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The Gig Economy and the Future of Work

Malcolm Sargeant¹

Abstract Purpose. The purpose of this paper is to consider the development of the so-called gig economy and to show that really the developments in the labour market are really just a development of an increase in contingent work generally.

Design/methodology/approach. The paper analyses relevant literature and statistical information, together with the issues raised by litigation in relation to the employment status of workers employed in the developing gig economy.

Findings. The paper is part of a wider literature on the development of the gig economy and hopefully contributes to current analysis and debate on employment status on 'new forms of work'.

Research limitations/implications. The research is part of a debate adding a legal perspective.

Originality/value. The paper provides further material for an ongoing discussion about how new are new forms of work.

Paper type. Issues paper

Keywords: *The Gig Economy, Vulnerable Workers, The Future of Work.*

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1. Introduction

Full-time open ended contracts of employment are the most prevalent types of contract in the workplace in the EU (apart from the Netherlands). This standard form of employment accounts for some 59% of all contracts although this figure is declining (from 62% a year earlier). There has been a corresponding growth in more 'flexible' forms of employment and it is possible that these flexible forms will become the norm in the future². The number of self-employed workers has increased significantly and there are now more than one million more people in self-employment compared to 2006³. Here we consider the so-called gig economy, from a UK perspective, and place it within the context of precarious work and show that it is not a new phenomenon but a variation of the increasing flexibility of the labour market.

What is the gig economy?

Any discussion of the gig economy seems to demand at the start that we discuss what the term actually means. At its simplest it means that the nature of work is different to the conventional standard view that jobs consist of open ended contracts of employment where people work regular hours and are paid at a regular rate. In this new economy, those who work in it carry out a series of 'gigs', i.e. one off jobs, in order to create an income. This must mean that they are either self-employed working perhaps for a number of employers or that they are employed on a series of employed contracts and are employees during their working periods. In either case they are to be paid for a particular task or tasks, rather than receive a guaranteed income.

A research report by the Chartered Institute for Personnel and Development (CIPD) defined it as 'a way of working that is based on people having temporary jobs or doing separate pieces of work, each paid separately, rather than working for an employer'⁴. Of course large numbers of people have been working in this way for very many years, so it is not offering a definition of any new form of working.

The House of Commons Business, Energy and Industrial Strategy Committee carried out an enquiry into the future world of work, focussing on its rapidly changing nature, and the status and rights of agency workers, the self-

² DG for Internal Policies *Precarious employment in Europe; Part 1: Patterns, Trends and Policy Strategy* A study for the Employment and Social Affairs Committee (2016).

³ *Living on the Edge: The rise of job insecurity in modern Britain* TUC (December 2016).

⁴ CIPD *To gig or not to gig? Stories from the modern economy Survey report* (March 2017).

employed, and those working in the 'gig economy'⁵. Two businesses in the gig economy, in their submission to the Committee, offered their own definitions. Firstly, Deliveroo stated in its written submission that:

Deliveroo is a British tech business, founded in London in 2013. Our online delivery platform joins up customers who want great food, restaurants who seek incremental revenue and riders looking for flexible work. Customers order via our app from one of our partner restaurants, the vast majority of whom had never even considered deliveries before. Riders collect the prepared food and deliver it to the customer by bicycle or scooter. We operate in over 70 towns and cities in the UK, employing over 600 software engineers and employees in our UK headquarters, working with more than 7,000 partner restaurants across the country and engaging with over 10,000 people as riders.

Secondly Uber, in its submission, stated that

Uber is a technology company with a simple mission: to make affordable transportation available everywhere. Uber launched in London in 2012, and today connects riders and drivers in more than 25 towns and cities across the UK. Over 40,000 drivers in the UK use the Uber app to earn money each month.

They both describe themselves as technology companies and not as a delivery or a taxi business. If this were really true then one might argue that there is some merit to the idea that the 10,000 riders delivering restaurant food and the 40,000 individuals working as taxi drivers are all independent entrepreneurs operating as self-employed business people. This is the essence of the gig economy. It refers to people who are viewed as working as independent businesses carrying out a series of jobs 'and using a digital platform operated by a large company to match them to customers'⁶. A report by the Institute for Fiscal Studies⁷ stated that there was no clear way to decide which jobs were part of the gig economy, 'but one of the characteristic features is the use of third-party digital platforms'. These are provided by companies that provide a web based platform which enables those selling their services to be linked with customers wishing to buy those services.

⁵ <http://www.parliament.uk/business/committees/committees-a-z/commons-select/business-energy-industrial-strategy/news-parliament-2015/the-future-world-of-work-and-rights-of-workers-launch-16-17/>.

⁶ Adam, Stuart. Miller, Helen and Pope, Thomas *Tax, legal form and the gig economy* Institute for Fiscal Studies (2017).

⁷ Ibid.

The wider context is described by Professor Orly Lobel when she says that we should examine it in the context of the World Wide Web's genealogy. She suggests that we are now in the third phase of the internet. The first phase was about enabling searching and accessing information (1.0); the second phase was about selling things (2.0) and now the third phase (3.0) includes the selling of 'labor, effort, skills and time'⁸. The development of this technology, which enables a gig economy, is also reliant upon a pool of workers willing to work under this regime. A further study of independent work for the McKinsey Global Institute⁹ identified three key features of this work. Firstly, a high degree of autonomy for workers in deciding their workload and work portfolio; secondly, payment by task, assignment or sales, meaning that they are not paid for time not spent working; and, thirdly, the short-term relationship between the worker and the customer. Thus we have a picture of a large group of independent workers benefitting from new technology supported by large corporations who provide the platforms on which the workers rely. There are, however, differing views of these developments. On the one hand there is technology which empowers people to sell their skills in an alternative way to just getting a 'permanent' job. Alternatively, 'others see it as using new technologies to sustain business models based on old-fashioned exploitative employment relationships, which minimise obligations to workers and drive down hourly pay'¹⁰.

Precarious work and vulnerability

Contingency working is not something new and the idea that 'gig' type work is a new phenomenon is just fanciful. It can probably be said that precarious forms of work have almost always been present in systems of wage employment (Rodgers, 1989)¹¹. Definitions offered concerning the scope of the work usually include many of those in precarious types of employment

⁸ Lobel, Orly, *The Gig Economy & The Future of Employment and Labor Law* (2016). *University of San Francisco Law Review*, *Forthcoming*; San Diego Legal Studies Paper No. 16-223. Available at SSRN: <https://ssrn.com/abstract=2848456>.

⁹ Manyika, James. Lund, Susan, Bughin, Jaques. Robinson, Kelsey. Mishke, Jan and Mahajan, Deepa. *Independent Work: Choice, Necessity, and the Gig Economy* McKinsey Global Institute (October 2016).

