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STRENGTHENING THE LINKS BETWEEN EDUCATION AND THE LABOUR MARKET
THE CASE OF GREECE IN A EUROPEAN CONTEXT

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ABSTRACT

In the wake of the financial crisis and the associated austerity measures, the relationship between education and the labour market and, more specifically, the means for strengthening this, have attracted the attention of various groups of stakeholders at European and national level. This growing interest, which, among other things, has put skills and the skills mismatch at the centre of debate, is largely associated with the view that the absence of strong links between education and the labour market is a source of multiple negative outcomes, such as higher inequality and lower social cohesion. In contrast, a closer connection between the two fields is often regarded as crucial to attaining positive outcomes, such as improvements in the labour market integration of individuals and increased job satisfaction.

Against this backdrop, the present paper sheds light on the case of Greece in a European context. Drawing on extensive desk research, the analysis reveals, first, that the country has long suffered as a result of poor links between education and the labour market, as exemplified by the relatively high rates of unemployment among graduates of higher educational institutions. Moreover, the foregoing relationship appears to have deteriorated during the years of crisis and austerity. Second, it is argued that the same period saw the start of a debate on strengthening the ties between education and the labour market, as reflected, *inter alia*, in the growing importance attached to identifying skills needs and tackling the skills mismatch, and to the promotion of policies in this area. Overall, this trend is in line with broader trends at the European level that favour strong(-er) links between education and the labour market, illustrative of which is the increasing attention paid to ways of dealing with the skills mismatch and the establishment of relevant mechanisms to assist with this. Further action needs to be taken in Greece, however, in order not to jeopardize the progress made and to guarantee that new mechanisms and other existing policies are capable of fulfilling their declared goals.

Keywords: education–labour market relationship, skills, Greece, European context

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INTRODUCTION

The highly complex and multidimensional relationship between education and the labour market, which, alongside the steps taken to strengthen this relationship, is at the heart of this paper, is affected by a multiplicity of factors. Broadly speaking, understanding the interplay between these two fields depends on taking account of a wide range of parameters of influence. Hence, one needs to consider, for instance, that different macroeconomic and social contexts result in demand for different professions and skills (Foundation for Economic and Industrial Research 2018: 16–17); that the educational performance of individuals is affected by the characteristics of the family environment (Fasih 2008); and that the study choices of individuals are not always in accord with the professional prospects offered by different sectors and fields of study (Livanos and Núñez 2012: 14).

Furthermore, the relevant discussion, as well as that on the interrelated issues of ‘skills’ and ‘skills mismatch’, a phenomenon largely associated with the poor match between the skills of employees and their work positions, as exemplified by the fact that about one in three of those employees (7 in 10 in the EU) that need some fundamental ICT level to be able to perform their jobs, are at risk of digital skills gaps², should be viewed in the light of the increasing importance of features such as digitalization and robotization in a globalized economy and society (see e.g. Eurofound 2018). For example, during the last few decades computer technologies have substituted for workers in clerical and production tasks. As a result, European labour markets have seen a wide range of routine middle-income jobs disappear. Nevertheless, at the same time, the digital revolution has been accompanied by the creation of entirely novel types of jobs and industries, such as app development, big data analysis and software design (Berger and Frey 2016: 5–6).

Yet, the connection between education and the labour market remains indisputable. Undeniably, education contributes, for example, to equipping individuals with skills³ and to preparing them for entering the labour market (Furia et al. 2010: 1140). Indeed, it is widely acknowledged that the type of educational system experienced and the skills acquired influence the ‘results’ achieved by individuals in the labour market (e.g. their employability and the financial rewards received) (Ionescu 2012: 131–133). In turn, the different employment prospects of graduates from various educational levels and their diverging economic rewards affect the distinct characteristics of a country’s educational policies and system (Fasih 2008)

2 This data is based on Pouliakas 2017. Moreover, see McGuinness, Pouliakas and Redmond 2017 and Cedefop 2018a for a review of the various types of skills mismatch and the reasons behind them.

3 Indicative of the importance of skills is, inter alia, their inclusion in indices and frameworks that regard improvements in life quality (see e.g. OECD’s Better Life Index and World Economic Forum 2017).

In the wake of the financial crisis and the associated austerity measures which have led to structural changes in the labour market and a sharp increase in unemployment rates (especially in countries such as Greece which were hit hard by the consequences of the crisis), interest in the relationship between education and the labour market and the means to reinforce it has grown. This observation appears to apply even to countries where transition from education to the labour market seems, in general terms, to be 'traditionally' relatively 'easier' than in other parts of the 'developed' world [an example is the United States of America (USA), compared to most European Union (EU) () countries, see, e.g. Cleary and Van Noy 2014]. Similarly, in the so-called 'developing' world interest in strengthening the ties between education and the labour market has increased (see e.g. McKinsey Center for Government 2012).

This trend is linked to the belief that a close connection between education and the labour market contributes to a series of positive outcomes, such as improvements in matching the skills of individuals to labour market needs, lower inequality and higher levels of social cohesion. In contrast, weak ties between the world of education and that of employment are considered to be linked to a series of negative features. These include, for example, slow economic growth, and the inefficient use of means of production (Jovović, Đurašković and Radović 2017: 23), as well as negative outcomes for the individuals themselves (e.g. a deterioration in quality of life, as illustrated by a series of indices) (Acelandu 2017).

At the same time, one needs to keep in mind that a perfect 'match' between education and the labour market is impossible to achieve. It can be undermined by a multitude of factors, such as the unattractive wages offered by businesses, poor working conditions, and the lack of prospects for development, etc. (see e.g. Cedefop 2015c: 58; OECD/ILO 2017). In a similar vein, there is no 'ideal recipe' for strengthening the links between education and the labour market: the adoption of identical policies in countries distinguished by different characteristics, including differences in their educational and labour market systems, may have very different outcomes.

