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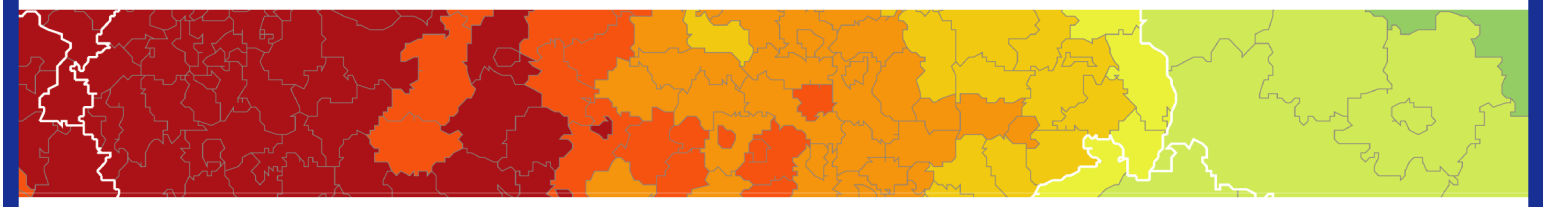

YUTRENDS – Youth unemployment: Territorial trends and regional resilience

ANNEX 2

FINDINGS OF THE LITERATURE REVIEW

Applied Research

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Findings of the literature review concerning causes and consequences of youth unemployment

1. General factors behind the development of youth unemployment

General causes of youth unemployment are those causes that in principle can refer to any geographical level. From a region's perspective some general factors are almost a contextual factor, to be taken into account but with little opportunity for influencing or changing them. A country's educational system or labour regulations are examples of such factors. Others, such as the demographic structure or the personal characteristics of young people are equally important for policy making at national, regional and local level. The labour market situation is in principle a general factor too. However, because of its entwinement at regional level with other region-specific causes and its importance for regional (un)employment policies, this is treated as a regional factor and therefore discussed in section 3.3.

General causes of youth unemployment are wide-ranging. In order to identify the main ones, we compared the findings of a number of overview studies. Here we start with a discussion of the general causes, i.e. those not specific to a geographical area or level.

Literature summarising and comparing findings from existing research provides information on the type of factors that matter and to a certain extent also on their importance. Empirical studies that cover a variety of factors complement the information on the relative importance of causes. Both types are contained in Table 1.

The table includes four studies reviewing the available literature, amongst which the very thorough study published by O´Higgins in 2015. Also presented are three studies with primary empirical evidence on the relative importance of causes, including two recent and one older study that together cover a broad spectrum.

The business cycle, the demographic structure, institutional factors related to the labour market and education, as well as personal characteristics of young people stand out as important factors determining the nature and scale of youth unemployment. Under institutional framework we cluster a number of factors mentioned in the literatures grouped. The institutional framework of a country includes its legislation as well as its organisations and organisational structures. For youth unemployment the institutional framework for employment and education are of particular importance. Benefits schemes are often mentioned as a factor impeding labour market re-entry of unemployed, but this factor is far less relevant for young unemployed whose entitlements to such benefits are relatively small.

Table 1 Causes and their indicators found in the main studies covering multiple causes

	2008	**2017****	**2016**	**2015 (a)**	**2015 (b)**	**2014**	**2013**
Type of analysis	***EMP***	***EMP****	***EMP***	***LIT***	***LIT***	***LT***	***LT***
Business cycle	Economic conditions	Level of economic activity	GDP growth	Aggregate demand	Buffer function	Business cycle conditions	
Demographic structure	Share of young people in the total population				Demographic developments		Share of youth in total population
Higher EPL*	EPL			EPL			EPL
Minimum wages	Min. wage	Min. wage		Min. wage			
Flexible labour markets			Share of temporary employment	Various indicators			
Union density		Union density		Unionization rates			
Education	# years of education, number of young people with vocational training and high scores in the PISA**** study	VET participation					
Personal characteristics and conditions of youth			Less mobility due to homeownership, low work intensity of other household members or less possibilities to live outside parental homes				Likelihood of resigning voluntarily. Lack of experience, shorter credit history and lack of access to business networks.
Governance			Perceived corruption				

* EPL = Employment Protection Legislation

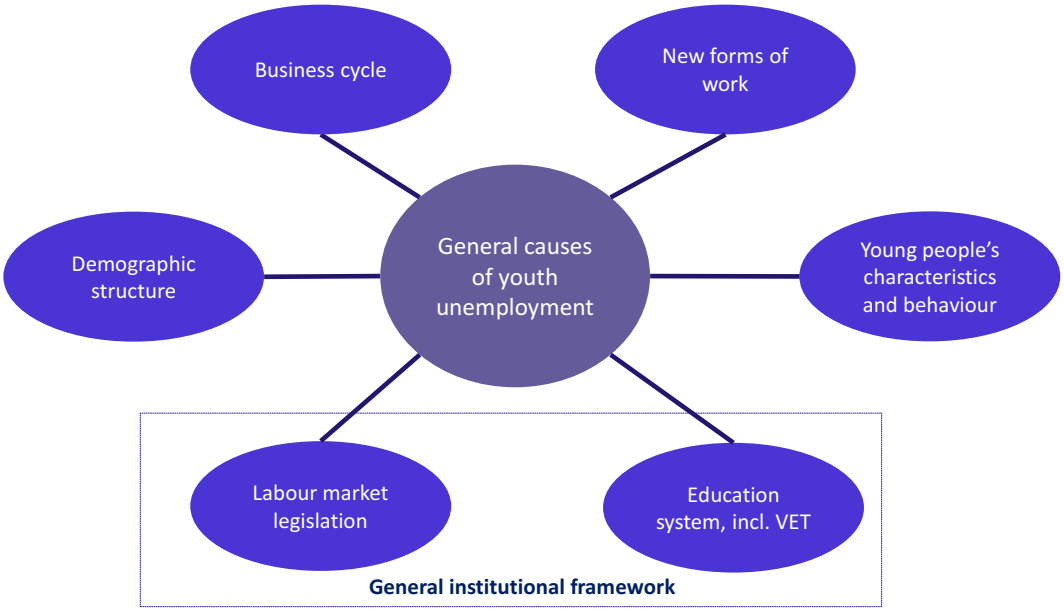
** Sources: Caroleo F. E., Ciociano E., Destefanis S., (2017), Tomič I. (2016), Ramon Gomez-Salvador and Nadine Leiner-Killinger (2008), O´Higgins N., (2015 (a)), Caroleo F. E., Ciociano E., Destefanis S., (2015 (b)), Gontkovičová B., Mihalčová B., Pružinský M., (2014), Gôrlich D., Stepanok I., and Al-Hussami F., (2013)

*** EMP = empirical findings from authors, LIT = review of research by others

**** Programme for International Student Assessment

An initial review of other publications confirmed the above findings. Figure 1 below summarises the main general causes of YU[1]. The following sections discuss each of these causes in more detail.

Figure 1 The main general causes of youth unemployment



Source: Author's representation of findings

1.1 Business cycle

The role of the business cycle is a key factor for explaining (un)employment in general and youth unemployment in particular. Youth unemployment rates are generally much higher than adult rates. Young people were also impacted higher by the economic crisis. This was already extensively discussed in the previous chapter.

The literature review confirms the importance of this variable when comparing different causes and their impact. The business cycle is included in most of the overview studies and reflects the obvious importance of this cause and perhaps also the fact that internationally agreed indicators and data are readily available. The studies confirm the paramount and dominant importance of the business cycle for YE and YU and the relationship is clear as well as undisputed for every indicator used: growth and decline of the economy lead to increasing and decreasing YU respectively. Only Bruno, Marelli, and Signorelli (2013) find little or no differences between the impact of GDP on youth in general and on NEETs during the periods 2000-08 and 2009-11. YU in the EU seems more pronounced in countries with comparatively poor GDP growth, low share of construction and high public debt (Tomič I., 2016).

In addition, youth unemployment responds more sensitively to the business cycle conditions than adult unemployment. (Gontkovičová B., Mihalčová B., Pružinský M., 2014). This applies

[1] Youth unemployment refers to all youth not working and looking for job. It includes NEETs.

to the entire EU, even if substantial differences between countries and regions exist. Young workers mostly play a role of a "buffer" to absorb macroeconomic shocks, through wider fluctuations in their unemployment rates (Caroleo F. E., Ciociano E., Destefanis S., 2015).

1.2 Demographic structure

The demographic structure of the country or the region, in general has a somewhat lesser impact, but in specific types of regions variables with a relatively high or low share of young people in the population may be a key determinant for youth unemployment.

In 2008 Ramon Gomez-Salvador and Nadine Leiner-Killinger showed that if the share of young people in the total population is higher, a higher proportion of them will be unemployed and vice versa. This variable would seem to have lost some of it relevance due to the ageing societies that most EU Member States are becoming. At regional level, this variable may still play a more prominent role, but it should be noted that research also shows that its influence is outweighed by the impact of the business cycle.

Regional demographic patterns reflected in the degree of urbanisation or the existence of metropoles are one of the key distinguishing factors between regions. Metropolises tend to have relatively youthful populations, related to the education and labour force opportunities they offer. For similar reasons, relatively large numbers of young people are living in cities within close proximity of the capital. In contrast the elderly are more likely to leave big cities and retire to the countryside or more provincial towns. On balance, more remote, rural regions often experienced declining population numbers, outmigration of young people and as a result an ageing population with associated consequences for the services level and attractiveness of the region. Demographic developments influence regional economic performance, and have social, economic and environmental implications. (Eurostat, 2016 and Eurostat, 2018)

As the share of the youth population is forecast to decline during the coming decades, Moffat, John and Roth, Duncan (2014) examined whether this would automatically increase the chances of work for young people. They conclude that this will indeed be the case, also when examining the situation starting from the regional level. Nevertheless, macroeconomic changes will again have the greater influence on employment and unemployment of youth.