¹⁰ Written evidence from the Chartered Institute of Personnel and Development (CIPD) (WOW0098) to the House of Commons Business, Energy and Industrial Strategy Committee who carried out an enquiry into the future world of work', see n. 3.

¹¹ Rodgers G (1989) Precarious Work in Western Europe: The State of the Debate. In: Rodgers G and Rodgers J (eds.) *Precarious Jobs in Labour Market Regulation: The Growth of Atypical Employment in Western Europe*. Geneva: International Institute for Labour Studies; Free University of Brussels.

which has existed probably long before the invention of the standard full-time open ended contract of employment. What is new about the gig economy is the development of technology which enables companies to claim not to employ those that work for them. It creates a pseudo employment market where workers are said to be independent self-employed receiving work from and providing services via a digital platform created by the company.

The issues of concern with precarious working relate to those on low incomes or who are liable to exploitation. The characteristics of precarious working appear to be, firstly, instability, i.e. short term horizons or when the risk of job loss is high; secondly, insecurity, i.e. the lack of control (individually or collectively) over working conditions, wage, or pace of work; thirdly, lack of protection in employment and social security (stipulated either by law, collective organisation or custom and practice); and lastly, social or economic vulnerability which is associated with low income resulting in poverty and insecurity¹². There is an element of these characteristics in all freelance or 'gig' work, but it probably applies more to those that do low level work and those who cannot obtain any other sort of work, rather than those who choose this path to develop a professional practice.

The Trades Union Congress (TUC), in a 2016 Report titled *Living on the Edge*, focussed on an alternative view within the context of precarious working and insecure work. The report is concerned with the growth of insecure working, which includes the gig economy but its concern is with those who primarily are in this low level work. The TUC estimated that one in ten workers, or 3.2 million people, face insecurity at work, either because they are on a zero-hours contract, or a temporary contract that offers them little protection at work, or because they are engaged in low paid self-employment¹³. This last group is estimated to make up some 5% of all those in work. The Report also highlights a pay penalty for being in insecure work and particularly for the self-employed. They cited research by the Social Market Foundation¹⁴ which showed that 45 per cent of the self-employed, or 1.7 million people, are low paid, that is paid below the level of the government set National Living Wage.

¹² Rodgers, Gerry *Precarious jobs in labour market regulation: the growth of atypical employment in Western Europe* International Institute for Labour Studies (1989). See also Kalleberg, Arne L, *Measuring Precarious Work*; A Working Paper of the Einet Measurement Group (November 2014).

¹³ TUC *Living on the Edge: The rise of job insecurity in modern Britain* (December 2016).

¹⁴ Broughton, Nida and Richards, Ben (2016) *Tough Gig: low paid self-employment in the UK and London*, Social Market Foundation <http://www.smf.co.uk/wp-content/uploads/2016/03/SocialMarket-Foundation-Tough-Gig-Low-paid-self-employment-in-London-and-the-UK-FINALEmbargoed-0001-210316.pdf>.

2. The size of the gig economy

Estimates of the size of the gig economy are confusing and contradictory, partly because of disagreement over which jobs are relevant. Contingent working is not a recent phenomenon and has certainly been around long before the coming of the digital platform which is the basis of the 'Uber model' of carrying out business. The important characteristic of this model is, however, the carrying out of that business by large numbers of people who are treated as being self-employed. At the beginning of 2017 the UK Office for National Statistics estimated that there were some 4.8 million self-employed in the UK (this compares to 26.8 million employees). Of these some 3.4 million were working full-time and the rest were working part-time¹⁵. The total figure represented a 3.2% increase on the previous year, i.e. an increase of 148,000 in the self-employed in one year. Almost 9% of the self-employed worked for less than 16 hours per week (the great majority being female) and, interestingly, over 28% worked for more than 45 hours per week (35% of male self-employed and 15% of female self-employed). This compared to 19% of those in employment who worked for more than 45 hours per week.

The McKinsey Global Institute carried out a survey of 8000 respondents in 6 countries (the United States, the United Kingdom, Germany, Sweden, France and Spain) concerning independent work¹⁶. Their results estimate that some 20 to 30 per cent of the working age population in the US and the EU15 countries were engaged in some form of independent earning. This included some 10-15 per cent of the working age population that relied upon independent work for their primary income and another 10-15 per cent reliant upon it for supplemental income. There is an issue here about definitions of independent work, but it is clear that significant numbers of people can be classified as independent workers. The report also makes two further important points. Firstly, that independent work is not dominated by the young. Those aged under 25 years represent less than one quarter of independent workers. Secondly, independent work is not just about low income workers. Although they estimate that 40-55 per cent of low-income households engage in independent work, they make up less than 25 per cent of all independent earners (except in Spain). It is also, they point out, the preferred method of working for many professionals. This last point is important when considering the size of the gig economy, particularly as much of the focus has been on the lower end of the employment market. The CIPD,

¹⁵ Office for National Statistics *UK Labour Market March 2017*.

¹⁶ Manyika et al n 7.

in its analysis¹⁷, showed that over 70% of the increase in employment since 2010 had been in the top three more highly skilled occupational groups. What the CIPD research¹⁸ shows, however, is that the majority of those working in the gig economy are second jobbers. Only a quarter of their survey participants stated that gig economy type work was their main employment and about 50% had been involved for one year or less. Yet second jobbing as a feature of employment has not grown overall in recent years. As Adam et al (2017)¹⁹ point out, more or less the same proportion of employees had second jobs in 2015–16 (3.5%) as in 2007–08 (3.7%). They also point out of course that the size of the labour force has increased during this period so the actual numbers involved will have increased. There has also been a small growth in the proportion of individuals who work for their own business as a second job and that the proportion who work in a second job as an employee has fallen slightly in this period.

A different focus might be to concentrate on those who are self-employed but with no employees as it is some of this group upon whom the public and legal discussion has taken place. Interestingly a BIS survey found that when those without employees were asked what was the main reason for this, almost half said they had never thought about it or felt it wasn't relevant to them. The same analysis found that some 10% stated that they worked solely for a single client²⁰. The OECD²¹ has estimates for this group. It defines these individuals as people whose primary activity is self-employment and do not employ others. They also state that the incorporated self-employed are only partly or non-included in the counts of self-employed in some of the countries in its analysis). The OECD estimate was that 11.6% of all male workers in OECD countries fell into the category of the self-employed without employees. The figure for the UK was 14.2% of male workers; for the US it was 8.1% and the rest ranged from lows of 5% for Luxembourg and 5.5% for Japan to 26.7% for Greece. For female workers the OECD average was 7.9% with 8.2% in the UK and 5.7% in the US. Here the rest ranged from a low of 2.9% in Japan to 21.2% in Mexico. For Europe the EU estimates that some 10% of workers are in this category and has only increased by about 1% over the last decade²². This

¹⁷ See no. 8.

