delay in delivering the report is to be noted.

4. Performance of the partners

All partners have fulfilled their tasks satisfactorily. There was an intense collaboration with UNIVIE during the elaboration of the proposal and the data collation that was crucial to meet the challenging deadlines. The partners have generally provided good quality outputs and have met the important deadlines.

5. Conclusions

The Full Assembly deems this deliverable to be satisfactorily fulfilled.

Annex 1. Cross-national and Cross-regional Report Quantitative Analysis



Work Package 4

International Report

Quantitative Analysis Young Adults' Data

**University of Granada (UGR), University of Glasgow (GU)
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Cross-national and Cross-regional Report Quantitative Analysis – Work Package 4

Executive Summary

Aim of WP 4

The YOUNG_ADULLLT project aims at understanding the relationship and complementarity of LLL policies in terms of orientations and objectives to their specific target groups. Moreover, from the perspective of the young adults, the project enquires into policies' fit and potentials for successfully appreciating the hidden resources of young adults for building life projects. Within this frame, LLL policies are investigated in their embedding and interaction in the regional economy, the labour market and individual life projects of young adults in order to identify best practices and patterns of coordinating policy-making at local/regional level. In order to contribute to the overall objectives of the project, the working package 4 (WP4) conducts quantitative research in order to gain a better understanding of differences in living conditions of young adults in regional settings by means of secondary analyses of quantitative data from international and national sources. This gives relevant insights in terms of structures of opportunities and constraints that characterize the regional context where young people build their biographies and courses of action, in a close relationship with LLL interventions that constitutes the focus of YOUNG_ADULLLT.

LLL policies for young adults are the result of a complex interplay between economy, society, labour market and education and training systems both at national, regional and local levels. In order to analyse how LLL policies define, target and affect young people life courses in Europe, we need first to assess young adult's living conditions in the contexts where they live and act, as resulting from young people's position in the education systems, or in the transition from education to employment, which is influenced also by broader economic, demographic and social trends. The results from WP 4 provide relevant contextual information for future analyses within the project. As a matter of fact, WP 4 provides contextual data for embedding the context specific information of the qualitative data collection approaches in WP 5 and 6, as well as for the case studies in WP 7 and the comparative analysis in WP 8.

The theoretical frame(s)

In the YOUNG_ADULLLT project, three theories guide the analysis, namely Life Course Research (LCR), Cultural Political Economy (CPE), and Governance (GOV). The main perspective addressed by WP 4 is LCR, as the objective of the package is the assessment of contextual living conditions of young adults: thus, the LCR perspective is crucial as it focus on the young people providing insight into their social realities and individual life courses

within the given national and regional specific contexts. However, the contribution of WP 4 can also be framed within the CPE and GOV approaches. First, the process of gathering structural data with the secondary analyses approach on young adults is accompanied by the question what kind of data is available on them. Second, the way how data is produced and used to steer political processes on LLL policies concerning young adults is likely to influence their living conditions at regional/ local level. This implies identifying the levels on which data is collected within the EU regarding our Functional Regions. In order to do so, WP 4 compiles a data quality assessment to describe the data availability and gaps on national and regional/ local level.

In this light, WP 4 conducts quantitative analysis of young adults' contextual living conditions, by analysing socio-economic data aggregated at regional level on different dimensions of labour market and education/training in participating countries. By doing this, it contributes to the overall aim of YOUNG_ADULLLT of identifying parameters for future decision-making support systems for young adults, as it provides contextualized and multidimensional evidence of life opportunities manifested in educational and school-to-work transitions of European youths. The main research questions can be summarised into two main types of questions: what are the data availability and gaps at regional level about the living conditions of young adults? And what data could tell about the contextual living conditions of young adults at regional level?

In this report, we analyse the interplay among different dimensions of contextual living conditions that contribute to shape the structures of opportunities of young adults in the regions and places where they live. We focus on the contextual living conditions in selected European regions, according to a multidimensional approach that considers the level of economic development and material living conditions, demographic trends, the interaction between education systems and labour markets and the health coverage within a region. By doing this, we want to stress the relevance of contextual living conditions in building different structures of opportunities for young people, in terms of complex mixes of enablements and constraints.

The complexity and multidimensionality of the phenomena analysed requires an integration of different methods of research grounded in the scientific literature and drawing on the full breadth of available data. Considering data availability constraints, the level of analysis selected is NUTS2 level which represents the highest level of territorial disaggregation to conduct an in-depth analysis of young adults living conditions. The level of analysis of WP 4 in this sense is constrained from the existing territorial division, which reflects the data availability. The data collation draws on databases from national administrative sources and comparative surveys compiled by international organisations such as EUROSTAT and the OECD, being the main sources the European Labour Force Survey and the European Social

and Income Conditions. Data was collated for more than 10-year span, from 2005 through 2016, the latest available year. This enables comparability across countries and regions, before and after the economic crisis. In order to show the interplay among the different regional contextual information, we build composite indicators which represent a synthetic proxy covering the different domains of living conditions. The results of the analysis are presented in comparative perspective, allowing identifying trends across the selected regions; and also by building more specific profiles of contextual living conditions of regions and national states.

Findings

The regions selected show a trend of general but differentiated increase in tertiary education attainment among young adults that are therefore becoming more qualified, when trying to access the labour market. On the other hand, due the impact of the economic crisis, many regions experienced a steep increase in youth unemployment, especially in the South and East European regions. The youth unemployment rate is more sensitive to the economic cycle, as it is generally higher in countries where the economic crisis had a major impact. Regions with a higher GDP per inhabitant show better employment conditions for young adults, while the level of tertiary education appears to be less correlated, showing that economic growth does not have a direct impact on the outcomes of the education system, which are connected to long-term trends and institutional structures. However, this is marked by strong regional variations: a decreasing trend in youth unemployment can be observed in the German regions of Darmstadt and Bremen and in Oberösterreich, while in the Finnish region of Pohjois-Suomi and in the Austrian regions of Wien it remained stable or slightly decreased. These regions present more favourable structure of opportunities in young adults' school-to-work transitions. On the contrary, some regions combine an above-the-average level of youth unemployment coupled with a low educational attainment. This is the case of Andalusia, Liguria Continental and Adriatic Croatia and Yuzhen Tsentralen. The regions of Lombardia and the two Portuguese regions (Alentejo and Norte) share with this first group a similar level of educational attainment, but show more favourable labour market conditions, as youth unemployment is lower.

Composite indicators on overall education attainment of the regions and labour market access allow synthesising a major amount of information related to youth educational opportunities and labour market conditions. The overall picture is quite differentiated, confirming the relevance of a research approach focusing on sub-national levels of analysis, bringing local contexts centre stage. Some regions show a mismatch between a growing supply of higher qualified young people and a demand affected by the economic downturn, resulting in a difficult integration of young people into the labour market, while other couple

increasing educational attainments with a higher labour market integration. German, Austrian, Scottish and Finnish regions have both higher values in 2014 and they show better scores if compared to 2007. On the other hand, Andalusia, Yuzhen Tsentralen, Alentejo and Norte score low in 2007 and they remain stable on both dimensions. Pohjois-Suomi, Darmstadt, Vienna Yugozapaden and Oberösterreich strongly increased their labour market integration, while it increased slightly for Oberösterreich, Wien and North East Scotland. The marked decrease in the labour market access is mainly driven by reduced youth unemployment which conversely affected negatively mainly South-European countries where the rate almost tripled between and after the European crisis. This seems to configure a particular poor context for young adults, which is likely to affect their life-course perspectives. Educational attainment of young adults shows an opposite pattern with an overall increase. This is likely during an economic recession when the opportunity cost of remaining in education decreases. In 2014, there are only three regions that maintained higher education opportunities and high labour market access compared to 2007: North East Scotland, Darmstadt and Oberösterreich, three out of the four richest regions which also show more stable labour market conditions. These regions coupled better overall economic conditions with smoother labour market integration.

Trends

Overall there is a tendency towards living conditions marked by better educational opportunities within the regions analysed versus sluggish labour market integration basically due to low access. These seem to be consequences of the economic downturn that hit unequally the territories analysed. However, German, Austrian, Finnish and Scottish regions seemed to better maintain their educational opportunities for young adults coupling this with high overall material conditions.

A different comparative view is presented in the section on regions and country profiles. Here the results are not presented by considering all the regions according to a limited number of dimensions, but by considering the composite indicators (scores) along all the dimensions for the two regions within the same country. The specificities of the selected regions across the multiple dimensions represent the main object of the section: the regions are compared among them and in the light of the country-level conditions by using standardized indicators going from 0 to 1. The scores are used for a basic description and positioning of the regions and countries in comparative perspective, that are however to be read as a complement and support to the partners' context-sensitive interpretations on contextual living conditions.

The project YOUNG_ADULLLT derives from the assumption, that the implementation of LLL policies is best studied at the regional/local level to understand the context specificity of young adult life courses beyond the national level. LLL policies are the result of a complex

interaction with the social and economic contexts in which they are implemented. Results show that there are huge differences both in the level and dispersion across European territories in young adults living conditions. In order to better inform policies, an intense effort is needed in developing richer context-based information at territorial level. This report emphasizes the relevance of contextual living conditions as shaping the structures of opportunities for young adults in different regional settings. It provides synthetic information on different dimensions that can be usefully related to LLL policymaking and to the impact of such interventions. Given its broad range, the secondary data analysis presented has to be intended as a contribution to a wider strategy integrating quantitative results as a basis for the institutional and policy analysis carried on in the following and highly connected WPs. Highlighting existing data gaps and improving the availability of territorial information for better targeted policy are crucial steps to overcome nation-state based measures. There is the need for increasing the social impact by understanding the role of the specific contexts within which measures are implemented. This calls for more contextualized information which is a prerequisite for regional comparative analysis and a more targeted and evidence-based policy.

Introduction

The project *YOUNG_ADULLLT* calls attention to the fact that the target groups implied in LLL policies are not natural and static categories, but rather are themselves changed and sometimes even constructed by these policies. Thus, we need to pay attention to how policies themselves –directly or indirectly – impact on the target groups, for instance, by creating new life course normality expectations, framing ‘problems’ as deriving from individual or collective attributes, creating new constellations of education-to-work transition, etc.

Life Long Learning (LLL) policies across Europe have been repeatedly described as highly fragmented and often conflicting in their objectives in relation to their target groups and means of implementation. Although aiming to improve economic growth and social inclusion for young adults, they might produce unintended effects when they are not well suited to the highly diverse target groups. In particular regarding the high fragmentation of LLL policies different effects in different contexts can be observed, which raises the question as to their fitness of these policies to the targeted groups.

The project *YOUNG_ADULLLT* aims at identifying necessary parameters for future decision-making support systems by understanding LLL policies for young adults in their interplay between economy, society, labour market and education and training systems at regional and local levels, including discussing issues of fragmentation and discrepancies affecting young adults’ life course. Thus, the objectives are:

1. To understand the relationship and complementarity of LLL policies in terms of orientations and objectives to their specific target groups including (intended and unintended effects);
2. To research LLL policies in their embedding and interaction in the regional economy, the labour market and individual life projects of young adults to identify best practices.

Policies in general, and LLL policies in particular, are more often than not framed by issues that are identified/constructed with reference to how specific groups perform or progress in comparison to others. In general, statistical data are used to identify issues such as educational attainment or performance, Early School Leavers (ESL), people Neither in Education nor in Employment (NEET), competence levels, etc. or employment status. It is with reference to these – usually national – indicators that groups are identified/constructed as ‘vulnerable’ or ‘at risk’. While this represents a standard and useful practice, the level and the quality of data available/used may also gloss over subtle but important differences among groups. This applies in particular heterogeneous groups such as young adults. This is relevant to understand under which circumstances policies are operating.

As LLL policies become effective at the regional/local level, the sub-study aims to provide insights into the different local contexts LLL policies are embedded in and how these regional settings under study provide different living conditions for young adults. Thus, each regional context can provide (or preclude) specific opportunities for young adults' lives, leaving untapped the plentiful resources for individual growth and social inclusion. The aim is to pay particular attention to the structural characteristics of the regions, such as the economy, education and work opportunities, to describe the different social realities of young people and how those realities are constructed in statistical data collection. This allows us to understand how the context can mediate and influence LLL policies in each region.

Against this background, *YOUNG_ADULLLT* sets out to analyse country and region specific settings of young people's living conditions in terms of their implications for LLL policies. Two main types of questions are dealt with in this report: First, what are the data availability and gaps at regional level about the living conditions of young adults? And, second, what data can tell about the living conditions of young adults and the identification of risks profiles at regional level?

The data collection includes databases from national administrative sources and comparative surveys publicly available and compiled by international organisations such as the EUROSTAT and the OECD all procedures will comply both with national and European legislation. The report is structured as follows: section 1 is devoted to the concept of vulnerability and risk in post-industrial society; section 2 concentrates on young adults and their related risks in their transition to adulthood; section 3 and 4 present the framework of the analysis and the dimensions of living conditions; section 5 summarizes shortly the methods, the data collation, the units of analysis and the limitations of the approach; section 6 present the findings which are structured in three parts, section 7 concludes.

1. The contextual living conditions of young adults as opportunities' structures

The concept of vulnerability in social sciences

More recently, the concept of vulnerability has become central in European policy debates around issues concerning the prevention of social exclusion among different populations. *YOUNG_ADULLLT* focuses on young people targeted by lifelong policies, who are characterised as 'vulnerable', 'at risk' or 'near social exclusion'. While these definitions of young adults' point to their relative position in the education system or in their transitions from education to labour market, we need to recognise that they must not be viewed as individual attributes that simply denominate or qualify a static or 'natural' category or group. For this reason, it is crucial to clarify the use of the concept of vulnerability when applying it

to our research activities. We argue that an understanding of vulnerability as a fixed, static category is highly problematic as it suggests 'being vulnerable' is an essential attribute of specific social groups. The term needs to be used in reflective ways to consider its dynamic, relative and multidimensional nature.

YOUNG_ADULLLT suggests analysing these categories as constructed in relation to context-specific ascriptions of normality of the standard life course (see Weiler et al. 2017), and as varying according to the orientation of the specific policy – for instance, prevention, intervention, compensation, human capital development, etc. (cf. Kotthoff et al. 2017)

Vulnerability is a term deriving from Latin (*vulnerare*=to wound, injure) that became current since the 1970s in bioethics and in disaster risk management and assessment, and more recently in poverty/social exclusion research to refer to groups or subpopulations worthy of protection or under higher levels of exposure to poverty or welfare losses (Vatsa 2004; Luna 2009; Alwang et al. 2000).

Every individual is entitled to live his or her life to the best of their capabilities and personal development, however, everyone may find himself or herself vulnerable at some point in their life, either on an individual basis or as part of a specific group. Human vulnerability implies some form of physical or psychological suffering and/or some form of impediment as part of a disabling environment. This includes sources of vulnerability that are inherent as they are "intrinsic to the human condition" as for instance natural disasters or major economic changes that affect the well-being of individuals, regions or even have a global impact like the financial crisis of 2008 (Mackenzie et al., 2014, p. 7). While these situations have a large scale impact in terms of people affected, the way in which these disasters render a group or individual vulnerable depends on the different forms of resilience and coping mechanisms exercised by each individual (UNDP, 2014). It depends largely on whether an individual is already in a situation of vulnerability, for instance belonging ethnic minority, being disabled or in view of one's gender. Thus, vulnerability is also constituted by social interactions and contexts as a form of different "layers" rather than one solid form of vulnerability that transcends all circumstances. In other words, a person is not vulnerable, but is rendered or made vulnerable by certain situations and thus may be vulnerable, highly vulnerable or not vulnerable at the same time depending on the situation and context (Luna, 2009, p. 128; Delor & Hubert, 2000).

These forms of structural vulnerabilities depend on the context the individual finds itself in. This may be due to social divisions within a given community or society that are deeply rooted and may not be easily overcome. Major constraints may be gender issues in societies with restricting social norms and rules for females, discrimination against certain racial and ethnic minorities or disabled persons who have to face practical obstacles in order to participate in everyday life. Moreover, this may also refer to the social status as living below

the poverty line renders people more vulnerable than people with abundant assets or having limited access to health and education services (UNDP, 2014). Problematic regarding this form of vulnerability is the labelling of particular subgroups as vulnerable as this may lead to forms of discrimination and stereotypisation (Mackenzie et al., 2014).

While vulnerable situations can occur due to specific and deeply rooted structural (social) divisions within a given group or society, vulnerable situations also arise at particular points during an individual's life course. On the level of the life trajectory, the tendency of being vulnerable is based on the individual's age, social status and the respective planning of and perception of the future (Delor & Hubert, 2000). These situations require support, most notably during transitions between different life phases: early childhood, youth to young adulthood and adult life into seniority. The capabilities and setbacks experienced during the lifetime have a strong impact on the following life stages (UNDP, 2014). A key stage within the life course is the transition into young adulthood, very much impacted by school-to-work transitions. Thus, young adults are in particular susceptible to marginalisation in the labour market due to lack of work experience, precarious employment or unemployment. The latter may be due, on the one hand, to being overqualified, retaining a level of education and training that cannot be absorbed by the labour market and, on the other hand, to retaining no skills at all due to early school leaving.

The next section argues that in European post-industrial societies, vulnerability is more sensibly understood as a constitutive facet of contemporary societies, which to some extent requires more attention to a more contextualised and place-based perspective on vulnerability.

From risk to social vulnerability in post-industrial societies

The transformations associated with the transition of societies to a post-industrial era have been widely discussed in the academic debate. Many scholars have analysed how the wide processes of globalization, technological development, tertiarisation of production activities and transformation of employment relationship has had a strong impact on contemporary societies, in conjunction with changes in the demographic structure of the population, in the distribution of income and other basic resources (for instance housing and social care) (Esping-Andersen, 1998; Castel, 2003; Ranci, 2002; Blossfeld & Hofacker, 2014). As a consequence, the new economic and social settings reveal the emergence of a mutated array of social risks that affect highly heterogeneous social groups. Taylor-Gooby (2004, pp. 2-3) defines *New social risks* (NSR) as 'the risks that people now face in the course of their lives as a result of the economic and social changes associated with the transition to a post-industrial society'. NSR directly challenge the systems of social integration (the market, the family and the state), and are spreading because of the combination of increasing job insecurity, decreasing caring capacity of families, and reduced effect of traditional welfare

institutions (Bonoli, 2005; Ranci et al., 2014).

By examining the consequences of such trends on the life course, the literature on *risk societies* (Beck, 2000; Giddens, 1994) argues that new risks affect all individuals, irrespective of their social and economic positions. For instance, the increase in employment flexibility is expected to affect the whole labour force. Therefore, it follows that class structure would lose relevance in influencing life trajectories, due to this levelling effect. As a consequence, and in line with the individualization argument, individuals are released from conventional restraints and therefore are more able to autonomously build their life projects. Conversely, more critical approaches stressed that the increased dependence from the market brought about by globalization, negatively affected the conditions of disadvantaged and less protected groups in labour markets. Breen (1997) refers to a process of selective recommodification that increased already existing inequalities and transformed life course patterns. At a closer look, if inequality between countries is slowly shrinking, inequalities within countries is rising in the last decades: in early 2000s this trend began to emerge even in Northern European social-democratic countries with stronger and more universalistic welfare states (Nolan, 2014; OECD, 2011).