1.3 The institutional framework

The institutional framework that governs employment relations includes those regulations that determine labour market rigidity or flexibility, employment and social legislation that has a bearing on (un)employment, and mobility. From a more quantitative perspective, indicators here relate to, for example, wage flexibility, flexibility in hiring and firing, wage and employment rigidities, regional labour mobility (i.e. occupational and job mobility and geographical mobility), as well as benefit replacement ratio and age restrictions for benefit claiming. Unions and the collective bargaining system are key institutions in this area.

Two groups of factors play a particularly important role: employment protection legislation (EPL) and labour market flexibility.

Employment Protection Legislation

Banerji, Angana, Saksonovs, Sergejs, Lin, Huidan, and Blavy, Rodolphe (2014) in a study on advanced economies in Europe, looked at the impact of several labour market factors and the business cycle simultaneously. They confirm that higher labour costs—that is, a larger tax wedge and/or minimum wages relative to the median wage—are associated with higher youth and adult unemployment rates.

The studies comparing multiple causes show minimum wages and union density to have clear impact, consistent to that of the business cycle, albeit smaller. According e.g. to Caroleo, Ciociano, and Destefanis, (2017), density and the minimum wage are important causes of youth employability. The evidence from table 1 on Employment Protection Legislation (EPL) as a determining factor for youth unemployment seems more mixed.

The relationship between employment legislation and institutions and (youth) unemployment was already documented before the onset of the latest crisis. Sachs, Andreas, and Smolny, Werner (2014) analysed data for 17 OECD countries from 1982 to 2005. They used a series of 12 indicators to measure the labour tax system, employment protection, the unemployment benefit system, and the wage bargaining system, as well as a demographic and an educational factor. They concluded that 'institutions matter', both for unemployment in general and for youth unemployment.

Furthermore, their findings are consistent with what has been termed an insider view of labour market institutions. Older people are in this context seen as insiders, while youth are the outsider. Their analysis shows that powerful unions and a coordinated wage bargaining system in practice benefit older people, while being disadvantageous to youth. Employment protection regulations for regular jobs, have a particularly strong effect on youth unemployment.

Dietrich (2012) on the basis on an extensive literature review concludes that many studies confirm the impact of employment protection legislation on youth unemployment, but also notes that findings were not always fully evidence- based.

On the other hand, the 2013 report on the European economy by the European Economic Advisory Group (EEAG, 2013) confirms that the level and cyclical sensitivity of youth unemployment are relatively higher in more rigid labour markets. They point out that labour market rigidity reduces unemployment inflows for older workers, but tends to result in high numbers of unemployed amongst young workers, even more so in times of recessions.

Another large study covering 29 OECD countries, amongst which 24 EU Member States, also confirms the negative impact of stricter employment protection legislation on youth employment. Using European Social Survey data from, 2002, 2004, 2006 and 2008, they report that it is harder for young people to integrate in the labour market in countries with stricter employment protection legislation and hence a more prominent distinction between labour market insiders and outsiders. (Lange, Marloes, de Gesthuizen, Maurice, and Wolbers, Maarten H.J., 2012). They explain this by the fact that in such countries the jobs of existing

employees are more strongly protected. As a result labour market entrants experience more difficulties to find a stable job. They also find that this leads to increased levels of temporary employment and unemployment among this group. This affects higher educated entrants particularly strong, as highly skilled jobs are often typically found in the better protected labour market segments. Perugini, Cristiano and Signorelli, Marcello (2008) already found that labour demand of highly skilled workers tends to be accompanied by higher youth unemployment.

Signorelli, Marcello (2017) confirm the importance of employment protection legislation for (young) people in transition economies. They draw attention to its impact on worker turnover and the duration of unemployment, besides the unemployment level.

Stronger labour market duality is usually associated with strong employment protection for permanent and fulltime jobs. Gôrlich, Stepanok, and Al-Hussami, (2013) draw attention to the fact that employment protection is less for temporary contracts and even decreased during the recession in many countries. Banerji, Angana, Saksonovs, Sergejs, Lin, Huidan, and Blavy, Rodolphe (2014) show that, conversely, higher protection for temporary contracts go hand in hand with lower unemployment rates for both youth and adults. Young people are affected more though, as they are more often working under temporary contracts.

On balance, the evidence shows that employment protection has a negative impact on youth unemployment. It is likely though, that other factors influence the strength and coverage of its effects.

Labour market flexibility

Dietrich (20102) presents Eurostat LFS data to show the steady increase of part-time employment during the 2000s in the EU27 and Euro17. This continued trend during the recession in the Euro17 countries, and even show a slightly increase in the EU27. In most Member States part-time employment rates for young people increased, with France, Germany and Poland being the exception. The impact of flexible labour markets as a whole is, however, not clear-cut. Dietrich found mixed evidence in the literature on the impact of temporary jobs, and reported that youth unemployment rates and temporary employment rates were weakly correlated in his own analyses. He concludes that responses to the recession seem to be highly country-specific. Some, though not all countries used part-time employment as an instrument to respond to the crisis. The interaction with other parts of the institutional framework, such as social protection and education might help explain the differences between countries.

Statistics on the EU show that youth unemployment is typically lower in countries with a stronger presence of atypical forms of employment. This applies to the years preceding the economic crisis (2000-2007), during, and after the crisis (2008-2015). The study from Urbánné Mező, Júlia (2017) from which these data were taken clearly shows that in EU Member States the increase in the wage flexibility and the flexibility of working hours goes together with declining youth unemployment. She concludes that by increasing labour market flexibility, these countries helped improve the labour market situation of young people. Her analyses did show that all age groups, not only young people, benefitted from more flexibility in terms of being

employed. The analysis could, however, not take into account the implications this may have for the quality of employment.

O´ Higgins (2015) furthermore describes how research shows that while flexible labour markets do seem to exacerbate the effects of an economic downturn on youth unemployment, the opposite does not seem to happen during economic recovery. Using more sophisticated analyses he was able to take account of a variety of factors. Based on this he clustered EU countries in terms of characteristics that mitigated or strengthened the impact of the business cycle on youth unemployment. He concluded that making labour markets more flexible will definitely not facilitate the entry of young people into stable employment.

Complex relationships

In the analysis mentioned above O´ Higgins (2015) distinguished three types of flexibility: numerical (hard to fire workers), wage, and functional (workforce easily adapts to structural change). On this basis he found three clusters of countries were GDP had different impacts on flexibility:

- Very small impact: the 'Education-based' systems comprising Scandinavian and Continental European countries with numerical, wage, as well as high functional flexibility.
- Very high impact: the Anglo-Saxon countries characterised by high numerical and wage flexibility, but only intermediate functional flexibility.
- High impact on atypical employment: in Mediterranean countries with low flexibility on all counts. In these countries 'atypical employment forms were very responsive to variations in GDP indicating that these forms were used as to adjust to variations in labour demand'.

1.4 Education systems

The education system includes general and VET systems, apprenticeship systems and opportunities for work experience for young people. Most of the research into the role of education systems and youth unemployment zoom in on the role of vocational education and the way this provided.

Authors argue that education systems with a close connection to the labour market are associated with lower unemployment, for youth as well as for older people (Sachs, Andreas, and Smolny, Werner, 2014). Also, in such systems young people find it easier to get a job and avoid unemployment (Lange, Marloes de Gesthuizen, Maurice, and Wolbers, Maarten H.J., 2012).

The most far-reaching form of connecting education and work occurs in countries where the traditional sequential system is replaced by a dual system. In the sequential system school

based general education and work based vocational training are provided one after the other, the dual systems provide them together. The dual system is typical of Germany and other Central European countries.

Key features of the dual system

Cahuc, Pierre, Carcillo, Stéphane, Rinne, Ulf, and Zimmermann, Klaus F. (2013) highlight the importance of labour market institutions and labour policies after an in-depth comparison of youth (un) employment in Germany and France.

They observe some substantial differences between the two countries in labour market institutions and labour policies, with the German system appearing to better enable young people to cope with school-to-work transitions and labour market integration.

Key features of the German institutional framework they distinguish are:

- The dual apprenticeship system
- Less prominent labour market segmentation
- The absence at the time of a national statutory minimum wage
- A more efficient approach of the public employment service towards youths.

The dual system is considered to be superior because young people are able to gather work experience while studying at the same time (Signorelli, Marcello, 2017) and fill their experience gap with on-the-job-training (Pastore F. and Luca Guliani L., 2015). Dual education also creates a better match between the skills young people acquire, with the skills sought by their future employers, thus facilitating a smoother school-to-work transition (Signorelli, Marcello, 2017), Lange, Marloes de Gesthuizen, Maurice, and Wolbers, Maarten H.J., 2012). The dual system also increases the chances of work for job for young people, as it reduces the risk employers take when hiring them after having been able to observe their work and capabilities (Signorelli, Marcello, 2017).

Nonetheless, ensuring smooth school-to-work transitions is not limited to the dual system. Cahuc, Pierre, Carcillo, Stéphane, Rinne, Ulf, and Zimmermann, Klaus F. (2013) already warn that it is crucial to consider the interactions between labour policies and institutions, specifically referring to the interaction between vocational education and labour market segmentation. Pastore F. and Luca Guliani L. (2015) draw attention to the fact that some liberalist countries achieved similar results as countries with dual education systems, when combining a sequential, but 'high quality, fast and efficient' educational system with a lower degree of employment protection legislation.

