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YOUNG PEOPLE'S RESILIENCE IN TIMES OF ECONOMIC CRISIS: THE CASE OF NEETS

Abstract. Recently, particular attention has been devoted to NEETs, young people who are disengaged from both work and education and are at a high risk of labour market and social exclusion. There is a unanimous consensus about the risk factors in becoming NEET. NEET status seems to arise from the interaction of macro-economic, personal and family factors and at the individual level a key determinant in becoming NEET is the level of education. Nevertheless, the recent economic crisis has reduced the positive impact of the level of education on the risk of becoming NEET, although with widely differing intensity in each European country. Numerous studies have documented that differences between countries could be ascribed to numerous factors such as the various social or cultural norms of societies, the different structures and performance of their education and vocational training (VET) systems, and the functioning of local labour markets and economies in general. However, some questions remain unanswered: i. how profound is the impact of the economic crisis in terms of NEETs in the European countries? ii. to what extent are European countries vulnerable to recessionary shocks, in terms of NEETs and how much have they been able to recover after the crisis? This paper tries to answer the questions embracing the concept of resilience recently used to study the processes of economic growth and their spatial configurations, by applying a methodology suggested by Martin (2012). Specific attention will be devoted to NEETs aged 25-29 years who are supposed to have completed their formal educational path with a particular focus on those with tertiary education. The results will provide a reference framework at European level regarding the ability of the youth population to "resist" and "recover" from economic shocks that make it difficult for them to access and remain in the official labour market.

Keywords: economic crisis, NEETs, resilience, youth unemployment.

1. Introduction

The phenomenon of youth unemployment entered the policy debate at the beginning of the 1980s and since then it has become a matter of concern and interest for both the academic community and policy makers as labour market conditions have worsened and the adverse trends seem to persist due also to the negative impact of the recent economic crisis (Freeman and Wise, 1982; UNESCO, 2004; Eurofound, 2012; O'Higgins, 2012).

Recently, particular attention has been devoted to a specific group of young unemployed people, those defined as NEETs (not in employment, education or training)¹, young people who are disengaged from both work and education and are at a high risk of labour market and social exclusion². As many authors have pointed out

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¹ The term, originating in the UK in the late 1980s, was formally introduced at the political level in the UK in 1999 with the publication of the government's *Bridging the gap* report (Social Exclusion Unit, 1999). The term rapidly gained importance beyond Britain and at the beginning of the last decade equivalent definitions were adopted in almost all EU Member States (see Eurofound, 2012 for a detailed description of the origin of the concept).

² According to Eurostat the indicator young people neither in employment (i.e. unemployed or inactive according to the International Labour Organisation definition) nor in education and training, abbreviated

being NEET has long-lasting implications for the individual, society and the economy. Being NEET may lead to a wide range of social negative outcomes in both the short and the longer term, such as high risk of poor life and insecure future employment, criminality and mental and physical health problems (Eurofound, 2012). Those who are NEET today run a high risk of remaining outside the labour market in the future (Bynner and Parsons, 2002; Furlong, 2007) resulting in a cost for the economy, society and the individuals themselves.

The need to focus more on NEETs is now particularly relevant for the European policy debate, and the term NEET is explicitly mentioned in the Europe 2020 agenda (European Commission, 2014).

There is a unanimous consensus about the risk factors in becoming NEET. NEET status seems to arise from the interaction of macro-economic, personal and family factors (Marelli and Vakulenko, 2016). At the individual level, a key determinant is the level of education: in fact, the probability of belonging to the NEET group is definitely higher in less educated people (Eurofound, 2012; ETF, 2015; Eurofound, 2016).

Nevertheless, the recent economic crisis has reduced the positive impact of the level of education on the risk of becoming NEET, although with widely differing intensity in each European country. As the European Training Foundation (2015, p. 6) has recently highlighted the positive effect of education in lowering the numbers of NEETs is no more always guaranteed. More education clearly decreases the risk of being NEET in some countries, while in others [....] those with higher levels of education perform less well in entering the labour market than those with lower levels.

Numerous studies have documented that differences between countries could be ascribed to numerous factors such as the various social or cultural norms of societies, the different structures and performance of their education and vocational training (VET) systems, and the functioning of local labour markets and economies in general (Caroleo, 2012; Quintini and Martin, 2014; ETF, 2015). However, some questions remain unanswered:

- 1) how profound is the impact of the economic crisis in terms of NEETs in the European countries?
- 2) to what extent are European countries vulnerable to recessionary shocks in terms of NEETs and how much have they been able to recover after the crisis?