¹⁸ CIPD n 2.

¹⁹ Adams et al. n 4.

²⁰ Department for Business, Innovation and Skills *Understanding self-employment BIS Enterprise Analysis research report* (2015).

²¹ OECD (2017), Self-employed without employees (indicator). doi: 10.1787/5d5d0d63-en (Accessed on 21 March 2017).

²² DG for Internal Policies; n 1.

EU report describes the gig economy as that part which is online, i.e. the carrying out of individual tasks and commissions online.

3. Employment status

In *Aslam and Farrar v Uber B.V.*²³, at the Employment Tribunal, the claimants argued that the written terms between Uber and themselves should be read sceptically. They argued that the terms misrepresented the relationship and that in reality they worked for Uber and that they therefore fell within the definition found in ERA S230(3)(b) and were to be regarded as workers (para 83). Uber argued that this was not the case and that the terms reflected the reality of their relationship with the drivers. The fact that Uber makes and enforces rules about the way in which drivers may make use of the platform was ‘unremarkable and unexceptional’ (para 84). The Tribunal cited a US case²⁴ involving Uber which rejected the company’s claim that it was a technology company and not a transport one. The judgment stated (para 89) that ‘Uber does not simply sell software; it sells rides. Uber is no more a technology company than Yellow Cab is a technology company...’.

In a lengthy analysis the Employment Tribunal rejected all of Uber’s claims, stating that ‘it is plain to us that the agreement between the parties is to be located in the field of dependent work relationships’ (para 94). All the authorities relied upon by Uber were rejected. They argued that the contract for the provision of transport services was between the driver and the user and not between Uber and the driver. This extract from para 91 of the reasons shows this scepticism:

Uber’s case is that the driver enters into a binding agreement with a person whose identity he does not know (and will never know) and who does not know and will never know his identity, to undertake a journey to a destination not told to him until the journey begins, by a route prescribed by a stranger to the contract (UBV) from which he is not free to depart (at least not without risk), for a fee which (a) is set by the stranger, and (b) is not known by the passenger (who is told only the total to be paid); (c) is calculated by the stranger (as a percentage of the total sum) and (d) is paid to the stranger.

The Tribunal stated that the Respondent’s general case did not correspond with the practical reality (para 90). In its notice of appeal Uber disputed this and stated that there was ‘no proper lawful basis for such a wholesale rejection of the written contracts’ (para 11).

²³ We use the term Uber to apply to all the entities who were responding to the claim.

²⁴ *Douglas O’Connor v Uber Technologies Inc Case 13-cv-032460EMC* March 2015.

A similar Employment Tribunal claim is being made on behalf of drivers who work for Deliveroo. Leigh Day, the solicitors putting the claim together, state on their website²⁵ that:

Deliveroo riders are recruited by Deliveroo, a process which involves an interview, a trial shift and online tests, they are required to wear a Deliveroo-branded uniform and to use a Deliveroo branded box, they are given very specific instructions about how and where they work, they are subject to performance reviews and their terms and rate of pay are determined by Deliveroo.

They will be arguing that the riders are not self-employed and ought to be classified as workers and thus entitled to some employment protection measures.

If we confine our definition of the gig economy to those sectors using new technology to provide a digital platform for putting together service providers and service recipients, then we can focus on a narrower group than many other definitions provide and a group of workers who are in a new and potentially unique situation. This is a type of working relationship which enables people to enter and leave the employment market with apparent relative ease and, in particular, can facilitate part time and casual working possibly as second jobs or a way of supplementing income. These workers are usually treated as self-employed and, for some, this will be the preferred form of employment status when doing this work. The arguments about whether such workers should be classified as employees, workers or self-employed obscure, perhaps, the fact that there is a great variety in the way that people participate in this form of work. The CIPD (2017) survey²⁶ showed that almost a third of their respondents were working in the gig economy to boost their overall income and quarter were working to achieve a short-term goal, such as buying a car or going on holiday. In other words, it is not their primary employment for income purposes. It is also relevant that younger workers are more likely to cite these reasons than older ones (35% of under 18-29s compared to 16% of 30-59 year olds). It perhaps is too simplistic to say that one employment status should apply to all individuals in this economy and many may be happy to continue on a self-employed status. The same CIPD survey report also cited a US survey of 3000 American workers by Penn Schoen Berland published in 2016 which showed a split between those who preferred the security and

²⁵ <https://www.leighday.co.uk/News/News-2017/March-2017/Deliveroo-faces-legal-action-over-holiday-pay,-min.>

²⁶ CIPD n 2.

benefits of working for a traditional company or the independence and flexibility that came from the on-demand approach²⁷.

Uber, in their written evidence to the House of Commons Committee²⁸ argued in favour of this flexibility:

Over 40,000 drivers in the UK use the Uber app to earn money each month [...] This preference for independence is also revealed in how drivers use the app, which allows drivers to log in or out when and where they choose. Just 21% of drivers drive set themselves a fixed amount of hours, while 34% decide how many hours to drive depending on what else they have going on. Another 32% of these drivers set an earning goal for a given day, week or month and drive until they hit that goal. And 12% decide to drive on the spur of the moment, turning the app on whenever they choose. Internal Uber data shows that 23% of drivers in the UK are logged into the app for 10 hours or less each week, and 25% are logged in for 40 hours or more each week.

Deliveroo, in their submission, argued the same case:

The growth of a new on-demand economy in the UK has created new on-demand work. The flexible arrangements that Deliveroo offers appeal to individuals looking to work in a way which fits around their other commitments. Riders at Deliveroo work on average around 15 hours per week, and the vast majority are aged under 25. Many of them are students looking to earn money in a way which fits around their studies, others work with Deliveroo to supplement their income or alongside other personal commitments.

Perhaps supporting the arguments of gig economy employers, the self-employed are now more likely than employees to work part-time (31% of the self-employed compared with 26% of employees worked part-time)²⁹.

In 2015 Uber, in the US, partnered research on how working on the platform impacted on drivers. This included a survey of several hundred drivers. Professor Alan Krueger, who carried out the research, concluded that most Uber drivers had joined the platform not because of the absence of other job opportunities, but because of the flexibility and rewards that the platform offered³⁰. The majority of Uber drivers were employed, either on a full time or

²⁷ The on-Demand Economy Survey: <http://www.burson-marsteller.com/what-we-do/our-thinking/on-demand/ondemand/>.