Finally, three caveats should also be mentioned here. The advantages of a more vocationally specific educational system only reach youth who actually participate in and complete this education with a formal qualification (Lange, Marloes de Gesthuizen, Maurice, and Wolbers, Maarten H.J., 2012). And Cahuc, Pierre, Carcillo, Stéphane, Rinne, Ulf, and Zimmermann, Klaus F. (2013) warn against the possibility that more efficient labour markets and more employment may come at the cost of more inequality. Also, according to Dietrich (2012) there

seems to be only weak consensus in detail concerning the labour market effects of vocational versus general education, industry- versus occupation-specific training, secondary versus tertiary level degrees.

1.5 Young people's characteristics and behaviour

When analysing figures on youth unemployment it becomes clear that certain personal characteristics are associated with success and failure on the labour market.

Dietrich (2012) reviews the literature on such characteristics and concludes that social class influences labour market success though access to resources, aspirations, and perceptions of opportunities. Social class is also objectively related to the chances of success. Education, in terms of the level of education, the type of education and school performance, is also partly determined by social class.

According to Marcello Signorelli (2017), young people typically have a higher education than older people. One reason why young people nevertheless are more likely to become unemployed, is the fact that young people possess less skills and lack the work experience older workers have.

Kramarz, Francis and Viarengo, Martina (2015) observe a strong inverse link between educational attainment, skill proficiency and youth unemployment for EU Member States. Among young people with lower levels of education the share of NEETs is higher also than for the tertiary educated. Interestingly, in countries with very high levels of unemployment, unemployment also affects the better educated individuals more.

They also draw attention to the fact that unemployed youths (and NEET) are often from socioeconomically disadvantaged backgrounds such as poor areas or an immigrant background. Low qualifications and immigrant background are also mentioned as contributing factors to youth unemployment by Dietrich (2012). The skills level is also mentioned as impacting on resilience. (ESPON, 2014c)The skills mismatch between young jobseekers and company demand is a factor in itself. Here E. Marelli, D. Sciulli, M. Signorelli (2014) point out that there also exists a risk of over-education when discussing the importance of human capital for economic growth and local development. While universities may play an important role in developing a "learning region", a mismatch between acquired skills and employer demands for skills, including over-education, may contribute to high and persistent youth unemployment rates.

Gôrlich, Stepanok, and Al-Hussami, (2013) explain that young people may be more likely to resign voluntarily, as they may want to explore other options before settling, have fewer people depending on them, and they are at the age where higher education 'is a more natural and viable option'. On the other hand, the labour market also presents them with higher entry barriers because of their lack of experience, while the option of becoming self-employed is hampered by a shorter credit history and lack of access to business networks.

Tomič (2016) points at some causes that do not play the all-pervasive role that other factors play, but that still may be a factor of importance in countries with comparatively high youth unemployment rates. These include homeownership (lower mobility), high remittances from abroad, household members that work relatively little, and less opportunities for people to live outside parental homes.

Dietrich (2012) draws attention to the role of mobility in furthering labour market integration of young people. Younger and better educated people are more likely to move across the country to find training or work. This includes young people search for apprenticeship places, e.g. in Germany.

2 Region specific factors behind youth unemployment

Most of the studies on general factors available at the international level did not contain a regional dimension. However, the few exceptions show that this omits a key element in the analysis: it would be unwise to assume that causes of YU have the same importance at regional as at national level. This is confirmed by the few studies that do consider regional differences.

Daniel Rauhut and Petri Kahila (2012) e.g. reviewed the way how public policy aims to address the consequences of ageing on the Swedish regional labour market. One of their conclusions is that such policies are failing because they do not address the variety in ageing (consequences) amongst Swedish regions. Signorelli, Marcello (2017) in their study of youth unemployment in transition economies also mention the growing body of literature showing that regional (sub-national) differences in youth unemployment rates are particularly relevant for youth unemployment and persistent over time.

The importance of regional differences in Greece

Even in a country such as Greece, which has seen a sharp rise in unemployment across the country during the crisis, remarkable regional differences in the development of unemployment and adjustment trajectories exist. Vassilis Monastiriotis and Angelo Martelli (2013) find that in the main metropolitan regions and the north and north-western periphery of the country the fall in effective demand was largest. Overall, adjustment processes have been weak. The crisis in fact hit especially those regions that benefitted most from the Eurozone. Specific problems in need of addressing during the recovery included over-education and 'matching efficiency in the demand-depressed areas and of inter-regional adjustment mechanisms nationally'.

Perugini, Cristiano and Signorelli, Marcello (2008), carried out an analysis for 248 EU regions. They too found a 'strong temporal persistence and geographic structure of labour market performance'. Their analysis confirms the expected negative relationship between development levels and unemployment, also it reports that higher youth unemployment is found particularly in highly urban areas. This again confirms the importance of differentiating between regions when discussing youth unemployment.

Economic differences across Poland

The Polish economy has been affected by the crisis comparably later and to a smaller extent than many other European countries. This resulted in a rather gradual increase in the number of persons registered with PES. The current situation is thus relatively favourable in Poland, with the third lowest level of unemployment rate in EU, according the Eurostat data.

The labour market situation of youth depends on the region. By the end of 2017, the highest recorded youth unemployment rate (a percentage of unemployed aged up to 25 in the total unemployment) was in the south-eastern region of Poland. According to the MRPiPS database, in 2017 16.1% of unemployed in the rural area were young people, while in the urban area it was 9.3%. It is also related to gender – by the end of 2017 in the rural area for every 100 of unemployment men there were 144 unemployed women.

The different unemployment rates in Poland are caused by social and economic differences across Polish regions. The eastern part of Poland is considered to be less developed – the quality of life and access to work is limited. Additionally, there are significant differences in development between metropolitan areas and villages. Even if the development in the rural areas is increasing year by year, it is notable that the change in the rural areas is slower than in cities.2

Source: literature review carried out by dr Łukasz Sienkiewicz, Szkoła Główna Handlowa w Warszawie

Including the regional dimension also enables a better understanding of resilience of regions to economic shocks. Regional economic resilience is being defined in this report as the ability of a regional economy to withstand and recover from the effects of exogenous shocks (vulnerability or exposure to exogenous shocks coming from economic openness). In general, resilient regional (and local) economies are expected to have strong labour markets[3] and could therefore be expected to be more resilient against YU.

A number of determining factors on regional resilience feature in various studies in this area. Key determinants identified for economic resilience[4] (regional resilience capacity – RR) already in 2009 are macroeconomic stability, microeconomic market efficiency, good governance, and social development. These are supported by a recent EU-wide empirical study by Giannakis and Bruggema published in the Journal of European Planning Studies, and extensive data analysis and case studies reported in the twelfth Territorial Observation published by ESPON. Some other studies zoom in on the impact of sector structure, regional labour markets and regional public policy. Giannakis and Bruggeman (2017) compared likely socioeconomic causes during the pre-crisis period (2002–2007) to employment changes during the period

2 Stan i struktura bezrobocia na wsi w 2016 roku [The condition and structure of rural unemployment in 2016] Ministerstwo Rodziny, Pracy i Polityki Społecznej Departament Rynku Pracy Wydział Analiz i Statystyki 2017

3 AWM Strategy Team: Community Economic Resilience Index, 2008. Available at: http://webarchive.nationalarchives.gov.uk/+/http:/www.advantagewm.co.uk/Images/Community Economic Resilience Index_tcm9-33264.pdf (accessed 10 February 2018)

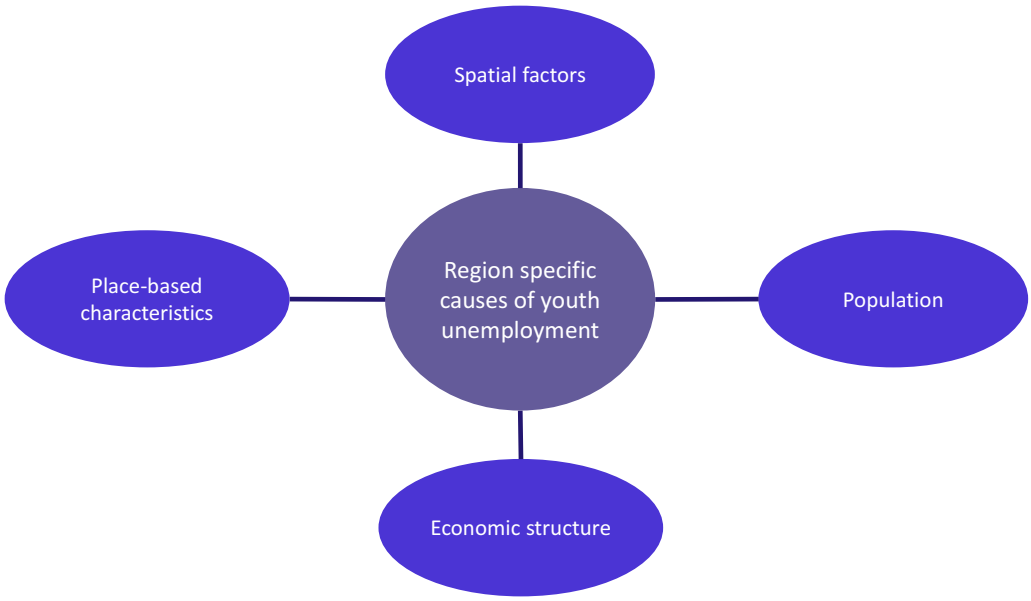
4 Briguglio, L., Cordina, G., Farrugia, N., Vella, S., (2009), Economic Vulnerability and Resilience: Concepts and Measurements. Oxford development studies. Available at: https://www.researchgate.net/publication/46527233_Economic_Vulnerability_and_Resilience_Concepts_and_Measurements (accessed 10 February 2018)

2008–2013. Contributing factors to economic resilience identified by them are the region's accessibility, its education and its economic development level. According to another study (ESPON, 2014c) the ability of regions to withstand economic shocks or regional resilience, is determined by the form and structure of the economy, labour market flexibility and skills, place-based characteristics and community-based characteristics.

