YOUTH UNEMPLOYMENT: A REVIEW OF FACTS AND INSTITUTIONS

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RESUMEN: Los jóvenes, en los últimos años, se han convertido en el centro del debate público, especialmente a partir del año 2009, en el que se vieron golpeados de forma desproporcionada por la crisis; seis años después, subsisten sus efectos sobre sus perspectivas en el mercado laboral. Los distintos datos muestran con claridad las difíciles condiciones en las que se encuentran insertos. El desempleo generalizado que no da signos de disminuir; los jóvenes desanimados por no ver salida que posponen su entrada en la sociedad activa, en la escuela o la universidad; así como los datos de la pirámide demográfica, muestran un balance bastante sombrío para la juventud. Aunque la crisis ha incrementado las dificultades de los jóvenes en el mercado laboral y en la sociedad, en general, las raíces de este fenómeno van más allá, al estar integradas, estructuralmente, en el ámbito cultural y en los rasgos económicos e institucionales de los países citados en el estudio.

ABSTRACT: Youth have been more and more at the centre of the public debate of the recent years, complicit the fact that, starting from 2009, the economic crisis hit younger generations disproportionally and almost six years later still exhibit its persistent effects on their labour market prospects. Different data manifestly show the increasingly difficult conditions of young people. From the widespread high youth

unemployment showing no sign of decreasing, to the discouraged youth seeing no prospects and postponing their entrance either in the active society or in school and university, to the demographic pyramid showing youth shares wearing thinner and thinner, the balance is rather grim for youth. If the crisis has exacerbated young difficulties in the labour market and, more in general, in the society, the roots of this phenomenon go back far beyond the crisis, being structurally embedded in the cultural, economic and institutional characteristics of the countries.

PALABRAS CLAVE: paro juvenil, instituciones de mercado de trabajo, transición de la escuela al trabajo, análisis comparativo, Europa, OECD.

KEYWORDS: youth unemployment, labour market institutions, school-to-work transition, comparative analysis, Europe, OECD.

1. INTRODUCTION

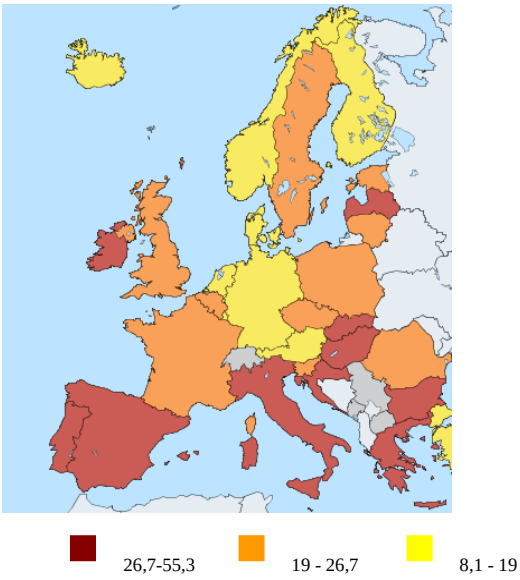
Youth have been more and more at the centre of the public debate of the recent years, complicit the fact that, starting from 2009, the economic crisis hit younger generations disproportionally and almost six years later still exhibit its persistent effects on their labour market prospects. Different data manifestly show the increasingly difficult conditions of young people. From the widespread high youth unemployment showing no sign of decreasing, to the discouraged youth seeing no prospects and postponing their entrance either in the active society or in school and university, to the demographic pyramid showing youth shares wearing thinner and thinner, the balance is rather grim for youth.

If the crisis has exacerbated young difficulties in the labour market and, more in general, in the society, the roots of this phenomenon go back far beyond the crisis, being structurally embedded in the cultural, economic and institutional characteristics of the countries. Young people hard times are often compared (and sometimes opposed) to the conditions of other generations, adults and elderly in particular, that, though strongly affected by the economic crisis, is proving to be more resilient, given a (generally) stronger safety net provided by greater stability and protection. Adding to this, the ageing population is putting pressure not only on public finances, mining the robustness of social security systems and welfare states, but also on the fundamental inter–generational solidarity. In this view, the present contribution aims at providing a picture of youth labour market conditions six years after the start of the crisis, also showing trends in the institutional determinants of youth unemployment in 21 OECD countries, in order to shed light on the long-term institutional factors hindering (or vice versa improving) youth labour market outcomes, with a focus, besides traditional labour market institutions, on the role of school–to–work transition.

2. INTERNATIONAL STYLIZED FACTS

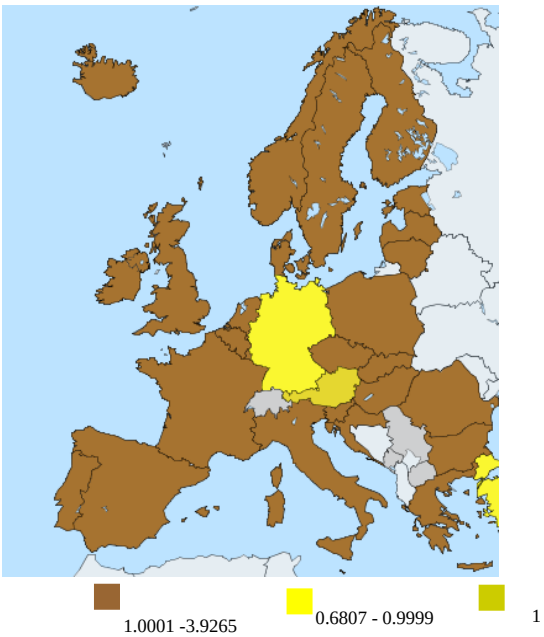
Starting from the '90s, young people in the industrialized countries have been facing increasing difficulties in the labor markets compared to the previous decades, culminated in the recent economic crisis, which caused the youth unemployment rate to increase more than double of that of adults, and that, according to statistics, is still higher than pre–crisis levels almost everywhere.

Figure 1 - Youth unemployment rate in 2012



Source: Eurostat

Figure 2 - Youth unemployment rate in 2012 compared to 2007



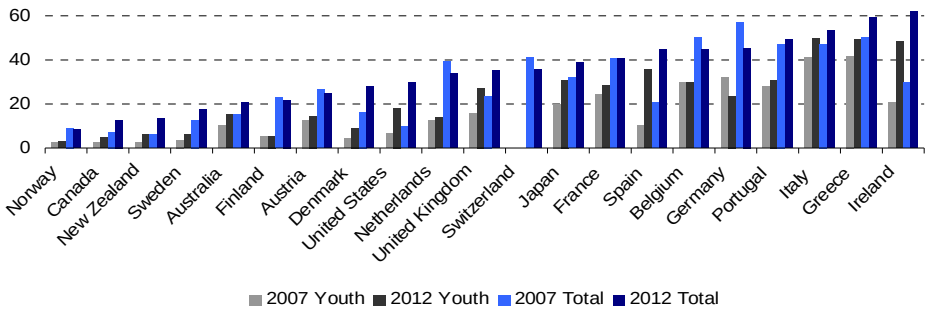
Source: Eurostat

As Figure 1 shows youth unemployment rate varies greatly across countries, ranging from 8% in Germany to over 50% in Greece (2012)[1].