²⁸ No. 3

²⁹ Adam Stuart; n. 4.

³⁰ See Beat The Press, *Ubernomics*, CTR. FOR ECON. & PUB. POL'Y (Jan. 23, 2015), <http://www.cepr.net/index.php/blogs/beat-the-press/ubernomics> which criticises some of

a part-time basis, elsewhere. Flexible working appealed more than the standard forms of employment.

The arguments in the cases so far reported are about whether these workers should be classified as self-employed or fall into the category of ‘workers’. This latter category recognises that there is an employment relationship that falls between that of ‘employee’ and that of someone who is genuinely self-employed. This is provided for in section 230(3)(b) Employment Rights Act 1996 which states that a worker can be someone working under a contract ‘whereby the individual undertakes to do or perform personally any work or services for another party to the contract whose status is not by virtue of the contract that of a client or customer of any profession or business undertaking carried on by the individual’. The only way that an individual can establish that they fall into the category of worker or employee is to challenge their current classification before the court. The court will consider the reality of the contractual relationship between the parties, e.g. the Employment Tribunal³¹, when considering the case against Uber accused the firm of ‘resorting in its documentation to fictions, twisted language and even brand new terminology’ and even quoted Hamlet to suggest that the group’s UK boss was protesting too much about its position. The judges stated further that ‘(I)the notion that Uber in London is a mosaic of 30,000 small businesses linked by a common ‘platform’ is to our minds faintly ridiculous’.

4. Conclusion

Establishing the correct employment status is important as differing employment protections apply to each category. Workers, who are not employees, have the right to: the National Minimum Wage (or National Living Wage); protection against unlawful deductions from wages; paid annual leave; the statutory minimum length of rest break; protection from accidents at work; not work more than 48 hours on average per week; protection against unlawful discrimination; some protections for pregnant workers; protection for whistleblowing; not be discriminated against if working part-time; join a trade union and be accompanied in grievances and disciplinary actions³². All these rights plus other are enjoyed by ‘employees’. The self-employed, however, just benefit from some provisions on health and safety and protection from

Professor Kreg’s conclusions; cited in Lobel, Orly, *The Gig Economy & The Future of Employment and Labor Law* (2016). *University of San Francisco Law Review*.

³¹ Case numbers 2202551/2015 *Y. Aslam and J. Farrar v Uber B.V.*

³² TUC - <https://www.tuc.org.uk/employment-status-and-rights>.

discrimination. It is the search for these additional protections which lead to challenges of false self-employment.

This issue is not a new one and is not a result of the gig economy, although this puts a new argument when the companies claim not to be employers but technology companies. The issue of misclassification of employment status has been around a long time and the gig economy employers are just a further complication in a process which lacks precise definitions and requires fine judgments. Indeed it can also be said that ‘non-standard employment is an evolving concept’ and that this ‘may reflect attempts by employers to structure working relationships differently to avoid regulation’ or it ‘may reflect generational aspirations and requirements to life and work or both’³³.

³³ Written evidence from the Employment Lawyers Association (WOW76) to the House of Commons Business, Energy and Industrial Strategy Committee who carried out an enquiry into the future world of work’, see n. 3.

Research Work in the Industry 4.0 Era: The Italian Case

Michele Tiraboschi¹

Abstract Purpose. This paper wants to contribute to providing a legal framework for research work carried out in companies and the private sector.

Design/methodology/approach. After providing the theoretical framework, an analysis is supplied of all measures –including financial ones – related to the promotion of research work in companies and the private sector, more generally.

Findings. The idea of research in Italy is still closely associated with academia and this might hamper the establishment of company-based researchers and cooperation between the public and the private sector, especially without the setting up of a legal and institutional framework that puts private research work on an equal footing with public research.

Research limitations/implications. This research calls for the need to bring together academia and industry by putting in place a set of rules regulating research work at companies and in the private sector, more broadly, according to the European Charter for Researchers.

Originality/value. For the first time in Italy, non-academic research work is analyzed in a systematic framework covering legislation and rules laid down by collective bargaining.

Paper type. Theoretical and institutional research aimed to change and modernize the legal framework in Italy.

Keywords: *Research work, Industry 4.0, Labour Law, Italy.*

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1. Framing the Issue²

Though far later than in other countries, Italy's lawmakers have eventually addressed research carried out in companies, and in the private sector, more broadly. Yet this has been mostly done through narrow and piecemeal rules – somehow drawing on the well-established path leading to the *norma-incentivo* (see par. 3) – which have frequently paved the way for legislation on labour flexibility. An example of this has been the troubled process concerning the legal justification for fixed-term employment contracts and derogations to limitations on the duration of one's work performance set by legislation and collective bargaining (see par. 3.1.).

The same narrow-minded approach has also marked the growing interest towards more innovative forms of doctoral programmes which, as shown by international experience, are focused on closer collaboration with employers and on the new skills needed in the labour market.

In Italy's case, the goal of Italian lawmakers has been that of preserving the wealth of knowledge gained by PhD holders, often by means of generous incentives afforded to employers. This is usually done against the background

² This research is part of a larger international project concerning “innovative doctoral degrees” and their relative career prospects, funded by the European Commission (Grant Agreement n. 2014-1-UK01-KA203-001629) and coordinated by Middlesex University in collaboration with ADAPT, Maastricht School of Management, Trinity College of Dublin, EURODOC and University of Central Florida. A first part of this research has been published in a Special Section of the *International Journal of Technology and Globalisation* of the Belfer Center for Science and International Affairs, Harvard University, with the title “The Evolution of Doctoral Education Towards Industry and the Professions”, for which I served as a Guest Editor. A second part of this research concerning the promotion of research in the private sector was presented in Brussels on 19 January 2016 during a closed-door seminar on Inter-Sectorial Mobility and Industrial Talents promoted by the Directorate B – European Research Area of the European Commission which saw the participation of the most important European stakeholders on research, among which was ADAPT. This seminar provided the occasion to establish an international network coordinated by ADAPT in collaboration with the University of Gent and the Vienna University of Technology which led to a feasibility study concerning a strategy for researchers' inter-sectorial mobility within the European Space for Research, which is now under evaluation by the European Commission. Finally, the outcomes of the present research were also used as a starting point for two draft bills submitted to the Italian Parliament in the XVII legislature. One was Draft Bill no. 3654/2016 tabled by a number of members of the Parliament (among whom were Vignali and Palmieti), aimed at amending article 2095 of the Italian Civil Code to introduce the legal category of the researcher and at regulating research in the private sector. The other was Draft Bill no. 2229/2016 submitted by Senator Sacconi and D'ascola, among others, concerning to agile working in the fourth industrial revolution. To facilitate consultation and comparison, most documents and essays referred to in this paper can be accessed open access in *Osservatorio ADAPT Il lavoro di ricerca nel privato* (<http://moodle.adaptland.it>).

of their increasing difficulty to pursue the academic career for which they have been singled out and educated³, even more so because holding a PhD does not seem to appeal to industry⁴.