Among the many features of NSR debated in the literature, two stand out as particularly relevant in our argument. First, as we said, new social risks emerge in the interplay between work and other spheres of everyday life, while old and more traditional social risks (for instance sickness or unemployment) were strongly related to the employment position and therefore easier to predict and to be handled by standardized public interventions (Rosanvallon, 1997). On the contrary, NSR are less predictable with traditional social policy instruments based on social insurances and they bring about complex, intersectional and multidimensional risk profiles (Ranci, 2011). Second, they tend to concentrate in the early stages of work careers, due to the lengthy and difficult transitions to stability in the labour market, with a consequent impact on family formation (Blossfeld & Hofacker, 2014). This marks another relevant difference with old social risks that were instead mainly occurring in later stages of the working life. Moreover, the young population is particularly affected by the new configuration of social risks.

The exposure to events that represent new and not fully insurable risks threatens the individuals' social independence and reproduction: being not protected against such events, people live in a condition of social insecurity, where they cannot fully control their present and project their future (Castel, 2003). The spreading of uncertainty and insecurity does not necessarily concern individuals facing severe hardship or social exclusion, but people who are exposed to instability and weak integration into society. This condition is described by the notion of *social vulnerability* that identifies a situation characterised by a state of weakness which exposes a person (or a family, or a social group) to suffering damaging consequences

if a problematic situation arises, i.e. if one or more risk factors occur. This relates to the degree of exposure to damage (Ranci, 2011), a formulation that resonates with the general definition of the United Nations of vulnerability as a higher propensity of particular individuals or groups for risk, danger of deterioration in conditions or poor outcomes or achievements (UNDP, 2014). Due to the complex and diversified effect of NSR, the peculiar trait in the critical situations we have identified is the presence of few social guarantees, the instability in the fundamental mechanisms for acquiring resources and the fragility of social and family relations. What they have in common is that their position within the main systems of social integration (work, family, the welfare system) is characterized by uncertainty. The notion of vulnerability draws its relevance from the instability of the social position occupied. As Castel (2003) puts it, exposure to the risk of serious negative outcomes depends not only on the class position, but also on a broad set of circumstances where a person fluctuates in the social structure. Fluctuation occurs in various ways: horizontal mobility between different jobs, flexibility in work and family roles (delayed parenthood), uncertainty over the position occupied, absence of welfare guarantees, difficulty in reconciling and co-ordinating different roles and responsibilities. While on the one hand the fluctuation opens up the possibility for many individuals of 'building their own biography' (Beck, 1992), on the other hand it contributes to social instability and difficulties in being independent, particularly affecting some vulnerable groups like young adults in the transition from school to stable employment.

2. Youth in transition

In contemporary societies, young individuals face a strong uncertainty in the transition to adulthood and labour market entry, as well as in the phase of family formation, so that they have been labelled as the 'losers' of globalization processes (Buchholz *et al.*, 2009). They often have to deal with complex weaknesses at the intersection of multiple risk factors rooted at different levels, including: the economic context of globalization and demographic change; the institutional structure involving the education system, the labour market and the welfare state; the material conditions (including poverty, deprivation and housing conditions); the individual level of perceived well-being and uncertainty. The result is a life course often characterized by uncertain access to material resources and by the fragility of family and social networks (Blossfeld & Hofacker, 2014). Research on change in young people's transitions from youth to adulthood in general largely agrees upon a diagnosis of on-going de-standardization, individualization and fragmentation (Mortimer & Shanahan, 2003; Biggart & Walther, 2006).

Difficulties experienced in the transition from school to work are usually deemed as particularly relevant in this regard. By the end of the 1970s, the match between work demand and supply had become more problematic due to reduction of the demand in a context of

sluggish economic growth and the enlargement of the labour market supply, increasingly made up of female participation. Many factors conspire in the difficulties experienced by young adults' in accessing employment. First, the on-going flexibilization of the labour market brings about the spread of temporary and non-standard work arrangements (as opposed to a standard working relationship based on full time and permanent contract). This has increased the risk of being trapped in low-income and precarious dead-end jobs, with negative long-term effects on individual working biographies and future pensions (Cuzzocrea, 2014). Second, the trend of tertiarization and the expansion of high productivity economic sectors imply a stronger disadvantage for low-educated people possessing low or obsolete skills, who mostly end up as unemployed or employed in the low value-added service sector, depicting a typical post-industrial employment problem (Bonoli, 2012). One could object that younger generations are on average better educated than older cohorts. However, and here we come to the third factor implied, when caught in the school-to-work transition phase they often lack job experience requested by employers, nor do they possess strong ties with social partners and consequently strategic power for negotiation. As a consequence, stable employments in permanent and well-paid jobs are quite hard to reach for young labour market entrants. Ryan (2008) refers to this paradoxical disadvantage as a *double skill bias*, as it refers both to low skills and to the lack of job-related and soft skills that can be fully developed through work experience. In the literature on labour market participation and growing inequalities, young people are often considered as outsiders, as a group characterized by disadvantaged conditions and less opportunities with respect to other groups of insiders like for instance middle-aged males with a permanent working position (Lindbeck & Snower, 2001; Emmenegger et al., 2012). This condition is exacerbated by demographic changes that weaken the caring capacities of families (population ageing, low fertility rates and diffusion of new family models); as well as by the slow adaptation of welfare programmes to the changing configuration of risk profiles (Ferrera, 1998; Laesthaghe, 2010; Bonoli, 2005). However, such a general trend is mediated by varying configurations of the interface among the education system, the labour market and the welfare state that influence young individuals' opportunities and constraints, as debated in the literature on lifelong learning (Blossfeld, Kilpi, Vono de Vilhena, & Buchholz, 2014; Lehmann, 2014; Rubenson, 2006; Rubenson & Desjardins, 2009). In this light, Verdier (2012) builds a typology of public policies' regimes of lifelong learning, stressing the relevance of each national context, while Pastore (2010) draws upon the literature on comparative welfare states describing related 'worlds' of school-to-work transitions. In a similar fashion, Walther (2006) identifies different transition regimes identifying variations in the interplay between specific contextual structures and agency expressed by young people's subjective perspectives. The relationship between structural reproduction and actual decision making of the individuals was highly debated in

stratification research and youth transition research, with the latter criticizing the overemphasizing, and relevance, of the capacity of institutional structure to reinforce inequality and produce vulnerability, instead stressing the concept of agency (Lehmann, 2014). Without neglecting the influence of social structures, scholars state that personal agency is always present in the transition from youth to adulthood: young people can actively shape some important dimensions of their experience, as they make distinctive choices about their education and career pathways at critical junctures (Evans, 2002; Anisef et al., 2000).

3. A contextual and place-based perspective

In our understanding social vulnerability refers to the exposure to social disadvantage coming from complex configurations of risks affecting various life domains. It is a 'fluctuating' condition of weak social integration and high insecurity (Castel, 2003) that overlaps only partially with the identification of socially excluded groups characterized by material deprivation. In this light, scholars investigating economic insecurity (which is a component of social insecurity and vulnerability) argue that growing inequality in present European societies poses threats not only at the bottom of the income distribution, but also in the traditionally protected and secure middle classes (Mau, 2015; Ranci et al., 2017). Therefore, resonating with what is stated in the YOUNG ADULLLT's project Glossary, social vulnerability needs to be considered as a multidimensional concept and in relational terms, as it concerns the position within the systems of resource production and redistribution, as well as in the crucial spheres of social integration. It refers not only to individual and familial aspects, but also on contextual factors related to economic, demographic and social trends which mutually interact and shape living conditions of individuals and groups in specific places and areas. Therefore, we argue in favour of the necessity of investigating people's material living conditions (OECD, 2017) in their specific contexts (Pawson & Tilley, 1997; Kazepov & Ranci, 2016b), as they are strongly connected to their degree of social integration emerging from circumstances characterising specific areas. The impact of NSR is mediated by institutional structures and specific local characteristics, associated to the contexts where young people live. In this report, we investigate the **contextual living conditions**, defined as the result of the interplay of different social spheres that shape young adults' opportunities' structures made up by enablements and constraints (Cloward & Ohlin, 2013; Lehmann, 2014; Kerckhoff, 1995, 2001), in the regions where the young people live and build their own life trajectories.

Comparative analysis on inequality, poverty and vulnerability has mainly taken individuals or countries as their unit of analysis, (Stewart, 2003; Ranci, 2011) while less attention has been devoted to contextual and place-based approaches. However, several recent phenomena

have directed attention towards regional and local levels of analysis: processes of European integration and rescaling limited the role of the central state and at the same time attributed greater relevance to subnational scales of governance (Kazepov, 2010); marked and persisting regional and territorial disparities emerged within European countries, as the multifaceted debate on territorial cohesion demonstrates (Faludi, 2013; Medeiros, 2016). In this light, Atkinson *et al.* (2002) and Stewart (2003) stress the importance of regional and place-based indicators particularly when considering a wider view of exclusion that covers more dimensions including, poverty, education and health. This implies taking into consideration the interplay between contextual factors, as a manifestation of socio-economic trends in the region, and the impact of institutional factors related to welfare provision and structures of multilevel governance. As a consequence, we focus on the contextual living conditions in selected regions (NUTS2 level), according to a multidimensional approach that considers the level of economic development and material living conditions, demographic trends, the interaction between education systems and labour markets and the health coverage within a region. By doing this, we do not argue in favour of a deterministic view where the context and structural factors completely prevail over individual agency and self-determination. What we want to stress is the relevance of contextual living conditions in building different structures of opportunities for young people, in terms of complex mixes of enablements and constraints, according to the place where they live. Due to the wide range of data considered, our results cannot be translated into different degrees of vulnerability associated to the regions analysed, but contribute to build the contextual structure of enablements and constraints with which young people engage and actively form their dispositions and choices.

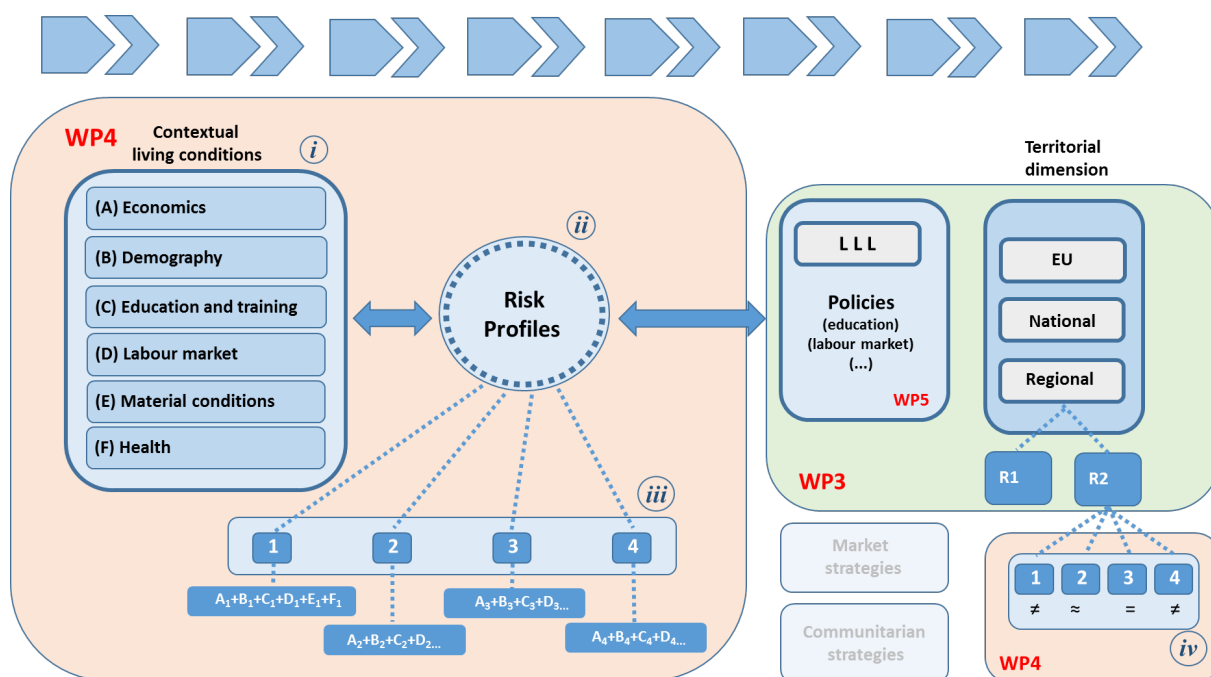
To sum up, in this report we build on a multidimensional and context-sensitive approach, investigating the developments of contextual living conditions and structures of opportunities:

- 1) according to selected dimensions related to different spheres of social integration (we elaborate on this point in the following paragraph);
- 2) in different contexts (European regions operationalized as NUTS2, see the methodological section);
- 3) during the time-span 2005-2015 (taking therefore into account changes over time and especially before and after the economic crisis of 2008-2009 and subsequent economics difficulties, which were heterogeneous across Europe, both in intensity and duration.).

4. Definition of the dimensions of contextual living conditions

As a target group of LLL policies, young adults represent a highly dynamic and heterogeneous group in terms of living conditions including socio-economic stratification, life projects and perspectives¹. Young adults' living conditions vary substantially in the participating countries. They are affected by structural developments, such as demographic change and life-course de-standardization processes, common trends that are however mediated by the institutional frames in which individuals' lives are embedded: institutions contribute to build the set of opportunities for individual's choices. As we said, the undergoing changes in contemporary societies are transforming the characteristics and dimensions of social problems, causing a spreading situation of social vulnerability in the population (Ranci, 2010). Structural changes have generated a new configuration of social risks, strongly affecting young people, difficult to address by traditional welfare systems and policy interventions (Morel et al., 2012; Palier 2010). The diffusion and intensity of those risks seems to show a considerable degree of variation among countries and regions, as well as different reactions by European welfare states (Hemerijck, 2013). Therefore, in order to analyse how LLL policies define, target and affect young people life courses in Europe, we need first to assess young adults' living conditions and the associated opportunities 'structures, as a mix of enablements and constraints to the individual's action.

Figure 1. Theoretical model



¹ cf. Glossary entry on Young Adults Available under: http://www.young-adultlt.eu/glossary/listview.php?we_objectID=219

How do we define YA's contextual living conditions? In WP4, we analyse country/region specific settings of young people's living conditions (see Figure 1) in order to set the stage for the investigation of LLL policies implications, which will be addressed in the subsequent WPs (from WP5 to WP7). The complexity and multidimensionality of the phenomena analysed requires an integration of different methods of research. This approach informs about the contextual dimensions that impinge on different risk profiles. In developing a research design appropriate for answering the project's questions, WP4 developed research hypotheses grounded in the scientific literature and draw on the full breadth of available data.

We identified six dimensions of contextual living conditions, which represent different aspect of young adults' experience and are strongly correlated. In order to identify these dimensions, we draw extensively on literatures on composite indicators, on social vulnerability, social inclusion, social justice and quality of life (Ranci, 2010; Mazziotta & Pareto, 2016; Schraad & Tischler, 2016; Noll, 2016; UrBes, 2015; European Commission, 2015; Eurostat, 2015; Schepelmann *et al.*, 2010; OECD, 2008, 2013), as well as on welfare policies (Kazepov & Ranci, 2016a; Morel *et al.*, 2012; Esping-Andersen *et al.*, 2002; Esping-Andersen, 1999), and lifelong learning, life course and school to work transition (Blossfeld, 2017; Walther, 2006; Verdier, 2012; Raffe, 2014; Ryan, 2008). The dimensions we considered are the following:

A= Economics

B= Demography

C= Education and Training

D= Labour market

E= Material conditions

F= Health

The economics dimension (A) refers to the economic context and to the structure of the productive system, as elements framing living conditions of young people in different national and local contexts. It can be broadly defined as the network of connections and interactions among economic actors involved in the production and exchange of goods and services within the market. This dimension is related to the impact of economic trends related to technological innovation, tertiarization, economic and financial globalization (Ferrera, 1996), on the structure of European economies. Here, we mainly look at the market as source of welfare, where the allocation of resources follows market relationships (Esping-Andersen, 1999). In the light of the YA project, a correct understanding of the characteristics of the economy, as embedded within various forms of social organization (Mingione, 1997), helps explain the preconditions for policies promoting both economic growth and social

development (OECD, 2001; Morel *et al.*, 2012). The current phase of capitalism has been variously described in terms of “knowledge-based economy” or “globalising learning economy” (Brown *et al.*, 2001; Lundvall & Lorenz, 2011; Jensen *et al.*, 2007), thus stressing the relevance of innovation, research and skills for the competitiveness of firms. Accordingly, a competitive productive system can result in an improvement of the quality of goods and services, creating jobs and addressing societal challenges (European Commission, 2015). As an example, labour productivity is regarded as a measure of economic growth and living standards within an economy (OECD, 2014b), strongly affecting young people’s opportunities in different contexts.

The demography dimension (B) refers to demographic characteristics that can be used to describe the population and its subgroups. Living conditions of young people are shaped by the demographic context, as the structure of a population deeply affects the characteristics and intensity of social needs of its various subgroups. Population ageing and the dynamics of migration, are commonly identified as drivers of transformation within European societies and social protection systems (Castles *et al.*, 2010; Brandolini *et al.*, 2009; UNHCR, 2015). Moreover, the role of the households with respect to living conditions of young people is widely recognised (Esping-Andersen *et al.*, 2002; Saraceno, 2015). Accordingly, this dimension analyses the structure of the population by looking at its composition and structure (OECD, 2013; Rhodes, 2005).

The education and training dimension (C), refers to access, process and outputs of education (Checchi *et al.*, 2014; Pawson & Tilley 1997). The comparative education literature shows how the institutional design of education and training has a variety of effects on the acquisition and distribution of educational achievements (Dupriez, Dumay, & Vause, 2008; Green, Green, & Pensiero, 2015; Hanushek, Woessmann, & Zhang, 2011; Heisig & Solga, 2015; Mons, 2007). This stream of literature has essentially focused on what is an effective institutional architecture in education provision focusing on macro institutional differentiation. It has used different dimensions such as the levels of stratification and standardisation, the degrees of access and accessibility, the levels of state control and expenditure (Allmendinger & Leibfried 2003; Green 2007; West & Nikolai 2013; Biggart, Järvinen & Parreira do Amaral 2015). These studies identify a range of different educational and training systems that are closely associated with a country’s specific history and culture, which have in turn shaped the development of the respective nation-state (Busemeyer & Trampusch, 2012; Green, 2013; Mayer & Solga, 2008). Literature on school-to-work transitions and skills mismatch assesses how the nexus between education outputs and labour market varies among countries, thus affecting youth living conditions and shaping life trajectories (Gambetta 1987; Raffe, 2014; Pastore, 2011; Quintini & Martin, 2006). In this field, VET systems and dual education

experiences are gaining increasing attention, as bridges potentially smoothing the passage from education to employment (Eichhorst *et al.*, 2015; Popiunik & Ryan, 2011). Accordingly, this dimension covers the available indicators on education and training, with a specific attention directed to VET. We integrate them with diverse measures of young adults' skills. Furthermore, we consider indicators on the input and outputs of education systems In detail (OECD, 2014a).