Moreover, one should not ignore those who disagree with the need for a strong connection between education and the labour market (and in particular who oppose state intervention intended to achieve this), often on the ground that education is expected to play a much richer, and more complex role, socially and culturally, than that of providing people with the skills that will enhance their employment opportunities (Hutchinson and Kettlewell 2015: 116). However, the multiple benefits emanating from close links between education and the labour market are broadly accepted. Likewise the utility of collecting information on the means to reinforce the foregoing links is also generally acknowledged (see e.g. the prologue in Cedefop 2015b).

Against this backdrop, this paper focuses on the relationship between education and the labour market and the means utilized to strengthen this in crisis- and austerity-stricken Greece, while also considering this in a European context. It aims to provide an overview of the issues discussed and to offer a succinct and comprehensive (but 'non-exhaustive') description of key features related to these issues. In order to do so, the author draws on extensive desk research, based largely on documents produced by supranational organizations with significant expertise in the subjects considered here, such as the European Centre for the Development of Vocational Training (commonly known as Cedefop).

In defining the aims of the study, the author adopted a ‘broad’ understanding of education, i.e. one that allows the inclusion of training programmes, referring to initiatives that take place mostly after completion of studies in the education system. Furthermore, intra-entrepreneurial practices targeted at enhancing the interplay between education and the labour market are out of the scope of this study (e.g. through improvements in recruitment practices, see e.g. World Economic Forum Global Agenda Council on Employment 2014: 20–21).

Given the complexity of the issues discussed, and the broad range of policies and interventions utilized in order to strengthen, in a direct or indirect way, the connection between education and the labour market, achieving the aims of the study presented some significant challenges. For this reason, this paper should very much be seen as a first step in exploring this issue. The underdevelopment of literature on efforts to strengthen education–labour market links (especially in the Greek case), compared to the rich bibliography on issues related to the causal relationship and interaction between education and the labour market (see e.g. Ionescu 2012), poses additional difficulties.

The author argues that Greece has long suffered from a poor relationship between education and the labour market and its consequences, as exemplified by the relatively high rates of unemployment among graduates of higher educational institutions. Furthermore, during the years of crisis and austerity, the chronic weak connection between the two spheres of education and work has further deteriorated. At the same time, however, there has been a growing interest in the need to strengthen the education–labour market relationship and the means to achieve this. Illustrative of this is the increasing significance attached to identifying the skills needs of the labour market and the development of relevant measures – such as the Mechanism for the Diagnosis of Labour Market Needs, introduced in 2016 – to assist with this.

The author contends that, overall, this trend is in line with the broader approaches and methods utilized at the European level to reinforce the ties between education and the labour market. Further initiatives should, however, be pursued in Greece in order not to jeopardize the progress made to date and to guarantee that the existing policies will be capable of fulfilling their stated aims.

Following this introduction, the next two sections of this paper present the European and Greek experiences respectively. The final section summarizes and discusses the main findings, and highlights suggestions for improving the existing education–labour market relationship in Greece.

THE EUROPEAN EXPERIENCE

The literature review undertaken for this study revealed that different countries and groups of European countries are associated, among other things, with different modes of transition from the world of education to that of the labour market (Papakitsos 2017: 168). Significant differences between countries are also evident in a series of education- and labour market- related indicators.

One example of differences between countries that is illustrated by evidence reported in the literature relates to the often-expressed view that countries with ‘strong’ apprenticeship systems achieve ‘better’ labour market outcomes compared to countries with ‘weaker’ systems. Indeed, European countries with extensive apprenticeship programmes (e.g. Germany, Austria and Switzerland) appear to be characterized, for example,

by lower levels of youth unemployment compared to countries prioritizing school-based education (general or technical) (e.g. Italy and France) (Wolter and Ryan 2011).

The existence of differences between European countries, in terms of the degree to which the educational 'results' achieved by a country 'match' the 'results' it achieves in the labour market, is likewise illustrated by findings which indicate that countries such as Germany, Sweden, France and Poland achieve a 'medium' performance in both fields. On the other hand, southern European countries, such as Italy, Greece, Portugal and Cyprus, are not particularly successful in either one of these fields. Moreover, countries with a good education performance, such as Estonia, Lithuania, Ireland, the United Kingdom and Ireland, do not do as well in terms of labour market performance. On the contrary, countries such as Slovenia, the Netherlands and the Czech Republic are distinguished by their good performance in both fields, whilst the Finnish performance in both education and the labour market is excellent (Furia et al 2010: 1144). Moreover, despite a trend towards an increase in skills mismatch, the extent and the intensity of the phenomenon also differs among countries (Cedefop 2014, 2018).

At the same time, weaknesses in the connections between education and the labour market at the European level are reflected in a series of phenomena. These include the difficulties faced by graduates of higher educational institutions in accessing the labour market and the large number of young people not in education, employment or training (commonly referred to as NEETs); the fact that a large proportion of highly qualified employees work in positions that require only medium or low level qualifications; and the problems faced by more than one third of enterprises in finding employees with the appropriate qualifications and skills [albeit, this is a problem also affected by other factors such as inadequate recruitment practices, geographical restrictions (in terms of job location and employee mobility) and non-competitive job offers] (see. e.g. Cedefop 2014 and 2015a: 20, Eurofound 2015, Hutchinson and Kettlewell 2015).