Youth unemployment is dangerously high in Southern European countries, especially in Spain (53% in 2012) and Greece (55%), but also in Italy (35% in 2012, it reached 40% in September 2013) and Portugal (38%). Conversely, youth unemployment is lower than 10% in Germany (8%), Austria (8,7%), Norway (8,6%), Switzerland (8,4%, source: OECD) and the Netherlands (9,5%) and below 20% in Finland and Belgium, while it is slightly higher than 20% in the United Kingdom (21%) and France (24,5%). In other developed non-European countries, youth unemployment rate in 2012 was 11,7% in Australia, 14,3% in Canada, 7,9% in Japan, 17,7% in New Zealand and 16,2% in the United States (source OECD.Stat Extracts, http://stats.oecd.org/).

Figure 2 shows youth unemployment rates in 2012, compared to 2007. Almost six years after the start of the crisis, most of these countries still register youth unemployment rates higher (up to 4 times) the pre-crisis level (brown colored countries), with the notable exception of Germany (in yellow), where youth unemployment in 2012 was even lower than in 2007 and Austria, where it was equal to pre-crisis level. Across non European industrialised countries, only in Japan youth unemployment is returned to pre–crisis level. On the contrary, in the majority of the other countries youth unemployment is still from two to four times higher than before the crisis. As a consequence, long-term unemployment rate (over 12 months) both for youth and at the total level soared in many countries from 2007 to 2012 (Figure 3), though with some exceptions.

Figure 3 – Long-term unemployment rates (15-24 years old and total). 2007 - 2012



Source: Elaboration on OECD data

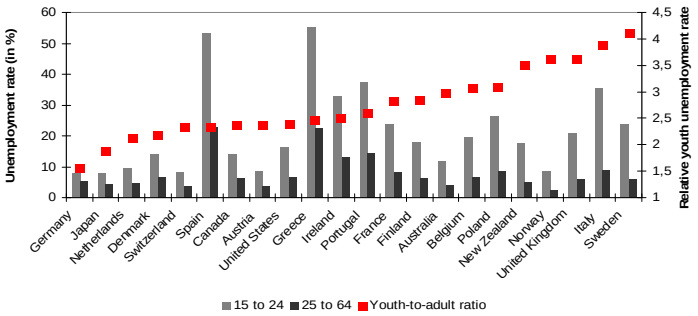
[1] Youth in the global labour markets, between long- and short-term trends, have been described by ILO, *Global Employment Trends for Youth 2013: A generation at risk*, International Labour Office, Geneva, March 2013.

In 2012, compared to 2007, longer cues out of employment are to be found almost everywhere, with the notable exception of Norway, Finland, Austria, the Netherlands, Belgium and Germany, where young and total long-term unemployment rates are equal or lower than pre–crisis levels.

The share of long-term unemployment represents an important signal of the degree of labour market dynamism, i.e. the extent to which people can easily exit from the status of unemployment and find a new job. Dynamism in this sense is important for keeping skills updated and avoiding scar, stigma effects and discouragement. Since youth are yet to start their careers, it is therefore crucially important for them to avoid long periods outside employment. During the crisis, however, dynamism collapses due to decrease in the demand of labour by firms, pushing up long–term unemployment[2]. As Figure 3 shows, long–term unemployment for youth is generally much lower than total levels, obviously because youth have just entered the labour market, and also because of higher youth mobility, driving them to change job more frequently, to move to an other city more easily and therefore to experience shorter unemployment spells. However, some exceptions can be found. In fact, differently from other countries, in Italy and Greece youth are not less likely to be long–term unemployed than the average, registering instead similar shares of long–term unemployment.

As explained in the literature review, large consensus exists on the fact that young people have been hit the most by the crisis because of larger share of temporary contracts compared to adults and older workers. Notwithstanding this general evidence, it is possible to identify differences across countries in the extent to which youth have been disproportionally affected.

Figure 4 – Youth and adult unemployment rates and youth relative ratio. 2012



Source: Elaboration on OECD data

[2] S. SCARPETTA, A. SONNET, T. MANFREDI, *Rising Youth Unemployment During The Crisis: How to Prevent Negative Long-term Consequences on a Generation?*, OECD Social, Employment and Migration Working Papers, No. 106, OECD Publishing, 2010.

Figure 4 shows youth and adult unemployment rates (bars) and the ratio between the two rates (red squares) in selected OECD countries in 2012. The already noted wide heterogeneity in youth unemployment rates is comprehensibly mirrored in the adult unemployment data, as a signal of structural and macroeconomic differences among the labor markets and the economies, however, some differences exist. Looking in fact at the youth relative unemployment rate, i.e. at the ratio between young and the adult data, what emerges is the negative Italian record (overtaken by Sweden), where young people are over four times more likely to be unemployed than the adult counterpart. On the contrary, at the top of the inter-generational equality one can find Germany, representing the only case where youth unemployment rate is nearly equal to that of adults.

3. DETERMINANTS OF YOUTH UNEMPLOYMENT

Some determinants of youth conditions in the labour market can be considered as structural, being not directly connected to cyclical factors, but being instead inborn to the condition of youth or to the aggregate economy (macro-structural factors). Demographics has been considered as a central structural determinant of youth unemployment[3]. Even though this is not the case today, since most developed countries are rather facing a dramatic ageing of the population and a reduction of the youth relative cohort–size, the baby boomers era economic literature included demographics as one of the causes of youth unemployment. The fact that the more young people are in the labour markets and the more jobs will be needed to accommodate them has been extensively explained. Other structural reasons for youth unemployment and joblessness' seem to be deeply–rooted in the youth age. In this view, key structural factors could be the high mobility and short job tenure (low-seniority) of the young, also linked to the fact that young people are generally hired on a temporary basis, becoming more sensitive to the economic cycle according to the «last–in, first–out» mechanism. Moreover, the long permanence of youth by family's household is connected to lower job mobility which is, in turn, connected to higher equilibrium unemployment.

Besides structural causes, one of the most important determinants of youth unemployment, as well as of the overall level of unemployment, is the economic cycle.

[3] S. KORENMAN, D. NEUMARK, *Cohort crowding and youth labour markets: a cross national analysis*, NBER Working Paper Series, No. 6031, May 1997; G. BERTOLA, F. D. BLAU, L. M. KAHN, *Labor Market Institutions and Demographic Employment Patterns*, NBER Working Papers 9043, 2002.

Indeed, notwithstanding the fact that the business cycle affects overall unemployment, there is strong consensus on the observation that youth are disproportionally hit in economic downturns and youth unemployment is one of the most highly sensitive variables in the labour market. Other than general economic conditions and age–specific characteristics, labour market and educational institutions have been mainly addressed to explain the wide heterogeneity existing across countries, as well as the disparity between youth and adults labour market conditions. In what follows it will be shown from a descriptive point of view how countries differ, from an institutional side. The analysed variables will then serve as explanatory variables in the empirical analysis in order to assess more firmly their role for youth unemployment.