Adding to this is the lack of a consistent approach to examine research in the private sector in the light of what Karl Polanyi has termed the new “great transformation of work”, which in turn calls for the need to thoroughly review concepts like “business”, “work” and “employment contract”, also from a legal and regulatory standpoint.

Industry 4.0, 3D printing, robotics and Artificial Intelligence (AI), big data, biotechnology, nanotechnology and genetics are triggering a new industrial revolution in Italy, which is fuelled by research and continuous innovation of processes and products.

Standardised and routine tasks that characterised Taylorism and Fordism manufacturing and work organisation are now increasingly mechanised and less relevant⁵, as is large-scale and series production that marked industry in the twentieth century. Therefore, priority is given to skills that are necessary to operate short- and very short-cycle manufacturing in need of continuous re-planning and reviewing. The will to attend to this “great transformation” is the actual reason behind employers’ growing attention towards dual training and alternation between work and study⁶, that can serve purposes other than helping young people access employment⁷. The same can be said of the many,

³ Relevant literature refers to this as “over-education” (e.g. G.L. GAETA, G.L. LAVADERA, F. PASTORE, *Much Ado About Nothing? The Wage Effect of Holding a Ph.D. Degree but Not a Ph.D. Job Position*, IZA Discussion Paper, 2016, n. 10051), though the actual problem seems to be the mismatch between PhD holders’ traditional education and the needs of the labour market as far as research is concerned outside academia.

⁴ This problem is also seen elsewhere, though in Italy it seems to be a more serious one. Cf. H. DE GRANDE, K. DE BOYSER, K. VANDEVELDE, R. VAN ROSSEM, *From Academia to Industry: Are Doctorate Holders Ready? Journal of the Knowledge Economy*, 2014, vol. 5, n. 3, 538-561, and EXPERT GROUP ON THE RESEARCH PROFESSION, *Excellence, Equality and Entrepreneurialism. Building Sustainable Research Careers in the European Research Area*, European Commission, 2012, esp. p. 28, where it is argued that: «many researchers are trained in a traditional academic environment, which does not equip them for the needs of the modern knowledge economy where connections with society’s needs and the private sector are increasingly important».

⁵ Cf. A. Corlett, *Robot wars. Automation and the labour market*, Resolution Foundation, 2016.

⁶ Cf. E. MASSAGLI, *Alternanza formativa e apprendistato in Italia e in Europa*, Studium, 2016, who discusses the school-to-work alternation system not only as a tool to promote young people’s access to employment but also as a learning method facilitating people’s employability in the new labour market.

⁷ I discussed this aspect at length in M. TIRABOSCHI, *Productive Employment and the Evolution of Training Contracts in Italy*, *IJCLLR*, 2006, vol. 22, n. 4, 635-649, and in I. SENATORI, M. TIRABOSCHI, *La sfida della occupazione giovanile nel mercato globale tra produttività del lavoro e investimento in capitale umano*, in *Diritto delle Relazioni Industriali*, 2008, n. 3, 648-677.

albeit misfiring, attempts to promote advanced-level apprenticeships as a means to favour young people's involvement in company-based research projects and activities (see par. 3.2). This way, apprenticeship schemes are no longer viewed as employment contracts featuring on-the-job training⁸, but as arrangements helping individuals during their early stages of learning⁹. Specifically, they are taught to deal with real tasks, with this approach that is more suitable to provide them with the skills required by the labour market, among others the ability to identify, to examine, and to solve complex problems and realities¹⁰.

Somewhat linked to Industry 4.0¹¹ is the on-demand economy¹², which creates new markets and acts on producers, investors, workers and consumers' attitudes and needs, therefore affecting the spatial and temporal dimension of the production of goods and the provision of services and the legal regulation and framework of employment relationships¹³. This state of affairs has led

⁸ This is based on misleading assumptions relative to the opportunity provided by apprenticeship contracts to undergo training. For a more detailed analysis and relevant literature, see M. TIRABOSCHI, *Definizione e tipologie*, in M. TIRABOSCHI (a cura di), *Il Testo Unico dell'apprendistato e le nuove regole sui tirocini. Commentario al decreto legislativo 14 settembre 2011, n. 167, e all'articolo 11 del decreto legge 13 agosto 2011, n. 138, convertito con modifiche nella legge 14 settembre 2011, n. 148*, Giuffrè, 2011, spec. 183-185.

⁹ The topic of new educational and training models resulting from ongoing economic and social changes has been nicely dealt with in D. BARRICELLI (ed.), *Spazi di apprendimento emergenti. Il divenire formativo nei contesti di coworking, FabLab e università*, Isfol Research Paper, 2016, n. 29.

¹⁰ See L. ORSENIGO, *Politiche per la ricerca e l'innovazione*, in AA.VV. (eds.), *Investimenti, innovazione e città. Una nuova politica industriale per la crescita*, Egea, 2015, esp. p. 219. More generally, see also the WORLD ECONOMIC FORUM, *The Future of Jobs. Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution*, 2016. On this topic, mention should also be made of

EuroDualLE – European cooperative framework for Dual Learning – an Erasmus+ Project on advanced-level apprenticeships funded by the European Commission and carried out by the Centre for International and Comparative Studies of the University of Modena and Reggio Emilia (DEAL) in collaboration with ADAPT, the Italian-German Chamber of Commerce, the Otto-von-Guericke Universität Magdeburg, the University of Southampton, the Fondazione Politecnico di Milano, the UC Leuven, Cofora International Projects, the European Foundation for Education (EFE), the Universidad de Sevilla, the University of Padua, and Università degli Studi Roma Tre.

¹¹ The links between Industry 4.0 and the sharing economy have been pointed out by F. SEGHEZZI, *Una risposta di mercato ai rivolgimenti originati dalla sharing economy*, *Il Foglio*, 10 March 2016, 2. On this point, see the final document drafted by the X Commission of the Chamber of Deputies, *Indagine conoscitiva su «Industria 4.0»: quale modello applicare al tessuto industriale italiano. Strumenti per favorire la digitalizzazione delle filiere industriali nazionali*, Roma, 30 June 2016, esp. p. 32-33.

¹² Cf. W.P. DE GROEN, I. MASELLI, *The Impact of the Collaborative Economy on the Labour Market*, European Union, 2016.