In a context characterized by the serious implications of the recent crisis and associated austerity measures (and without disregarding the effect of phenomena such as the growing trend towards digitalization, which, however, could be, *per se*, the subject of another study), enhancing the connection and interplay between education and the labour market as a means of dealing with the skills mismatch has become an issue of growing concern for EU institutions and member states; including the most recent or those currently in transition (see e.g. European Commission 2016a). In countries that experience intense problems of labour market access, the foregoing concern may perhaps be even more pertinent. An example can be found in the case of Spain, where the Confederation of Employers and Industries recently published a 'white paper' on education, which recorded the various dimensions and consequences of the weak education–labour market relationship in the country, and put forward relevant proposals for addressing this (see the reference to this intervention in Hellenic Federation of Enterprises 2017).

Initiatives targeted at strengthening the links between education and the labour market in a European context are thus undertaken by both supranational and national authorities, while other actions depend on their cooperation. Illustrative of the former is the legislative resolution of the European Parliament (issued on 19 April 2018) concerning the proposal for a Council Decision on guidelines for employment policies in mem-

ber states. Among other things, the resolution explicitly refers to the need to reduce youth unemployment and the high proportion of NEETs, by structurally improving the transition from education to employment. An example of the latter may be found in the frequent references made in the National Reform Programmes of member states (in agreement with the European Commission) to the urgency of enforcing the links between education and the labour market (see e.g. Croatia's National Reform Programme for 2017)⁴.

Another example is the collaboration of EU organizations, such as Cedefop, with member states in working to improve the 'governance system' for forecasting future demand for skills in the labour market, and coping with the mismatch between the supply of and demand for skills (widely accepted to be one of the consequences of a poor connection between education and the labour market). During 2017–2019, for instance, Cedefop, has worked very closely with public services and other agencies in Greece, Bulgaria, Slovakia and Estonia in addressing this⁵.

Yet, it should be noted that phenomena linked to skills mismatches, such as 'overeducation' [(a term used to describe the situation in which an employee is more educated than his/her current employment position requires (McGuinness 2006)], cannot be oversimplified as a 'waste'. Additional 'limitations' exist: for instance, we need to take into consideration that many fields of the rapidly growing globalized economy do not necessarily reflect the 'traditional' 'high', 'medium' and 'low' skills categories, but a new and changing mix of skills.

Nevertheless, broadly speaking, taking full cognizance of the concept of skills and initiatives to mitigate skills mismatches, a problem which becomes more intense during periods of financial recession (see e.g. European Commission 2016b), is increasingly regarded as a *sine qua non* for strengthening the ties between education and the labour market. Hence, it has been placed at the centre of the policy agenda in this area.

Against this backdrop, it should come as no surprise that country-specific policy recommendations issued by the EU Council, as well as the National Reform Programmes referred to above, mention the need to deal with the skills mismatch, in countries as diverse as Lithuania, Greece and Malta, and also stress the need to reform national educational and training strategies (McGuinness, Pouliakas and Redmond 2017: 27–29). Further examples at the EU level include the adoption of the 'New Skills Agenda for Europe' by the European Commission (in June 2016), which comprises ten actions targeted at improving training and the overall support offered to employees to help them improve their skills (one of these actions is a plan for greater cooperation between stakeholders engaged in education and/or the labour market, so as to deal with short- and medium-term skills needs in selected sectors of the economy) (European Commission 2017a); and the introduction of tools such as 'ESCO' ('European Skills, Competences, Qualifications and Occupations'), which attempt to classify skills, competences and professions, and aim, inter alia, to improve the communication between the world of education and the labour market (e.g. by enabling employers to accurately identify the skills sought from employees) (European Commission 2017b). Moreover, Cedefop has recently developed the so-called 'European Skills Index', a composite index which measures the comparative performance of the skills systems

4 See https://ec.europa.eu/info/2017-european-semester-national-reform-programmes-and-stability-convergence-programmes_en#croatia.

5 See <http://www.cedefop.europa.eu/en/events-and-projects/projects/assisting-eu-countries-skills-matching>.

of member states, with a view to identifying areas for improvement to support the development over time of skills that better match labour market needs (Friedrich Ebert Stiftung 2018).

In a similar vein, a large number of member states (including Greece, as discussed in the next section) have made significant steps towards the establishment of mechanisms for the identification of skills (and, more generally, of labour market trends); even in countries lacking a systematic and coordinated identification process, such as Croatia, there has been increased movement in this direction⁶.

The study of these mechanisms highlights their complexity: despite their differences, as reflected, among other things, in the different degree of involvement of stakeholders and the extent of governance centralization, they are usually not ‘isolated’ policy tools. Rather, they are a ‘grid’ of overlapping and interconnected interventions that attempt to identify labour market and business needs, by focusing both on the supply and demand sides and by stressing trends in the availability of and demand for different skills.

The driving force behind these operations is the proven value of the need to match the skills of employees with the skills required by enterprises. Moreover, a key objective is to promote ‘evidence-based’ policy-making – i.e., policy-making informed by real data (see e.g. Tsekos 2012) – that is expected to reinforce the connection between education and the labour market.

Despite the progress made, arguably less than half of EU member states have developed a comprehensive strategy targeted at improving the match between the needs of employees and those of the labour market. Additional obstacles exist, as exemplified by the limited expertise of employment counselors, who are often not in a position to utilize the data collected from the foregoing mechanisms (Scarpetta and Sonnet 2012: 9). Furthermore, it is questionable (or at least unclear) whether EU member states utilize the outputs produced by these mechanisms in designing and implementing policies [especially as far as educational interventions are concerned; vocational education and training (VET) and apprenticeships may, however, be deemed to be an exception to this rule] (Cedefop 2015b: 9).