Regional differences reflect different position regarding general causes of youth unemployment, but also region-specific causes. The latter are the subject of the present section. This section discusses the general literature on three key region-specific factors. The international literature often focuses on the link between such factors and regional unemployment in general. Examples of different types of regions and the way youth unemployment came about and developed in these types of regions are discussed in Chapter 4 of this report, when discussing ten case studies on regional policy and its impact.

The factors mentioned for regional resilience include many of the region-specific causes for youth unemployment. The following figure provides an overview of such region-specific causes. The following sections discuss these region idiosyncratic causes in more detail.

Figure 2 Region specific causes of youth unemployment



Source: Author's representation of findings

The above figure encompasses three of the four innate properties that ESPON (2014c) distinguishes as shaping the capacity of a region to respond to an economic shock: place (place-based characteristics of the physical environment), business (form and structure of the economy), and people (a region's population).

ESPON also lists community-based features. Strong social ties and positive levels of community based capital (including business networks, and inter-firm social capital) in theory

can play a role in mediating resilience outcomes. However, evidence on the subjects is scarce and mainly of a qualitative nature. (ESPON, 2014c).

As a fourth factor we have instead included spatial factors. The degree to which young people in a region are affected by an economic downturn or a crisis does not only depend on the region itself, but also on its interaction with neighbouring regions.

2.1 Economic structure

The importance of the economic structure

The business cycle was the key factor amongst the general factors determining youth unemployment levels and duration. Similarly, the form and structure of the economy are the most influential of the region-specific factors. ESPON (2014c) explains the importance of this factor for regional resilience in general, but characteristics such as the size of the market and access to a larger external market, a diverse economic structure, not depending on a few particular sectors or employers, and innovation capacity are also likely to influence the labour market situation of young people.

The importance of the economic structure for resilience is specifically discussed in a number of other studies. Silvia Rocchetta & Andrea Mina (2017) empirically examined the effect of different regional technological profiles on the regional economic resilience for the United Kingdom (UK) using NUTS 3 data. They found that regions with technologically coherent knowledge bases and local economies that innovate in sectors with the strongest growth opportunities, are more resilient to exogenous shocks. Giannakis and Bruggeman (2017) found that a large manufacturing sector negatively impacts on the ability of regions to withstand economic shocks.

Sector structure

The sector structure is e.g. a key factor when it comes to the demand for labour and, hence, the labour market opportunities for young unemployed. The sector structure is also expected to influence the options for work experience and work-based learning for young people.

Banerji, Angana, Saksonovs, Sergejs, Lin, Huidan, and Blavy, Rodolphe (2014), studied youth unemployment in advanced European economies. They propose that the sensitivity of youth unemployment to a deteriorating economy may be due to the concentration of youth unemployment in cyclically sensitive industries and in small and medium enterprises (SMEs). Youth employment is concentrated in sectors such as manufacturing, wholesale and retail trade, and hotels and restaurants. Such sectors are hit particularly hard during a crisis.

On the other hand, the presence of specific sectors may also entail specific opportunities or barriers for youth to enter the labour market. Certain sectors appear to be “youth-friendly”, such as tourism, ICT, social services, or environmental management[5].

[5] Dennis Görlich, Ignat Stepanok and Fares Al-Hussami (2013) Policy Brief No. 59: Youth unemployment in Europe and the World: Causes, consequences and solutions. Kiel Institute for the World Economy.

It is important to take into account that labour markets tend also to be characterised by occupational gender segregation. Marcello Signorelli (2017) finds that in transition economies, growing specialization in agriculture was shown to offer higher employment opportunities only for young women. Regions with a higher industrial specialisation experienced significantly reduced male YU rates. Economies with a strong presence of traditional market services (e.g. retail trade) was associated with higher rates of female YU and a larger share of public services had a negative impact on both genders.

Perugini, Cristiano and Signorelli, Marcello (2008) provide clear evidence of the impact of the regional industry structure on YU. According to their findings, higher shares of the primary sector and industry favour less YU and the same effect occurs in the case of increasing importance of financial and business services. Public services in this study also have a positive impact on YU. This latter inconsistency with the findings from Signorelli above, can perhaps be explained by the difference in the periods examined and the changes the public sector has undergone in these periods. On the other hand, a growing construction sector typically leads to higher YU.

Knowledge economy

The knowledge economy in principle offers good opportunities for young people, as they tend to be better educated. However, less developed and rural areas are often unable to develop and sustain knowledge dissemination and innovation since they lack infrastructure and the highly-skilled human capital needed for this. This leads to out-migration with young people in particular moving to regions with high income levels, especially since they tend to have higher education levels than their elders. This has a further downward impact on the resilience of sending regions and decreasing cohesion between regions. On the other hand, this shows that the knowledge economy and richer regions offer opportunities to young people that may mitigate the impact of unemployment (Simone Busetti, et al. (2017). In general, sheltered economies are less resilient, with the possible exemption of the extremely sheltered (isolated) ones (Ugo Fratesi and Andrés Rodríguez-Pose, 2016).

2.2 Place-based characteristics

Types of regions

Several typologies of regions based on their place-based characteristics have been developed in the past. Based on Böhme, Kai, Zillmer, Sabine Pflanz, Kai, Hanell, Tomas, and Niemi, Petteri (2010) distinguish eight types and ESPON (2011) nine typology dimensions.

ESPON (2014c) already found that some place-based characteristics have proven more significant than others for economic resilience and by inference, for resilience against (un)employment. Their most telling conclusion was that urban areas, and areas that are more accessible, are more resilient than more remote locations. The resilience of mountainous,

Available at: https://www.ifw-kiel.de/wirtschaftspolitik/zentrum-wirtschaftspolitik/kiel-policy-brief/kpb-2013/KPB_59.pdf. (Accessed 10 February 2018).

coastal and island regions was also studied, but these physical characteristics showed to be less important for resilience, (i.e. other factors and a wider context need to be taken into account).

The available evidence on the resilience of three types of regions against economic shocks and its impact on YU is reviewed below. If no information was found specifically dealing with youth, the information on general unemployment impacts are reported as a first suspected indicator for the impact of place-based characteristics on YU.

Role of cities

A high proportion of Europe's ageing population lives in relatively small towns. Younger people on the other hand, are more likely to live in the suburbs close to the capital or other large cities in a country (Eurostat, 2016).

Cities attract young people mostly because of the education and employment opportunities they offer. However, not all cities are equally successful in this respect. Higher-income cities tend to be more attractive than low-income cities. Therefore, out-migration of young people also occurs from low-income to high-income cities (European Commission, 2016a). It should also be noted that although cities have many job opportunities, unemployment rates and poverty rates can still be high. In the cities of several western EU MS, NEET rates for young people were higher than those in rural areas. Cities appear to offer better opportunities especially in eastern and southern MS (Eurostat, 2016).

Work done by Capello, Caragliu, and Fratesi (2015) provides some more nuances on the relationship between cities and their surrounding areas. These researchers developed a model to examine the extent to which large cities have a positive impact on the economic resilience of the region they are located in. According to their model, regions with large cities experienced a higher increase (or a lower loss) of GDP growth during the crisis. This means that the costs of the crisis are considerably lower for the agglomerated regions where large cities are present. Large cities are, as the authors put it, all 'driving their respective regions to the best economic performance'. A second important finding of their analyses is that MEGAs - Metropolitan European Growth Areas – regions, lose less (or gain more) than agglomerated regions. MEGA cities are cities with higher value-added activities, higher quality of production factors, higher density of external linkages and cooperation networks and a better quality of urban infrastructure. Hence, it can be expected that in the face of a crisis (youth) unemployment in a region is less likely to be lower when the region hosts a large city or cities, and especially when these possess the type of functions described above.

Outermost and coastal regions

Youth unemployment rates remained high in several outermost and coastal regions even after the global financial and economic crisis came to an end. The large flow of young labour market entrants is one of the factors causing higher unemployment rates in the outermost regions (Eurostat, 2010). The evolution of the political, economic and social situation in these regions

has a negative impact on YU (Eurostat, 2018). The outermost regions are characterised by a need for modernisation of traditional sectors such as the fisheries and agricultural sectors. On the other hand, environmental concerns and new technologies offer new opportunities, especially those related to the blue economy (European Commission, 2017). Currently, a skills gap between education offered and labour market needs, and a lack of awareness of career opportunities in these sectors prevent young people from realising employment opportunities.

Coastal regions are typically more densely populated than the hinterland, with higher rates of population growth and urbanisation (Neumann B, Vafeidis AT, Zimmermann J, Nicholls RJ, 2015). For coastal regions the service sector is by far the biggest employer (Eurostat, 2010). The density of tourism capacity or large marine passenger traffic cause high employment in households and enterprise services. High levels of urbanisation are also conducive for employment in administrative and financial services. The tourism sector is typically a sector with relatively low entrance barriers for youth.