3.1. Shape of labour market institutions: regulation, policies and industrial relations

Differences in labour market performances across countries can be better explained «structurally», by looking at their institutional frameworks[4]. The debate on the role of labour market institutions took off with the observation of divergent labour market outcomes across Europe and the United States. Starting from the famous OECD Jobs Study of 1994[5], these pieces of evidence provided a strong and lasting basis for the spread of several (mainly empirical) works, all supporting the mainstream view that institutions interfere with labour market mechanism, creating unemployment. In particular, the related economic literature has identified a number of policy and institutional determinants of unemployment. One main source of institutions interacting with the labour market is the regulation of labour, which includes employment laws, industrial relations and social security[6].

Among these regulations, the employment protection legislation[7] has been strongly indicated as a possible determinant of the disproportionally higher youth unemployment rates, especially in the debate on the dualism between «overprotected adults» and «youth without protections». Indeed the thesis of the «segregation» of the

[4] E. S. PHELPS, *Structural Slumps*, Cambridge, MA: Harvard University Press, 1994.

[5] OECD, *The OECD Jobs Study. Facts, Analysis, Strategies*, OECD Publishing, 1994.

[6] For a review of labour regulations in 85 countries see J. C. BOTERO, S. DJANKOV, R. LA PORTA, F. LOPEZ DE SILANES, A. SHLEIFER, The Regulation of Labour, Quarterly Journal of Economics, Vol. 119, No. 4, November 2004, while for the consequences of labour regulations see E. LAZEAR, Job Security Provisions and Employment, Quarterly Journal of Economics, pp. 699–726, 1990.

[7] E. P. LAZEAR, *Job security provisions and employment*, Quarterly Journal of Economics, pp. 105, 699-726, 1990.

so called «atypical» workers (workers with temporary contracts) attributes the high youth unemployment rate to the employment protection disproportion between adults and youth. In a context where labor market insiders have obtained high job protection levels, that are difficult to root up, for outsiders the contractual flexibility represents at the same time the chance to enter the labor market and the possible risk of leaving it in short time. The employment protection legislation literature underlined the indirect consequences of excessive or asymmetric job protection, such as the extensive use of atypical labour contract and the rise in the labour market dualism between outsider and insider[8]. This process led to a disproportional effect on new entrants –mainly youth, immigrants and women– raising the relative incidence of temporary employment. However, in Europe with the only exception of Spain, temporary jobs have been demonstrated to be stepping stone into stable employment rather than dead end jobs.

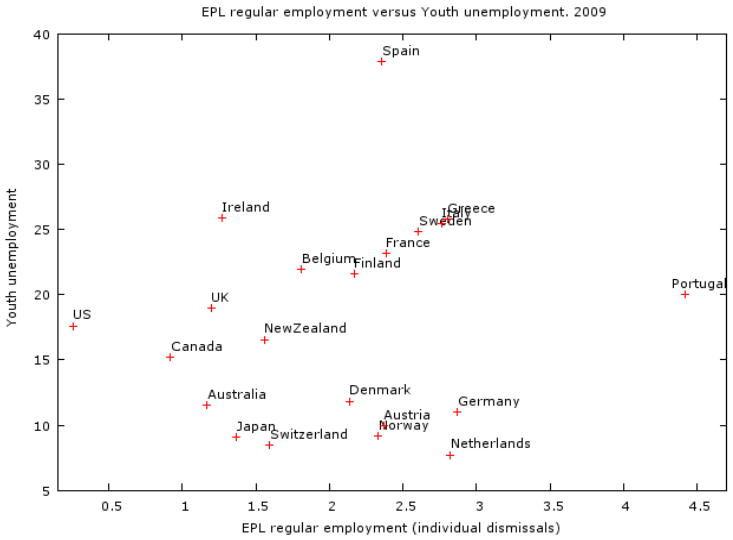
The OECD indexes the degree of rigidity of labour regulations according to three topics: protection of regular employment, strictness of regulation on fixed-term contracts and on collective dismissals. The higher the index, the stricter the regulation and the more rigid the labor market. Interestingly, from 2013, the OECD indexes also the strictness of regulation for temporary work agency employment (included in the EPL index for temporary work).

Even though a vast literature claimed for the important role of hiring and firing regulations on unemployment, evidence is mixed, with several empirical studies showing no direct link between restrictive employment protection legislation and unemployment[9]. Figure 5 shows no correlation between the stringency of the employment regulation and youth unemployment rate in selected OECD countries in 2009.

[8] S. BENTOLILA, J. J. DOLADO, *Labour Flexibility and Wages: Lessons from Spain*, Economic Policy, Vol. 18, April 1994; T. BOERI, P. GARIBALDI, *Two Tier Reforms of Employment Protection: a Honeymoon Effect?*, Economic Journal, Royal Economic Society, vol. 117(521), pp. 357-385, 2007.

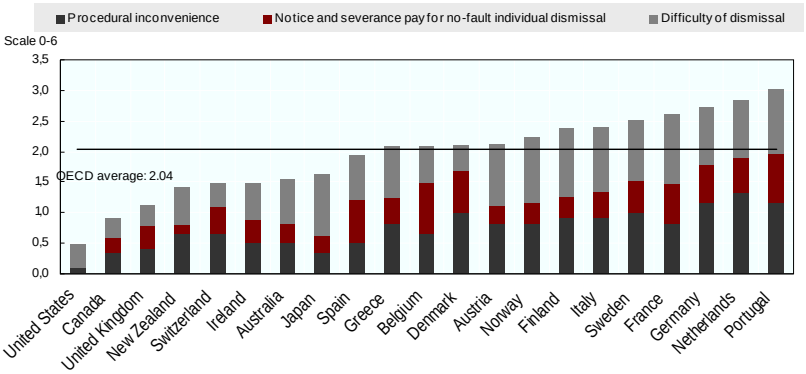
[9] BASSANINI AND DUVAL, 2006; D. R. HOWELL, D. BAKER, A. GLYN, J. SCHMITT, *Are Protective Labor Market Institutions Really at the Root of Unemployment? A Critical Perspective on the Statistical Evidence*, CEPR Reports and Issue Briefs 2006-14, 2004; M. BELOT, J. VAN OURS, *Unemployment and Labor Market Institutions: An Empirical Analysis*, Journal of the Japanese and International Economy, Vol. 15, No. 4, 2001.