The emphasis placed on skills and policies to cope with the skills mismatch should be viewed in conjunction with the extension of and improvement to VET and the establishment of policy tools aimed at introducing new ‘pathways’ to the acquisition of skills. Illustrative of the importance of VET as a means of strengthening the links between education and the labour market is the adoption, over recent years, of at least 22 EU Guidelines on this issue. Apprenticeships, in particular, are increasingly being seen at the European level as a priority for the reinforcement of the education–labour market relationship. This is a trend that conforms with the idea that participation in these programmes improves employability: indeed, according to EU data, 60–70% of apprentices move into a job directly following their studies, and in some sectors this increases to 90% (European Commission 2017c). As a result, a large number of relevant initiatives with a focus on apprenticeships – targeting medium and long-term outcomes – have been pursued, at both EU and member state level (see e.g. EEENEE 2012: 10–13, Pouliakas 2014, Lalioti, Karantinos and Chrysakis 2018: 3).

⁶ See <https://skillspanorama.cedefop.europa.eu/en>. The Skills Panorama integrates in one single portal data and information on skills needs and mismatches in the EU. It provides information on different policy themes, such as the labour market context and matching skills and jobs.

With regard to policy tools opening new paths for the development of skills, as mentioned above, an example is the establishment of the so-called ‘relative’ degree in the Netherlands, which provides VET students with the chance of developing specific technical skills at a higher educational level (by staying in a learning environment that allows the practical application of their skills). The aim is to mitigate skill mismatch, through the development of certified qualifications, at a level between secondary education and higher VET, whilst linking the latter to higher education. Such programmes are directly linked to the needs of enterprises and the labour market, since course providers have to prove that they are operating in line with these needs (Cedefop 2015b: 68–69). There is a growing movement towards the use of work-based learning as a means to enhance the education–labour market relationship, as reflected in the fact that, once again in the Netherlands, the law obliges 18-year-olds who have not acquired a secondary vocational education diploma to attend a programme combining learning with work (Cedefop 2015c: 60, 63, Comyn and Brewer 2018).

Overall, in their effort to reinforce the connection and interplay between education and the labour market, member states use a series of policy tools (often targeted at specific groups, such as the unemployed, employees of different age groups, members of groups deemed to be vulnerable; and often offered in combination) (EENEE 2012: 22–29). These tools include training programmes (focusing, for example, on the development of ‘general’ and ‘sector-/job-specific’ skills, re-skilling, up-skilling, etc., thus emphasizing the importance of ‘skills’ in general, and those where a deficit is observed, in particular); counseling services (which increasingly benefit from the use of technology, e.g. through the establishment of web platforms); and job subsidy programmes (sometimes also associated with the opportunity to develop skills). Furthermore, the planning and implementation of the above tools takes place at different levels (national, regional, local), although this is a phenomenon which is more pronounced in countries with more decentralized governance systems (Cedefop 2015b: 6–9, 12–17, 19–94, 111).

The use of active labour market policies as a means to strengthen the links between education and the labour market, and achieve ‘quick’ results has, traditionally, been very common. This should be viewed alongside the central role typically played, in pursuit of the same objective, by other interventions, such as centres connected to public employment services and the latter services per se, or the establishment of ‘liaison offices’, which operate mostly under the auspices of educational institutions and function as a bridge between education and the labour market⁷. The assessment and the subsequent restructuring/modification of educational/training programmes and curricula, in accordance with existing or future labour market needs, is also not uncommon.

Finally, during recent years there has been a trend towards reinforcing the engagement of key stakeholders from the fields of education and the labour market in initiatives targeted at strengthening the ties between these two fields. Examples may be found in the growing participation of employers, in many European countries, in the design and implementation of educational and training programmes; or in initiatives that promote direct contact between apprentices and social partners. Similarly, efforts are increasingly being made to

⁷ See the example of Cyprus, where, in the framework of an ESF-funded programme, students are placed as interns in enterprises with the aim of getting professional experience during their studies. Moreover, the programme provides students with an allowance to cover their basic expenses, while companies get the chance to contribute to the development of university programmes/curricula, in line with the needs of the modern business environment. (<http://www.liaisonoffices.ac.cy/>).

strengthen the synergies between the worlds of education and employment, by building partnerships between them (see e.g. the establishment of the Education–Enterprises Alliance in the Netherlands⁸).

Such initiatives should be understood in the context of broader institutional interventions, aimed at strengthening the connections between education and the labour market. Examples include the establishment of sectoral and local skills councils; the design of national qualifications frameworks; and the redesign of key organizations, such as public employment services, and training programmes, after taking into account the needs of specific economic sectors and professions that are regarded as particularly important for economic development (Cedefop 2015a: 22–23).

THE GREEK EXPERIENCE

According to the literature, the connection and the interplay between education and the labour market in Greece has been historically weak; this is an observation that also applies to the relationship between VET and the labour market (KANEP-GSEE 2013: 13). Illustrative of the relatively poor ties between education and the labour market in the country during the pre-crisis period is, for example, the roughly equal unemployment rates of graduates from higher educational institutions and individuals with low levels of educational attainment. This is a phenomenon that contrasts with what usually happens in other developed countries where, in general, those educated to a higher level experience lower rates of unemployment (Foundation for Economic and Industrial Research 2018: 10).

Graduates of higher educational institutions in Greece (commonly known as AEI) face chronic difficulties in accessing the labour market. Although there are notable exceptions, with graduates from some scientific fields whose studies offer employment opportunities in the private sector having, broadly speaking, better prospects of labour market integration compared to graduates whose studies traditionally meet public sector needs (Livanos 2010), it is quite common for AEI graduates to remain outside the labour market for a long time before managing to find a job (Karamessini 2010).

Another expression of the weak education–labour market connection in Greece may be found in the particularly high incidence of ‘overeducation’. In the 1990s, Greece had one of the highest rates of employee overeducation in the EU (Dolton and Marcenaro-Gutierrez 2009).