The labour market dimension (D) focuses on the interaction among labour market, welfare state and education structures, by looking specifically at the demand and supply side of labour and young adults' skills (Busemeyer & Trampusch, 2012; P. Hall & Soskice, 2001). The participation of young people in the labour market deeply affects their life opportunities and social identities. Moreover, it is seen as a key objective of policy strategies trying to connect economic growth and social inclusion (Morel *et al.*, 2012). However, young people in contemporary societies face increasing disadvantages in the labour market: on the one hand, they often lack work experience and related skills that are highly valued by employers (Ryan, 2008); on the other hand, economic and labour developments within post-industrial societies diminishing employment prospects for low-qualified people (Bonoli & Mouline, 2012). As a result, young people are often depicted as a group of *outsiders* in terms of labour market access and outputs (Lindbeck & Snower, 2001), but such outcomes strongly vary across countries (Emmenegger *et al.*, 2012). This reflects the interaction between different contextual and institutional conditions at stake. In the social science, scholars have written extensively on the association between employment, education and skills, showing positive relationships among those dimensions (Abrassart, 2013; Bol & van de Werfhorst, 2013; Heckman, Stixrud, & Urzua, 2006; Psacharopoulos & Patrinos, 2004; van de Werfhorst, 2011). The increasing complexity of labour markets requires selection and allocation based on education attainment associated with cognitive and non-cognitive skills (Heckman *et al.*, 2006). Against this background, human capital theory (Becker, 1964) argues that education provides individuals with enhanced skills that make them more productive. Conversely, signalling (Spence 1973) and screening (Stiglitz, 1975) theories view qualifications as a solution to an information problem in the labour market, which are, in extremis, not regarded as productivity enhancing, but simply as indicators of intrinsic abilities. Moreover, positional good approaches contend that qualifications and other attributes affect the rank of individuals in the merit order of labour supply. As employers recruit in order of diminishing merit, education is an important means to affect an individual's position in the ranking and therefore an educational arms race can emerge, which does not improve aggregate well-being, but simply increases the cost of education (Thirlwall, 1975). Therefore, we consider the available empirical evidence related to labour market, employment dynamics.

The dimension on material conditions (E) focuses on the material living conditions and on their participation to the civic life. Participation fosters cooperation and social cohesion, thus it stimulates social trust as well as a stronger attention to efficiency and efficacy of public policies, including LLL policies (UrBes, 2015). However, under conditions of poverty and social exclusion, social participation becomes harder, and a self-determined life is possible only with great difficulty (European Union, 2015). This is why measuring material conditions is of utmost relevance in the investigation of contextual living conditions of young people. Poverty and deprived material conditions harm individual lives by affecting their health and wellbeing and lowering educational outcomes. This limits young people's chances to achieve their full potential, that is, according to a capability approach, their real opportunities to do and be what they have reason to value (Sen, 1992; Deneulin, 2009; Venkatapuram, 2011). This dimension examines the extent to which trends towards social exclusion and polarization have an impact on young adults' living conditions, also considering to what degree they are counteracted by policy interventions in the redistribution and re-allocation of resources.

The dimension on health refers to the relationship between health, life expectancy and quality of life (OECD, 2016). Health has consequences on all dimensions and all different phases of people's life, modifying their life conditions and influencing their behaviour, social relationships, opportunities and prospects. Further, health is a multidimensional feature (World Health Organization, 1948) and it comprises to enjoy a "complete physical, mental and social well-being" and cannot be intended only as the absence of disease. We did not expand on the concept of well-being in terms of perceptions and opinions expressed by the individuals on their own life about their own personal welfare (Sen, 1992), as the availability of aggregate regional and comparable data on individual perception of life satisfaction is limited, especially looking at a wider time-range. For this reason we could not integrate in this dimension the well-being as perceived by people.

These six dimensions defined above define in our framework the contextual living conditions as shaping the structures of opportunities for young adults in different regional settings. It provides synthetic information on different dimensions that can be usefully related to LLL policymaking and to the impact of such interventions. However, this might not be intended as a fixed portrayal of young adults' living conditions, but as a mix of enablements and constraints in which individual's action is embedded.

5. Data collection and methodology

The level of the analysis

To gain understanding of the heterogeneity of young adults in different national and regional contexts, we based the quantitative analysis on describing young adults living conditions of each context. Within the EU, the official statistical approach of gathering data on structural information is using a hierarchical categorisation of EU territories and regions. As a geographical system, a division was developed by Eurostat to structure and classify regional statistics resulting in the nomenclature of territorial units for statistics (*Nomenclature des Unités territoriales statistiques* – NUTS). The aim is to provide a single and coherent system for “comparable and harmonised data for the European Union to use in the definition, implementation and analysis of Community policies” (Eurostat, 2007, p. 3). Therefore, the EU predominantly uses a national state driven concept for producing, describing and implementing regional statistics. However, due to changing realities, such as internationalisation, Europeanisation and globalisation processes, the concept of using administrative units, in particular national level, as a unit of analysis is increasingly questioned as a useful tool to describe social realities (cf. D2.3, State of the Art Report, p. 10). The project YOUNG_ADULLLT derives from the assumption, that the implementation of LLL policies is best studied at the regional/local level to understand the context specificity of young adult life courses beyond the national level. Therefore, the use of the concept of Functional Regions sharpens the focus on regional differences and variations. However, using the concept also raises challenges for the validity of research, as the different FRs can match/mismatch with the territorial and/or administrative regions that are predominantly used within established statistics, as well as creating challenges in data availability of different sources. For example, statistical data on socioeconomic and socio-demographic aspects, education and training, labour market and welfare dimensions are not limited to administrative units (countries, states, districts, provinces, or cities) (ibid, p.10f). Departing from the tension between official descriptions of communities, changing realities and data availability, WP4 deals with this in two ways: by developing a practical approach of data collection, as well as an assessment of the data production process of the EU. In the case of the latter, the data gaps in the European Statistical Systems also imply how data are collected within the EU, with regards to our Functional Regions. This provides insight to the question, of how data are used to steer political processes on LLL policies and thus in the process of definition, coordination and implementation of policy measures. In the case of the data gathering process, the WP4 collects data as close as possible to the regional level. In this way, the pre-existing data on NUTS Level 2 was used, however, enriched and specified by local/regional specifics. This is relevant, as subdivisions in some levels do not necessarily

correspond to administrative divisions within the country. The level of analysis of WP4 in this sense is constrained from the existing territorial division, which reflects the data availability².

WP4 explores contextual living conditions in nine European member states and eighteen regions (NUTS2). **Table 1** presents the regions with the corresponding information about their territorial division. The indicators were chosen based on their analytical relevance, measurability and territorial coverage and comparability.

Table 1 Description of the Functional regions with the corresponding codes at NUTS2 level.

Country	Territory name in the proposal	Name in the corresponding language	NUTS2 name in the corresponding language	Code 2016 NUTS2	Territory is NUTS3
Finland	Kainuu	Kainuu	Pohjois-ja Itä-Suomi	FI1D	X
	Southwest Finland Region	Varsinais-Suomi	Etelä-Suomi	FI1C	X
UK	Aberdeen City & Aberdeenshire	Aberdeen City & Aberdeenshire	North Eastern Scotland	UKM5	
	Glasgow City Region	Glasgow City	West Central Scotland	UKM8	X
Germany	Bremen	Bremen	Bremen	DE50	X
	Frankfurt Rhein-Main Area	Frankfurt Rhein-Main Area	Darmstadt	DE71	X
Austria	Upper Austria	Oberösterreich		AT31	
	Vienna	Wien		AT13	X
Portugal	Vale do Ave	Ave	Norte	PT11	X
	Litoral Alentejano	Alentejo Litoral	Alentejo	PT18	X
Spain	Girona	Girona	Catalonia	ES51	X
	Malaga	Málaga	Andalusia	ES61	X
Italy	Milan	Milano	Lombardia	ITC4	X
	Genoa	Genova	Liguria	ITC3	X
Croatia	Istria-County	Istarska županija	Jadranska Hrvatska	HR03	X
	Osijek-Baranja County	Osječko-baranjska županija	Kontinentalna Hrvatska	HR04	X
Bulgaria	Blagoevgrad	Благоевград	Югозападен	BG41	X
	Plovdiv	Пловдив	Южен централен	BG42	X

Considering this mismatch between the territories chosen in the project as functional regions and the availability of the data extracted from the international data sources, the level of analysis varies hugely in terms of percentage of young adults living in these regions. As

² Detailed information about territorial division of the European territory could be found at <http://ec.europa.eu/eurostat/web/nuts/overview>. In the EUROSTAT division, NUTS1 corresponds to major socio-economic regions; NUTS2 are the basic regions for the application of regional policies and; NUTS3 are the small regions for specific diagnoses, which are generally metropolitan area.

shown in **Table 2**, the units of analysis (NUTS2 regions) varies in terms of territorial extension and rural vs. urban as displayed by their degree of urbanization. In the sample of regions selected, Wien and Bremen are both highly populated and dense areas and correspond administratively to single federal states (*Bundesländer*). Other regions such as Andalusia, or Pohjois-ja Ita Suomi represent respectively 17% and 67% of the entire Spain and Finland. Other regions, such as Alentejo or both the Finnish regions selected are large and rural. This influences substantially the estimates of the overall findings and needs to be taken into consideration when interpreting the results. It is natural to expect that urban area are richer in terms of labour market opportunities or show a higher degree of economy innovation. Moreover, there are big changes in terms of the share of young population living in these regions and the changes produced by the different economic circumstances these territories went through during the 2007-2014 time-span. South European regions such as Spain, Portugal, Italy, Croatia, and also Bulgaria suffered a loss in the share of young adults population ranging from -39% in Catalonia to -2.7% in Yugozapaden. Similar or even more extreme results are shown if we take into account the population between 20 and 34 years. This is partially related to aging process, although migration flows are playing certain role.

Table 2 Population density and share of young adults living in regions, ordered by variation of the share of population aged 20-29 years between 2007 and 2014.

	Area, km2	Density of population, km2			Pop. 20-29 as % of total pop		
	2014	2007	2014	Variation	2007	2014	Variation
Catalonia	32,091	226.1	232	2.5%	14.6	10.5	-39.0%
Andalusia	87,597	93.1	96.8	3.8%	15.4	12.1	-27.3%
Norte	21,286	174.7	170.7	-2.3%	14.0	11.5	-21.7%
Alentejo	31,605	24.4	23.4	-4.3%	12.4	10.3	-20.4%
Yuz.tse.	22,365	67.9	66.3	-2.4%	13.9	12.2	-13.9%
Lombardia	23,864	413.7	418.5	1.1%	10.5	9.6	-9.4%
J.Hrvatska	24,705	57.1	56.8	-0.5%	13.2	12.1	-9.1%
K.Hrvatska	31,889	91	88.8	-2.5%	13.5	12.5	-8.0%
Yugozapaden	20,307	104.7	105.8	1.0%	15.2	14.8	-2.7%
Etela-S	35,376	36.2	36.9	1.9%	11.7	11.4	-2.6%
Pohjois-ja	227,148	6.4	6.4	0.0%	11.9	11.9	0.0%
OberO.	11,980	119.8	122.1	1.9%	12.6	12.7	0.8%
Liguria	5,416	295.1	293.1	-0.7%	8.5	8.6	1.2%
Darmstadt	7,445	507.3	516.2	1.7%	11.4	11.9	4.2%
Bremen	419	1641.3	1574.3	-4.3%	13.3	14.0	5.0%
SW.Scotland	13,438	175.8	178.9	1.7%	12.8	13.6	5.9%
Wien	415	4212.3	4506.8	6.5%	14.0	15.3	8.5%
NE.Scotland	6,498	70.2	75.2	6.6%	13.6	15.3	11.1%

The data collation and the operationalisation process

This sub-section describes the methodology adopted and the operationalization process carried out in conducting the quantitative research on young adults' contextual living conditions. First, the core team designed a framework of analysis (**see section 4**) and selected the dimensions and categories of interest for the overall research, finally the indicators connected to the categories were selected (see **Figure 2** and **Annex A1** for a detailed description of the items).

Second, the team leader identified administrative sources and comparative surveys and assesses the data coverage and quality at national and regional level. Considering data availability constraints, the level of analysis selected is NUTS2 level which represents the highest level of territorial disaggregation to conduct an in-depth analysis of young adults living conditions.

The data collation draws on databases from national administrative sources and comparative surveys compiled by international organisations such as EUROSTAT and the OECD, being the main sources the European Labour Force Survey and the European Social and Income Conditions. In **Figure 1** the six dimensions of the analysis are shown with the correspondent items components.

Data was collated for more than 10-year span, from 2005 through 2016, the latest available year. This enables comparability across countries and regions, before and after the Great Recession. Young adults are defined as individuals aged between 18 and 29 years, however, a plurality of age ranges were used pragmatically to overcome data limitations and select the sound indicators. For example, in the category attainment we select the age group between 30 and 34 years. This is due to the fact that to consider the level of attainment of the territorial unit, it is better to peak the age group which is likely to have attained the highest education.

Composite indicators and their construction

The European statistical information system has made substantial efforts to obtain cross-country comparable proxies, regarding the living conditions of the population. However, it has not developed an aggregate measure that examines the complementarities of the living conditions. There are highly correlated measures, which provide a singular aspect of the living conditions, such as poverty (e.g. AROPE), health conditions, education attainment, housing or working conditions. The shortcoming of this method is that it is not easy to capture how these different aspects produce different equilibria.

Another set of indicators, which are generated, are nominal measurements that indicate population proportions below certain thresholds (e.g., EU-SILC poverty measures). However, these do not allow a comparison of changes in levels because they are not scalar

measurements (Atkinson and Marlier 2010). This means that it is not possible to observe changes in relative position on a continuous scale and not possible to assess the proximity or distance to the threshold of risk of given social groups. This implies that these measures cannot provide information about how different are given social groups between them and how they diverge from a certain point of reference. Moreover, as raised in section 5, fewer indicators are available at a regional level, which reduces considerably the number of items that can be used to develop a comprehensive measure at a regional level.

To overcome these difficulties, we conceive a more complete conception of living conditions, which goes beyond the mere measurement of the income, or material deprivation, and integrate these into a more comprehensive proxy, which also encompasses levels of education and health. The construction of this comprehensive composite indicator proceeds from the most fine grained measures of living conditions, but it does not include different aspect such as housing, health and well-being conditions, social and political participation, relational and vital space and skills. The European statistical information does not provide any harmonized data for these dimensions at regional level.

Having selected a list of more than 70 items, exploratory factor analysis (EFA) was performed for each category. EFA is a tool for aggregating items with the purpose of determining the latent structure of the data. This implies a reflexive measurement structure of the data, in which a general unobserved construct is assumed to be the causal origination which produces the observable, error contaminated data. After having established consistent categories, second order factors were predicted. We have proceeded to reduced form of measurement by looking at reliability and then assessing the validity of the factors.

Most of the composite indicators such as the Social Cohesion Index use principal component analysis (PCA) or apply arbitrary weights for each dimension. EFA will perform better accounting for covariance, while PCA is designed to compress a matrix into a lower rank while minimising loss of information (i.e., variance) through the use of linear structures³.

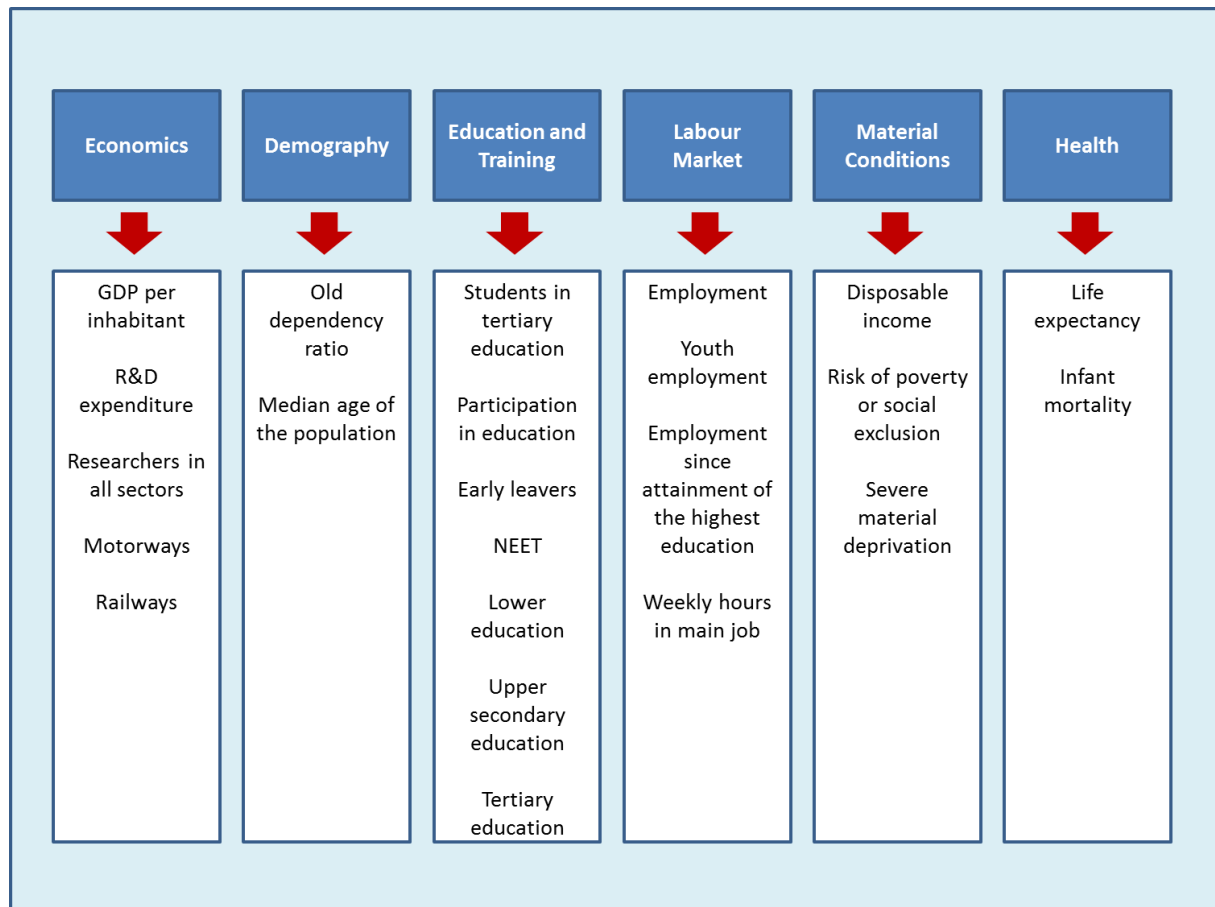
After having developed the factors we perform configurational invariance test to check measurement invariance across the time-span. This involves establishing whether factor loadings, intercepts and residual variances are equivalent in a factor model that measures a latent concept. This is a fundamental step to assure that comparisons made on the latent variable are valid across groups or time. Testing for measurement invariance involves examining a set of increasingly constrained Structural Equation Models (SEM), and verifies whether differences between these models are significant.