Neumann B, Vafeidis AT, Zimmermann J, Nicholls RJ (2015) refer to coastal hazards including sea-level rise and its impact on social and economic life. Natural disasters such as the hurricanes in September 2017 demonstrate the vulnerability of these regions. The tourism sector in coastal regions is also highly vulnerable to the impacts of climate change. Kūle, L.; Haller, I.; Varjopuro, R. & Alberth, J. (2013), emphasise that climate change may have positive as well as negative impacts on the tourism industry in the Baltic Sea Region. A future warmer climate can bring new weather-related opportunities for this region. However, low income regions, less populated coastal areas and those that depend on wildlife tourism are relatively susceptible to negative impacts. Climate change may increase outward migration of younger people, but environmental objectives may go hand in hand with combating YU if policies are properly designed (European Commission, 2009).

Environmental concerns and youth unemployment – Baltic Sea region

Eight of the nine states bordering the Baltic Sea are members of the EU. The region is by the sea, one of the largest bodies of brackish (part saline) water in the world. It has on the one hand a prosperous, innovative North and West (regions located in Nordic countries and Germany) and on the other hand a developing East and South (Poland and the three Baltic States). However, the latter countries have a supply of well-educated young people. Environmental concerns for the sea are a driving force for cooperation, which can also be a source of employment for these young people. This has prompted the EC to launch and support an ambitious strategy for the Baltic Sea region, the first comprehensive EU strategy to target a 'macro-region'. Subsequent plans included several actions aimed at furthering the employment of young people.

Information: https://www.balticsea-region-strategy.eu

https://ec.europa.eu/regional_policy/en/policy/cooperation/macro-regional-strategies/baltic-sea/

It should be noted though that (youth) unemployment in coastal regions is not only determined by the closeness of the sea border, the state of the economy, the population structure and education levels in these regions also play a role. The demographic structure (i.e. the number

of young people coming onto the labour market or the number of older people retiring) is another factor (Eurostat, 2010).

Mountainous regions

Although not the only mountainous area in Europe, the Alpine region receives comparatively much attention in the international literature on (un)employment in mountainous areas. This may be related to the fact that the mountain range covers multiple regions and countries and because the EU focused on this area for its fourth macro-regional strategy.

According to a report from the European Commission (2015), the Alpine Region is 'one of the richest areas in the world and among the most economically dynamic, innovative and competitive areas in Europe'. The reason for the development of a macro-regional strategy were the differences still existing within this area. Gløersen et al. (2013) point out that the Alpine region includes metropolises, Alpine cities, stable or growing rural areas, as well as declining rural areas. The latter tend to be far removed from urban centres and do not have the transport infrastructure to compensate for the distance. According to Antonescu (2014) most mountain regions have a relatively large ageing population. Young people living in these areas do not benefit from the employment opportunities of towns and cities. The region's tourism areas are mainly located in the mountainous core and these tourism areas, as well as rural areas in general, are confronted with outmigration of young highly-qualified people, i.e. the brain drain effect (Gløersen et al., 2013). The European Commission (2015) also highlights the lack of incentives for young people to return to their region after their education and start a business as one of the significant challenges the regions face.

Euromontana, the European multi-sectoral association for co-operation and development of mountain territories, organised a conference on youth in mountains in 2012. In preparation for this conference, they launched an online survey amongst young people between the ages of 18 and 30. The 81 replies do not necessarily constitute a representative sample, but they do provide a useful overview of the type of problems young people experience in mountainous regions. The four main groups of problems relate to employment and career opportunities, educational opportunities, a lack of infrastructure (housing, health, daily transport, broadband connections), and insufficient provision of cultural activities, especially outside touristic centres and seasons (Euromontana 2012 and 2012a). These difficulties lead young people to leave mountain areas to study elsewhere and stay in or close to these new destinations after completing their study.

Alpine areas with fewer economic opportunities and infrastructure experience more outward migration. This trend has been strongest for young people, but also for middle-aged people. These are the two more mobile age groups. The problem of outward migration is the lowest in rural areas located close to the large peri-Alpine towns. These as are very attractive for working people who commute into these towns (Price, Martin F., Borowski, Diana, Macleod, Calum, Rudaz, Gilles, Debarbieux, Bernard, 2011).

A final observation to be made is that YU in mountainous areas is not only related to place-based characteristics. Gløersen et al. (2013) specially mention the diversity of the existing alpine organisations for transnational cooperation and dialogue as the main hampering factors for policies dealing with youth unemployment.

2.3 Population

The few studies that examined the role of population characteristics in preventing or reducing YU at regional level confirm the importance of the institutional framework and education, discussed in sections 3.1.3 and 3.1.4.

The ESPON (2014c) study on the crisis and the resilience of regions found the clearest evidence on the relationship between population characteristics and resilience to be in the area of skills. Areas with more highly qualified populations tend to have more positive resilience outcomes. They also identified the positive role played by flexibility in labour markets in helping regions to respond to economic crisis.

Perugini, Cristiano and Signorelli, Marcello (2008) compared eastern and western regions and their outcomes corroborated the view that youth are more likely to enter flexible labour markets. However, they find clear differences in this respect for men and women. Young males tend to profit in terms of labour market performance from part-time, temporary, as well as self-employment. However, out of these three, only part-time employment seems to be able to reduce the unemployment among women. Another interesting finding relates to the effect of having relatively high levels of self-employment in a region. According to their data this is accompanied by higher levels of YU. The authors point out that self-employment requires high skills, experience and risk undertaking and that these characteristics constitute a barrier for people when they are still young.

2.4 Other spatial factors

Spatial interaction and dependence and unemployment

Other spatial factors, such as the heterogeneity or the interaction of regions are important for explaining different developments in unemployment at regional level and for understanding causes and policy implications. Regions are linked by various ties, including trade, investments, commuting, and (labour) migration. These spatial interactions are determined by distance and by similarity or complementarity of the economies and the populations of these regions.

Experience shows that spatial interaction leads to spatial dependence amongst labour markets. This means that high and low unemployment regions tend to cluster geographically. In other words, unemployment tends to cluster on a regional base. This is a relevant observation because it explains that the situation of neighbourhood regions may be more important for the development of European region than the situation of the country it is located in (Grekousis, George, (2018). Thus, spatial factors help take into account the wider labour markets and in particular those of neighbouring regions. This is important as these offer intra-regional opportunities for regional policymakers dealing with (youth) unemployment.

The concept of ‘spatial autocorrelation’ measures how much the value of a variable such as unemployment in a specific location is related to the values of the same variable at its neighbouring locations. The statistical analysis of spatial autocorrelation complements the visual comparison done by the visual mapping of regional YU and its development (see Chapter 2)

By examining the development of such patterns over time, Annekatrin Niebuhr (2003) also found that different forms of spatial interaction impact on the *evolution* of regional unemployment in Europe. She analysed the spatial association of regional unemployment for a sample of European countries between 1986 and 2000 by measures of spatial autocorrelation and spatial econometric methods. It was observed that regional labour markets in Europe are spatially dependent on one another. In other words, regions with high unemployment tend to cluster in space, and so do regions characterised by low unemployment.

Polarisation

George Grekousis (2018) performed a similar analysis with similar results. He also highlights that the unemployment rate is highly polarized across the EU regions. In southern MS, strong unemployment clusters exist in in space and time due to high unemployment in those countries. In contrast, spatial clusters of low rates of unemployment are found in countries such as Germany and Austria which are more resilient to economic crises.

Overman and Puga (2012) signalled an overall polarisation of regional unemployment rates towards extreme values since the mid-1980s. They argue that the polarisation has similar outcomes for neighbouring regions, only partially explained by similar skills levels and industry performance. They point to new economic geography literature that shows that economic integration fosters employment clusters that cross regional and even national borders. This would imply that regional and transnational employment policies, including those related to wage-setting and mobility, are required to deal with ‘neighbour’ effects.

According to the findings of Grekousis (2018), spatial autocorrelation increased considerably between the beginning of the crisis in 2008 and 2013, in spite of austerity measures taken. He signals further polarisation of unemployment, as well as a widening gap between the south and the central-north. More precise analysis shows that regional unemployment has spread in nearby areas, not unlike an outbreak of a disease.

Cracoliciab M-F, Cuffaroa, M. and Nijkamp, P. (2007) submit that the polarised structure of unemployment rates in fact indicates the clustering or grouping of economic activities. Consequently, the polarisation of labour demand becomes a key factor in understanding why unemployment is persisting in a region and what policies are needed to alleviate this problem, including national policies aimed at furthering the integration between heterogeneous regions.