¹³ Cf. The Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - a *European*

many to move on from the traditional debate on stable and atypical work and to reflect on the gradual marginalisation of working arrangements featuring salaried employment, which prompted the rise of crowd-based capitalism that is mostly managed through digital platforms. Notwithstanding challenges stemming from assessing and evaluating each contributor's output¹⁴, these forms of crowd-sourced capitalism are well researched and developed¹⁵. Many express some reservations about these futuristic views regarding the changing world of work. Specifically, doubts are voiced as regards those supporting forms of circular economics – through which new forms of employee representation¹⁶ can also be established – who argue that “physical factories will become less and less relevant, but cities with a large percentage of interconnected, highly-educated workers will become the new factories”¹⁷. In a similar vein, difficulties arise at the time of providing legal definitions for new working arrangements because of some resistance to moving on from legal subordination¹⁸. This is so despite widespread automated and on-demand manufacturing that makes salaried and permanent employment¹⁹ no longer

agenda for the collaborative economy, 2 June 2016 COM(2016)356 final, that has been examined by E. DAGNINO, *Sharing economy e lavoro: cosa dice l'Europa?*, in *Nòva*, blog ADAPT *La grande trasformazione del lavoro*, 4 June 2016.

¹⁴ An overall analysis of this issue is provided in E. DAGNINO, *Uber law: prospettive giuslavoristiche sulla sharing/on-demand economy*, in *Diritto delle Relazioni Industriali*, 2016, n. 1, 137-163. In relation to the proposals put forward by Italian lawmakers to regulate the sharing economy, see E. DAGNINO, *Proposta di legge sulla sharing economy: il grande assente è il “lavoratore”*, *Nòva*, blog ADAPT *La grande trasformazione del lavoro*, 4 April 2016.

¹⁵ See, among others, A. SUNDARARAJAN, *The Sharing Economy. The End of Employment and the Rise of Crowd-Based Capitalism*, MIT Press, 2016, esp. cap. 7 e 8.

¹⁶ For a perspective that goes beyond that of employment studies but is a key issue in future industrial relations, cf. G. SATERIALE, *Come il welfare crea lavoro. Guida per contrattare nel territorio*, LiberEtà, 2016, who also deals with geography and cities as new areas for trade unions. See also R. SANNA, G. SATERIALE, *Contrattazione territoriale per creare occupazione, innovazione e sviluppo locale*, in AA.VV. (eds.), *op. cit.*, p. 263-268.

¹⁷ This is the point of view of E. MORETTI, *La nuova geografia del lavoro*, Mondadori, 2012, p. 215. A similar approach is provided by K. SCHWAB, *op. cit.*, p. 74 and ff.

¹⁸ An example of this is provided by Italy's Jobs Act that gives employers full powers (in terms of recruitments, dismissals, changes to tasks, employee monitoring and sanctions), yet making reference to full-time open-ended salaried employment as “the most common type of employment relationship” (article 1 of Legislative Decree no. 81/2015). A criticism to this approach, which fails to consider the changes to work prompted by technology, demography and the environment is offered in F. SEGHEZZI, M. TIRABOSCHI, *Al Jobs Act italiano mancano l'anima e la visione di un lavoro e una società che cambia*, in F. SEGHEZZI, F. NESPOLI, M. TIRABOSCHI (eds.), *Il Jobs Act dal progetto alla attuazione. Modernizzazione o ritorno a un passato che non c'è più?*, ADAPT University Press, 2015, p. 11 and ff.

¹⁹ This point is highlighted by K. SCHWAB, *op. cit.*, p. 47-49 and 71. See also A. SUNDARARAJAN, *op. cit.*, esp. p. 159-176.

relevant. The same holds for those professionals with key roles in the past, e.g. middle managers and executives²⁰, that served as a link between decision-makers in the company and the other workers.

Though many authoritative sources speculate that technological changes challenging the current classification of working arrangements, also from a legal standpoint, will take place within five years,²¹ it is difficult to predict what the future of work holds and the possible organisational models that will apply. On reflection, in considering the foregoing, the arguments made by Marco Biagi more than 15 years ago are even more compelling. According to Biagi “labour terminology itself – e.g. posts – is outdated. Now and in the future, workers will not only be parties to the employment relationship but collaborators operating within a ‘working cycle’. Be it a project, a mission, an assignment, a production phase or its duration, one’s career path is increasingly made up of stages where one moves between salaried and self-employment and that at times can be interspersed by training and re-training courses”²². While appealing to employers willing to carry out research in the private sector (see par. 3.1), Biagi Law did not produce the expected results in relation to project work²³, even though this form of employment is compatible with the features of research. This is so because research “is an extremely dynamic activity that cannot depend only and always on the same people, but needs different skills to carry out specific projects”²⁴.

No one can deny the evolution of businesses – not only research institutions – that undergo major changes to their nature and structure. They are moving from being top-down economic organisations managed through “command

²⁰ On the obsolescence of managerial roles within the Industry 4.0 model, cf. AA.VV., *Man and Machine in Industry 4.0. How Will Technology Transform the Industrial Workforce Through 2025?*, *beg.perspectives*, 28 September 2015.

²¹ Cf. WORLD ECONOMIC FORUM, *op. cit.*, 2016, and the ILO *Technology at Work* portal (technologyatwork.ilo.org).

²² See, M. BIAGI, *Competitività e risorse umane: modernizzare la regolazione dei rapporti di lavoro*, in L. MONTUSCHI, M. TIRABOSCHI, T. TREU (eds.), *Marco Biagi. Un giurista progettuale. Scritti scelti*, Giuffrè, 2003, 151.

²³ An assessment of project work and of how its implementation has somehow moved away from the original intention provided in relevant legislation is provided in A. PERULLI, *Il lavoro autonomo tradito e il perdurante equivoco del “lavoro a progetto”*, in *Diritto delle Relazioni Industriali*, 2013, n. 1, 1-33, and A. PERULLI, *Il lavoro a progetto tra problema e sistema*, in *LD*, 2004, n. 1, 87-116. An interesting empirical analysis is provided by S. BERTOLINI, *Flessibilmente giovani. Percorsi lavorativi e transizione alla vita adulta nel nuovo mercato del lavoro*, Il Mulino, 2012, esp. p. 48-88.

²⁴ See GARATTINI, *Ricerca, le assunzioni restano un miraggio*, in *Sanità24 – Il Sole 24 Ore*, 3 June 2015.

and control” models²⁵ and focused on the production and exchange of goods and services²⁶ to being full-fledged cooperation platforms giving rise to networks establishing partnerships and innovation districts which are difficult to classify from a legal point of view²⁷. With production involving hybrid professionals, whose work is a halfway house between researching and managing changes in organizational and production processes, work itself is performed as a sort of circular process involving training and research aimed at “learning to learn”²⁸ according to a sequence of productive tasks based on studying, learning, innovation, planning and developing²⁹.