Sensitivity tests were performed by using different way of factor prediction. Finally, the factors were scaled on a 0-1 scale.

³ PCA is equivalent to a formative structure, with Hollingshead's SES being a standard default example in the social sciences.

A complete list of the variables and their definition is given in A1 and in A2 descriptive statistics are shown. The list of the variable represents key aspect of the regional overall conditions of the population. Some of the items are targeted to different age group which changes slightly.

Figure 2 Factors and items employed



Source: Authors own elaboration

Limitations and constraints of the analysis

The limitations of the research work in WP4 are diverse and need to be considered carefully. Like all concepts in the social sciences, and academic disciplines in general, the act of constructing measures implies a selection of the dimensions (in Ancient Greek *κατηγορία* or in Latin *categoria*), which have to be operationalized and thus, leads to a simplification of the object of study. This means a transformation of some qualities into a metric which is not just a technical process, but an important feature of social life (Desrosières, 2008; Hacking, 1999). This process is generally called commensuration and has been widely examined by historians, statisticians, sociologist and philosophers (Espeland & Stevens, 1998). From Plato and Aristotle, to Marx, Weber, Simmel and Foucault, the implications of

commensuration have been analysed as a process that influences our valuation and the way we invest in goods and services.

The research of WP4 could not escape the process of commensuration. First, the establishment, recognition, and use of a statistical object is very appealing. Second, the interpretation and political use of each measure is a very powerful way to push forward a specific approach or even a political agenda (Meyer & Benavot, 2013). In this sense, our research objectives are constrained from existing and available sources, their comparability and statistical issues such as representativeness. On this matter, we stress that the most relevant survey data source for the research objectives of WP4 is the European Labour Force Survey, as the only survey available and comparable at NUTS2 level that collects information on living conditions of young adults.

There are substantial limitations in the availability of complete information of young adults' living condition at regional and sub-national level. The EUROSTAT statistical information system relies on restricted administrative records with territorial disaggregation, mainly on the economics, demographics and health system. Moreover, this information is quite disperse and not very user-friendly. Few micro-data sources provide a scattered figure on territorial differences of young adults living conditions. The most complete information available for this purpose is the Labour Force Survey.

An important limitation for the production of regional indicators on young adults living conditions is the absence of complete information on the sample structure and territorial identification, both in the EU-SILC and LFS, which are potentially the most adequate data sources for the research objective of the project. This limited the ability of the YOUNG ADULLLT project to derive local level indicators from these sources. Functional regions partially correspond with the NUTS2 classification and some indicators are available at this level. However, deriving finer contextual-based measure of young adults and LLL policies in the European territories is particularly challenging as few data are available at the NUTS3 level.

6. Findings

This section of findings is structured as follows: first, an assessment of the data relevance and usability; second, comparative cross-regional findings on education and labour market dimensions; third, regional, country profiles where the composite indicators (scores) along all the dimensions are compared for the two regions within the same country.

Summary of findings from data relevance and usability assessments

This section provides an overview on the possibilities and limitations of the available data for

describing the living conditions of young adults' in the selected regions. Statistical data is widely used in policies processes to inform and steer the definition, coordination and implementation of policy for young adults. Thus, assessing the data allows us to understand the perspective, or the 'data-lens', shaping LLL policies. As LLL policies unfold differently within the different contexts, the implementation of LLL policies is not only a question of the process of policy coordination and matching, but also a question of the information on which policy-making is based on. Its objective is to describe the availability, representation and quality of the data and data sources on the local/ regional level. In order to do so, firstly, context specific data gaps at national and local level were described in order to secondly, assesses limitations and constraints of the analysis.

Eurostat UNESCO and OECD provide a vast amount of harmonized and comparable data that can be a useful resource for assessing the life conditions of young people in different domains and in various countries/regions. However, the availability of data at the regional/local level is limited. In terms of thematic coverage, the richest data is available in the economy and demography domains at NUTS2 and NUTS3 level. This restrains the possibility of comparison. Within the surveys available the most relevant source of information is the EU-LFS which has large sample size at local level. Moreover, complementing the international data with local data is a hard task mainly for four reasons: the fragmentation of the sources available; the comparability of the data; the level of disaggregation at local level and the actual availability for research purpose. Effective availability is reduced when working at the level of functional regions, as the richest data is available at the national level and availability is reduced at smaller spatial scales. This is particularly evident in the domain of material conditions, where the scale of data availability tends to be national.

Availability of regional data varied across participating countries. Some countries reported severe difficulties assessing data beneath the national scale (Portugal), whilst in other countries there was reasonable availability at sub-national scales, but challenging to go beyond the NUTS2 scale (Austria, Croatia, Finland, Scotland, Spain). When sub-national data was available another challenge that arose was the fit, or lack of fit, between the geography of the data zones and functional regions. In some cases, national teams reported both selected functional regions to have a reasonable approximate fit with existing data geography (Austria, Croatia, Scotland), whilst in other cases this was seen as challenging (Finland, Italy). Typically, these matches were based on NUTS2 regions, which in some contexts were reported to be too aggregate. For instance, for the case of Bulgaria, national experts highlighted their awareness of internal divisions within the functional region, which aggregated indicators would miss.

In all cases, national report authors reported that complementary data was available and sometimes in significant quantities (e.g. Italy, Austria). However, a range of challenges were highlighted with regards to integrating “local” data with harmonised data to achieve an integrated statistical profile. First of all, some national report authors highlighted that data availability wasn’t transparent and that significant contextual knowledge was required to identify the availability of data. Similarly, whilst usually at least notionally in the public domain, some reports highlighted practical challenges in accessing data. For instance, it was observed that collating the data was by no means costless as it would require significant amount of time to identify availability, obtain the data and process (Portugal, Spain). For the case of Finland accessing some data carried an explicit cost in terms of access fees. A recurring observation was that data sources and formats were fragmented (Austria, Croatia, Finland, Germany, Italy, Portugal and Spain). This required engagement with several organisations and various formats ranging from data portals to published reports. The Croatian report, points out a specific challenge. As the country only joined the EU formally in 2013, harmonised data is only available for a subset of the period from 2005 to 2015. According to the National classification of territorial units, as of 1 January 2013 the Republic of Croatia has been divided into two statistical regions – Continental Croatia and Adriatic Croatia. This classification has been set up according to EUROSTAT criteria. Even though it is only a statistical division, that is without elements of management character or a division of non-administrative type, the recent division of the Republic of Croatia into two statistical regions – Continental and Adriatic Croatia, has opened up a series of questions in a sense of financial and administrative efficiency of local and regional self-government.

The Spanish report highlights an example from the case of Catalonia, where rich data exist, but they are not actively made accessible to civil society:

“some private institutions in agreement with some public ones (the Chamber of Commerce of Catalonia and the Department of Education of Catalonia and the Catalan Employment Service) are collecting very rich information on skills and competences of the vocational and training education. However, these data are not provided publicly and the channels to accessing them are not clearly established. This hampers the transparency of the administration that is collecting a huge amount of information, but it is not using it neither to better inform the citizenship nor, as stated by the Chamber of Commerce, to improve their own political action” (Scandurra & Rambla, 2017, p. 3).

Even if data could be identified and accessed, there is no guarantee that the data was useful for comparative analysis, as most national reports highlighted gaps in coverage, both in terms of time and geography, as well as difficulties establishing comparison with harmonised

sources. For instance, the Austrian reports comments that although a wide range of local data sources had been identified and examined, the main emphasis was on harmonised data. Similarly, the Portuguese report highlights an example where education participation indicators from local sources were incompatible with harmonised source, and hence the latter were preferred for comparative work. The authors concluded that:

“Since local data are collected within a particular framework and there is no prior intention to bring them into interaction with other data sources, this affects the possibilities of contextualised comparison between the different national cases.

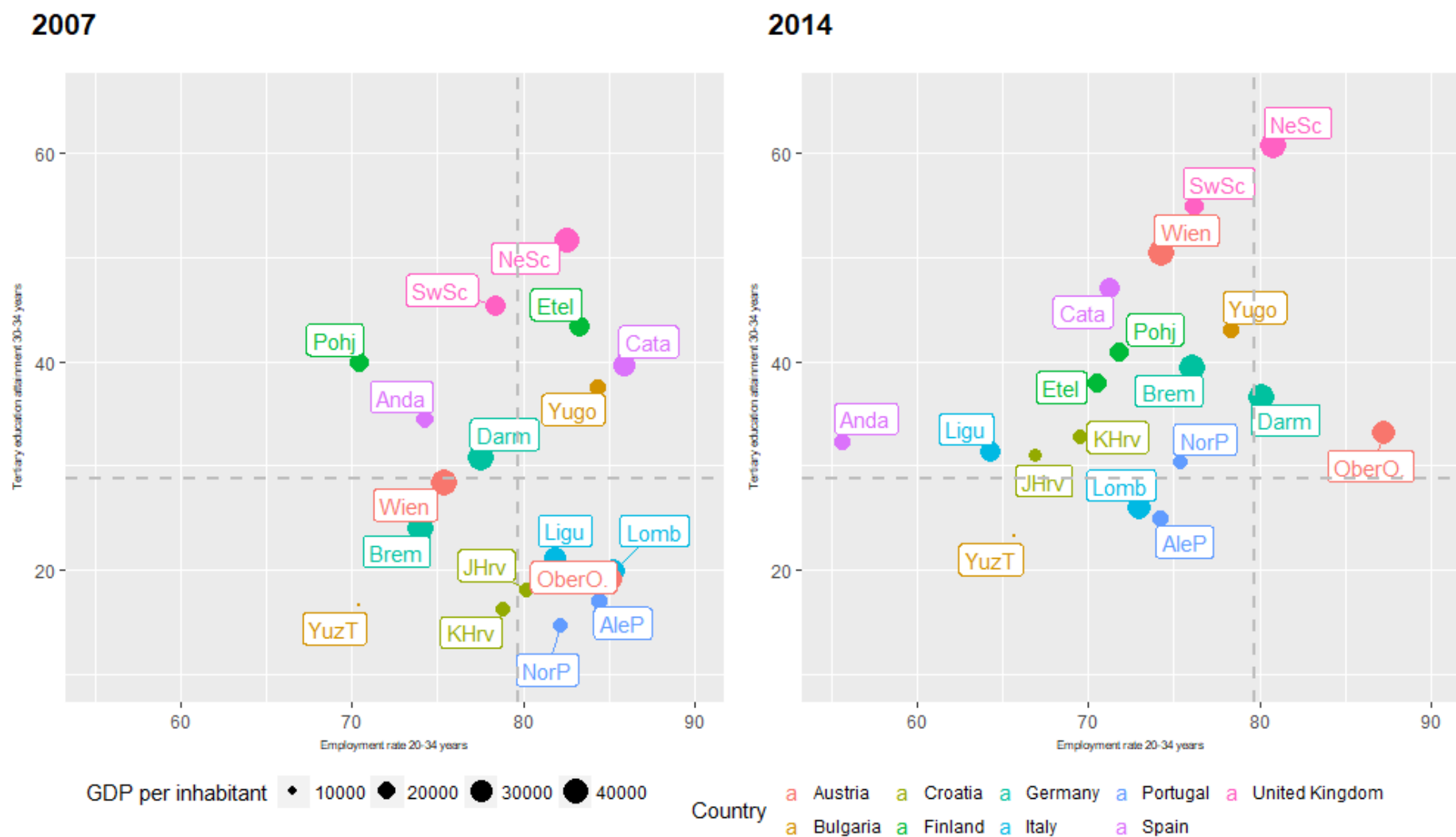
[...] a comprehensive integration and analysis of multi-source data at the different levels of analysis is a hard goal to accomplish; therefore, this research intends to raise awareness for the need and relevance of contextualised data at regional and local level in order to be able to produce a full picture of the risk profiles derived of the living conditions of young people in different European regions” (Rodrigues et al, 2017, p. 4).

Cross-regional findings on education and labour market

LLL policies are the result of a complex interaction with the social and economic contexts in which they are implemented, and with the social actors. The success of any political reform depends largely on how these aspects are structured. These preliminary results show that there are huge differences both in the level and dispersion across European territories in young adults living conditions. Unfortunately, this evidence is partial and could rely on very limited and general information. In order to better inform policies, an intense effort is needed in developing richer context-based information at territorial level. Highlighting existing data gaps and improving the availability of territorial information for better targeted policy are crucial steps to overcome nation-state based measures. Due to changing realities, such as internationalisation, Europeanization and globalisation processes, the use of the national-level as a representative unit of account should be questioned and more localised measures could be useful tools to describe changing social realities.

There is the need for increasing the social impact by understanding the role of the specific contexts within which measures are implemented. This calls for more contextualized information which is a prerequisite for regional comparative analysis and a more targeted and evidence-based policy. Moreover, in order to develop a broader interpretative framework it is necessary to tap new data sources that are not strictly based on existing measures of education and labour market status. A holistic approach of living conditions is needed particularly in a time of socio-economic changes and reconfiguration of young adults' motivations and aspirations.

Figure 3 Tertiary education attainment, employment rate and GDP between 2007 and 2014.



Note: **Figure 3** shows the relationship and the evolution of the selected regions between 2007 and 2014. Both axis in the graphs are centred at 2007 values, this means that the origin of the graph represents the mean both for education attainment and employment rate. The size of the dots represent the values of the GDP at regional level in PPS.

Figure 3 shows the relationship between education attainment and employment rate of the young adults during the time-span 2007-2014. A general trend of increase in tertiary education attainment among young adults aged 30-34 is particularly pronounced in the regions of Wien and Darmstadt, but it is also presented in the regions of South Western and Eastern Scotland, Bremen, Continental and Adriatic Croatia and Catalonia. On the other hand, due the impact of the economic crisis, many regions experienced a steep increase in youth unemployment. This was more pronounced in the South and East European regions. A decreasing trend can be observed in the German regions of Darmstadt and Bremen and in Oberösterreich, while youth unemployment in the Finnish region of Pohjois-Suomi and in the Austrian regions of Wien remained stable or slightly decreased. As a result of the trends described, the **Figure 3** shows that some regions combine an above-the-average level of youth unemployment coupled with a low educational attainment. This is the case of Andalusia, Liguria Continental and Adriatic Croatia and Yuzhen Tzentralen. The regions of Lombardia and the two Portuguese regions (Alentejo and Norte) share with this first group a similar level of educational attainment, but show more favourable labour market conditions, as youth unemployment is lower. A second major group is made up by regions with medium-high levels of educational attainment coupled with medium and medium-low unemployment rates. Some of these regions have been affected by the economic crisis, but still the youth conditions on the labour market is comparatively favourable. It is the case of the Scottish, German and Finnish regions, together with Catalonia and Yugo Zapaden. The region of Oberösterreich is distinguished by low levels of youth unemployment but also a comparatively medium-low level of tertiary education attainment. Regions with a higher GDP per inhabitant show better employment conditions for young adults, while the level of tertiary education appears to be less correlated, showing that economic growth does not have a direct impact on the outcomes of the education system, which are connected to long-term trends and institutional structures. For instance, the region of Lombardia combines a medium-high GDP and unemployment with low educational attainment; while the region of Yugo combines less favourable economic conditions with a higher diffusion of tertiary educated among young people and a lower unemployment. Conversely, the youth unemployment rate is more sensitive to the economic cycle, as it is generally higher in countries where the economic crisis had a major impact.

Figure 4 Education, Labour Market Access and Disposable Income in the selected regions between 2007 and 2014

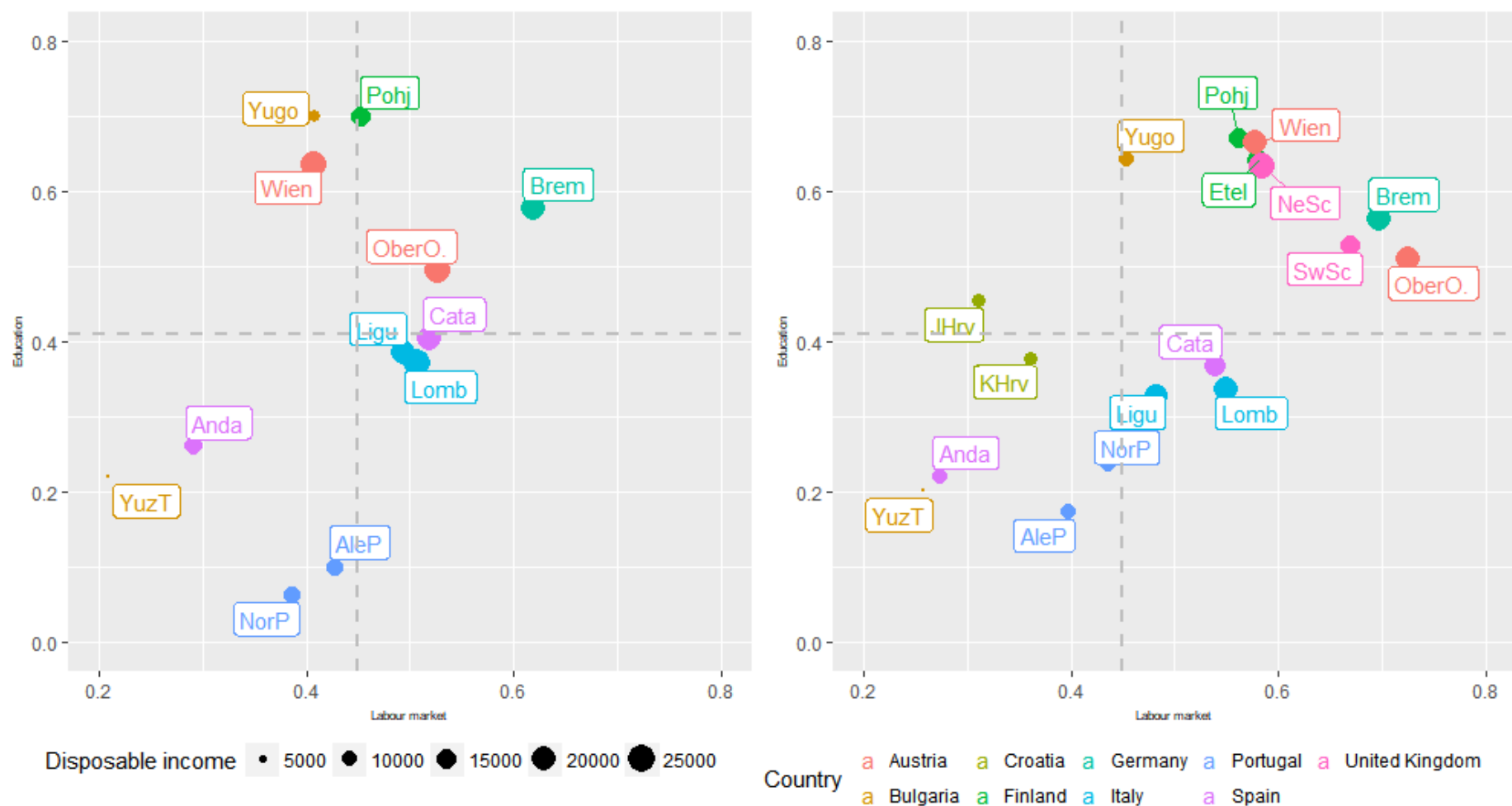


Figure 4 shows the relationship and the evolution of the selected regions between 2007 and 2014. Both axis in the graphs are centred at 2007 values, this means that the origin of the graph represent the mean of the regions considered both for education and labour market access. The size of the dots represents the values of the disposable income.