Figure 5 - EPL index for regular employment and youth unemployment rate. 2009



Source: Elaboration on OECD data

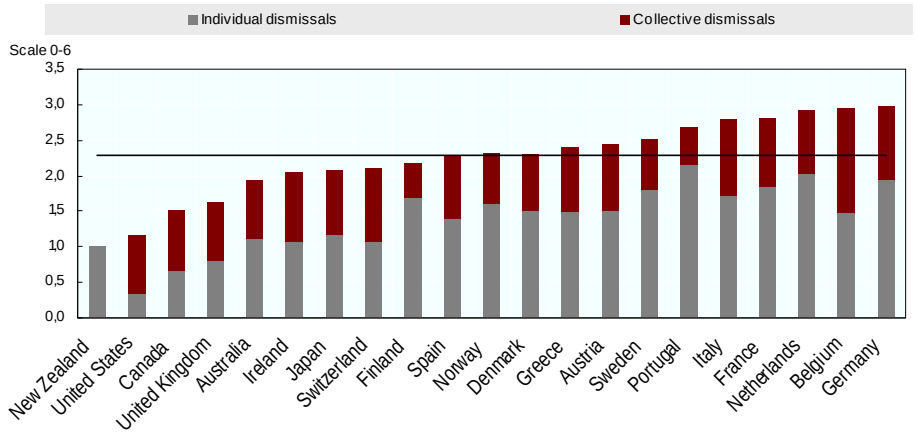
Figure 6 – Protection of permanent workers against individual dismissal



Source: OECD

Note: Data refer to 2013 for OECD countries and Latvia, 2012 for other countries.

Figure 7 – Protection against individual and collective dismissals

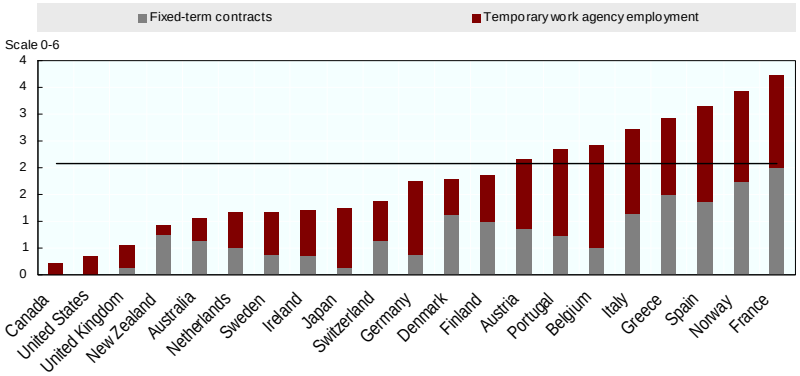


Source: OECD

Note: Data refer to 2013 for OECD countries and Latvia, 2012 for other countries.

As Figures 6 and 7 show, flexibility on the exit side of the labour market, both in terms of individual and collective dismissals, is traditionally higher (below OECD average) in Anglo–Saxon countries, Switzerland and Japan, and lower in continental European countries, something that brought to the idea that the European–American divide in labour market performance was caused by the excessive rigidity characterizing the former labour market.

Figure 8 – Strictness of regulation on temporary work: fixed–term contracts and temporary work agency



Source: OECD

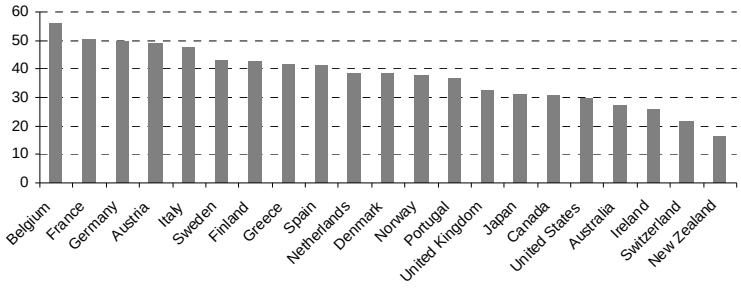
Note: Data refer to 2013 for OECD countries and Latvia, 2012 for other countries.

Besides *outward* flexibility, another aspect entailing different levels of regulations among countries is represented by *inward* flexibility, i.e. the extent to which it is easy for employers to hire people through fixed-term contracts and temporary agency work. Despite the attention put on the negative role of labour protection asymmetries, a cross–country comparison reveals that this relationship is not straightforward, as in the case of Germany. Indeed, the German labour market is characterized by a relatively high degree of rigidity with regards to regular employment protection (Figures 6 and 7) and a relatively low rigidity concerning the regulation of temporary work (Figure 8), thus suggesting a theoretically high dualism between insiders and outsiders in the country. Despite this fact, it is well known that young Germans enjoy the lowest unemployment rate in Europe and among the industrialized economies. Rather than making more difficult for youth to find a job, in Germany this disproportion is not producing a dualistic labor market, as can be seen from the rather unique equivalence between adult and youth unemployment rates. This observation represents a starting point for the empirical analysis of the determinants of youth unemployment suggesting that other arguments other than regulation are likely to better explain the youth unemployment phenomenon.

Besides the role of labour regulation, as a factor shaping the wage formation process and the labour utilisation, taxes have been identified as possible determinants of unemployment, with high tax wedges found to increase unemployment and to lower employment prospects, especially for groups at the margin of the labour market[10]. The tax wedge is measured by the OECD as the difference between labour costs to the employer and the corresponding net take-home pay of the employee and it is calculated by expressing the sum of personal income tax, employee plus employer social security contributions together with any payroll tax, minus benefits, as a percentage of labour cost.

[10] F. DAVERI, G. TABELLINI, *Unemployment, Growth and Taxation in Industrial Countries*, Economic Policy, No. 30, 2000; OECD, *Taxing Wages 2013*, OECD Publishing.

Figure 9 – Average Tax Wedge (in %). 2012



Source: Elaboration on OECD data

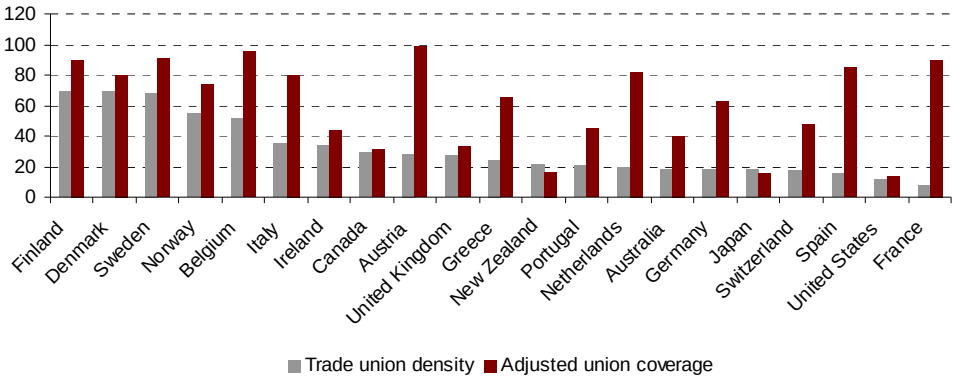
In 2012, taxes on an average worker (defined as a single person earning the average income of full–time workers of the country) represented around 35% of their total labour costs across OECD countries. Among the analysed countries, average tax wedge ranges between 16% in New Zealand to 55% in Belgium (Figure 9).

A particularly strong impact of tax wedge is found in countries with powerful trade unions and with a low or intermediate degree of centralisation/co–ordination of the wage bargaining process. Indeed, union density and the structure of the wage bargaining have also been included as determinants of youth unemployment in the empirical analysis.