This paper tries to answer the questions embracing the concept of resilience recently used to study the processes of economic growth and their spatial configurations, and applying a methodology suggested by Martin (2012). Specific attention will be devoted to NEETs aged 25-29 years who are supposed to have completed their formal educational path with a particular focus on those with tertiary education. The results will provide a reference framework at European level regarding the ability of the youth population to "resist" and "recover" economic shocks that make it difficult for them to access and remain in the official labour market.

The paper is organized as follows: section 2 describes the data and the methodology used, section 3 presents the results and section 4 provides some concluding remarks and future research prospects.

as NEET, corresponds to the percentage of the population of a given age group and sex who is not employed and not involved in further education or training.

2. Data and methods

The evaluation of the extent to which European countries have been affected by the recent economic crisis with respect to NEETs aged 25-29 has been conducted embracing the concept of resilience recently used to study the processes of economic growth and their spatial configurations, and applying a methodology suggested by Martin (2012).

According to Martin (2012) there are two interrelated dimensions which help to describe how economies respond to recessionary or other such shocks. The first, called *resistance*, measures the vulnerability or sensitivity of an economy to disturbances and disruptions, such as recessions. The second, called *recovery*, measures the speed and extent of recovery from such a disruption. Of interest here is whether the speed and extent of recovery are determined by the degree of resistance to the shock in the first place. As Martin (2012) suggested a very simple way to measure the resistance (or vulnerability) of a country to shocks such as recession in terms of NEETs is to compare the variation in the NEET rate in each country with that recorded on average in Europe. The index called *Sensitivity index* is computed as follows:

$$\beta_r = (NEET_{r,t}/NEET_{r,t-1})/(NEET_t/NEET_{t-1})$$
 (1)

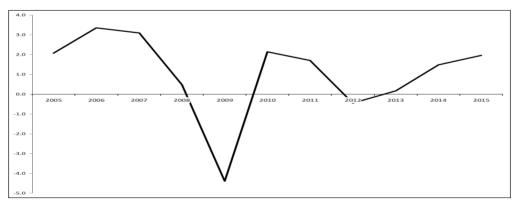
where

NEET $_{r,t}$ /NEET $_{r,t-1}$ is the variation in the NEET rate in r^{th} european country during the economic crisis;

NEET $_t$ / NEET $_{t\cdot l}$ is the variation in the NEET rate in the EU27 during the economic crisis.

Each country is vulnerable (or sensible) to recession as far as NEET rate is concerned if β_r is greater than unity. The speed and extent of recovery from the shock (recovery) can be measured by evaluating the change in NEET rate in the post-recession period. The economic cycle in the last decade is well described by Figure 1.

Figure 1. Gross domestic product at market prices (chained linked volumes 2010): percentage change compared with the previous year – EU27.



Source: EUROSTAT.

Figure 1 reports the percentage annual change in GDP in the EU27 and allows us to identify the following three periods: 1) Pre – economic crisis 2004-2007; 2) Economic crisis 2008-2013; 3) Post – economic crisis 2014-2015. In fact as we can see in Figure 1 the economic crisis started in 2008, when a strong first contraction of GDP occurred and, despite a brief upturn in 2010 and 2011, only in 2014 did the economy begin to start slowly recovering.

3. Results

In the EU27 and in 2015 the NEET rate among people aged 25-29 years is equal to 19.7 % and exceeds the average in 12 countries out of 27 reaching alarming levels in Greece and Italy (Figure 2).

25.0
20.0
10.0

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Figure 2. NEET rate EU27 (% - aged 25-29).

Source: EUROSTAT.

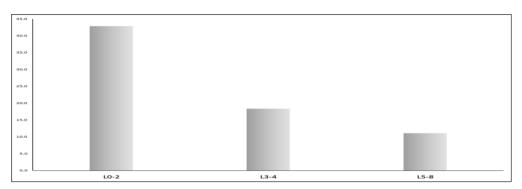
However, Figure 2 does not take into account that the risk of becoming NEET varies according to the level of education.

As a matter of fact, Figure 3 shows that the risk of being NEET decreases as the level of education increases confirming that the level of education is a key determinant of youth employment status (Eurofound, 2012; ETF, 2015; Eurofound, 2016).