In **Figure 4**, we show the relationship between education attainment of the regions and labour market access. These measures represent composite proxies of the educational opportunities and the labour market integration of the young adults in the selected regions. As a general tendency, there is a differentiation between education and labour market in the two years considered. German, Austrian, Scottish and Finnish regions have both higher values in 2014 and they are higher compared to 2007. On the other hand, Andalusia, Yuzhen Tsentralen, Alentejo and Norte score low in 2007 and they remain stable on both dimensions, although the Portuguese regions improve their relative position in terms of educational opportunities. This seems to be coupled with generally better material conditions of the regions which have both higher education opportunities and labour market integration.

Labour market integration remains stable in almost the rest of the regions going from no change to an increase of 0.02%. While it increased slightly for Oberösterreich, Wien and North East Scotland. Labour market integration decreased in particular in those regions hardest hit by the economic crisis, such as those in Italy, Spain and Portuguese. This seems to configure a particular poor context for young adults which is likely to affect their life-course perspectives.

When looking at the scores for each region there are important differences being the most extreme case Andalusia which represents a context in terms of the two dimensions compared very different from Catalonia.

Pohjois-Suomi, Darmstadt, Vienna, Yugo Zapaden and Oberösterreich increase their labour market integration between 16.2% and 27.4% between 2007 and 2014. The marked decrease in the labour market access is mainly driven by reduced youth unemployment which conversely affected negatively mainly South-European countries where the rate almost tripled between and after the European crisis.

Education attainment of young adults shows an opposite pattern with an overall increase, being the exception the regions of Alentejo, Continental Croatia (-16% the highest decrease), Oberösterreich (the lowest decrease), South West Scotland and Wien. This is likely during an economic recession when the opportunity cost of remaining in education decreases. In 2014, there are only three regions that maintained higher education opportunities and high labour market access compared to 2007. These are North East Scotland, Darmstadt and Oberösterreich, these regions are three out of the four richest regions which also show more stable labour market conditions. These regions coupled better overall economic conditions with smoother labour market integration.

Unfortunately, the availability of the data does not make fully comparable the graphs due to the lack of key indicators in the selected regions, especially for the year 2007.

Particularly, the data available cannot establish a comparison in terms of educational access

in the regions considered, because the data on education access are available until 2012. When considering 2012 within the regions with low education access, the only Lombardia and Liguria registered a reduction between 2007 and 2012.

Overall there is a tendency of better educational opportunities within the regions analysed versus sluggish labour market integration basically due to low access. These seem consequences of the economic downturn that hit unequally the territories analysed. However, German, Austrian, Finnish and Scottish regions seemed to better maintain their educational opportunities for young adults coupling this with high overall material conditions.

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Regional and country profiles

In this section, we present the results for the 18 selected regions comparing them with the respective country average. This shows the heterogeneity in each of the dimensions of young adults' living conditions which are relevant for specific policies. The specificities of the selected regions across the multiple dimensions represent the main object of the section: the regions are compared among them and in the light of the country-level conditions by using standardized indicators going from 0 to 1. The findings are then combined to produce a cross-regional profile of contextual living conditions of young adults.

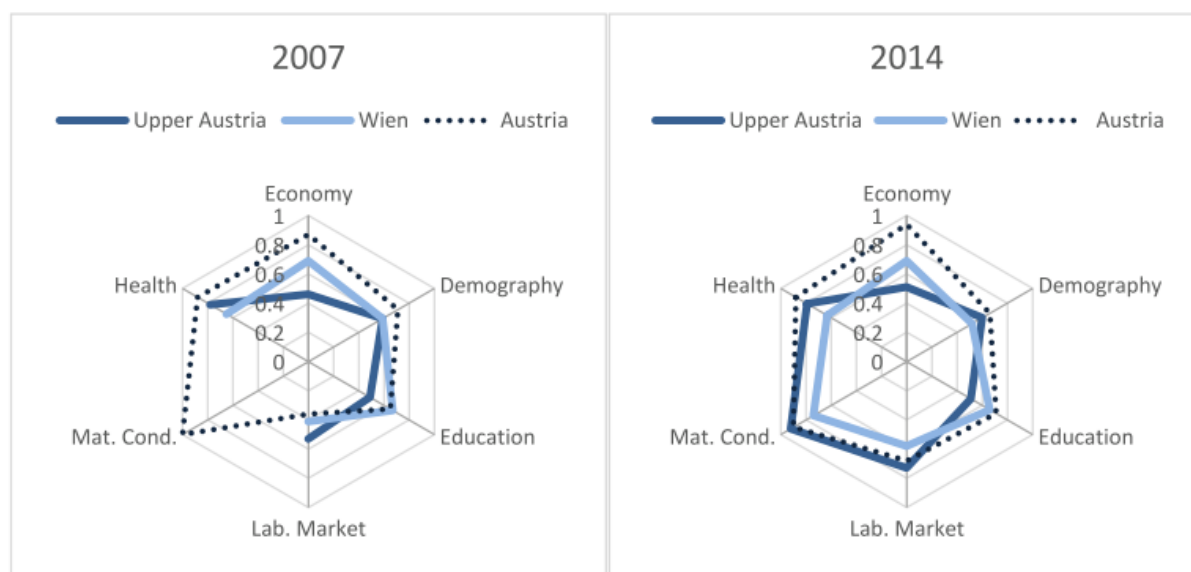
Austria

The contextual living conditions of young adults are analysed focusing on the regions Vienna and Oberösterreich. The two regions selected share some characteristics as they are within the same federal regulatory framework, but they present differences in the socio-economic structure, political tradition and degree of urbanization as well as in the way they react to common challenges like youth unemployment. Generally speaking, Austria faces an increasing demographic pressure, as the old-dependency rate is rising while young age dependency is shrinking. Values for Oberösterreich are close to the country average while in Vienna the weight of young people is stronger because of migration inflows. Vienna has a leading role in the Austrian economy, confirmed by the high GDP per capita. Also, the industrial region of Oberösterreich shows a remarkable economic performance, as the GDP per inhabitant is above the national average. The link between education and the labour market appears to be stronger in Austria, compared to the European average. The percentage of low-educated young adults recently increased. In Oberösterreich young people heavily participate, especially in upper secondary education, while higher education is more widespread in Vienna. The rate of young people out of education and work is higher in the Vienna region, while extremely low in Oberösterreich. All in all, employment in Austria has been increasing especially in temporary and part-time jobs, but the economy cannot fully

absorb the growth in the labour force (migration, increasing female participation): this has led to recent increases in unemployment, especially for young low-skilled people. In Vienna, young people face a higher unemployment risk, while youth NEET rates in Oberösterreich are lower than the country average. Social welfare standards are still high overall, as the proportion of the population at risk of poverty or social exclusion is one of the lowest among EU Member States, but some groups must face greater risks, in particular, older women and children of foreign-born parents.

According to our indicators, the two regions of Vienna and Oberösterreich show high values in the dimension material conditions (0.74 for Vienna and 0.92 for Oberösterreich in 2014). Both regions have relatively low levels of poverty and social exclusion and a relative high disposable income, compared with the country-level scores for Austria in the same domain. Vienna is characterised by medium-high scores in education and economics (0.66 and 0.69), and its labour market conditions have improved from 2007 to 2014 (from 0.43 to 0.58). Oberösterreich has high values in the labour market dimension, which accounts for the comparatively favourable employment conditions of young adults (with a strong increase from 0.53 in 2007 to 0.73 in 2014). The two regions, like Austria as a whole, were not as affected by the economic crisis as many other selected regions were. Ageing is more pronounced in Oberösterreich, as shown by the higher score in the Demography dimension (0.59), together with a higher score in health dimension (0.78) and life expectancy. Among the countries, Austria scores high or very high in all the dimension of contextual living conditions considered and especially in the economics and material conditions dimension.

Figure 5 Profile of Austria, Wien and Oberösterreich



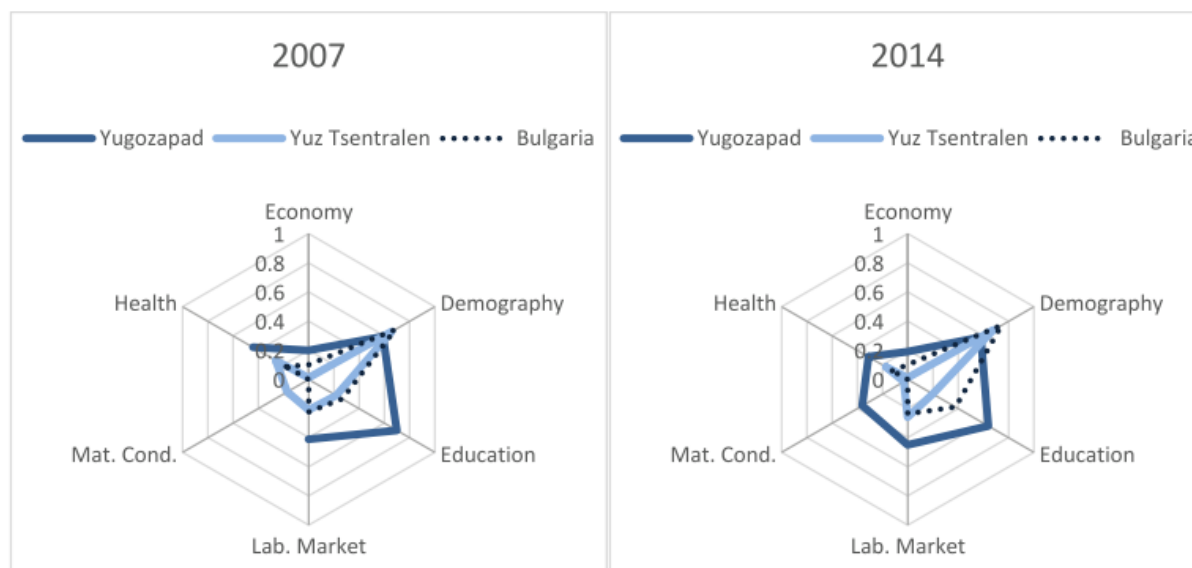
Bulgaria

The contextual living conditions of young adults are analysed focusing on the regions Yuhzen Tsentralen and Yugozapaden. The overall contextual living conditions are characterized by a process of slow economic stabilization, low disposable household income, youth employment growth and high educational attainment. All in all, the distance in living conditions indicators with respect to other EU countries is still significant. The two regions of Yuhzen Tsentralen and Yugozapaden show similar characteristics together with relevant differences. The population decline and ageing affecting the country is less pronounced in the regions selected. The economic system is still undergoing a deep restructuring with different impact on the more industrialized Yuhzen Tsentralen and the more service-oriented Yugozapaden. Bulgaria has very high shares of people with higher education compared to European partners, as roughly two thirds of the 20-24 age group are students. This is a sign that education is still perceived as a value-added and it is generally spread within the population, as confirmed by the high proportion of people aged between 30 and 34 with upper secondary education. However, when it comes to further adult education, the share of learners is much lower than the European average. After having completed their education qualification, people tend to interrupt their formation: this would require a more active involvement of the training organizations in formal and non-formal education and lifelong learning. Apart from education, in Bulgaria, almost all other dimensions show poorer conditions compared to EU average. The overall satisfaction for young people in Bulgaria is much lower than the European average, and men are more satisfied than women. Social protection expenditure increased from 2005 to 2014 but remains much lower than that of other EU countries, as it is the Households disposable income. The share of people at risk of poverty and social exclusion in Bulgaria remained relatively stable in the last years, describing Bulgaria as the poorest European country with low standard and poor living conditions.

The two Bulgarian regions of Yugozapaden and Yuhzen Tsentralen show considerably different patterns of contextual living conditions: Yugozapaden scored medium-high on the education dimension (0.64) in 2014, implying a high level of participation and attainment in the education system and medium along the labour market dimension (0.45); while Yuhzen Tsentralen scores low or medium-low on all the dimensions considered, and especially in economics and material conditions (0 and 0.3). Both regions score highly on the demography dimension (0.58 for Yugozapaden and 0.68 for Yuhzen Tsentralen), implying an advanced process of population ageing. While the profile of Yuhzen Tsentralen is coherent with the factor scores at the national level for Bulgaria (high score on demography and low or medium-low in the other dimensions). Yugozapaden is characterized by better contextual

living conditions within the Bulgarian context, even if with low scores along the economic dimension (0.19 in 2014).

Figure 6 Profile of Bulgaria, Yugozapaden and Yuhzen Tsentralen



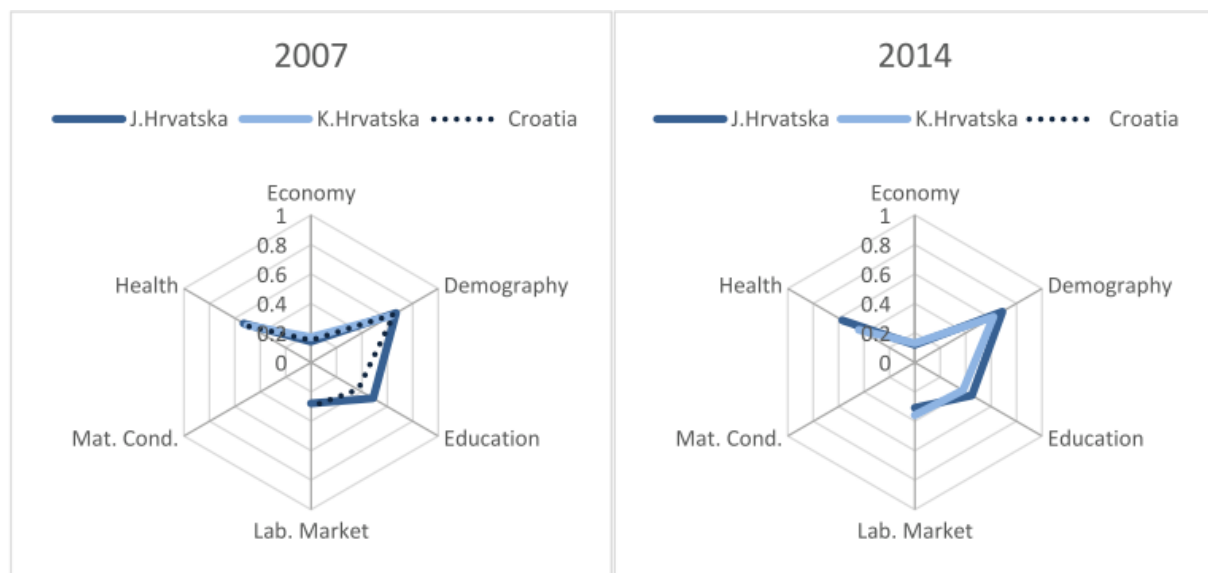
Croatia

The contextual living conditions of young adults are analysed focusing on the regions Istria and Osijek-Baranja. However, the NUTS2 regions analysed are the two macro-regions (Adriatic and Continental Croatia) in which the country is divided. This is an ad-hoc statistical division (see the Section 5). Contextual living conditions of young people in Croatia are less favourable in comparison with the European average. This concerns youth in both regions, even though Istria is more developed than the Osijek-Baranja region. The main demographic characteristic is a decline of the rate of natural population (including increasing the average age of the population and low fertility rate). However, Istria recently experienced a mild increase of population, while the decline was very strong in Osijek-Baranja. Croatian economic conditions are significantly below the European average by looking at GDP and productivity. The main strengths of the Croatian education system are a very low early school leaving rate and the high proportion of secondary vocational school graduates entering higher education, while adult education is underdeveloped. Croatia is one of the European countries with the highest NEET rates and lowest youth employment, but the position of youth in the labour market is significantly worst in Osijek-Baranja. The key issues faced by young people when entering the labour market in Croatia are the lack of previous work experience and mismatch between their qualifications and the skill demand. Social protection expenditures are below the European average, while the poverty and material deprivation

rate is much higher. The healthcare system appears to be broad and encompassing but the availability of health services is not uniform in all regions. However, Croatian people are usually less satisfied than the average European citizens in the field of satisfaction especially for what concerns the financial situation, overall life and living environment. All in all, the indicators on the different dimension show that the contextual living conditions of young people tend to be better in Istria than in the region of Osijek-Baranja.

The two Croatian regions of Jadranska Hrvatska and Kontinentalna Hrvatska are characterized, according to the factor scores, by similar living conditions, which are closely aligned with national level scores. The scores are low along the economic dimension (0.12 for Jadranska Hrvatska and 0.13 for Kontinentalna Hrvatska), indicating a weak performance of the economic system relative to most of the other countries participating in the project, with the exception of Bulgaria. On the other hand, population ageing seems to be a quite established trend (medium-high scores of 0.69 and 0.62 along the demographic dimension). Education opportunities and labour market integration are not favourable from a comparative perspective, as demonstrated by medium and medium-low values for the education (0.45 and 0.38, 0.42 at country level) and labour market dimension (0.31 and 0.36, 0.27 at country level) in 2014. Data on material conditions are missing at the regional level, while the country scores medium-low in comparative perspective (0.39 in 2014).