With regards to union density, the literature on wage–setting institutions has pointed out how a strong presence of trade unions tends to compress wages particularly at the bottom of the wage distribution or tend to price certain individuals out of the labour market[11]. The effect is considered to be bigger for those individuals characterised by a more elastic labour supply, as youth and women, with the consequence of reducing their relative employment, other things equal. Commentators drawn attention also on indirect ways in which unions could influence the labour market, and precisely on the fact that high performance work practices (HPWP) adoption seems to be hindered by the presence of unions. One of the measures used for representing trade union power is trade union density, corresponding to the ratio of wage and salary earners that are trade union members (Figure 10).

[11] W. KOENIGER, M. LEONARDI, L. NUNZIATA, *Labour Market Institutions and Wage Inequality*, IZA DP No. 1291, September 2004; see R. FREEMAN, *Labour Market Institutions around the World*, NBER Working Paper, N° 13242, 2007.

Figure 10 - Trade union density and adjusted union coverage (in %). 2009



Source: Elaboration on OECD and J.Visser, ICTWSS database (Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts, 1960-2010).

As Figure 10 shows, trade union density varies greatly across countries. Membership is still high (though declining) in the Scandinavian countries, reaching almost 70% in Finland, Denmark and Sweden. It is around 50% in Norway and Belgium, while it falls to 30% of workers or less in Italy, Ireland, Canada and Austria and the United Kingdom. Trade union density is lower than 20% in the Netherlands, Australia, Germany, Switzerland, Spain and the United States and the minimum level is represented by France, with only 7% of workers and employees that are members of trade unions.

This trade union density indicator is in fact not very representative of the actual power of trade unions. Indeed, if declining membership could be interpreted as a signal of the declining power of trade unions, their collective bargaining capacity is instead better represented by the bargaining or union coverage (also called adjusted union coverage). This indicator considers the employees covered by wage bargaining agreements as a proportion of all wage and salary earners in employment with the right to bargaining, expressed as a percentage (the indicator is adjusted for the possibility that some sectors or occupations are excluded from the right to bargain).

In France for example, the difference between trade union membership and bargaining coverage is striking. In fact, if only 7% of French employees are members of a trade union, almost 99% of them are covered by wage bargaining agreements. When looking at the adjusted union coverage indicator, it is possible to notice a greater (bargaining) power of trade unions in Austria, Belgium, Sweden, France,

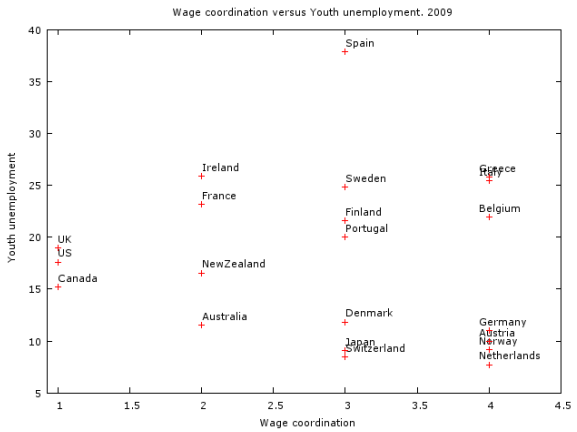
Finland, Spain, the Netherlands, Italy and Denmark, where collective bargaining coverage reaches 80% of employees.

Besides coverage, the general structure and functioning of the industrial relations system conveys different degrees of power to trade unions and social partners in general. For example, Germany is characterized by a low union membership and an average level of bargaining coverage, but German trade unions are famously known for their power, visible for example in right of workers to participate in the management of the companies they work for, as provided by the codetermination mechanism (*Mitbestimmung*).

Complementary to trade unions is therefore the structure of collective bargaining, with both decentralised wage bargaining or highly corporatist systems (characterised by a high degree of centralisation and coordination), which are regarded as more «employment–friendly», while medium level of centralisation/co–ordination that are considered to be more inefficient[12].

Central level of bargaining has been traditionally dominant in Belgium and Ireland, while sectoral level is most common in Austria, Germany, Spain, Finland, Greece, Italy, the Netherlands, Norway and Portugal. A company or establishment level of bargaining is instead traditionally important in the Anglo-Saxon countries (Australia, Canada, the United Kingdom and the United States), as well as in Denmark, France, Japan and Sweden. Besides bargaining levels, coordination of wage bargaining also differs across countries.

Figure 11 – Wage coordination and youth unemployment. 2009



Source: Elaboration on OECD data

[12] F. TRAXLER, B. KITTEL, *The Bargaining System and Performance: A Comparison of 18 OECD Countries*, Comparative Political Studies, Vol. 33, N. 9, November, 2000.

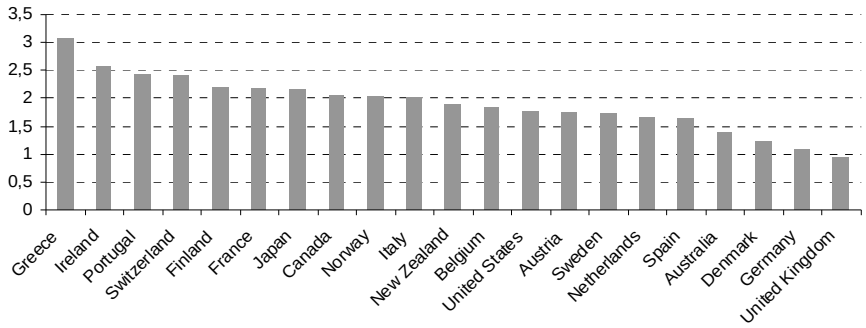
As Figure 11 shows, a higher degree of wage coordination can be found in Austria, Belgium, Germany, Greece, Italy, the Netherlands and Norway, where it is a mixed of industry and economy–wide bargaining, with either central organisations that negotiate non–enforceable central agreements and/or key unions and employers associations who set pattern for the entire economy.

An intermediate level of coordination is instead visible in Denmark, Finland, Japan, Portugal, Spain, Sweden and Switzerland, where there is a predominance of industry bargaining with irregular or non existing pattern setting, limited involvement of central organizations and limited freedom for company bargaining.

Finally, Anglo–Saxon countries and France are characterised by a low level of coordination, being mostly mixed industry– and firm level bargaining, with weak enforceability of industry agreements (as in Australia, France, Ireland and New Zealand) or even basically fragmented bargaining mostly happening at the company level (as in Canada and the United States).

As automatic extension of wage agreements may distort the balance between costs and productivity, similarly, the lack of competition in the product market may induce profit maximising firms to set prices above the marginal cost of production, thus reducing labour demand and hindering overall competitiveness. There is not a single indicator to look at when analysing the extent to which product market is regulated. For reasons of data availability across years, the empirical analysis of the determinants of youth unemployment will include an indicator that summarizes regulatory impediments to product market competition in seven non–manufacturing industries (gas, electricity, post, telecommunications, passenger air transport, railways and road freight), presented in Figure 12.