Nevertheless, the recent economic crisis has reduced the positive impact of the level of education on the risk of becoming NEET, although with widely differing intensity in each European country. As the European Training Foundation (2015, p.6) has recently highlighted the positive effect of education in lowering the numbers of NEETs is no more always guaranteed. More education clearly decreases the risk of

being NEET in some countries, while in others [....] those with higher levels of education perform less well in entering the labour market than those with lower levels.

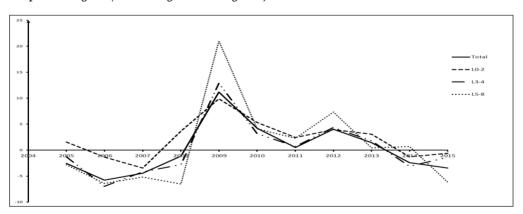
Figure 3. NEET rate by educational attainment level (EU27 - 2015 - % - $aged\ 25$ - 29 years)



Source: EUROSTAT.

Although, even today, the risk of being NEET decreases if the level of education increases³ Figure 4 shows that during the recent economic crisis the risk for those with a tertiary level of education (L5-8) has grown at a higher pace with respect to lower levels of education (L0-2 and L3-4) at least, until 2013 when there was an upturn in the economic cycle.

Figure 4. NEET rate by educational attainment level: percentage change compared with the previous year (EU27 - aged 25-29 years).



Source: EUROSTAT.

³ The 2011 classification ISCED (International Standard Classification of Education) has nine levels of education, from level 0 to level 8 grouped into three major categories: L0-2 –Early childhood, primary and lower secondary education; L3-4 Upper secondary and Post-secondary non-tertiary education; L5-8 Short-cycle tertiary education, bachelor or equivalent level, Master or equivalent, Doctoral or equivalent level.

This trend confirms what the European Training Foundation (2015) has highlighted and in particular that at least during an economic crisis high educational levels are no longer able to ensure safe access to the labor market. Authors, attribute this situation mainly to overeducation for jobs on the labour market and to the gap between the offered and requested skill set: the composition of expertises emerging from EU universities and other post secondary educational institutes hardly supports the emergence and existence of a real demand-driven labour market (European Commission, 2008; Mavromaras et al., 2010; Lazányi, 2012). Nevertheless, it is important to note that the phenomenon does not occur in all European countries with the same intensity. Let's, then, focus the attention on people aged 25-29 years with tertiary-level education

In the EU27 and in 2015 the NEET rate among people aged 25-29 years with tertiary-level education is equal to 11.1% and exceeds the average in half of the European countries, reaching alarming levels in Greece and Italy ⁴ (Figure 5).

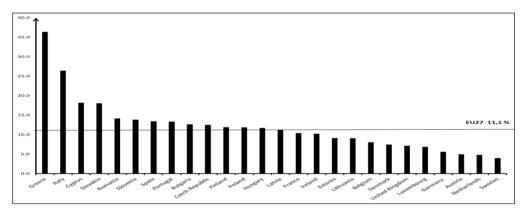


Figure 5. NEET rate EU27 (% - aged 25-29 years with tertiary education).

Source: EUROSTAT.

Such high rates are certainly, largely, the result of the recent economic crisis, but not in all countries and not with the same intensity. Table 1 shows that, on average in the EU27, the trend of NEET rate percent variation (%) among people aged 25-29 years with tertiary-level education is concordant with the business cycle. However, trends are quite heterogeneous across countries and each of them shows a different behaviour as far as "resistance" and "recovery" from the economic crisis are concerned.

⁴ No Eurostat data are available for Malta.

Table 1. NEET rate annual variation EU27 (% - aged 25-29 years with tertiary education).

	Pre economic crisis	Economic crisis	Post economic crisis
EU27	-4.8	4.5	-2.8
Austria	-3.1	-5.3	1.1
Belgium	0.8	3.3	-6.4
Bulgaria	-17.9	11.8	-23.2
Cyprus	4.8	16.3	-8.6
Czech Republic	-2.5	1.9	5.4
Denmark	-27.7	8.8	12.4
Estonia	-1.9	4.2	-20.6
Finland	-4.3	3.0	10.1
France	-1.9	-0.9	8.0
Germany	-5.0	-5.6	3.1
Greece	-4.8	14.5	-5.4
Hungary	5.1	1.5	-5.1
Ireland	-3.6	11.8	-4.1
Italy	-7.3	4.8	0.4
Latvia	-14.1	2.8	-1.7
Lithuania	0.8	2.3	-1.0
Luxembourg	5.6	5.9	-20.6
Netherlands	-11.6	10.5	-1.4
Poland	-6.7	3.9	-8.4
Portugal	10.9	0.3	-3.7
Romania	-17.7	15.4	2.4
Slovakia	-1.7	6.2	-3.4
Slovenia	2.7	7.3	-6.4
Spain	-14.3	14.2	-8.2
Sweden	0.5	-2.8	-4.6
United Kingdom	*	5.4	1.2
*data not available			