A series of factors are thought to have contributed to the poor relationship between education and the labour market in Greece. These include, among other things: the ‘irrational’ (i.e. without evidence-based planning) establishment of university departments; the strong orientation of the educational system to the requirements and needs of the public sector (mainly education and public administration); the ‘problematic’ and often ‘improvisational’ distribution of graduates between specialties and university departments, resulting in an oversupply of students in departments whose graduates face significant difficulties of labour market access and employability⁹; the absence of a productive model that could be linked to at least one part of the educa-

⁸ See <https://www.s-bb.nl/en>.

⁹ This finding must be seen alongside the fact that, although the share of students studying social sciences, business administration, law and health sciences in Greece is lower than the European average, more than two out of five students study humanities, social, behavioural and educational sciences. In contrast, only 4% of students study computer science (EY, Athens University of Economics and Business and Endeavor 2017: 18–20).

tional system; the tendency of families to invest in education/training in specific professions for reasons that are entirely unconnected with the employment prospects of their children; misconceptions concerning the prospects of various professions/occupations; the limited attractiveness of VET; the largely outdated nature of occupational profiles; the non-systematic harmonization of the skills developed during educational and training programmes with labour market needs; and the very weak impact of vocational/professional guidance and its essential absence from lower educational levels (see e.g. Themelis 2017: 59, Pouliakas 2014: 4, University of Thessaly 2008: 7–9, Cedefop 2018b, Daskalopoulou 2017, Tsakoglou 2018).

Contrary to what appears to happen in practice – with current interventions, as we shall see below, generally being focused on the post-study phase – the numerous proposals for strengthening the ties between education and the labour market in Greece arguably point to the need for primarily education-based interventions. The proposals put forward include, for instance, designing educational and training programmes in line with production needs at national, regional and local levels, as well as with updated, competitive and certified occupational profiles; changing the funding and administration of educational institutions, and introducing greater transparency and accountability (e.g. via the establishment of a mechanism for the evaluation of educational units at all levels); and attracting private resources. More ambitious proposals even refer to the need to redesign higher education in a way that will place less emphasis on employment in the public sector and more on the private sector (particularly in export-oriented sectors) (see e.g. University of Thessaly 2008, KANEP-GSEE 2013: 13, 134–135, Foundation for Economic and Industrial Research 2018: 107, Tsakoglou 2018).

The recent economic crisis and the associated austerity measures seem to have resulted in the deterioration of the already weak connection between education and the labour market in the country. This is reflected, for instance, in the fact that, despite graduates from higher educational institutions being more likely to find work¹⁰ (Pouliakas 2014: 12), there has been an increase in the percentage of such graduates employed in positions that do not correspond to their educational level. This phenomenon conforms with one observed, during recent years, in several European countries (especially in southern Europe): an increase in the availability of skills, as opposed to a decrease in demand for skills (Caroleo and Pastore 2017).

Additional expressions of the aforementioned deterioration include the following: the limited relevance of education to the work carried out by employees with a secondary education degree, based on which Greece ranks 25th among the 28 EU member states (Foundation for Economic and Industrial Research 2018: 12); the extremely ‘late’ transition (often at age 30 or older) into the labour market for the majority of graduates of higher educational institutions (Themelis 2017: 59); the difficulties faced by one out of four enterprises in finding staff (National Institute of Labour and Human Resources 2018); the high incidence of overeducation and the fact that a large proportion of employees are employed in professions/occupations that require a lower level of formal qualifications than the ones they have (Chletsos and Roupakias 2018); and the fact that Greece

¹⁰ The relevant data may differ, however, according to the database used, as well as other parameters, such as the age group to which they concern.

is the country with the greatest skills mismatch¹¹ in the EU, a phenomenon also associated with other issues, such as the low level of participation of young people in employment and the low level of technological expertise of the Greek economy (Friedrich Ebert Stiftung 2018).

This low level of expertise should be seen alongside the quite low rate of digital skills in Greece, as reflected in the Digital Economy and Society Index (DESI)¹². Although things are moving faster in the private than in the public sector of the economy, generally speaking, Greek companies still struggle to engage in a transformative journey towards digitization and robotization (see e.g. Blix, 2015: 173, EIT Digital, 2018, IOBE, 2018).

In a context shaped by the factors outlined above, and viewed in conjunction with the severe consequences of the crisis and austerity (e.g. the so-called ‘brain drain’, which has affected large parts of the Greek economy), as well as the growing interest at European level in strengthening the links between education and the labour market, the need to strengthen these links has attracted increasing attention in public debate in the country; often with an emphasis on reinforcing VET as a means of achieving the desired goal. National agencies that play a key role in the design and implementation of relevant policies, such as the Ministry of Labour and Social Affairs and the Ministry of Education, Research and Religious Affairs, as well as other stakeholders, such as local authorities and social partners (often working in collaboration with supranational authorities), are all engaged in this debate. A 2012 workshop, ‘Bridging Education and Training with the Labour Market – Evaluation and Certification of Learning and Qualifications at European Level’, which took place in Thessaloniki, and which came about as a result of close cooperation between the Municipality of Thessaloniki, the Directorate of Education of the Region of Central Macedonia and Cedefop (the Europe Direct Information Centre of the European Commission also supported the workshop)¹³ provides one example of the wide ranging and collaborative nature of the current debate.

Those arguing that efforts to link education to the labour market are not altogether negative, but often take place in an unorganized and ineffective way, cannot be ignored. Attempts targeted at fully ‘subordinating’ the world of education to market requirements are also criticized for diverting universities from their traditional role and undermining studies typified as ‘non-productive’ (Daskalopoulou 2017). However, as reflected in the initiatives pursued by national authorities and other stakeholders (see below), as well as in the positive stance of organizations such as the Union of Hellenic Chambers of Commerce (commonly known as KEEE), the need to strengthen the connection and interplay between education and the labour market is increasingly recognized.