Figure 7 Profile of Croatia, Jadranska Hrvatska and Kontinentalna Hrvatska



Germany

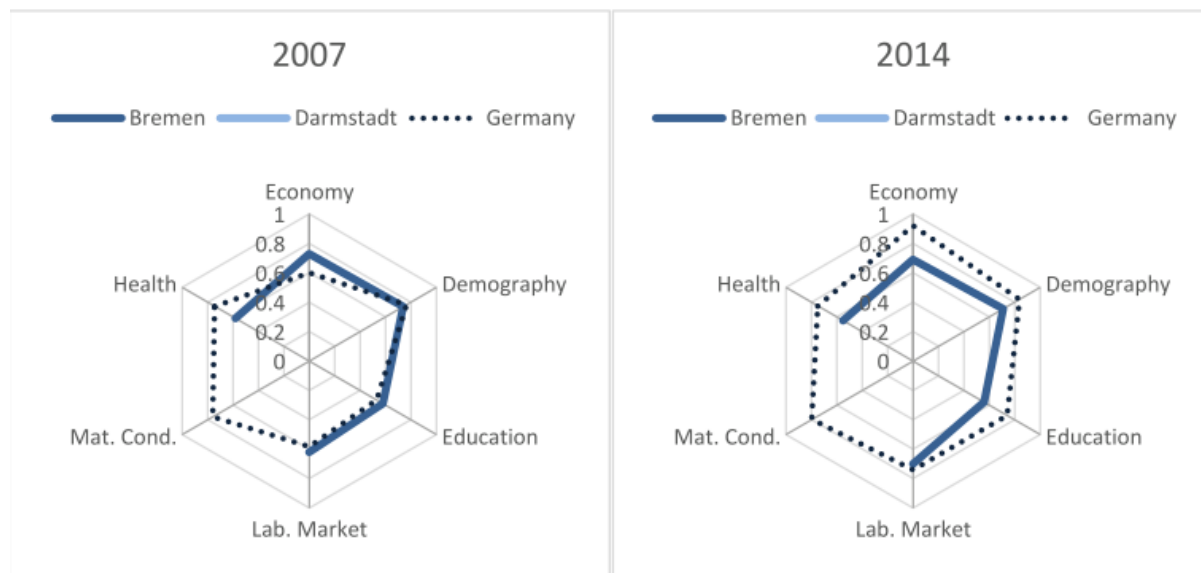
The contextual living conditions of young adults are analysed focusing on the regions Bremen and Darmstadt. German society is undergoing demographic changes due to an ageing society and an inflow of migrants. However, the growth of the two regions differs

largely, as Darmstadt is constantly growing due to worker inflow, whereas the population in Bremen is shrinking. While in Bremen young adults are more likely to be responsible for children from a young age, interrupting training and work in early career stages, in Darmstadt, especially in the metropolitan core of Frankfurt, young people are more prone to postponing life projects of family and owning children. Wealth and economic productivity are unevenly distributed in the researched locales: While the core of both regions is rather wealthy, its periphery hardly benefits from the economic turnover. Simultaneously, the regions face structural changes creating risks for career paths, particularly affecting young adults in Bremen. While traditionally dominant sectors are on the decline (such as logistics), other low-wage sectors are growing, which could lead to a rethinking of young adults' career choices. The German education system is characterised by a tight coupling of certificates and occupational biographies. With the increasing trend towards academisation, young adults face a prolongation of formal education. However, their occupational opportunities are largely determined by the region the young adults grow up. Although youth employment rates are above and unemployment rates are below the EU average, for young adults living in Bremen, the risk is higher than in Darmstadt. The labour markets is highly polarised in Bremen, with focus on high and low skilled workers and constantly reducing the medium-skilled workers. In contrast, Darmstadt offers a broader variety of jobs in more innovative sectors. Being at risk of social exclusion and poverty varies remarkably within and across both Functional Regions. Living in the core of both regions enhances the risk of receiving benefits for long term-unemployment. However, the risk varies with the regions. The above-mentioned poverty risk profiles are similar regarding health, as growing up in poor families' leads to a decreased health status. This risk enhances for young adults living in more rural areas, as the access to health care is limited.

Among the regions selected in YOUNG_ADULLLT, the two German regions of Bremen and Darmstadt are joint high scorers on the labour market dimension, along with Oberösterreich. In both cases the scores have improved since 2007 (Bremen went from 0.62 to 0.7, Darmstadt went from 0.57 to 0.68). In terms of contextual living conditions it is therefore clear that labour market integration was not negatively affected by the crisis. This is line with overall scores for Germany at country level (0.72 in 2014). Medium-high scores on health and demography are indicative of an ageing population with a high life expectancy (respectively 0.71 and 0.55 for Bremen, 0.68 and 0.74 for Darmstadt). This is also a strong characteristic for Germany at country level. Bremen shows medium-high scores along the economics dimension (0.69 in 2014), in the wake of the strong economic performance of Germany after 2007 (from 0.82 to 0.92). Unfortunately, key data are missing for Darmstadt on education and economics, as well as for both regions on material conditions. In this domain, we can also look to country level as a wide proxy: Germany shows very high scores

on material conditions, driven by low social exclusion and poverty together with high disposable incomes.

Figure 8 Profile of Germany, Bremen and Darmstadt



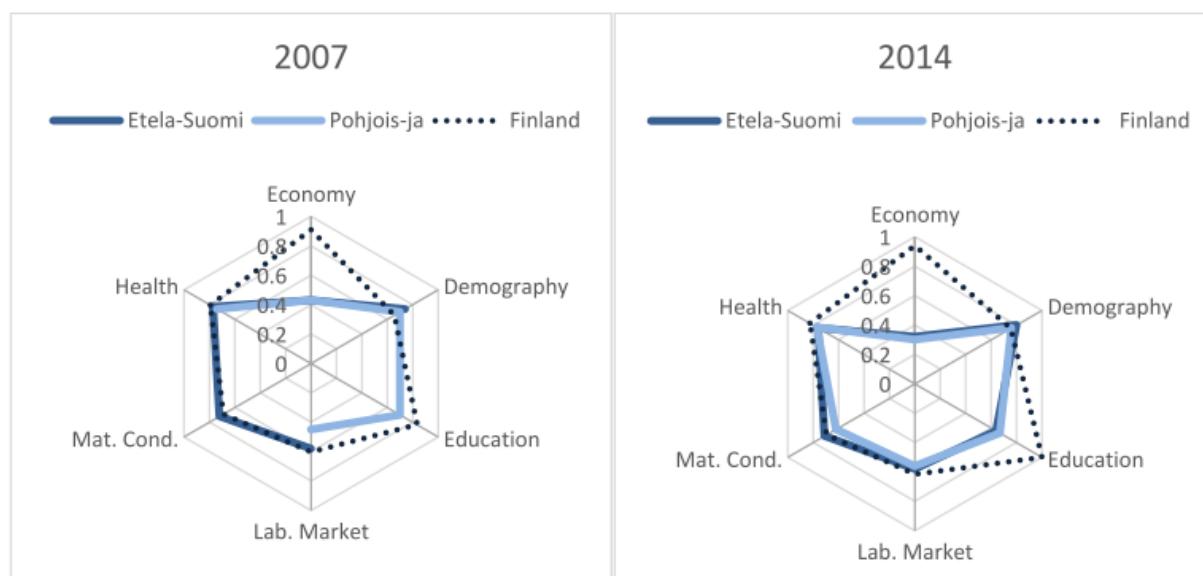
Finland

The contextual living conditions of young adults are analysed focusing on the regions Pohjois-ja Itä-Suomi and Etelä-Suomi'. The Finnish education system, especially the comprehensive school, is characteristically intertwined with the Scandinavian notion of the welfare state, which entails a strong emphasis on equal educational opportunities. The Finnish school system has been successful in compensating for the poor socioeconomic background of pupils and has proved to be homogeneous in quality. Young people have relatively good educational opportunities at the upper secondary and tertiary level. However, still an approximately 5-10 percent share of young people in each age cohort do not continue in education or training after basic education. Their situation is getting worse while the competition in the labour market gets tighter. The Finnish economy has suffered two severe crises since the 1980's, first in the early 1990's and then as an effect of the global financial crisis from 2008 onwards, which have had drastic effects on youth employment: the rate of NEETs has been slightly increasing together with long-term unemployment among young people, more severely for males than for females. In certain regions of the country getting a job without work experience and vocational training is practically unheard of. The young adults living in the two regions selected live in quite different realities with regard to their prospects. People born in northern and eastern parts of the country tend to move to southern cities after completing compulsory or upper secondary education. The overall employment in Pohjois-ja Itä-Suomi has decreased in the past decades. However, Finnish young people are

clearly more satisfied with several areas of their life than their peers in Europe on average. In particular, large differences are observed between Finnish youth and the European average for accommodation, job satisfaction, and overall life satisfaction. Being at risk of poverty and social exclusion is lower in Finland than it is in other European countries but the gap between different parts of the country has been growing during the past decade. The risk of poverty and social exclusion has grown bigger especially in northern and eastern regions of Finland. The number of children born in Finland will be lower than ever since the last famine years 1866-68, although the size of the population has more than doubled. According to the projection, the share of people aged under 15 in the population would decrease to 14 per cent by 2060. The share of people with foreign background has been very low compared to other European countries. Hostility towards people with foreign background has increased during recent years among the native population. These developments will have severe consequences for the dependence ratio in the future.

The two Finnish regions of Etelä-Suomi and Pohjois-ja Itä-Suomi show quite similar profiles of contextual living conditions, which are quite consistent with the scores at national level for Finland. Comparing indicators between time periods representing before and after the economic crisis do not show significant worsening of conditions. Scores are very high on the demographic and health dimension (respectively 0.8 and 0.76 for Etelä-Suomi and 0.76 and 0.77 for Pohjois-ja Itä-Suomi), reflecting both population ageing and high life expectancy. Scores are also high for material conditions (0.71 and 0.62), indicating low levels of poverty and exclusion, and medium-high when it comes to education opportunities and labour market integration (respectively 0.64 and 0.58 for Etelä-Suomi and 0.67 and 0.56 with a relative increase from 2007 to 2014 for Pohjois-ja Itä-Suomi). The economic dimension is the only one where values are medium-low (0.32 and 0.3) revealing a relative distance, especially from German and Austrian regions, and deteriorating after 2007. On balance, both the Finnish regions represent context characterized by quite favourable living conditions, compared to the regions selected in YOUNG_ADULLLT,

Figure 9 Profile of Finland, Etelä-Suomi' and Pohjois-ja Itä-Suomi



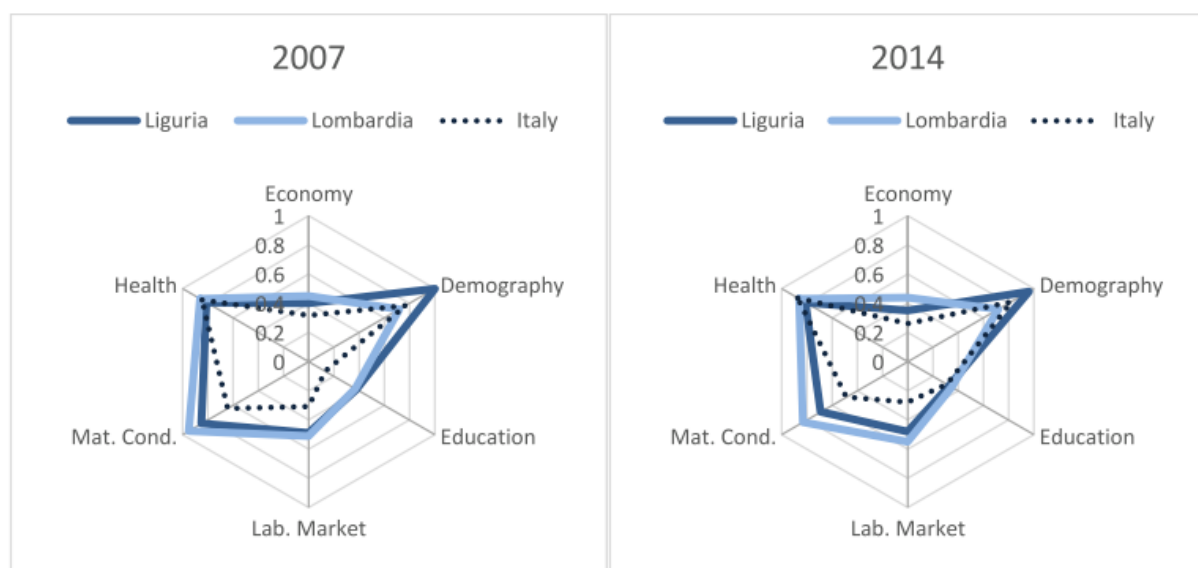
Italy

The contextual living conditions of young adults are analysed focusing on the regions Liguria and Lombardia. Italy is one of the oldest countries with the lowest replacement rate. This makes the demographic stability and the same system of social security more and more dependent on migrants. The old dependency ratio confirms a worse demographic dynamic in Liguria than in Lombardi. Productivity growth remains weak, slowing the correction of Italy's macroeconomic imbalances. However, in the public debate, mismatch and needs of flexibility prevails over the lacking capacity of productive context to absorb skilled workers. Lombardy and Liguria remain around the EU average with regards to the GDP, but while the first one is firmly above Italian and EU average, the second is much closer to the average. Participation in adult learning remains low. Italy's lack of short degrees (EQF 5) makes the average rate of young with tertiary education level lower than EU average, but at the same time the absence of technical short degrees causes the over-qualification of workforce, because the rate of degrees that do not use enough their qualification in the job is high (more in Liguria than in Lombardia), and the rate of highly educated that migrate is growing. Despite the gradual improvement of the labour market, youth employment remains low and the NEET rate high. The implementation of the active labour market policies reform is still at an early stage. Young people and women are confirmed as the less protected and needy strata of society, even if the female employment has developed over time. The rate of people at risk of poverty or social exclusion is well above the EU average and is particularly high in families with children, temporary workers and individuals with a migrant background. The data shows that in Liguria the risk of poverty and social exclusion is higher than in Lombardy. In general living conditions in Lombardia are better, as we must consider that Liguria is the region with the oldest population, heavily affected by the economic and demographic crisis. Less young

people in an ageing context with fewer opportunities and a greater part of the population at risk of social exclusion also contribute to lower levels of subjective well-being and lower expectations for the future. To summarise, the current problems of the Italian economic and social context (low productivity, high public debt, inefficiencies in some sectors, poor innovation, population ageing, overcrowded social policy costs, often passive) do not favour the opportunities of young adults, who to a large extent continue to live with parents (78% of people aged 20-29, vs a EU average of 55.4%): in the Italian context families are the main safety valve, reducing the autonomy of young people.

The two Italian regions of Liguria and Lombardia show considerable differences with the country level profile, confirming the existence of strong territorial based inequalities in Italy. This does not hold for the demographic and health dimension, confirming an advanced process of population ageing (especially in Liguria, with a factor score of 0.96 in 2014) and a high life expectancy; and for the economics dimensions, where Liguria shows medium-low scores (0.35 in 2014) and Lombardia medium scores (0.44 in 2014). What is important in terms of contextual living conditions of young adults, is that these two northern regions show a medium-level of labour market integration (0.48 for Liguria and 0.55 for Lombardia) and a medium-low level of educational opportunities (0.33 for Liguria and 0.35 for Lombardia). This is in contrast to low or very low scores at the country level. Scores on material conditions have been deteriorating in both regions in the last years, but remain high especially in Lombardia (0.83 in 2014, against 0.69 in Liguria and 0.59 at country level).

Figure 10 Profile of Italy, Lombardia and Liguria



Portugal

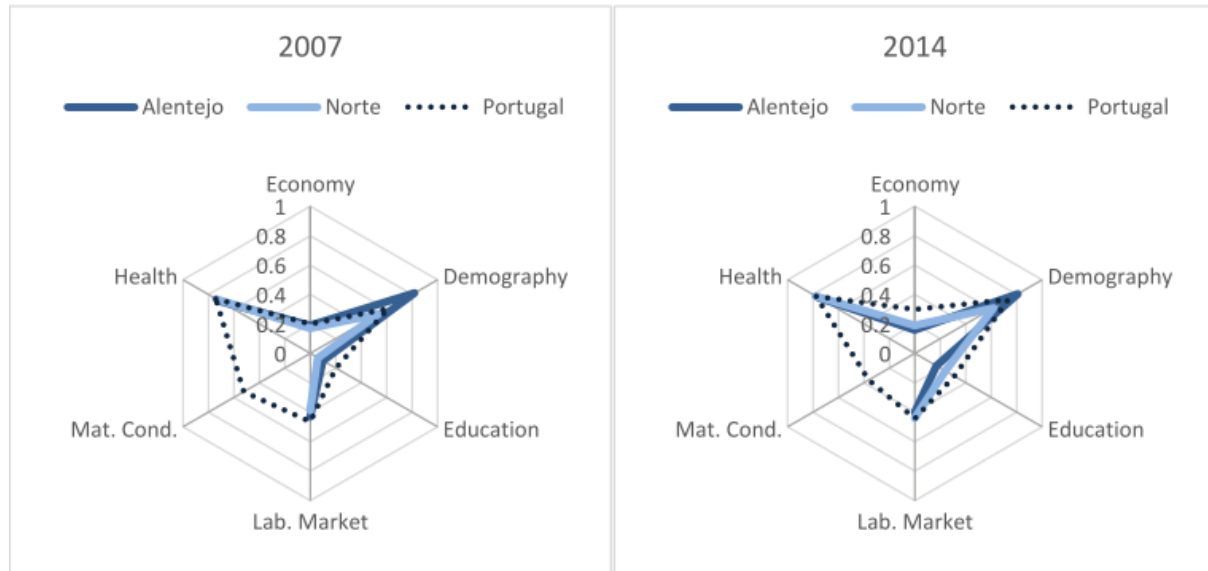
The contextual living conditions of young adults are analysed focusing on the regions Alentejo and Norte. The main demographic trends shown by the data are the growing ageing

of the Portuguese population both at national and regional levels, and the high percentage of young adults aged 20-29 living with their parents. During the time span, and in spite of the financial crisis, the GDP and the GVA increased at national and regional levels. However, the performance of the Portuguese economy measured by GDP per inhabitant and labour productivity is still considerably lower than the EU28 average. Between 2005 and 2016, the educational attainment of the Portuguese population has improved significantly both nationally and regionally. The rates of school attainment increased in all age groups, while the ratio of early school leavers decreased. However, when compared to other European partner countries, Portugal still reveals very low rates of education attainment. The NEET rate decreased both at the national and regional level. However, the NEET national average is higher than the European average, it is slightly lower in both Alentejo and Norte. In spite of an important skills upgrading during the decade, the occupational structure of the Portuguese labour market is less qualified than the European average. The youth employment rate is one of the lowest in Europe and decreased consistently during the time span 2005-2015, showing important differences at regional level, while unemployment strongly affects the youth. Once again, significant regional differences can be found. Generally, the Norte labour market seems to be more youth-friendly than the Alentejo one. In Portugal, the amount of resources spent for social protection benefits, provided to households and individuals affected by a specific set of social risks and needs is one of the lowest in Europe, especially in the fields of family policies and social exclusion. The income inequality started to increase strongly after 2011, transforming Portugal in one of the most unequal countries in EU. During the time span 2005-2015, self-perceived health in Portugal has always been lower than the EU27 average and Portuguese young people are comparatively less satisfied with their lives. The data show that the contextual living conditions of young people in Portugal are worse than the EU28 average with some regional differences showing that the overall picture for young people is slightly better in Norte than in Alentejo.