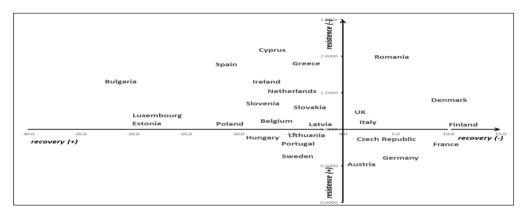
Source: EUROSTAT.

Figure 6 shows the position of European countries according to the measures of resistance and recovery obtained applying the methodology suggested by Martin (2012). Each quadrant (Figure 6) shows a different behaviour of the European countries to "resist" and "recover" from the economic crisis as far as NEETs are concerned. In particular, the countries in the third quadrant perform better while those in the first quadrant are the worst performing countries in the European Union.

The different behavior of the EU countries can be probably ascribed, as already underlined in section 1, to the interaction of macro-economic, personal and family factors, which are the key determinants of youth employment, as numerous empirical studies have shown. At the macro level it is possible to identify three groups of determinants (Marelli and Vakulenko, 2016): i) institutional such as regulation and policies concerning product markets (liberalisations, reforms, "economic freedom", etc.), housing markets (incidence of home ownership and housing policies), and more specifically labour markets such as the degree of unionisation, the structure of collective bargaining, employment protection legislation (EPL); ii) structural such as the quality of the educational system and its structure, the trade specialisation of countries, the links between the financial structure and real economic activities, the degree of competitiveness. In broader terms, structural factors include also

demographic aspects such as population density, the age structure of population, the intensity of migration flows; iii) cyclical such as the growth of output or GDP, productivity growth, trade openness, the terms of trade dynamics, the inflation rate and real long-term interest rates.

Figure 6. Resistance and recovery in European countries (aged 25-29 years with tertiary-level education.



Source: EUROSTAT.

Moreover, potential risk factors of ending up NEET are a mix of individual and family background such as gender, age, health conditions, marital status, family type, education level, nationality and immigrant status, the family income, parents' education and employment status, region of residence. (Kostoris and Lupi, 2002; Caroleo and Pastore, 2003; Bell and Blanchflower, 2011; Pastore, 2012; Hérault et al., 2012; Dolado et al., 2013; Marelli and Vakulenko, 2016).

However, Figure 6 shows a rather complex framework regarding the ability of youth population to "resist" and "recover" from the economic crisis. As a matter of fact, the ability of the 25-29-year-old population to "resist" and "recover" from economic shocks does not depend only on specific risk factors. For example, Germany doesn't perform well as far as "recovery" is concerned despite its "dual apprenticeship system" that seems to guarantee better employment outcomes; moreover, Ireland and UK performance with respect to "resistance" is quite poor despite having the less binding legislation in terms of employment protection. As a matter of fact the effect of the interaction of different macro and micro economic risk factors is not so clear and requires further in-depth analysis.

4. Conclusion

This paper has aimed at providing a reference framework at European level regarding the ability of the youth population to "resist" and "recover" from economic shocks, which make it difficult for them to access and remain in the official labour market.

Specific attention has been devoted to NEETs aged 25-29 who are supposed to have completed their formal educational path with a particular focus on those with tertiary education.

The results show a rather complex and heterogeneous framework at European level, which is supposed to be the result of the interaction of multiple individual, family and macro-economic factors. However, so far, empirical studies devoted to analysing the micro and macroeconomic determinants of being NEET are almost rare. Further research should be addressed in order to investigate these determinants with a specific focus on 25-29 year old NEETs, who are supposed to have completed their formal educational path, so as to highlight active labor market policies which stimulate demand for young employees and appropriate strategies which could be shared at European level for reducing the occurrence of NEETs.