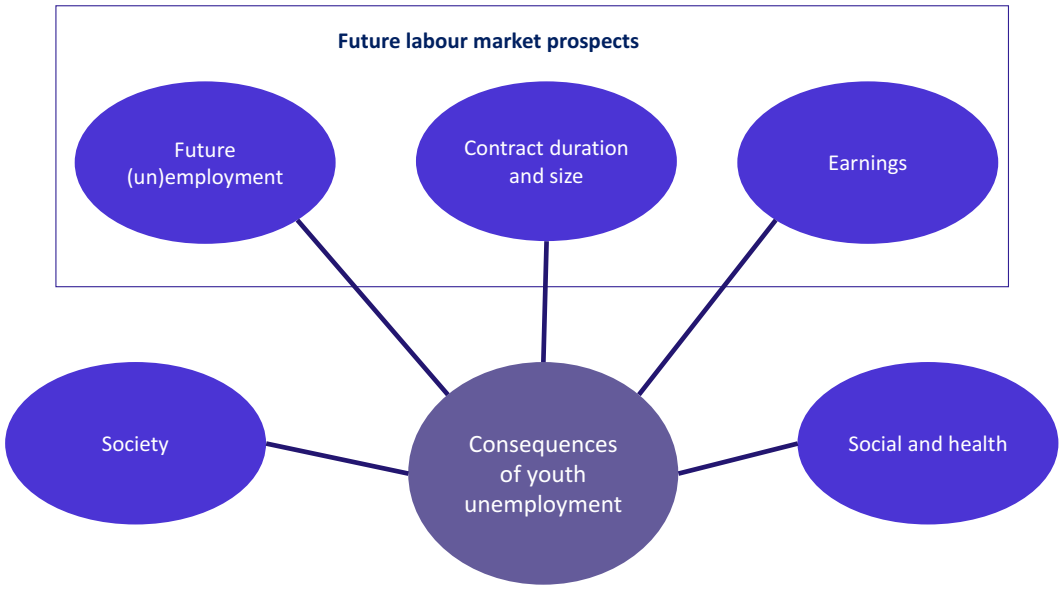
Example of labour market polarisation in Italy

Cracoliciab M-F, Cuffaroa, M. and Nijkamp, P. (2007) analysed the impact of a new regulation for the Italian labour market introduced in the 1990s. They conclude that while the new regulation had a positive impact on unemployment, the geographical unemployment differences remained high. They found polarisation of unemployment rates in 1998 as well as 2003. Local labour markets in Italy with high or low values of unemployment tended to cluster in space. They conclude that Italian provincial unemployment rates are characterized by a significant neighbouring effect, even when regional characteristics are taken into account. The country has a cluster of central-northern provinces which is clearly distinguished from the cluster of southern provinces. This divide did not change over time.

3 Consequences of youth unemployment

The consequences of YU are often long-term and have an impact on individuals as well as on the society or the region in which they live. The possible impacts encountered in the literature have been combined into three groups of impacts, as illustrated by Figure 3

Figure 3 Consequences of youth unemployment



Source: Author's representation of findings

When reading the findings below, it is important to bear in mind two types of caveats.

Many of the studies discussed in this section are based on empirical work that relied on the available data. This means that there are always factors, and possibly important ones, that were not included and might have yielded different results, had it been possible to include them. Fondevilla N. and Ward T. (2014) for example, specify that several studies found that the impacts of YU reported by them are stronger for low-skilled workers and in some cases for young people from ethnic minority backgrounds than on those with upper secondary or tertiary education. Methodological discussions continue on the causality of relations found between YU and its consequences. Dietrich (2012) warns of non-inclusion of relevant factors and sample biases. In this sense, the report reflects ongoing work and new insights will become available when data availability increases.

The present section differentiates between short as well as long-term impacts. Sometimes the distinction between the two may be blurred; however, it is important to bear these distinctions in mind, because they may determine the relevance of the consequences discussed here for specific youth policies. Similarly, it is also advisable to check whether consequences are the result of YU in general or particularly of longer-term unemployment. According to O'Higgins (2015), the latter is in fact often the case.

3.1 Future labour market prospects

Scarring mechanisms

'Scarring' is defined here as negative long-term effects of unemployment of young people that can be attributed to this unemployment spell at a young age. This means that unemployed young people are worse off in various areas of life *compared to* people who were not unemployed at that age.

The mechanisms by which scarring occurs are classified into three groups by Gôrlich D., Stepanok I., and Al-Hussami F. (2013). The first one relates to the fact that patterns of behaviour established at an early stage tend to persist. A further group assumes that in the course of being unemployed, skills and motivation may decrease or skills may become outdated. Finally, young people may become less attractive to employers because of their unemployment spells.

The second argument is also brought forward by Hernanz, Virginia; Jimeno, Juan F. (2017), referring to the fact that depreciation of human capital during the initial stages of the working career is much stronger than later in life. They specify that this applies to long-term unemployed youth, but also to young workers with many temporary jobs one after another.

The last argument may need some qualification. Fondevilla N. and Ward T. (2014) find studies that support the argument that employers use unemployment in young years as a screening device. On the other hand, German evidence shows that this is less the case when the unemployment spell took place during a period when many people were out of work. Employers would frown upon unemployment more if this occurred during a period of economic growth.

Whatever the reasons why scarring occurs, a series of studies indicate that unemployment early in life may have persistent negative consequences for the subsequent career of the individual, in terms of their employment situation and the quality of their employment (Gôrlich D., Stepanok I., and Al-Hussami F., 2013).

Future (un)employment

An important longer-term consequence of YU is its impact on the future careers of young people. This effect is stronger if the unemployment occurs at the beginning of a career. A literature review carried out by Fondevilla N. and Ward T. (2014) listed studies for several countries showing that young unemployed are likely to be more often than others unemployed in future as well as earning less. Such experiences were recorded for Germany, Sweden, the Netherlands, Italy, and for the United Kingdom and also the United States. For the latter two countries, research also found that the impact of unemployment spells at later stages in life was considerably smaller.

For the UK and the US, Bell, D and Blanchflower, D (2011) report state dependence in YU, meaning that a spell of unemployment by itself increases the risk of future spells of unemployment. Nilsen, Øivind A., and Holm Reiso, Katrine (2011) analysed Norwegian individual register data for the period 1986-2008. They tracked young workers over a 10-year

period with a control group for comparison and concluded that that unemployment has a negative effect on later labour market attachment. They do also report that the negative effects decrease over time.

Signorelli (2017) in his study of transition economies, specifies that if a recession is followed by insufficient recovery, the situation of youth deteriorates further and may lead to higher permanent unemployment, 'as part of the cyclical unemployment transforms into structural unemployment'.

Schmillen, Achim and Umkehrer, Matthias (2012) also performed an extensive quantitative analysis using German administrative matched employer-employee data. They were able to follow over 800,000 individuals over 24 years. They conclude that early-career unemployment indeed leads to more future unemployment. In their analysis they were able to correct findings for local labour market conditions, in particular local unemployment rates right before graduation from the dual education system. Some adjustments do occur during the first five years, but the persistence of unemployment is definitely strongly related to true state dependence: 'on average, every day of (involuntary) unemployment during the first eight years of the professional career induces two additional days of unemployment during the subsequent 16 years, other things being equal.'

The duration of the effects could well be different, depending on the country. Fondevilla N. and Ward T. (2014), report that studies of French and North American survey data find that young people tend to 'catch up' relatively quickly; three years for the United Kingdom and Canada. French Labour Force Survey data showed that young people who completed their studies during a recession experienced negative effects in terms of lower employment rates and part-time and in temporary jobs, but that again the effects would disappear after a period of some three years. Other studies reported a high probability of being unemployed for at least a month 10 years later (United Kingdom) or young people graduating from vocational high schools in the recession years of 1991-94 had a higher risk of unemployment up to five years later (Sweden). Fondevilla and Ward (2014) conclude that young people entering the labour market when jobs are scarce means that they run a higher risk of unemployment for some years, but not necessarily permanently.

Low quality unemployment as alternative to unemployment

The crisis forced young people into unemployment. At the same time there was a surge of temporary and part-time jobs, due to relaxation of labour market regulations in an attempt to reduce entry barriers for, among others, young people. Such contracts, while alleviating the situation of young people in the short term, entail new spells of unemployment or constitute partial unemployment. As O'Higgins (2015) notices, high levels of temporary and part-time employment amongst young people require to also examine the longer-term impacts of these contractual forms.

Temporary jobs entail a number of costs for young people. It can by no means be assumed that firms will transform temporary jobs into permanent ones. Gôrlich D., Stepanok I., and Al-

Hussami F., (2013) list the ones they encountered in their review of literature. Temporary jobs are fragile and less well remunerated. As they are also insecure, young people working under such contracts have less access to credit and mortgages. Temporary workers often receive less training, so their skills and qualifications do not increase, and temporary workers are also the ones most strongly affected by globalisation and employment reductions.

However, no unambiguous conclusions can be drawn regarding the opposing views on temporary contracts as a stepping stone to stable jobs or traps of low-quality employment. Dietrich (2012) quotes research by Scherer (2004) who compares West Germany, Great Britain and Italy to examine the impact of different labour market structures. According to Dietrich the findings lean more towards the trap hypothesis but are not conclusive. Dietrich's article suggests that the effects of starting out with part-time or temporary work will also diminish over time. Other factors, in particular the national labour market structure, may intervene with these effects.

Wages

Fondevilla N. and Ward T. (2014) found much literature supporting the view that YU has a strong effect on the wages that young people can earn afterwards. The size of this 'earnings penalty' and its duration varies again among countries. According to the review by Fondevilla and Ward, it would seem that it takes longer for young unemployed to catch up in terms of wages than in terms of the likelihood of being employed. Such negative effects on wages apply to young people regardless of their educational attainment levels, although university graduates were found to be able to find jobs with firms paying higher earnings relatively more quickly.

Kahn (2010) studied college graduates who graduated during a recession and found that they encountered 'large, negative and persistent' effects on (lifetime) wages. They are also more likely to be working in lower-level occupations. The analysis used corrections for national and state economic conditions as well as unemployment rate. Five years before, Gregg P. and E. Tominey (2005) already showed that an early period of unemployment can lower wages by up to 20% at the age of 42.

A general word of caution is issued by Skans (2011). He argues that many unknowns may distort analyses and their findings and if their inclusion in the analysis were possible, they might seriously change the outcomes. In the case of the impact of youth unemployment he refers to unknowns such as social problems, drug use, differences in attitudes, health problems, and occupational choices that may be both related to a high risk of future YU and future wages.