The two Portuguese regions of Alentejo and Norte show quite similar profiles of contextual living conditions, with high and medium high scores along the dimension of demography (0.81 for Alentejo and 0.62 for Norte in 2014) and health (0.76 for Alentejo and 0.78 for Norte in 2014). This is in line with the national profile for Portugal. However, the indicator for economic performance is low (0.16 for Alentejo and 0.19 for Norte in 2014). Similarly, the scores for educational opportunities are low. However these appear to be improving, albeit from a low base in 2007. Specifically, Alentejo went from 0.1 to 0.17, while Norte went from 0.06 to 0.24. The weaknesses of the education system and of the connection with the labour market coincide with a medium score for employment (0.4 for Alentejo and 0.44 for Norte in 2014). As for material conditions, data is unfortunately lacking for both the regions but the scores at the national level reveal deterioration in conditions, manifested in lower disposable

income and higher poverty and exclusion. On this dimension, Portugal fell from 0.69 in 2007 to 0.44 in 2014.

Figure 11 Profile of Portugal, Alentejo and Norte



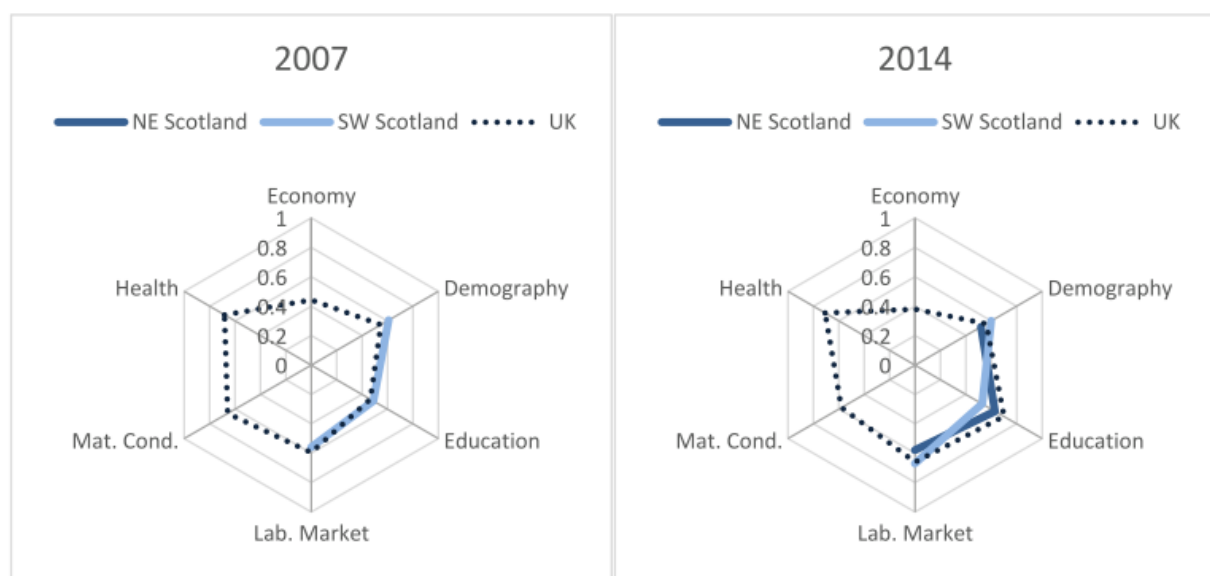
Scotland

The contextual living conditions of young adults are analysed focusing on the regions North Eastern Scotland and West Central Scotland. It is well-known in Scotland that risk profiles of young adults correlate with socioeconomic background, as for instance manifested in the education attainment gradient and access to universities. Fortunately, the four NUTS2 statistical regions in Scotland represent an approximate fit with major metropolitan areas of Glasgow, Edinburgh and Aberdeen, in addition to the Highland and Islands. However, many policies operate at a smaller spatial scale and therefore such aggregate data is often unsatisfactory. Scotland has a rising old-dependency ratio, albeit from a lower level than the UK. South Western Scotland is in line with Scottish average, but North Eastern Scotland is starting from a lower base. GDP per capita in Scotland is slightly below the UK average: whilst South Western Scotland is further below this average, North Eastern Scotland, with its oil and gas industry, is one of the UK's most affluent regions. Youth employment in Scotland on average is slightly stronger than in the UK as a whole and markedly so in North Eastern Scotland. On the whole, the UK compares favourably to an EU average. In terms of the share of tertiary education in the working age population, Scotland is the most educated country in Europe. This is shown also by the regional data that, however, attest a higher tertiary attainment in North Eastern Scotland. Overall, the UK compares favourably on this metric. However, this claim is doubtful when the share of less qualified workers is examined. In this regards Scotland, and the UK, compare unfavourably, for instance, with Eastern

Europe and German-speaking countries. Average household disposable income in Scotland was just over EUR 16,000 in 2013, which is slightly below the UK average. South Western Scotland trails the Scottish average by about EUR 1,000, when North Eastern Scotland is approximately EUR 3,000 above the average. Overall, regional variation in household disposable income is stark across the UK and the range of spatial inequality is far higher than in any other European country, as the UK average masks a strong contrast between the South East of England and the rest.

The two Scottish regions of North Eastern Scotland and South Western Scotland present quite similar profiles, with medium or high scores that are representative of comparatively favorable contextual living conditions. These are in line with the country-level scores for the United Kingdom in 2014. The demographic pressure is medium and less than several European countries (0.52 for North Eastern Scotland and 0.6 for South Western Scotland in 2014). The same holds true the health dimension. Scores on the key dimensions of labour market and education are medium or medium-high. North Eastern Scotland scores 0.63 on the education dimension and 0.58 on the labour market dimension. South Western Scotland scores 0.53 on education and 0.67 on the labour market, showing a strong improvement after 2007. Data on economic and material condition dimensions are unfortunately missing, so that we can only refer to national level scores: In 2014 the United Kingdom scored comparatively high on the economic dimension (0.72) and also on material conditions (0.69), even if both have deteriorated slightly after 2007.

Figure 12 Profile of Scotland, North Eastern Scotland and South Western Scotland

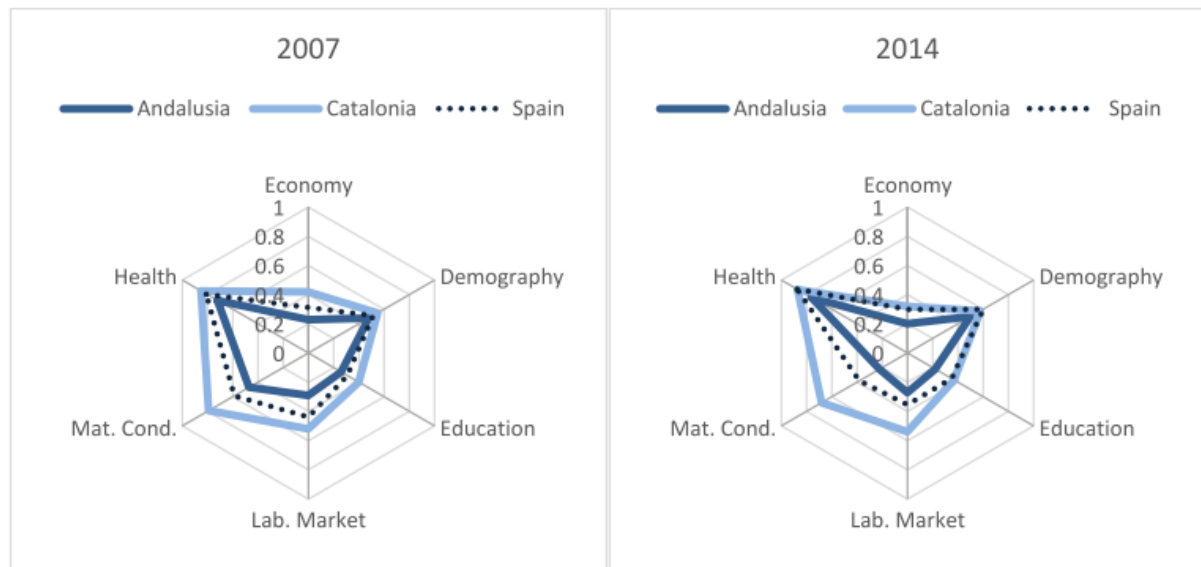


Spain

The contextual living conditions of young adults are analysed focusing on the regions Catalonia and Andalusia. The impact of the economic crisis has strongly hit the contextual living conditions in Spain, and especially the economy of the country was heavily affected by the recent recession. In recent years, some signs of recovery seem to be emerging together with growing socio-economic disparities within the country. The Spanish demographic old-dependency ratio is lower compared to EU partners, although a fast increase in the share of dependent among the population is registered since 2009 onwards. Spain still lags behind its European partners with regard to educational attainment of the total population, but this is the result of strong differences across age cohorts. The stock of tertiary educated people is lower compared to other European partners, despite a steep increase in the last years. As a consequence, considering young adults aged between 30 and 34 years, tertiary educational attainment is higher than other European partners. However, there are important and increasing variations between regions. In Andalusia tertiary education attainment remains below the national average, while in Catalonia it is higher. The ratio of early school leavers (ESL) is higher than the European average with marked gender differences showing the prevalence of early school leavers among men. Similarly, the proportion of young people neither in employment nor education and training aged between 15 and 24 years (NEET) diminished in the time span considered but it is still way above EU average. The labour market has traditionally suffered from very high unemployment, but this was gradually reduced in the 20-year period up to 2009. The economic crisis has hampered the access to the labour market, and the transition between education and the first job is especially precarious. Additionally, employment is more concentrated in low skilled occupations, while high skilled white-collar occupation represents only a minor share of the employed situation. The scores of the two Spanish regions of Andalusia and Catalonia reveal a divided picture on many dimensions of contextual living conditions. In general, when benchmarked against national scores, Andalusia is usually characterized by worse conditions, while Catalonia performs better. This holds true for the level of educational opportunities, with Andalusia scoring 0.22 and Catalonia 0.37; of labour market integration, with Andalusia scoring 0.27 and Catalonia 0.54; and of material conditions, with Andalusia scoring 0.22 and Catalonia 0.68. For Catalonia in particular the data reveal a deterioration from 2007 to 2014, which is in line with findings for Spain as a whole and is indicative of a strong impact of the economic crisis on resources, poverty and exclusion. A similar trend holds true for the economic dimension, especially for Catalonia (the respective score fell from 0.42 to 0.32). The demography and health dimension show, instead, a common pattern made up by high life expectancy and low infant mortality, together with a process of population ageing that

appears to be less pronounced than many other European countries (scores of 0.5 for Andalusia and 0.58 for Catalonia in 2014).

Figure 13 Profile of Spain, Catalonia and Andalusia



7. Implications for young adults

This report emphasizes the relevance of contextual living conditions as shaping the structures of opportunities for young adults in different regional settings. It provides synthetic information on different dimensions that can be usefully related to LLL policymaking and to the impact of such interventions. Given its broad range, the secondary data analysis presented has to be intended as a contribution to a wider strategy integrating quantitative results as a basis for the institutional and policy analysis carried on in the following and highly connected WPs.

A complex framework is developed in order to inform the contextual dimensions that correlate with the production of different risk profiles. The approach is based on six dimensions: economic, demographic, education and training, labour market, social inclusion and participation, and health and well-being. The data are collated from national administrative sources and comparative surveys compiled by international organisations such as the EU and the OECD. The research uses harmonized quantitative data on the mediating role of LLL policies in the configuration of individuals living conditions, but it gets as close as possible to the regional level using pre-existing datasets. Furthermore, it explores data gaps in the European Statistical System in order to complement those data with context specific information.

The findings show that there are huge differences both in the level and dispersion of in young adults' living conditions across European territories. However, this evidence is partial and relies on limited and aggregate information about the living conditions young adults are experiencing.

The regions selected show a general trend of general but differentiated increase in tertiary education attainment among young adults that are therefore becoming more qualified, when trying to access the labour market. On the other hand, due the impact of the economic crisis, many regions experienced a steep increase in youth unemployment, especially in the South and East European regions. The youth unemployment rate is more sensitive to the economic cycle, as it is generally higher in countries where the economic crisis had a major impact. Regions with a higher GDP per inhabitant show better employment conditions for young adults, while the level of tertiary education appears to be less correlated, showing that economic growth does not have a direct impact on the outcomes of the education system, which are connected to long-term trends and institutional structures. However, this is marked by strong regional variations: a decreasing trend in youth unemployment can be observed in the German regions of Darmstadt and Bremen and in Oberösterreich, while in the Finnish region of Pohjois-Suomi and in the Austrian regions of Wien it remained stable or slightly decreased. These regions present more favourable structure of opportunities in young adults' school-to-work transitions. On the contrary, some regions combine an above-the-average level of youth unemployment coupled with a low educational attainment. This is the case of Andalusia, Liguria Continental and Adriatic Croatia and Yuzhen Tsentralen. The regions of Lombardia and the two Portuguese regions (Alentejo and Norte) share with this first group a similar level of educational attainment, but show more favourable labour market conditions, as youth unemployment is lower.

Composite indicators on overall education attainment of the regions and labour market access allow synthesizing a major amount of information related to youth educational opportunities and labour market conditions. The overall picture is quite differentiated, confirming the relevance of a research approach focusing on sub-national levels of analysis, bringing local contexts centre stage. Some regions show a mismatch between a growing supply of higher qualified young people and a demand affected by the economic downturn, resulting in a difficult integration of young people into the labour market, while other couple increasing educational attainments with a higher labour market integration. German, Austrian, Scottish and Finnish regions have both higher values in 2014 and they show better scores if compared to 2007. On the other hand, Andalusia, Yuzhen Tsentralen, Alentejo and Norte score low in 2007 and they remain stable on both dimensions. Pohjois-Suomi, Darmstadt, Vienna Yugoapaden and Oberösterreich strongly increased their labour market

integration, while it increased slightly for Oberösterreich, Wien and North East Scotland. The marked decrease in the labour market access is mainly driven by reduced youth unemployment which conversely affected negatively mainly South-European countries where the rate almost tripled between and after the European crisis. This seems to configure a particular poor context for young adults, which is likely to affect their life-course perspectives. Educational attainment of young adults shows an opposite pattern with an overall increase. This is likely during an economic recession when the opportunity cost of remaining in education decreases. In 2014, there are only three regions that maintained higher education opportunities and high labour market access compared to 2007: North East Scotland, Darmstadt and Oberösterreich, three out of the four richest regions which also show more stable labour market conditions. These regions coupled better overall economic conditions with smoother labour market integration.

Overall there is a tendency towards living conditions marked by better educational opportunities within the regions analysed versus sluggish labour market integration basically due to low access. These seem to be consequences of the economic downturn that hit unequally the territories analysed. However, German, Austrian, Finnish and Scottish regions seemed to better maintain their educational opportunities for young adults coupling this with high overall material conditions.

A different comparative view is presented in the section on regions and country profiles. Here the results are not presented by considering all the regions according to a limited number of dimensions, but by considering the composite indicators (scores) along all the dimensions for the two regions within the same country. The specificities of the selected regions across the multiple dimensions represent the main object of the section: the regions are compared among them and in the light of the country-level conditions by using standardized indicators going from 0 to 1. The scores are used for a basic description and positioning of the regions and countries in comparative perspective, that are however to be read as a complement and support to the partners' context-sensitive interpretations on contextual living conditions.

In order to better inform policies, an intense effort is needed to develop richer context-based information at a territorial level. Highlighting existing data gaps and improving the availability of territorial information are crucial steps to achieve better targeted policy that isn't contingent up nation-state based measures. Due to changing realities, such as internationalisation, Europeanization and globalisation processes, the use of the national-level as a representative unit of account should be questioned and more localised measures could be useful tools to describe changing social realities.

There is a need for increasing the social impact by understanding the role of the specific contexts within which measures are implemented. This calls for more contextualized

information which is a prerequisite for regional comparative analysis and a more targeted and evidence-based policy. Moreover, in order to develop a broader interpretative framework, it is necessary to tap new data sources that are not strictly based on existing measures of education and labour market status. A holistic approach of living conditions is needed particularly in a time of socio-economic changes and reconfiguration of young adults' motivations and aspirations.

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Annex

A1. List of variables

Variables	Category	Dimension
GDP at current market prices, Euro per inhabitant	GDP and Economic Growth	ECONOMICS
Total intramural R+D expenditure in all sectors	Innovation	ECONOMICS
Researchers in all sectors as a % of total employment	Innovation	ECONOMICS
Motorways, Total line, (1000/km2)	infrastructure asset	ECONOMICS
Railways, Total line, (1000/km2)	infrastructure asset	ECONOMICS
Old dependency ratio, 2nd variant (65+ to population 15-64)	Pop Structure	DEMOGRAPHY
Median age of the population	Pop Structure	DEMOGRAPHY
Students at ISCED 5-6 as a percentage of pop.20-24 years	Access	EDUCATION AND TRAINING
Students at ISCED 0-6 in all levels of education % of tot population	Access	EDUCATION AND TRAINING
Students aged 17 (all ISCED levels) % of corresponding age population	Access	EDUCATION AND TRAINING
Early leavers from education and training (18-24 years), %	Transition from education to employment	EDUCATION AND TRAINING
NEET (people aged 15-24 neither in education, employment or training), %	Transition from education to employment	EDUCATION AND TRAINING
NEET (people aged 18-24 neither in education, employment or training), %	Transition from education to employment	EDUCATION AND TRAINING
Population (25-64) with ISCED 3-4, %, total	Upp. Secondary Attainment	EDUCATION AND TRAINING
Population (30-34) with ISCED 0-2, %, total	Primary and Secondary attainment	EDUCATION AND TRAINING
Population (25-64) with ISCED 0-2, %, total	Primary and Secondary attainment	EDUCATION AND TRAINING
Population (25-64) with ISCED 3-4, %, total	Upp. Secondary Attainment	EDUCATION AND TRAINING
Population with ISCED 3-4 (30-34 years), total %	Upp. Sec Attainment	EDUCATION AND TRAINING
Population (25-64) with ISCED 5-8, %, total	Tertiary Attainment	EDUCATION AND TRAINING
Population with ISCED 5-8 (30-34 years), total %	Tertiary Attainment	EDUCATION AND TRAINING
Employment rate (25-54)	Employment	LABOUR MARKET
Employment rate (15-24)	Employment	LABOUR MARKET
Employment rate since education completion (5 years), 20-34 years	Employment	LABOUR MARKET
Weekly hours of work in main job, 15-24 years	Typology of employment	LABOUR MARKET
Weekly hours of work in main job, 25-64 years	Typology of employment	LABOUR MARKET
Disposable income, net. PPS based on final consumption, per inhabitant	Disposable income	MATERIAL CONDITIONS
Population at risk of poverty or social exclusion, %	Poverty	MATERIAL CONDITIONS
At risk of poverty rate, % of population	Poverty	MATERIAL CONDITIONS
Severe material deprivation rate	Poverty	MATERIAL CONDITIONS
Life expectancy in age, more than 1 year	Life expectancy	HEALTH
Infant mortality rate	Infant mortality	HEALTH