References

- BELL D. N. F., BLANCHFLOWER D. G. (2011), Young people and the Great Recession, Oxford Review of Economic Policy **27**, 2, pp. 241-267.
- BYNNER J., PARSONS, S. (2002), Social exclusion and the transition from school to work: The case of young people not in education, employment or training, *Journal of Vocational Behavior* **60**, pp. 289-309.
- CAROLEO F.E., PASTORE F. (2003), Youth participation in the labour market in Germany, Spain and Sweden, in HAMMER T. (ed.), Youth unemployment and social exclusion in Europe A comparative study, Policy Press, University of Bristol, pp. 109-133.
- CAROLEO F. E. (2012), Il difficile passaggio verso il lavoro dei giovani che lasciano la scuola: quali possibili politiche? *Discussion Paper* n.5, Dipartimento di Studi Economici, S. Vinci, Università degli Studi di Napoli, Parthenope, June.
- DOLADO J. J., JANSEN M., FELGUEROSO F., FUENTES A., WOLFL A. (2013), Youth labour market performance in Spain and its determinants: A micro-level perspective, OECD Economics Department Working Papers n.1039.
- ETF-EUROPEAN TRAINING FOUNDATION (2015), Young people not in employment, education or training (NEET), Turin.
- EUROFOUND (2012), NEETs Young people not in employment, education or training: Characteristics, costs and policy responses in Europe, Publications Office of the European Union, Luxembourg.
- EUROFOUND (2016), Exploring the diversity of NEETs, Publications Office of the European Union, Luxembourg.
- EUROPEAN COMMISSION (2008), New skills for new jobs; anticipating and matching labour market and skill needs, Luxembourg.
 - http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2008:0868:FIN:EN.
- EUROPEAN COMMISSION (2014), Taking stock of the Europe 2020 strategy for smart, sustainable and inclusive growth, COM(2014) 130 final, Brussels.
- FURLONG A. (2007), The zone of precarity and discourses of vulnerability: NEET in the UK, *Journal of Social Sciences and Humanities* **381**, pp. 101–121.
- FREEMAN R. B., WISE D. A. (1982), The youth labor market problem: its nature causes and consequences, in FREEMAN, R. B., WISE D.A. (eds.), *The youth labor market problem: its nature, causes, and consequences*, University of Chicago Press and NBER.

- HÉRAULT N., KOSTENKO W., MARKS G., ZAKIROVA R. (2012), The effects of macroeconomic conditions on the education and employment outcomes of youth, *Australian Journal of Labour Economics* **15**, 1, 17-36.
- KOSTORIS PADOA SCHIOPPA F., LUPI C. (2002), Family income and wealth, youth unemployment and active labour market policies, *International Review of Applied Economics* **16**, 4, 407-416.
- LAZÁNYI K. R. (2012), Study for nothing? Literature overview of labour market opportunities for individuals with tertiary education, *Proceedings of FIKUSZ '12 Symposium for Young Researchers*, pp. 37-45. Obuda University Keleti, Faculty of Business and Management: http://kgk.uni-obuda.hu/fikusz.
- MARELLI E., VAKULENKO E. (2016), Youth unemployment in Italy and Russia: aggregate trends and the role of individual determinants, *The Economics and Labour Relations Review* **27**, 3, pp. 387-405.
- MARTIN R. (2012), Regional economic resilience, hysteresis and recessionary shocks", *Journal of Economic Geography*, **12**, pp. 1–32.
- MAVROMARAS K., MCGUINNESS S., O'LEARY N., SLOANE P., WEI Z. (2010), Job mismatches and labour market outcomes: panel evidence on Australian university graduates, *IZA Discussion Paper No. 5083*, July, http://ftp.iza.org/dp5083.pdf.
- O' HIGGINS N. (2012), This time it's different? Youth labour markets during 'the Great Recession', *IZA Discussion Paper* n. 6434, March.
- PASTORE F. (2012), To study or to work? Education and labor-market participation of young people in Poland, *Eastern European Economics* **50**, 3, 49–78.
- QUINTINI G., MARTIN S. (2014), Same but different: school-to-work transitions in emerging and advanced economies, *OECD Social, Employment and Migration Working Papers n. 154*, OECD Publishing, Paris. http://dx.doi.org/10.1787/5jzbb2t1rcwc-en.
- SOCIAL EXCLUSION UNIT (1999), Bridging the gap: new opportunities for 16-18 year olds not in education, employment or training, *Report of the Great Britain Cabinet Office*, London.
- UNESCO (2004), Youth unemployment meeting the needs of youth an annotated bibliography of research and related literature (1998 2003), *UNESCO-UNEVOC International Centre Publications*, Bonn.

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