Figure 12 - Product market regulation in energy, transport and communications. 2007



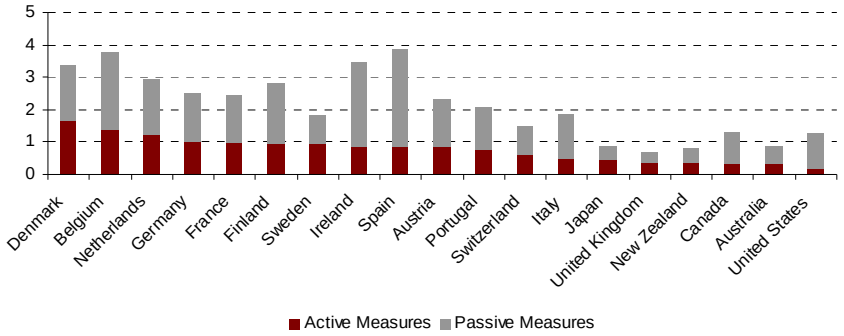
Source: Elaboration on OECD data

The reason for looking at regulations in telecommunications, transport and energy sectors is that these are traditionally the most regulated industries, while manufacturing sectors are typically more open to international competition. Figure 12 shows the OECD summary index, covering information in four main areas: state control, barriers to entry, involvement in business operations and market structure. The scale of the indicator is 0–6 and goes from least to most restrictive of competition. Despite regulatory intensity decreased notably in the last decades, it is possible to identify some relatively restrictive countries (as Greece, Ireland, Portugal and Switzerland) and some relatively liberal ones (as the United Kingdom, Germany, Denmark and Australia).

Besides labour market institutions, policies have to be considered as possible explanatory factors of unemployment. The economic and financial crisis resulted in a significant increase in the number of people who are unemployed and therefore eligible for assistance from labour market policy (LMP) interventions, mostly aimed at helping people who are out of work and wanting to move into employment.

Labour market policy expenditure can be decomposed into three main types of intervention: services, measures and supports. Labour market policy services cover the costs of all publicly funded services for jobseekers (guidance, counselling and other forms of job–search assistance), as well as any other expenditure of the public employment services (PES) not already covered in other categories. Labour market policy measures cover active interventions (also called active labour market policies, ALMP), aiming either to provide people with new skills or experience of work in order to improve their employability or to encourage employers to create new jobs and take on people who are unemployed or otherwise disadvantaged. Labour market policy supports are instead passive interventions, mostly providing financial assistance designed to compensate individuals for loss of wage or salary and to support them during active job–search (i.e. mostly unemployment benefits).

Figure 13 – Expenditure for active and passive labour market policies as percentage of GDP. 2009



Source: Elaboration on OECD data

Countries differ in the extent to which they spend for labour market policies and in the composition of this expenditure. At the total level, summing up active and passive measures, Spain, Belgium, Ireland and Denmark have committed over 3% of their GDP in labour market policy expenditures in 2009 (before the economic crisis). The Netherlands, Finland, Germany, France, Austria and Portugal dedicated between 2% and 3% of their GDP for labour market policies. Italy, Sweden, Switzerland, Canada and the United States between 1% and 2%, while Australia, Japan, New Zealand and the United Kingdom less than 1% of GDP. The composition of labour market policy expenditure greatly differs country by country, with the United Kingdom, Japan, Sweden and Denmark that reserve half of this expenditure to active measures, and Italy, Ireland, Spain and United States where active policies represent less than one fourth of the total expenditure. Top spenders on active labour market policies are Denmark (1,6% of GDP in 2009), Belgium (1,4%), the Netherlands (1,2%), Germany and France (1%).

Indeed, the role of active labour market policies on aggregate and youth unemployment has been particularly stressed[13]. The rational for this consideration is that, on the one hand, ALMP can enhance qualifications of participants in training schemes and raise their productivity once at work and can reduce unemployment by

[13] J. BOONE, J. VAN OURS, *Effective Active Labor Market Policies*, IZA Discussion Paper, No. 1335, November 2004; J. P. MARTIN, D. GRUBB, *What Works and for Whom: A Review of OECD Countries' Experiences with Active Labour Market Policies*. Swedish Economic Policy Review, Vol. 8, No. 2, Fall 2001; D. CARD, J. KLUVE AND A. WEBER, *Active labor market policy evaluations: A Meta-analysis*, IZA DP No. 4002, February 2009.

raising the search effectiveness of job seekers, increasing job matching efficiency and reducing wage pressure, which in turn would reduce the duration of unemployment spells and raise employment. On the other hand, the existence of generous active programmes may be taken as a signal of accommodation, which will raise wage pressure and contributing to longer duration of unemployment spells and higher overall unemployment rates.

Changes in labour market policy expenditure have a tendency to follow changes in the underlying level of unemployment, a reason why the ALMP variable will be instrumented and treated separately in the empirical analysis of the determinants of youth unemployment.

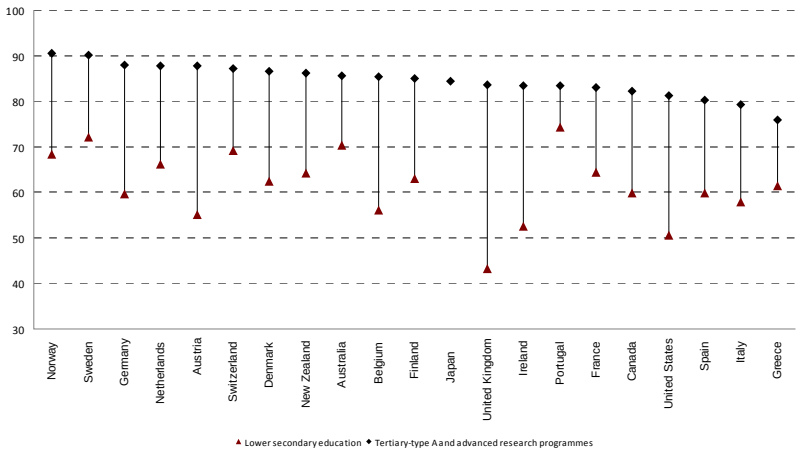
3.2. Shape of educational and school-to-work transition institutions

As explained in the literature review, school–to–work transition smoothness and effectiveness differ across countries. School–to–work transition is a path characterised by long–standing institutional patterns influencing the supply of flexible or permanent jobs and their learning content. Wide consensus exists on the fact that youth unemployment and, more in general, young people difficulties in the labour market are shaped not only by labour market institutions, but also by individual characteristics, most importantly the lack and/or mismatch of the right skills for jobs, resulting in the youth productivity gap[14].

Educational attainment represents the basis for the development of human capital and, even though education per se is no longer guarantee for job, more educated people have lower difficulties in the labour market, reporting comparatively higher employment and lower unemployment rates (Figure 14 and 15).

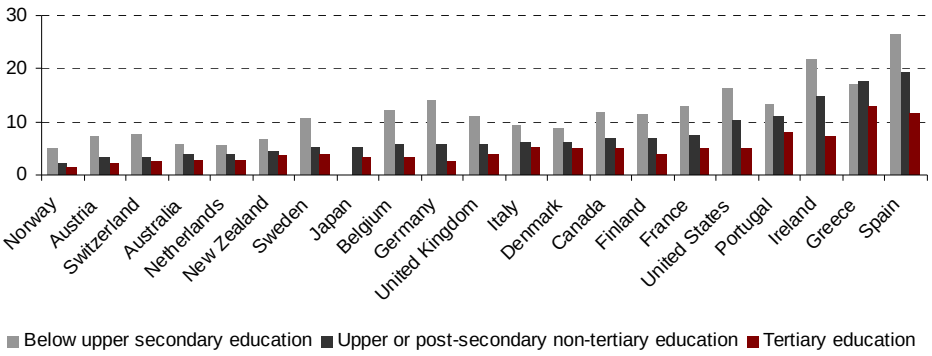
[14] J. MINCER, *Investment In Human Capital and the Personal Income Distribution*, Journal of Political Economy, 66:281-302, 1958.