Research is key to the transformation of the way business is performed because it is concerned with what has been termed “intermediate labour markets”³⁰ in international literature. In other words, research has to do with international hubs in those productive processes built on the open and circular interconnection of intelligent systems.³¹ These systems are such not because of the massive use of highly-developed technologies, but because of the involvement of people and modern researchers that create and implement them, fuelling ongoing development which in turn adds significant value.

The above is evident in those areas that are home to so-called “brain hubs” – to use the fortunate and catchy terminology employed by Enrico Moretti in his book on the geography of jobs³². Brain hubs can be seen as an evolution of industrial districts. For this reason, they have also been dubbed “knowledge

²⁵ See Article 2086 of the Italian Civil Code (“management and hierarchy in the enterprise”): “the employer is the head of the enterprise and his collaborators hierarchically depend on him”.

²⁶ See article 2082 of the Italian Civil Code (“the Entrepreneur”): “an entrepreneur is anyone who performs an organised economic activity professionally for the purposes of producing or exchanging goods or services”.

²⁷ See R.J. GILSON, C.F. SABEL, R.E. SCOTT, *Contracting for Innovation: Vertical Disintegration and Interfirm Collaboration*, in *Columbia Law Review*, 2009, vol. 109, n. 3, 431-502.

²⁸ See J.D. NOVAK, D.B. GOWIN, *Learning How to Learn*, Cambridge University Press, 1984. See also S. HEMLIN, C.M. ALLWOOD, B.R. MARTIN (eds.), *op. cit.*

²⁹ Pedagogical literature refers to it as “learnfare” in relation to lifelong learning. On this perspective, see U. MARGIOTTA, *Dal welfare al learnfare: verso un nuovo contratto sociale*, in G. ALESSANDRINI (ed.), *La formazione al centro dello sviluppo umano. Crescita, lavoro, innovazione*, Giuffrè, 2012, esp. p. 48.

³⁰ On this point, see C. LANCIANO-MORANDAT, H. NOHARA, *The Labour Market for the Young Scientists*, in E. LORENZ, B-A. LUNDVALL (eds.), *How Europe’s Economies Learn. Coordinating Competing Models*, Oxford University Press, 2006, p. 156-189.

³¹ See the study *Indagine conoscitiva su «Industria 4.0»: quale modello applicare al tessuto industriale italiano. Strumenti per favorire la digitalizzazione delle filiere industriali nazionali* already referred to, esp. p. 31, where an analysis is provided of the transition from a linear economy to a circular economy in which products and processes are monitored and developed through their entire lifecycle.

³² Cf. E. MORETTI, *op. cit.*, p. 85 and ff.

districts”, or “local innovation platforms” by Bellandi³³. The latter definition can be explained by the fact that innovation is a local process triggered by “a relation and interaction system favoured by proximity”³⁴ – also in terms of culture and language – and by critical thinking.

This is the “agglomeration” of ideas, projects, resources and qualified staff which is being increasingly discussed³⁵ by economists and that – beyond a certain threshold – helps to boost innovation, productivity and growth³⁶ in new markets in times of globalisation. The sharing economy itself can be viewed as an exemplar of proximity relations and agglomeration³⁷.

Besides the demise of the idea of national sovereignty underlying the notion of “Nation-State”³⁸, the geography of work and that of the economy are also undergoing major changes. Rather than the rigid political and administrative boundaries that have been delineated by traditional cartography, this new geography revolves around polycentric dimensions where cities³⁹ serve as

³³ Cf. M. BELLANDI, *Piattaforme territoriali per l'innovazione, fra città e distretti industriali*, in AA.VV. (eds.), *op. cit.*, 161-166, and A. GERVASONI, *Infrastrutture, capitali, intelligenze, le città come hub di sviluppo*, p. 345-348.

³⁴ See G. GAROFOLI, *Le interrelazioni tra ricerca e industria nei sistemi innovativi locali: i fattori critici di successo*, proceedings from the Conferència Econòmica de la Mediterrània Nord-Occidental, *La Cooperació Territorial a la Mediterrània Occidental*, Barcelona, 6-7 June 2011, p. 2. With reference to the regional case, see F. AIELLO, *L'occupazione di ricercatori, una sfida per le imprese calabresi*, in *OpenCalabria*, 26 August 2015.

³⁵ See the detailed report by the WORLD BANK, *World Development Report 2009. Reshaping Economic Geography*, 2009, esp. p. 126 and ff. For a detailed examination of research on the relationship between agglomeration and innovation and how this might affect growth and productivity, see G. CARLINO, W.R. KERR, *Agglomeration and Innovation*, Harvard Business School Working Paper, 2014, n. 15-007; S.S. ROSENTHAL, W.C. STRANGE, *The Determinants of Agglomeration*, in *Journal of Urban Economics*, 2001, vol. 50, n. 2, 191-229; B.T. MCCANN, T.B. FOLTA, *Location Matters: Where We Have Been and Where We Might Go in Agglomeration Research*, in *Journal of Management*, 2008, vol. 34, n. 3, 532-565.

³⁶ Cf. OECD *Business and Finance Outlook 2016*, 2016, p. 78 ff. On the close links between research, innovation and productivity see the report AA.VV., *L'innovazione come chiave per rendere l'Italia più competitiva*, Aspen Institute Italia, 2012. On the relationship between Industry 4.0, globalisation and local dynamics in relation to the German case, see ACATECH (ed.), *Industry 4.0, Urban Development and German International Development Cooperation*, Acatech Position Paper, 2015.

³⁷ On this point, see the enlightening research by N.M. DAVIDSON, J.J. INFRANCA, *The Sharing Economy as an Urban Phenomenon*, in *Yale Law & Policy Review*, 2016, vol. 34, n. 2, 215-279.

³⁸ Cf., among others, N. IRTI, *Norma e luoghi. Problemi di geo-diritto*, Laterza, 2006. For a labour law perspective, see T. TREU, *L'internazionalizzazione dei mercati: problemi di diritto del lavoro e metodo comparato*, in P. CENDON (ed.), *Studi in onore di Rodolfo Sacco. La comparazione giuridica alle soglie del 3° millennio*, Giuffrè, 1994, vol. I, 1117 and ff.