3.2 Social impacts and health

Wellbeing and poverty

A variety of social impacts of YU is mentioned in the literature. Eurofound (2017) mentions the results of an analysis of data from the 2011 European Quality of Life Survey (EQLS which shows that long-term unemployment 'harms the personal well-being of young people, reducing their overall life satisfaction'. An increased risk of social exclusion and less positive feelings

about the future are also found. Unemployment also brings unhappiness – also for employed fearing unemployment. Unhappiness itself is linked to mental and physical ill-health (Bell and Blanchflower, 2010). The Eurofound report also highlights higher material deprivation of longer-term unemployed young people in comparison with other young people.

The risk of poverty is increased by an economic crisis especially for young people. MS changes in social welfare or entitlement for support have heightened this problem. Homelessness, poor physical health and heightened psychological distress also occur. Fondevilla N. and Ward T. (2014) found studies identifying such effects for the EU and the United States.

The group most likely to experience these impacts are NEETs, young people not in employment, education or training (Fondevilla N. and Ward T., 2014). Poor health and poverty are amongst the negative impacts of being without work for several years. A large number of these young people are not entitled to benefits or social assistance, as they failed to up entitlements though work or live with their parents and hence are not eligible for many allowances under safety net assistance schemes.

Bell, D and Blanchflower, D (2011) also discuss the latter, arguing that co-habitation decisions are both influenced by, and influence, labour market status. Under difficult labour market circumstances, young people tend to stay living with their parents longer. These decisions are also influenced by welfare systems, but also housing markets and culture.

Fondevilla N. and Ward T. (2014), on the basis of an extensive literature review, concluded that young unemployed often 'suffered rejection, depression and hopelessness leading some to feeling suicidal'. Such effects persisted over time. Unrest, anxiety and insecurity of the future all contribute to a diminishing sense of well-being and at its worse result in long-term mental health problems. Evidence on Sweden shows that such problems last until well after the crisis and that young people continue having problems to find work, especially young men from a working-class background. The effect of unemployment on personal well-being also affects people close to the young unemployed.

Health

Fondevilla N. and Ward T. (2014) also found serious consequence of YU on mental and physical health. They conclude that it even reduces life expectancy of those affected and increases the chances of 'malnutrition, illness, mental stress, and loss of self-esteem' and state dependence, as well as a greater risk of depression and suicide. This applies in particular in the case of long-term unemployment combined with low income.

O´ Higgins N., (2015), when reporting on the findings of his own literature review also confirms that unemployment is associated with negative health consequences, which become worse with the duration of unemployment.

The findings of Bell, D and Blanchflower, D (2011) already feature in other literature reviews, but they also stress that happiness and health in turn influence the healing powers of individuals, life expectancies, and the risk of coronary heart disease. In addition, their research

in the United Kingdom provides evidence that the scarring effects of YU related to well-being and health are still visible two decades later. Thern, E., de Munter, J., Hemmingsson, T., and Rasmussen, F (2017) report for Sweden that young unemployed are more likely to have mental health problems and run an increased risk of getting a mental diagnosis. Overall national unemployment rates do not explain this finding.

Together with the World Health Organisation Rathmann, Katharina, Pförtner, Timo-Kolja, Hurrelmann, Klaus, Osorio, Ana M., Bosakova, Lucia, Elgar, Frank J., Richter, Matthias (2015) analysed data from the Health Behaviour in School-aged Children (HBSC) survey that is conducted every four years. The authors analysed data for 2005/2006 and 2009/2010, covering 31 of the 41 countries in Europe, North America and Israel. According to their findings the number of psychological complaints actually declined in most countries during the sharp increases in YU during the recent recession. However, an increase in YU during the recession corresponded to larger inequalities in psychological health complaints between socioeconomic groups, with worse health outcomes in adolescents with a low socioeconomic position. It remains to be seen how the findings of this macro level analysis can be reconciled with the more micro type of analyses reported above.

3.3 Impacts on society

YU not only influences the situation of young people and their immediate surroundings but has a wider impact on society.

Outmigration and shrinking regions

High YU rates in a region lead young people to seek opportunities elsewhere. Outmigration and population number shrinkage are the direct consequences of this movement. Šimon, Martin, Mikešová, Renáta (Eds.) (2014) find a continuing decline in the number of young people in most regions in Central Europe related to the development of the young-age-dependency ratio in these regions. The only exceptions to this were northern Italy and certain metropolitan regions.

Economic costs

YU is also costly in economic terms. At micro level it affects the accumulation of capital that young people would need to live independently or to start a family. At the aggregate level this could affect demographic and fertility trends **(**O'Reilly et al., 2015). At macro level young people can be regarded as economic resources that are not exploited. As a result, the production of goods and services decreases and so do personal income and state budget revenues. At the same time, the expenditure of the state budget grows.

Grinevica, Liva and Rivza, Baiba (2017) calculated the loss of GDP due to YU to assess the economic impact of it on their country. They estimated Latvia's losses in GDP between the start of the crisis in 2008 to 2015 to amount to EUR 5,233 billion. A year later they published the results of similar calculations for the countries in the EU for 2016. They used Eurostat data on gross domestic product (GDP), active population, unemployment and youth unemployment.

GDP losses ranged from – EUR 249million in Estonia 2016 to EUR 54,955million in France. Latvia lost EUR 357million that year (Grinevica, Liva and Rivza, Baiba, 2018).

Eurofound (2012) estimated the economic costs of NEETs for 26 EU MS, using the 2008 European Union Statistics on Income and Living Conditions (EU-SILC). They calculated public finance costs (excess transfer - the difference between the total amount of benefits received by the NEET and the benefits received by those in employment) and resource costs (foregone earnings). Eurofound estimated that the costs of NEETs not participating in the labour market for the 26 MS economies in 2008 amounted to some EUR 2.3 billion per week. The larger part of this amount were resource costs. The total estimated economic costs for 2018 were approximately EUR 119.2 billion. This figure corresponds to approximately 1 per cent of their GDP. The total annual cost comprises EUR 8.8 billion of public finance cost and EUR 111.3 billion of resource costs. These figures still underestimate the real cost as they do not include additional costs such as for health, criminal justice, unpaid taxes, or homelessness.

Drugs and crime

YU in the literature is often associated with drug use and crime. These may come on top of the other problems young unemployed mentioned before in this section, or in fact be the consequences of those problems. Gôrlich D., Stepanok I., and Al-Hussami F., (2013) as well as Bell, D. and BlanchflowerD. (2011) found various studies reporting these impacts in their literature review. Thern, E., de Munter, J., Hemmingsson, T., and Rasmussen, F (2017) report for Sweden in particular that young unemployed are more likely to suffer from alcohol and drug use disorders. Bell and Blanchflower point out that unemployment is often part of a vicious cycle with unemployment leading to criminal activities and involvement in such activities in return reduces young people's chances of work.

Societal cohesion

Being unemployed influences young people's subjective senses of recognition and value. This may affect their belief in, and commitment to, the society they live in and, apparently, not fully belong to. Giuliano P. and A. Spilimbergo (2009) find that recessions have a long-lasting effect on individuals' beliefs. A person exposed to a recession between the ages of 18-25 years has little confidence in public institutions. O'Reilly et al. (2015) argue that the consequences of YU may create a divide in societies. Being unemployed affects the values, aspirations, and attitudes of young unemployed and they may lose confidence that society and the institutions governing it will meet their needs.

4 The implications of new forms of work for youth (un)employment

Traditional notions of work overtaken by practice

Although this report focuses on YU, it would be unwise to ignore the major changes occurring in the world of work that challenge the very notions of employment and unemployment. This section summarises these developments and their implications for the labour market position of young people, now and in the future.

While the employment of young people has increased, it is not the same employment of previous years. Youth are nowadays more likely to be in part-time and fixed-term contracts and increasingly remain there (Eurostat, 2017). Their new employment more often entails higher risks of new unemployment or spells of unemployment between intermittent work periods (Peters, 2017). Labour market transitions are predicted to become even more frequent and complex (EPSC, 2016). The old beliefs and orthodoxies regarding the labour market are more and more replaced by such concepts as lifelong learning, re-skilling and flexibility. In fact, old assumptions of job security and planned careers have been overtaken by the profound economic and social changes of recent decades (Evans, 2010) and new forms of work are a new cause of precarious labour market positions, replacing the more traditional notion of unemployment discussed in the previous sections.

The European Political Strategy Centre emphasises that for some time, stable, permanent jobs have above all profited prime and working-age men. Younger workers' careers have been characterised by lower rates of employment and higher rates of part-time, temporary or self-employment, as do those of women, people with a migrant background, and people with disabilities (EPSC, 2016).

Impact of internet and ICT

Four megatrends currently impact the labour market position of youth work, according to the European Youth Forum (2019). Besides globalisation, climate change, and demographic changes, technological advancements are considered. A fourth industrial revolution is predicted, and actually happening, which will see further advancements in digitalisation and robotization, using tools such as Big Data, Artificial Intelligence, and the Internet of Things (devices interacting with one another and the internet).

The present young generation, having grown up with the internet and new technologies, is thought to have an advantage when it comes to profiting from the new opportunities offered by ICT developments (PWC, 2017). However, a report published last year by the Centre for European Policy Studies assert that the existing evidence shows that the internet creates many new jobs, but at the same time also destroyed or downgraded many others. The studies reviewed point to routinisation, job market polarisation and new labour market inequalities and labour market changes associated with this. These trends may well result in less inclusive

labour markets and decrease the resilience of countries and regions against youth unemployment (CEPS Pupillo, L., Noam, E. and Waverman, L., 2018).