Figure 14 – Employment rates among 25–64 year–olds with lower secondary education and with tertiary education. 2011



Source: OECD

Figure 15 – Unemployment rates among 25–64 year–olds, by educational attainment. 2011



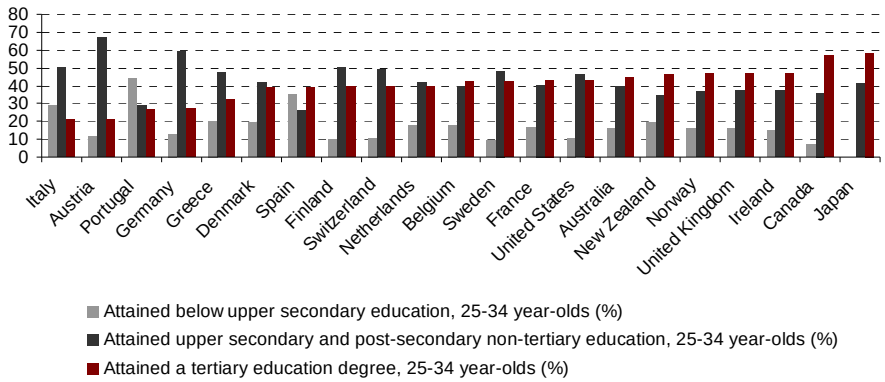
Source: Elaboration on OECD data

Education pays everywhere, but to different extent. Indeed the employment premiums connected to the attainment of a tertiary degree compared to a lower secondary education level vary across countries, from over 40 percentage points in the United Kingdom to around 10 percentage points in Portugal. Similarly, the probability to be unemployed decreases with education everywhere, but with different intensities. For example, the unemployment rate of adults with an educational

attainment below the upper secondary level is less than double of that of people holding a tertiary degree in Greece, Portugal, Denmark, Italy, New Zealand and the Netherlands, while this ratio increases from two to three times in Australia, Spain, Canada, France, Sweden, United Kingdom, Finland and Switzerland and over three times in Ireland, Austria, the United States, Norway, Belgium and Germany.

If education is the first important factor for employability, when looking at the educational attainment of young adults it becomes clear that countries are differently equipped for the labour market and against unemployment. Figure 16 provides an international comparison across selected OECD countries with regards to the educational attainment of people aged from 25 to 34 years old. It is clearly showed that only Japan and Canada register at least half of young adults holding a tertiary education degree, followed by Ireland, the United Kingdom, Norway, New Zealand, Australia, the United States, France, Sweden, Belgium, the Netherlands, Switzerland, Finland, Spain and Denmark, where tertiary graduated represent around 40% of the 25–34 year–olds population and Greece, Germany, Portugal, Austria and Italy, where the percentage is 30% and lower. In many countries young adults mostly hold upper secondary and post–secondary non-tertiary education levels, this being the case of almost 70% of people aged 25–34 year–old in Austria, almost 60% in Germany and nearly 50% in Italy, Greece, Finland, Switzerland and Sweden.

Figure 16 - Educational attainment of people aged 25 to 34 year-old. 2011



Source: Elaboration on OECD data

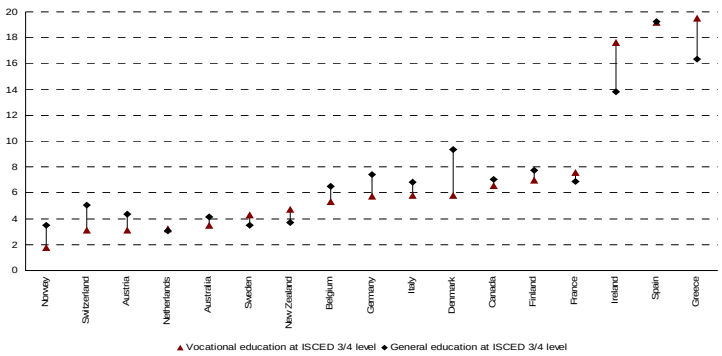
Comparing educational attainment data with the above presented data on youth unemployment, it becomes clear that not all types of education have the same

employability power and that, across similar educational attainment levels, the institutional characteristics of these educational pathways matter.

A first differentiation has to be done between education with vocational or general orientation. It is in fact widely recognized how vocational orientation can ensure better on–the–job learning and can ease the creation of the right skills for jobs, so enhancing youth employability.

The strong labour market orientation of vocational education is clear, starting from the definition reported in the UNESCO International Standard Classification of Education (ISCED–97), that defines vocational education and training (VET) as «education which is mainly designed to lead participants to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation or trade or class of occupations or trades. Successful completion of such programmes leads to a labour–market relevant vocational qualification recognised by the competent authorities in the country in which it is obtained».

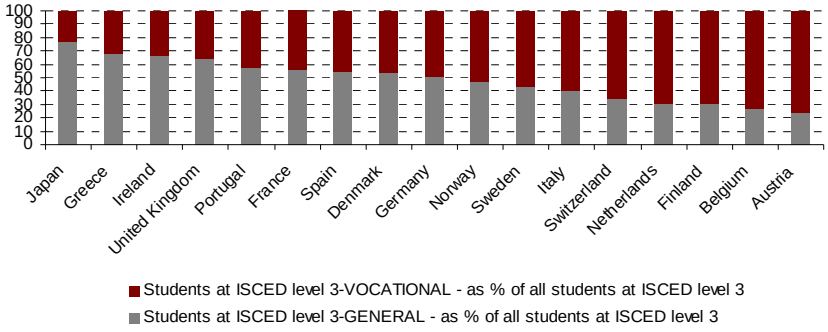
Figure 17 – Unemployment rates among 25–64 year–olds by type of education: general and vocational orientations at ISCED 3/4. 2011



Source: OECD

Data show that individuals with a vocationally oriented upper secondary education are, generally, more likely to be employed and less likely to be unemployed than those who have followed a general path (Figure 17). In Denmark unemployment rates among individuals with vocational upper secondary or post-secondary non–tertiary education are at least 3 percentage points lower than those of individuals with a general upper secondary or post–secondary non–tertiary degree, while the opposite pattern is observed in France, Greece, Ireland, New Zealand and Sweden.