It should be noted that these initiatives draw on other important developments, such as the establishment of the National System for the Connection of VET with Employment (Law 3191/2003) with its references to a System for Research on Labour Market Needs, and a System of Counseling, Vocational/Professional Guidance and Connection with the Labour Market; or the reference to the development and implementation of an

11 According to the Foundation for Economic and Industrial Research (2018: 11) this mismatch would be even greater if the state did not work ‘correctively’, that is, in employing the growing number of graduates and individuals who hold postgraduate and doctoral degrees.

12 See <https://ec.europa.eu/digital-single-market/en/desi>.

13 See <https://www.cedefop.europa.eu/en/events-and-projects/events/bridging-gap-between-education-and-training-and-labour-market-needs>.

integrated system for the identification of labour market needs, as a key priority, within the framework of the systemic interventions foreseen under the 1st Priority Axis of the Operational Programme Human Resources Development 2007–2013 (commonly known as EPANAD). Moreover, they build on the use of ‘traditional’ policy tools, such as liaison offices, vocational education and training centres (commonly known as KEK) and programmes of practical training at university level, as well as tools utilized by the Manpower Employment Organization¹⁴, i.e. the Greek public employment service, supervised by the Ministry of Labour, Social Security and Social Solidarity, and commonly known as OAED.

Special reference should be made to OAED’s significant expertise in the use of policy tools which, in a direct or indirect way, contribute to the strengthening the links between education and the labour market by focusing on different target groups (e.g. the unemployed, employees, enterprises). OAED is, for instance, in charge of numerous training programmes, as exemplified by its ‘voucher programmes’, which combine theoretical and practical training and are often accompanied by complementary support and counseling services offered by the training provider. The aim is to identify and promote the ‘most appropriate’ way of linking the educational needs and skills of trainees with those of enterprises. OAED, likewise, has extensive know-how in counseling services (offering, for example, an individualized approach to career guidance and re-orientation, and advice on job search techniques and business initiatives) (Titirou 2016), as well as in programmes targeted at assisting employees and enterprises to adapt to the evolving needs of the economy, and in job subsidy initiatives (e.g. in schemes covering social insurance contributions).

The above should be considered alongside OAED’s continuing primacy in the Greek apprenticeship system. In recent years a series of interventions have taken place, targeted at reinforcing VET, and apprenticeship programmes in particular. Examples include the establishment (in 2017) of a National Commission for VET, with the aim, *inter alia*, of implementing the National Strategic Framework for the Upgrade of VET and Apprenticeships, and the extension of apprenticeship programmes, which are now also offered via additional educational structures (Lalioti, Karantinos and Chrysakis 2018: 1–2). These initiatives are in contrast to the emphasis traditionally placed upon so-called ‘general’ education and VET’s long history of under-funding in the country, but are in line with the wider European trend to strengthen and modernize VET and, more specifically, apprenticeship programmes (Themelis 2017: 54).

Despite changes, OAED’s professional schools (commonly known as EPAS) continue to be the main providers of apprenticeship positions in Greece. Moreover, it should be noted that Offices of Professional Connection operate under the auspices of many EPAS. Their role includes promoting consultation with social partners, chambers of industry and commerce, local authorities and other bodies, as well as informing businesses about the benefits of apprenticeship programmes¹⁵. They are the link between apprenticeships and local labour markets.

The major role played by OAED in enhancing the connection between education and the labour market in Greece is reaffirmed in a recent (2018) ‘strategic framework’ drafted by the Ministry of Labour and Social Affairs (which at that point was named ‘Ministry of Labour, Social Security and Social Solidarity’). The frame-

¹⁴ See <http://www.oaed.gr/>.

¹⁵ See <http://www.oaed.gr/grapheia-diasyndeses>.

work explicitly refers to the need to redesign OAED's business model and take action to improve the match between active labour market policies (and the services offered by OAED more generally) and actual labour market needs and conditions.

Reference is also made to the need to update the knowledge and skills of individuals, as a means of facilitating their integration or re-integration into the labour market. The relevant programmes should conform with the plan to restructure the Greek economy, and take account of the dynamics and needs of the so-called 'development' sectors, as defined in the Partnership Agreement for the Development Framework 2014–2020 (commonly known as ESPA). Moreover, the foregoing framework highlights the importance of training programmes targeted at the up-skilling and/or re-skilling of low-skilled individuals and employees working in 'non-dynamic sectors' of the economy.

The above, similarly to the relevant European trend, should be understood in the light of the growing emphasis on the concept of 'skills' and the acknowledgement that, when aligned with labour market requirements, their development is a source of multiple benefits for individuals per se, but also for society and the economy as a whole (see e.g. OECD/ILO 2017). It should also be understood in the light of accepting the view that the establishment of mechanisms for the diagnosis of skills and labour market needs is crucial for strengthening the links between education and the labour market. Recent key interventions which can be seen as part of this trend include the redesign (from 2015 onwards) of programmes implemented under the aegis of the Ministry of Labour (e.g. the so-called 'community services programmes'), in a way that prioritizes the upgrading of skills and the certification of participant knowledge, in accordance with the needs of the labour market and specific employment positions; the establishment of the National Institute of Labour and Human Resources (commonly known as EIEAD), an organization with a remit to support the actions and policies of the Ministry of Labour at national, regional, local and sectoral levels and to promote vocational training and lifelong learning (article 88 of Law 3996/2011)¹⁶; and, in particular, the establishment of the so-called Mechanism for the Diagnosis of Labour Market Needs¹⁷ (operated by EIEAD) (referred to in this paper as 'the Mechanism').