New forms of work

Eurofound (2015) has prepared an extensive overview of new forms of work that emerged or became much more prominent since 2000. It distinguishes nine new forms of employment: casual work, interim management, employee sharing, job sharing, ICT-based mobile work, voucher-based work, portfolio work, crowd employment, and collaborative employment. These are characterised by:

- A new relationship between employers and employees different from the established one-to-one employment relationship;
- The provision of work on a discontinuous or intermittent basis or for very limited periods of time rather than on a continuous or regular basis;
- Networking and cooperation arrangements between the self-employed;
- Often place of work other than the premises of the employer and with heavy use of support of ICT'.

Gig economy

Three of the nine forms of work distinguished by Eurofound are clearly forms of self-employment: portfolio work, crowd employment and collaborative employment[6]. These three forms often are not clearly distinguished in the literature. Names such as collaborative economy and crowd work are used interchangeably, as are other phrases like 'sharing economy', 'platform economy', 'on-demand economy', 'Uber-economy' or 'gig economy' (Peters, 2017).

In 2016 the EC published a recommendation on what is called 'the collaborative economy'. They defined this as 'business models where activities are facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods or services often provided by private individuals' (European Commission, 2016).The collaborative economy is relatively easily accessible for young people as it offers opportunities for people who have difficulty finding more regular employment to earn an income. However, individual tasks are performed on an ad-hoc basis and these more flexible working arrangements may create uncertainty on the applicability of employment and social protection legislation for workers (Peters, 2017).

Holtz-Eakin, D., Gitis, B., and Will Rinehart, W., (2017) note that gig economy workers are relatively often part-time workers and that the share of part-timers in this sector has increased since 2002. They see the attractiveness of gig economy opportunities to gain additional income for unemployed workers with little attachment to the workforce.

A recent OECD report lists the challenges that policymakers in its member countries foresee. These include the dissipating boundaries between self-employed and employees and the risk

[6] In addition, voucher-based and ICT-based mobile work are applicable for both employees and self-employed.

that improper classification would prevent workers from access to social protection. Working conditions, especially those of platform workers and workers on fixed-term or flexible hours contracts, are another matter of concern (OECD, 2019).

The European Parliament in a study of platform workers note that most have another job or other source of income, because platform work is generally low-paid. They also conclude that workers in the platform economy tend to be relatively young. They report that the 30 expert stakeholders they interviewed see the issue of social protections not only as a problem for the individuals concerned, but as a potentially significant financial burden for wider society if left unresolved and if these workers fail to make sufficient contributions to old age pensions or other social protection arrangements.

In the new world of work, the onus tends to be on employees to adapt and remain relevant, and to ensure adequate access to welfare, decent and fair work conditions and sustainable employment protection (EPSC, 2016). Training and reskilling will be needed throughout people's working lives. New forms of work also require new competencies and skills such as social and emotional intelligence, virtual collaboration, foresight, creativity and adaptability (Canada, Alexander, C. and McKean, M., 2017). Young people will need to be supported in dealing with these challenges.

A new societal divide?

According to EPSC (2016), an increased polarisation of today's workforce can be observed between highly-skilled, well-paid jobs and lower-paid, low-skilled ones. Canada, A, C. and McKean, M. (2017) put forward the gig economy, while offering opportunities for some it can 'hamper career development, constrain income growth over time and often involves working without benefits.' Social inequalities are likely to increase, especially for vulnerable youth. Jonathan Evans (2010) asserts that globalisation has produced 'winners' and 'losers' and reminds that traditional patterns of disadvantage are very often reproduced in new circumstances. For young people from disadvantaged backgrounds, this could imply that they become again trapped in the labour market periphery (i.e. in jobs with new forms of flexible working and reduced job security). He argues that there could be a new labour force division between a skill-flexible core and a time-flexible periphery. The future will answer whether this divide indeed materialises and whether policymakers have been able to take appropriate preventative countermeasures.

5 Conclusions

General causes of youth unemployment

- Amongst the general causes of YU, the business cycle stands out as the single most important determinant. Youth unemployment responds more sensitively to the business cycle conditions than adult unemployment.
- Demographic factors aggravating YU include a higher share of young people in the population, and the degree of urbanisation or the existence of metropolises, which reflects regional demographic patterns and these have higher shares of young people living in them. The overall impact of these factors is, however, relatively small.
- Higher labour costs, minimum wages and trade union density increase the chances for young people of becoming unemployed. Employment protection legislation by many is seen as creating labour market duality, protecting older workers and excluding younger ones. The evidence in this regard is somewhat mixed, but on balance shows that employment protection has a negative impact on YU. However, it is likely that other factors influence the strength and coverage of its effects.
- Flexible labour markets and atypical forms of employment according to some have little impact on YU, but majority of the studies confirm that they exacerbate the effects of an economic downturn on YU. The opposite does not seem to occur during economic recovery. It should also be noted that the positive effect of flexibility concerns the employment status of young people. This may go together with high or low quality of employment and no evidence was found that shows flexible labour markets facilitate the entry of young people into stable employment.
- Education systems with a close connection to the labour market result in lower unemployment of young people. Work experience in parallel to schooling facilitates their entry into the labour market and the skills acquired in such systems are better geared to employer needs and hence are beneficial for continued-employment. The former notwithstanding, there are also countries without 'dual' education systems that perform well, and other factors such as labour market flexibility may interact with education systems. Also, the problem of early school leavers remains important.
- Higher social class and higher educational attainment create better employment prospects for young people. Disadvantaged backgrounds such as poor areas or an immigrant background do the opposite. Mobility helps young people finding work, but largely depending on the possibilities offered in other regions.

Region-specific causes of youth unemployment

- The form and structure of the regional economy are the most influential among the region-specific factors.
- YU is concentrated in sectors such as manufacturing, wholesale and retail trade, and hotels and restaurants. Such sectors are hit particularly hard during a crisis. On the other hand, certain sectors appear to be "youth-friendly", such as tourism, ICT, social services, or environmental management.
- Higher shares of the primary sector and industry in a region favour less YU, and the same effect occurs in the case of increasing importance of financial and business services. The presence of larger public services had a positive impact on youth employment in older research, but was not confirmed in more recent studies.
- While the knowledge economy in principle offers good opportunities for young people, this does not help young people in less developed and rural areas which are unable to develop and sustain knowledge dissemination and innovation.
- Place-based characteristics - the characteristics describing the type of region - have proven more significant than others for resilience against (un)employment. Specific

conclusions can be drawn for urban areas, outermost and coastal regions, mountainous regions, and the presence of large cities in a region.

- Urban areas and areas that are more accessible are more resilient than more remote locations.
- Climate change will bring opportunities to young people in outermost and coastal regions if it increases their region's relative attractiveness for tourism, as the associated services typically offer jobs for young people too. On the other hand, natural disasters and coastal hazards clearly have opposite effects and may further outward migration of youth.
- Mountainous regions host very diverging areas. Tourism areas, as well as rural areas in general, cannot offer the education and job opportunities that young people seek, resulting in outmigration of young highly qualified people that are not inclined to return after completing their studies if the situation remains the same.
- The presence of large cities in a region does increase the region's resilience and is attractive for young people, especially MEGA cities. Nevertheless, although cities have many job opportunities, unemployment rates and poverty rates can still be high there.
- In regions with high levels of part-time, temporary, as well as self-employment, YU is lower. Higher education levels of the population also coincide with lower YU.
- The situation of neighbouring regions has an impact on the unemployment of youth in a given region. However, regions with high unemployment tend to cluster in space, as do regions characterised by low unemployment.
- The YU rate is also highly polarized across the EU regions, with southern and northern regions accommodating clusters with high and low unemployment rates respectively.
- Both the clustering and polarisation increased over time after the start of the crisis.

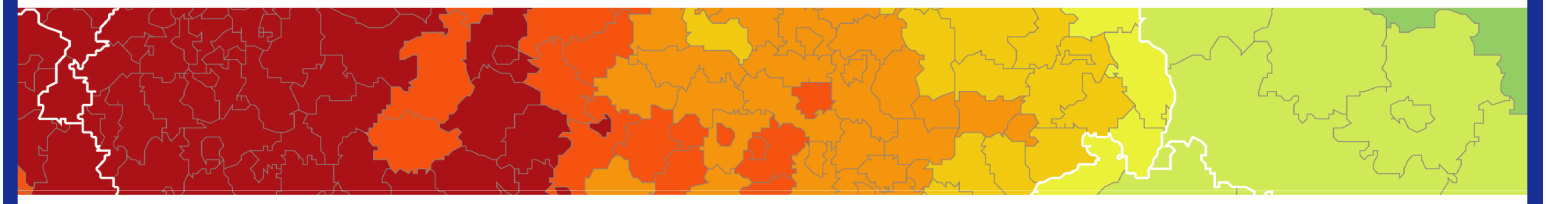
Consequences of youth unemployment

- Young people who experience a period of unemployment at the start of their career may encounter a more difficult labour market position in their future.
- They may be more likely to experience further unemployment spells and the quality of their jobs may be lower in terms of wages and contract duration.
- YU has a negative effect on the wellbeing as well as the income position of young people.
- Being unemployed as a youth also entails a higher risk of mental and physical health problems.
- Countries are confronted with high economic costs of YU in terms of GDP loss.
- Regions may be confronted with rising criminal activities and social inclusion/exclusion problems.

Implications of new forms of work

- New forms of work blur the distinction between being employed, self-employed and unemployment. Young people are more likely to profit from the opportunities offered here but they are also more likely to find themselves in precarious employment situations.

It is also unlikely that young people engaged in new forms of work will be able to organise the continuous re-skilling and arrangement of social protection provisions themselves, while employers do not necessarily feel responsible anymore and they are not covered by collective bargaining agreements. Vulnerable youth will need support to deal with these changing circumstances in the world of work.



ESPON 2020 – More information

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