Figure 18 – Share of students in upper secondary or postsecondary non-tertiary education by study orientation: general and vocational. 2011

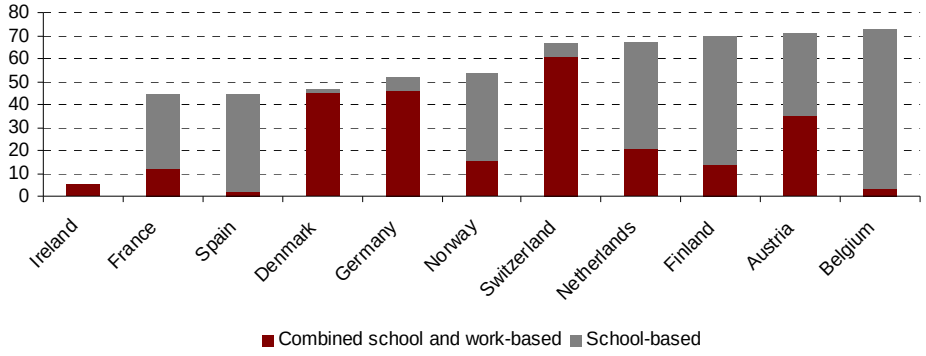


Source: Elaboration on OECD data

Among students in upper secondary or postsecondary non–tertiary education, the vocational orientation is more common in Austria, Belgium, Finland, the Netherlands, Switzerland, Italy, Sweden, Norway and Germany, where it is chosen by more than the half of the students at the ISCED level 3 (Figure 18).

VET systems vary widely among countries, thus limiting the cross–country comparability. An important breakdown is however the extent to which VET is combined with actual work experience (as by means of apprenticeship, traineeships or work–study programmes) or it is only school–based.

Figure 19 – Share of students enrolled in vocational upper secondary education by type of programme. 2010



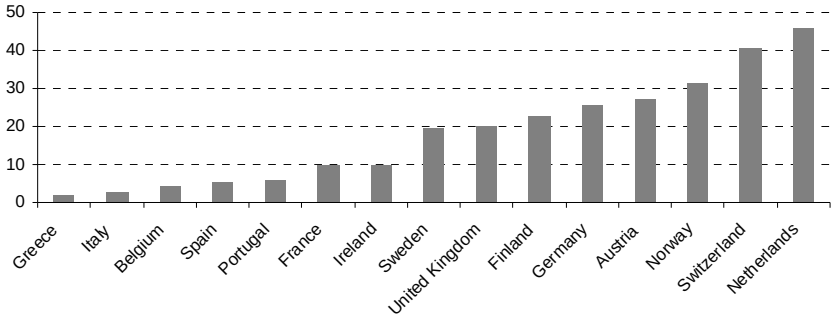
Source: Elaboration on OECD data

Figure 19 shows the share of students enrolled in vocational upper secondary education by type of programme: combined school and work or just school–based.

In countries for which data are available, combined school and work-based vocational education is typical of dual apprenticeship system countries (Denmark, Germany, Switzerland and Austria), while it represents a minor share in the other countries. For example, if in Italy VET is mostly attained in the classroom with no or irregular learning on–the–job, in German-speaking countries the dual apprenticeship system ensures systematic combination between school and work, with great employers' participation in the curricula design. Close collaboration between VET providers and employers greatly decreases the skills mismatch, while filling the inexperienced youth productivity gap and avoiding the need of long initial on–the–job training and late youth labour market entry. Indeed, wide consensus exists on the fact that, comparing school-based vocational training and dual apprenticeship models, a dual system tends to be associated with a smoother transition from school to work and with low youth unemployment.

Given data limitations concerning combined school–work educational programmes, an alternative way for understanding the extent to which young people experience the world of work while in study is to look at the participation of young people in education and training (formal and informal) by employment status, and particularly to look at the share of youth who study and work at the same time, no matter if this happens because the student is attaining a vocational programme combining school and work (as is the typical case in Germany with dual apprenticeship system), or simply because he/she is a working students (as it is very common in the Netherlands). Such measure can compensate the lack of data on vocational programmes and provide a picture of the school–to–work transition model existing in a country: «study first, then work» or «studying while working».

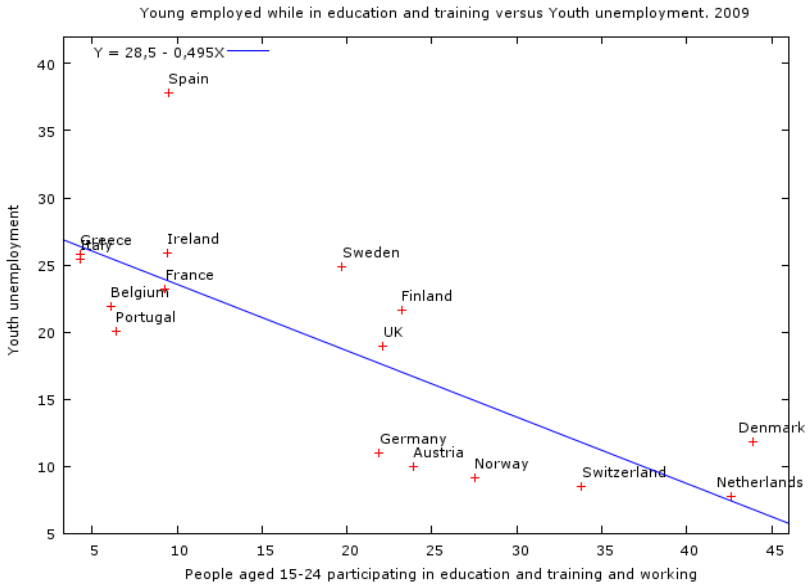
Figure 20 – Participation of young people in education and training (formal and informal) by employment status. 2012



Source: Elaboration on OECD data

Figure 20 shows the share of young people participating in education and training and also having a job. The measure includes formal and non-formal education and training; that means in general activities in the school/university systems but also courses, seminars workshops, etc. outside the formal education and regardless their topic.

Figure 21– Youth in (formal and informal) education and working and youth unemployment. 2009



Source: Elaboration on OECD data

Scatterplot in Figure 21 clearly suggests that countries where working while studying and learning is more common, youth unemployment is lower. The role of work experience seems to go beyond the emphasis put by media and policy makers on apprenticeship. For example, even if the Netherlands is not a dual system apprenticeship country, youth considers work a fundamental part of their student–life and so commit themselves either in part–time or full-time jobs, easing school–to-work transition and lowering youth unemployment.

4. CONCLUSION

Especially when researching on the institutional determinants of youth unemployment, one cannot consider labour market institutions without taking into account educational and school–to–work transition characteristics. In fact, youth from 15 to 29 year old are mostly in transition between school and work, the former building skills for the latter and shaping probabilities of future career. Despite this, studies on the institutional determinants of youth unemployment stressing (besides labour market institutions) also the role of school to work transition are scarce. The descriptive evidence reported in this paper suggested that the school–to–work transition characteristics seems to matter more than purely labour market institutions determinants.

In particular, countries where young people combine education and work, both because of attending apprenticeship or traineeship or because working with part-time contracts (as proxied by the share of young employed between 15 and 29 years old participating in education and training) is found to be linked to lower youth unemployment rate.

These results suggest the importance of the gradual integration of students in the labour market, through apprenticeship, traineeships or part–time contracts and point out problems related to the excessive separation between education and work, as in Mediterranean countries.

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