Both at a symbolic and practical level, the establishment of the Mechanism in particular represents a real milestone in the national effort towards strengthening the links between education and the labour market (see article 85 of Law 4368/2016) (e.g. by assisting OAED and other agencies to improve the match between the skills of the unemployed and participants in apprenticeship programmes and the needs of the labour market and enterprises). An example of the major contribution made by the Mechanism – which provides, among other things, policy-makers in the fields of education and employment with data on 'dynamic' sectors and occupations – is that its outputs have recently been taken into consideration in the design of the OAED programme, Training and Certification of Unemployed Aged 29–64 in Cutting-Edge Sectors of the Economy (Ministry of Labour, Social Security and Social Solidarity 2018).

The Mechanism comprises two pillars: one concerns the processing, organization and visualization of data on employment, unemployment and entrepreneurship; the other focuses on further analysing this data,

¹⁶ See <http://www.eiead.gr/>.

¹⁷ See <http://lmds.eiead.gr/>.

in order to highlight the ‘most dynamic’ professions and their characteristics and ‘facilitate’ the design of evidence-based ‘active’ policies. Its main objective is to identify and map key labour market trends, as well as the supply of and demand for professions/occupations and skills/competences/knowledge (at national, regional and sectoral levels).

The operations of the Mechanism are supported by a network of agencies and organizations that play key roles in both collecting and/or using the Mechanism’s data, and designing and implementing policies concerning the fields of education and the labour market. Moreover, new bodies and departments have been established in order to improve the coordination and use of Mechanism outputs (e.g. a Department of Planning and Monitoring the Mechanism for the Diagnosis of Labour Market Needs, based in the Ministry of Labour, Social Security and Social Solidarity).

The Mechanism receives funding from the ESPA Operational Programme, a key strategic funder in the fields of education and the labour market, which explicitly includes improving the relevance of education and training to the labour market and strengthening the links between higher education and the business world among its key targets (Operational Programme ‘Human Resources Development, Education and Lifelong Learning 2014). Furthermore, EIEAD per se, technically in charge of the Mechanism, carries out research (see e.g. National Institute of Labour and Human Resources 2018b) and produces know-how and policy proposals on how to strengthen the connection between education and the labour market, as exemplified by the emphasis given to the need to systematically analyse the offer and demand in skills and to practices such as the adoption of motives to reinforce the geographical mobility of the unemployed

Interventions like the Mechanism for the Diagnosis of Labour Market Needs should be discussed alongside other initiatives that have been put in place in recent years with a view to strengthening the ties between education and the labour market in Greece. These include the establishment of additional institutions/bodies targeted at reinforcing the foregoing ties; and actions aiming at enhancing the cooperation between educational units and enterprises.

The establishment (in 2017) of the National Council of Education and Development of Human Resources (commonly known as EKEKAAD) by the Ministry of Education, Research and Religious Affairs, as a replacement for the National Council of Education (commonly known as ESYP), which aims, amongst other things, to strengthen the education–labour market connection, is an example of the former. The collaboration between the Agricultural University of Athens and Interamerican in training insurance consultants on issues related to agricultural crops is an example of the latter. Traineeship programmes, such as the ‘Real-Time Graduates programme’¹⁸ for graduates of university shipping departments and other relevant disciplines, offered by companies, technical offices and organizations active in the shipping sector, should also be taken into account (EY, Athens University of Economics and Business and Endeavor, Greece 2017: 39–44).

Lastly, despite the ‘centralized’ governance model that characterizes the country, a range of actors such as local authorities and social partners are involved in developing policies aimed at strengthening the links between education and the labour market. Illustrative of the former is the implementation of vocational

¹⁸ See <https://www.investinthefuture.gr/>.

training programmes for unemployed members of groups deemed to be vulnerable (e.g. Roma), as well as of programmes based on the cooperation between local authorities and educational institutions (see e.g. the collaboration between the Regional Association of the Municipalities of Thessaly with the Agricultural University of Athens and the University of Thessaly in training programmes targeted at individuals interested in the agricultural sector¹⁹). Moreover, a number of regions are in the process of establishing Regional Mechanisms for the Diagnosis of Labour Market Needs (see e.g. the relevant report submitted by Akronymo Meletitiki EPE on behalf of the Region of Central Macedonia in 2015).

The contribution of social partners, on the other hand, is reflected, *inter alia*, in the design and implementation of training programmes, which often combine theoretical training with the chance of getting practical experience at the enterprise level; as well as in the provision of counseling services and actions aiming at promoting the diagnosis of labour market needs. Examples include the participation of the Hellenic Confederation of Commerce and Entrepreneurship (known as ESEE) in training, counseling and certification activities targeted at unemployed individuals aged 18–24 in the retail sector²⁰; and the establishment of a ‘laboratory for the diagnosis and monitoring of factors contributing to changes in the productive environment of economic sectors and professions/occupations’, which is underway at the Institute of Small Businesses at the Hellenic Confederation of Professionals, Craftsmen and Merchants (known as IME-GSEVEE)²¹.

Especially in the field of training, social partners have considerable experience and know-how. Indicative of this is the work done by the Companies Association Centre for Vocational Training (known as IVEPE), i.e. the educational branch of the Hellenic Federation of Enterprises (known as SEV), which is responsible for designing and implementing training programmes for employees, the self-employed and unemployed, and vulnerable social groups, after taking into account the supply of skills among the labour force and the demand for skills by industry and profession/occupation²². Social partners also investigate and document the skills required by their members and, based on the data collected, they adapt the content of the training programmes they offer to reflect the evolving needs of the labour market (Skills Panorama2017).

Overall, despite the progress made, Greece continues to be one of the many EU member states that lack a coherent, comprehensive strategy for strengthening the links between education and the labour market. This is reflected in the absence of a strategy aimed at addressing the severe skills mismatch in the country (see e.g. Cedefop 2015c).