A2. Items used for the construction of the composite indicators, descriptive

	Austria	Bulgaria	Croatia	Finland	Germany	Italy	Portugal	Spain	United Kingdom
Gdp At Current Market Prices, Pps Per Inhabitant									
Mean	31,506	9,950	15,190	30,300	29,826	25,934	19,827	24,093	28,785
Stand. Dev	6,187	3,984	964	6,220	7,180	6,632	3,843	4,691	18,712
Min	19,200	6,400	13,200	21,700	17,800	15,300	14,500	15,500	16,900
Max	43,500	20,600	16,600	41,500	56,600	40,300	29,300	35,200	148,000
Total Intramural R&D Expenditure In All Sectors,Euro Per Inh.									
Mean	561.61	17.07	70.31	506.32	498.76	276.71	141.65	233.15	361.62
Stand. Dev	251.23	26.25	42.70	397.33	242.17	157.79	128.74	169.62	235.21
Min	123.20	1.80	24.40	51.10	130.70	59.30	30.60	11.70	19.30
Max	972.40	103.40	132.30	986.50	994.60	656.90	553.10	655.10	976.90
Researchers In All Sectors,% Of Total Emp. - In Fte,Total									
Mean	0.74	0.26	0.38	1.21	0.74	0.40	0.52	0.55	0.78
Stand. Dev	0.47	0.25	0.10	0.69	0.45	0.16	0.40	0.31	0.47
Min	0.13	0.07	0.26	0.07	0.17	0.13	0.15	0.04	0.06
Max	1.86	0.88	0.49	2.30	2.09	0.90	1.64	1.33	2.25
Motorways (Kilometre/1000 Square Km)									
Mean	30.80	3.76	21.69	8.16	51.41	23.63	0.00	32.25	27.65
Stand. Dev	27.84	2.97	2.70	11.35	39.19	14.95	0.00	22.10	29.67
Min	15.00	0.00	17.00	0.00	12.00	0.00	0.00	0.00	0.00
Max	109.00	10.00	26.00	31.00	186.00	70.00	0.00	98.00	139.00
Total Railway Lines (Kilometre/1000 Square Km)									
Mean	na	37.35	46.50	27.70	232.10	54.35	41.96	31.33	25.00
Stand. Dev	na	4.19	14.92	12.22	206.41	20.66	22.06	24.72	0.00
Min	na	32.00	32.00	0.00	66.00	0.00	21.00	0.00	25.00
Max	na	45.00	61.00	46.00	708.00	95.00	91.00	91.00	25.00
Old Dependency Ratio 2Nd Variant (Population 65 And Over To Population 15 To 64)									
Mean	41.18	47.19	44.31	47.67	47.98	50.19	43.28	39.26	43.23
Stand. Dev	4.16	7.51	3.47	8.12	4.94	6.70	9.49	8.36	9.23
Min	32.80	37.00	40.50	29.10	39.90	35.10	29.50	23.30	16.60
Max	51.10	66.20	52.60	61.80	72.90	69.20	61.40	58.30	64.70
Median Age									
Mean	41.78	42.90	42.18	42.32	44.35	43.86	40.75	40.40	40.17
Stand. Dev	2.02	2.25	0.98	1.99	2.17	2.34	3.27	3.49	3.12
Min	37.30	39.50	40.50	38.20	40.00	37.30	33.40	32.30	31.40
Max	46.40	47.60	44.10	45.60	50.90	50.00	46.70	48.30	46.80

A2, continued

	Austria	Bulgaria	Croatia	Finland	Germany	Italy	Portugal	Spain	United King
Students In Tertiary Education (Isced 5-6)- % Of The Pop. 20-24 Years									
Mean	46.95	45.22	51.67	74.81	54.56	59.61	45.89	57.06	48.59
Stand. Dev	38.97	26.04	6.62	27.46	16.36	23.59	24.28	18.67	5.93
Min	6.2	3.4	43.1	26.1	31.3	7.7	15.2	23.2	35.9
Max	151.4	90.1	59.9	98.5	85.7	105.9	103.8	114.4	59.6
Pupils And Students In All Levels Of Educ(Isced 0-6) -% Of Tot Pop									
Mean	20.01	17.47	18.07	24.69	19.07	18.23	21.36	20.47	22.79
Stand. Dev	2.55	1.82	0.51	2.44	1.93	2.02	1.66	2.86	2.51
Min	15.9	13.8	17.5	20.7	15.7	14.4	17.3	15.1	19.9
Max	26	20.5	18.7	26.9	22.8	23.7	23.8	28.4	31.6
Students (All Isced Levels) Aged 17 - % Of Corresponding Age Pop									
Mean	89.02	81.19	88.42	95.93	96.33	83.9	85.48	87.44	79.41
Stand. Dev	7.13	5.38	1.8	2.12	10.16	6.8	9.61	8.05	7.6
Min	74.5	73.2	86.6	90.7	88.6	59.5	61.3	67.7	65.5
Max	102	92.5	91.4	98.3	129	96.2	100.6	108.9	104.8
Early Leavers From Education And Training, Y18-24,%, Total									
Mean	9.24	16.54	4.41	9.7	11.43	17.21	31.49	27.4	14.42
Stand. Dev	2.55	5.85	1.21	1.05	3.07	4.92	10.63	8.6	3.82
Min	4.5	3.4	2.2	7.6	4.5	8.4	14	9.4	4.7
Max	16.5	27.1	5.9	12.4	21	32.4	56.5	55.2	28.1
Neet 15-24 Years, Total									
Mean	7.35	22.81	15.71	8.93	8.01	17.18	13.52	15.54	11.73
Stand. Dev	1.79	6.69	3.13	1.72	2.36	6.69	3.75	4.84	3.16
Min	4.8	7.9	9.8	5.3	3.1	6.5	7.5	6.9	5.7
Max	13.3	35.9	20.3	12.2	14.7	34	24.1	34	23.4
Neet 18-24 Years, Total									
Mean	9.09	28.74	20.73	12.18	11.13	22.05	17.47	19.44	15.23
Stand. Dev	2.04	9.22	4.35	2.48	3.19	8.6	5.17	6.39	4.18
Min	5.7	10	13	6.7	4.3	7.3	9.1	8	7
Max	15.3	46.8	27.9	16.3	20.1	42.3	32.3	43.4	31.3
Ed At Lev 30-34 Y.O.,Ter Educ (Lev 5-8),%,Tot									
Mean	23.31	24.97	23.61	44.51	28.25	20.37	23.18	40.41	39.44
Stand. Dev	7	7.05	4.68	5.78	6.42	4.2	6.59	8.49	8.82
Min	16	16.6	16.2	37.1	14.9	10.7	12.8	22.6	17.6
Max	50.4	43	32.7	56.3	45.5	31.6	40.1	62.2	72.5
Ed At Lev 30-34 Y.O.,Up-Sec. And Post-Sec. Non-Ter Educ (Lev 3 And 4),%,Tot									
Mean	64.91	53.82	65.69	46.1	58.56	48.81	25.91	24.19	41.89
Stand. Dev	7.23	4.58	3.47	5.24	6.43	4.83	5.69	3.9	5.9
Min	38	44.9	59.5	36.5	42	37.6	15	14.6	19
Max	74.4	65.6	72.9	52.5	71.7	60.5	40.3	35.7	62.1
Ed At Lev 30-34 Y.O.,Less Than Prim, Prim And Lower Sec Educ (Lev 0-2),%,Tot									
Mean	12.54	21.22	10.69	9.4	13.88	30.5	54.44	35.97	18.36
Stand. Dev	2.97	6.71	4.34	1.8	3.91	7.35	12.11	9.84	4.87
Min	6.9	6.7	2.2	6.4	5.4	16.8	27.8	16	7.1
Max	20.8	30	19.2	14.4	27.2	48.4	79.2	69.4	32.4

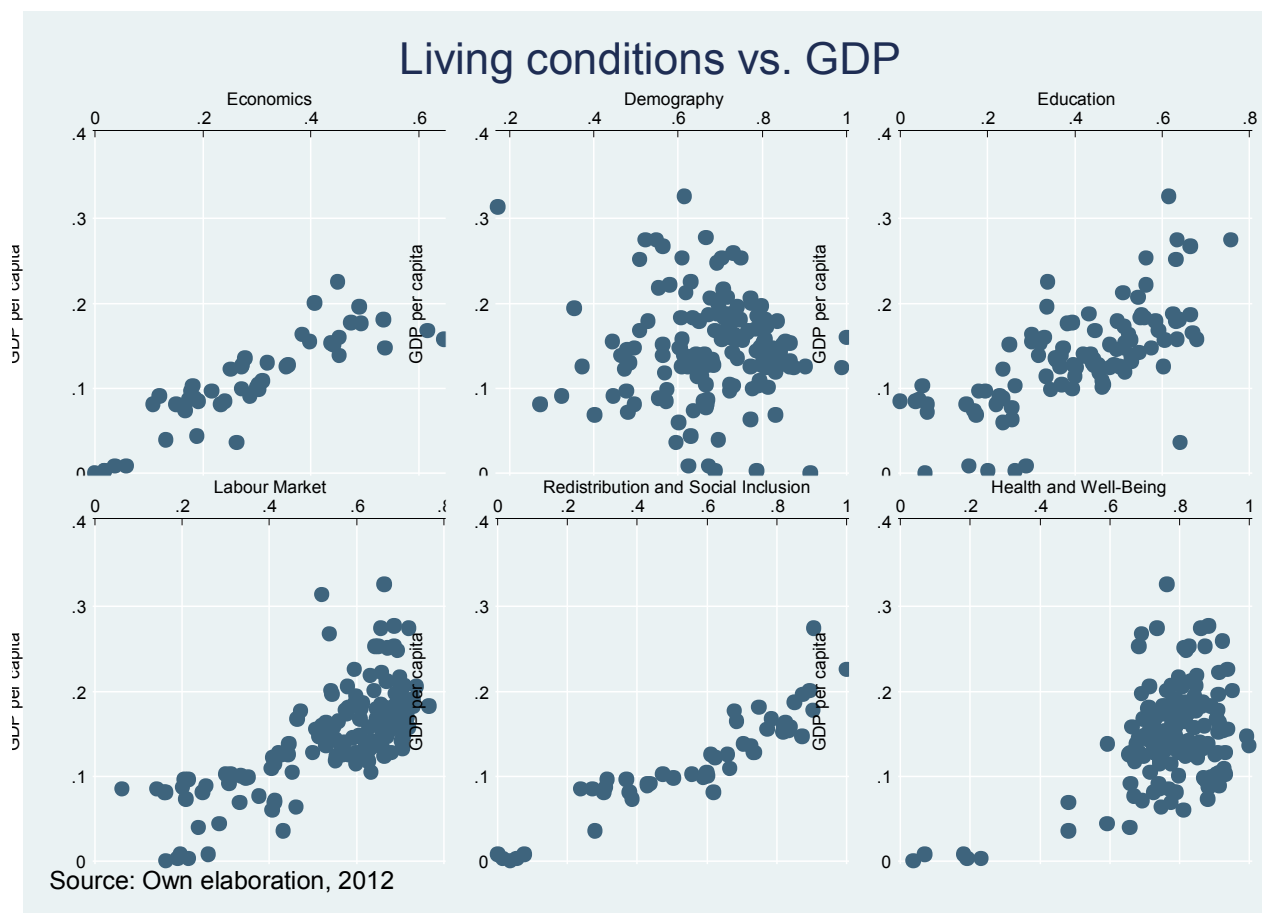
A2, continued

	Austria	Bulgaria	Croatia	Finland	Germany	Italy	Portugal	Spain	United King
Pop.25-64Y.O By Ed.At.Lev.,%, Less Than Prim, Prim And Lower Sec Educ (Lev 0-2)									
Mean	18.42	22.98	19.85	18.37	14.16	44.76	69.26	48.46	24.77
Stand. Dev	3.21	6.49	4.86	3.35	4.71	6.87	8.85	8.21	4.64
Min	11.6	8.6	12.4	12.4	3	29.9	43.3	27.9	13.2
Max	25.3	36.5	27.4	29.3	25.8	59.9	82	66.8	35.9
Pop.25-64Y.O By Ed.At.Lev.,%, Up-Sec And Post-Sec Non-Ter Educ (Lev 3 And 4)									
Mean	62.74	55.16	61.55	45.9	60.09	40.73	16.27	21.46	41.61
Stand. Dev	4.89	3.92	3.15	4.52	4.56	4.86	4.42	2.89	3.81
Min	43.7	47.8	57	36.3	47.9	30.7	10.3	11.4	22.7
Max	71.4	63.6	65.7	52.7	71.8	51.6	26.5	28.3	54.1
Pop.25-64Y.O By Ed.At.Lev.,%, Ter Educ (Lev 5-8)									
Mean	18.83	21.84	18.62	35.74	25.75	14.51	14.47	30.07	33.62
Stand. Dev	4.73	5.67	2.2	6.33	4.62	2.56	4.81	6.68	6.94
Min	12.7	15.6	15.2	25.2	15.3	9.4	7.3	16.6	21.2
Max	39.1	37.5	22.4	50.2	37.2	23.3	31	47.2	62.4
Employment Rate 25-54 Years									
Mean	250.88	222.39	216.11	250.58	243.7	215.3	234.67	211.13	244.27
Stand. Dev	8.38	15.1	8.66	13.44	10.63	34.5	10.94	22.51	10.54
Min	227.5	198.9	201.4	232.9	209.3	137.9	208	152.7	217.3
Max	263.7	263.6	230.7	283.5	263.3	258.2	253.5	250.3	267.2
Employment Rates: 15-24 Years, Total									
Mean	53.88	22.2	22.11	41.31	46.54	22.4	28.37	26.81	50.88
Stand. Dev	5.51	3.42	4.87	4.07	5.28	7.92	6.42	9.52	6.93
Min	38.8	17	14.1	34.3	34.5	8.5	13.7	9.8	31.6
Max	62	31.3	28.3	50.3	59.1	43.4	40.5	46.8	69.3
Employment Rate 20-34 Yrs, Over 5 Yrs Since Hi Educ									
Mean	82.85	68.05	74.75	76.38	79.56	69.33	80.49	70.41	80.47
Stand. Dev	4.05	7.67	4.63	4.14	5.03	14	4.94	10.88	5.16
Min	69.3	52.9	68.7	69.5	65.6	37.7	65.6	28.9	62.5
Max	88.9	87.9	81.9	86.8	90.8	87.8	88	87.8	96.5
Average Number Of Usual Weekly Hours Of Work In Main Job, 15-24 Years, Total									
Mean	36.06	41.17	39.92	30.03	34.12	36.04	37.99	34.01	31.3
Stand. Dev	1.9	1.05	0.97	1.08	1.69	1.61	1.43	2.68	1.46
Min	28.8	38.8	38.2	27.8	29.6	32.1	34	27.8	26.6
Max	38.7	43.8	41.7	32	37.9	40.1	40.5	40.7	36.9
Average Number Of Usual Weekly Hours Of Work In Main Job, 25-64 Years, Total									
Mean	38.3	41.14	40.44	38.14	35.86	37.68	39.79	38.78	37.77
Stand. Dev	0.98	0.58	0.57	0.59	0.85	0.82	0.93	0.99	0.81
Min	36.4	40.3	39.7	36.2	34.2	35.8	37.4	35.6	35.7
Max	40.4	42.3	41.5	39	37.9	39.4	41.1	41.1	42.2

A2, continued

	Austria	Bulgaria	Croatia	Finland	Germany	Italy	Portugal	Spain	United King
Disposable Income, Net, Pps Based On Final Consumption Per Inhabitant									
Mean	19,927	5,503	9,263	15,288	18,651	16,620	12,674	13,974	16,430
Stand. Dev	951	1,339	329	2,004	2,049	3,250	1,580	2,317	3,703
Min	17,700	3,500	8,700	11,300	13,900	11,300	10,100	10,400	12,300
Max	22,100	10,100	9,700	18,700	24,600	22,000	16,500	19,400	39,000
People At Risk Of Poverty Or Social Exclusion									
Mean	17.97	47.29	na	17.44	na	25.79	na	26.2	na
Stand. Dev	4.49	7.47	na	3.51	na	12.69	na	8.81	na
Min	11.9	28.6	na	11.3	na	7.5	na	8.5	na
Max	28.4	59.5	na	23.7	na	56.9	na	47.9	na
At-Risk-Of-Poverty Rate									
Mean	13.6	23.42	na	13.03	na	18.39	na	21.11	na
Stand. Dev	3.5	6.48	na	3.46	na	10.41	na	8.37	na
Min	9.1	9	na	7.1	na	5	na	5.3	na
Max	21.6	32.9	na	18.6	na	44.6	na	44.5	na
Severe Material Deprivation Rate									
Mean	3.25	41.44	na	3.03	na	8.46	na	5.06	na
Stand. Dev	1.98	7.64	na	0.65	na	6.54	na	3.75	na
Min	1.2	23.2	na	2.1	na	0.5	na	0.2	na
Max	8.8	55.2	na	4.6	na	35.9	na	27.4	na
Life Expectancy, Less Than 1 Year									
Mean	81.02	73.59	77.07	80.63	80.37	82.24	79.06	81.9	80.48
Stand. Dev	0.93	1.04	1.37	1.1	0.84	0.94	1.83	1.42	1.35
Min	78.9	71.5	74.7	78.7	78	79.3	74.8	78	76.3
Max	83.1	75.7	79.3	83.2	82.6	84.4	81.7	84.9	83.8
Infant Mortality, Total									
Mean	3.22	8.99	4.71	2.09	3.54	3	3.35	3.45	4.18
Stand. Dev	1.07	2.42	0.73	1.08	0.83	0.89	0.97	1.57	0.97
Min	0.7	3.6	3.5	0	1.4	0.2	1.1	0	1.6
Max	5.8	15.8	6.2	3.8	6.8	6.2	6.3	12.5	7.8

A3. Scatterplot of the six dimensions with GDP at regional level.



A4. List of abbreviation

Name	Description
AROPE	At-risk-of-poverty rate
CLV	contextual living conditions
EFA	Exploratory Factor Analysis
FR	Functional Region
GDP	Gross Domestic Product
GVA	Gross value added
LLL	Life-long learning
NEET	Not in employment nor in education
NUTS	Nomenclature des Unités territoriales statistiques
PCA	Principal Component Analysis
PPS	Purchasing Power Standard
SEM	Structural Equation Models
VET	Vocational Education and Training
WP	Working Package
YA	Young Adults
AleP	Alentejo
Anda	Andalusia
Brem	Bremen
Cata	Catalonia
Darm	Darmstadt
Etel	Etela-S
JHrv	J.Hrvatska
KHrv	K.Hrvatska
Ligu	Liguria
Lomb	Lombardia
NeSc	NE.Scotland
NorP	Norte
ObeO	Oberösterreich
Pohj	Pohjois-ja
SwSc	SW.Scotland
Yugo	Yugozapaden
YuzT	Yuz.tse.