19 See <http://www.paragogi.net/8223/synergasia-panepisthiwn-aytodioikhshs-gia-thn-katartish-newn-agrotwn>.

20 See <http://www.esee-emporio.gr>.

21 See <https://imegsevee.gr/>.

22 See <https://www.ivepe.gr/el/>.

CONCLUDING DISCUSSION

Based on extensive desk research, this paper sheds light on the education–labour market relationship in Greece and the means used to strengthen it, whilst placing the Greek case in a European context. The analysis confirms, broadly speaking, that the relationship between the two fields (i.e. education and the labour market) is extremely complex and multidimensional; it also highlights how and why, in the midst of the recent economic crisis and related period of austerity, this relationship has attracted the interest of various stakeholders at European and national level. This is a trend largely associated with the broadly shared view that, although the multiplicity of parameters that affect the education–labour market relationship makes a perfect match impossible, the close ties and interplay between the two fields can be a source of multiple benefits. Yet, there are no ‘magic recipes’, and approaches that prove to be successful in one particular context may be less so in another.

Furthermore, a study of the relevant European experience shows that, despite differences, relatively weak ties between education and the labour market are evident across a range of countries in, for example, the difficulties faced by graduates of higher educational institutions in accessing the labour market; or in the fact that a large proportion of employers have difficulty recruiting staff with the required skills. In this context, both supranational and national authorities in Europe have undertaken initiatives targeted at strengthening the connection between education and the labour market.

The analysis of these initiatives reveals an emphasis on, amongst other things, the importance of skills development and on the need to take action so as to mitigate skills mismatch, as exemplified by the establishment of mechanisms for diagnosing labour market needs. The use of these tools should be viewed alongside the use of traditional policy tools (such as active labour market policies), as well as alongside the trend towards the enforcement of VET and work-based learning (with a focus on apprenticeships) and the pursuit of additional institutional interventions (such as the redesign of public employment services or the development of partnerships between educational institutions and enterprises).

The paper also highlights the weak links between education and the labour market in Greece, as reflected in the roughly equivalent unemployment rates of graduates from higher educational institutions and less well educated individuals, and the high rate of overeducation. These weak education–labour market ties are due to a number of factors, such as the strong public sector orientation of the educational system, and the erroneous perception of the prospects of various professions, etc.

The recent economic crisis and the associated austerity measures put in place resulted in the deterioration of the already weak connection between education and the labour market in the country; this is illustrated by the fact that Greece is currently the country characterized by the greatest skills mismatch in the EU. In this context, there has been a move towards initiatives targeted at strengthening the ties between education and the labour market, much in line with the growing interest in this issue and the relevant policy tools utilized at the European level. Alongside the continued use of traditional active labour market policies, examples of other initiatives being pursued in Greece as a means to reinforce the ties between education and the labour market include the expansion of apprenticeship programmes, the establishment of a mechanism for the diagnosis of labour market needs and efforts to restructure OAED and redesign training programmes, in accordance with

identified labour market needs. Other stakeholders, such as local authorities and social partners, are also undertaking similar activities.

Overall, despite the progress made, a comprehensive and coherent strategy to reinforce the connection between education and the labour market in Greece is still missing. Such a strategy should take into account all the current criticisms of the ties between the two fields, as well as all the proposals aimed at reinforcing them. It should consider the need to design educational and training programmes that meet labour market needs at national, regional and local levels, and are in line with updated competitive and certified occupational profiles; it should also implement changes in the funding and administration of educational institutions, whilst increasing their (largely absent) transparency and accountability.

However, to be successful such a strategy will also need to consider numerous other additional actions. These would include the following: (i) exploring, on a systematic and regular basis, the changing relationship between education and the labour market, so as to identify the main problems and challenges and formulate suggestions for addressing them; (ii) recording, describing and evaluating all the actions targeted, directly or indirectly, at enhancing the education–labour market relationship; (iii) mapping ‘best practice’ at European and global levels and assessing the chances of successful application in Greece; (iv) analysing, on a systematic and regular basis, data on the offer of and demand for skills, so as to develop a clear picture of the sectors/occupations characterized by limited supply (or, alternatively, increased demand) at national, regional and local levels; (v) reinforcing the Mechanism for the Diagnosis of Labour Market Needs and making better use of its data (e.g. by strengthening and expanding the offer of training programmes in economic sectors and professions which, on the basis of systematic evidence, are typified by relatively ‘high’ rates of labour market access/employability, or by taking into account the analyses of the scientific team supporting the Mechanism in the development of educational and training programmes tailored to the needs of local economies and societies); (vi) assigning clear roles to stakeholders (e.g. social partners) and enhancing synergies between them (and also with other actors); (vii) exploring the possibility of designing a developmental/productive model that could be linked to at least a part of the education system without, however, diverting educational institutions away from their historical role and without promoting the ‘subjugation’ of education to market forces; (viii) expanding practical training at all higher educational institutions and exploring the possibility of introducing ‘mandatory’ traineeships in enterprises and public or private bodies; (ix) enhancing and upgrading the role of liaison offices; (x) offering incentives for participation in VET (e.g. by introducing a tax reduction for households whose members include VET students); (xi) encouraging contacts between students and employers/professionals (e.g. by inviting the latter to educational units, in order to present the employment prospects offered by a specific occupation or profession); (xii) extending programmes that include work-based learning; (xiii) improving incentives to encourage stakeholders with significant relevant know-how (e.g. professional associations, organizations representing employers and employees in various sectors of the economy, chambers of industry and commerce, etc) to participate in the development of educational and training programmes.

In the absence of such a comprehensive and cohesive strategy, and given the essential lack of an evaluation culture in the country and the underdevelopment of ‘evidence-based policy-making’, the already difficult

task of strengthening the links between education and the labour market ties will become even more of challenge. Further, the continuing absence of a strategy will work against the design and implementation of a long-lasting, visionary and evidence-based whole-system policy approach targeted at building stronger connections between education and the labour market, whilst existing initiatives may also be undermined.

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