³⁹ This issue is so widespread that many talk of interconnected cities as “New nations”. Cf. P. KHANNA, *Connectography. Mapping the Future of the Global Civilization*, Random House, 2016. In relation to Italy's geography of work and economy, see R.M. LOCKE, *Remaking the Italian*

aggregating elements of a network in which “distance is no longer referred to in terms of metrical parameters but considering the intensity of people’s relations”⁴⁰.

Therefore, while industrial relations in the past featured the construction of streets, bridges, railways, harbours and airports, the 4th Industrial Revolution is marked by the fact that research and planning activities, be they private or public ones, are key elements of the intangible infrastructure known as “knowledge infrastructure”, which concerns broadband connection and new generation technologies and should set the basis for a modern economy⁴¹.

If research work is considered against this backdrop, the present analysis should go beyond contractual and non-contractual⁴² arrangements promoting collaboration between the private and the public sector, either in general⁴³ or regarding the legal acknowledgement of researchers operating in the private sector and hired through industrial doctorates or by means of partnerships with employers⁴⁴. For this reason, this paper wants to contribute to setting a legal framework for research work carried out in companies and the private sector, particularly because the idea of research in Italy is still closely associated with academia and this might hamper the establishment of company-based researchers and cooperation between the public and the private sector,

Economy, Cornell University Press, 1997, where a classification is provided of how Italian capitalism develops locally.

⁴⁰ See E. CASTI, *Rappresentare la spazialità della mondializzazione*, in *Nuova Secondaria*, 2015, n. 7, p. 39. See also the *World Development Report 2009. Reshaping Economic Geography* already referred to, esp. 48, where the notion of “relational intensity” is defined in terms of “density” to explain the concentration of economic assets and resources.

⁴¹ Some insights into this are offered by C. MANCINI, *Il settore delle infrastrutture negli Stati Uniti: creazione di lavoro, competenze, formazione*, in *Nova*, blog ADAPT *La grande trasformazione del lavoro*, 30 May 2016. On the relationship between research and development activities and intangible infrastructure in the new economy, see T. SOUGIANNIS, *R&D and Intangibles*, Wiley Encyclopedia of Management, 2015.

⁴² On this point, see the detailed analysis by E.M. IMPOCO, *Il contratto di ricerca tra Ente pubblico e impresa*, Università degli Studi di Roma Tor Vergata, Dottorato in Autonomia individuale e autonomia collettiva, XXIV ciclo, a.a. 2011/2012.

⁴³ This topic is currently investigated by the Foundation set up by the Conference of Italian University Rectors (CRUI) that has established a specific observatory to promote dialogue and cooperation between universities and businesses. See FONDAZIONE CRUI, *Report Osservatorio Università-Imprese 2015*, 2015. See also G. ABRAMO, C.A. D’ANGELO, F. DI COSTA, *University-industry research collaboration: a model to assess university capability*, in *Higher Education*, 2011, vol. 62, n. 2, 163-181, and, more recently, the proposal contained in AA.VV., *Verso un ecosistema virtuoso “industria-università-ricerca”*, Aspen Institute Italia, 2015.

⁴⁴ I have devoted a specific study to this professional figure and the difficulty to be hired by companies due to legal and cultural limitations. See M. TIRABOSCHI, *Dottorati industriali, apprendistato per la ricerca, formazione in ambiente di lavoro. Il caso italiano nel contesto internazionale e comparato*, cit.

especially without the setting up of a legal and institutional framework that puts private research on an equal footing with public research (see par. 5). After all, assessing the efficacy of the generous public funds granted to Italian employers (see par. 3) to foster innovation becomes difficult if no eligibility criteria⁴⁵ are in place and if the national industrial relations system (see p. 4) fails to provide the tools to acknowledge the status of private-sector research in an open and transparent market, as hoped for in the European Charter of Researcher and in Code of Conduct for the Recruitment of Researchers (see par. 2), which are still poorly implemented in Italy.

2. Research carried out in the Private Sector: Relevance, Growth and Development Prospects. The Italian Case examined from an International and Comparative Perspective

R&D can be defined⁴⁶ as “the set of creative works performed systematically to increase one’s knowledge and to employ this knowledge for new applications”⁴⁷. In general terms, R&D consists of three main areas “a) basic research, that is experimental or theoretical research carried out to acquire knowledge on observable facts and phenomena but not intended to be used for a specific purpose; b) applied research, namely original work performed to gain knowledge to be used for practical or specific purposes; c) experimental development, that is systematic work based on existing knowledge acquired through research and practical experience that is performed to complement, develop or improve materials, products, production processes, systems and services”⁴⁸.

⁴⁵ This point is highlighted in MINISTERO DELLO SVILUPPO ECONOMICO, *Migliorare le politiche di Ricerca e Innovazione per le Regioni. Contenuti e processi di policy*, 2009, p. 107, where it is specified that eligibility criteria regarding funding “have the purposes of allocating incentives according to a results-based approach”.

⁴⁶ At the international level, the starting point to measure and define research and development activities was June 1963 when experts convened in Frascati in a meeting promoted by the OECD. Cf. OECD, *Proposed Standard Practice for Surveys of Research and Development: The Measurement of Scientific and Technical Activities*, 1963. See also OECD, *Frascati Manual 2015. Guidelines for Collecting and Reporting Data on Research and Experimental Development*, 2015. Finally, see the interim report related to Article 8 of the Council Decision (94/78/CE, Euratom) establishing a multiannual programme for the development of Community statistics on research, development and innovation (presented by the Commission). COM (96) 42 final, 14 February 1996.

⁴⁷ OECD, *Frascati Manual. Proposed Standard Practice for Surveys on Research and Experimental Development*, 2002, p. 30.

⁴⁸ *Ibidem*. In literature, see F. MERLONI, *Ricerca scientifica (organizzazione a attività)*, in *Enc. dir.*, 1989, XL.

If this definition is taken, R&D is identified taking account of its “purpose” – though varied in nature⁴⁹ – namely the search for new solutions to complex problems, and not by considering whether the institution that engages in or funds research is a private or a public sector one. This aspect alone suffices to call into question the misleading assumption underlying the public monopoly of research and to give private-sector research the same status as that conducted in the public sector, particularly because the fulfilment of objectives pursued by research should be more relevant than the location where research takes place or the formal qualifications of those carrying out research activities. Besides this, the definition referred to above reasserts the central role of Research and Development in relation to doing business and generating profit through the use of new technologies and systems of circular economies that promote sharing and that call into question the traditional boundaries between investors, producers and consumers (see par. 1).

At the start of the new millennium, thus earlier than elsewhere⁵⁰, the European Commission had already regarded research as “one of the most promising areas for future work”⁵¹, whether carried out in the public or the private sector. Suffice to say that R&D activities generate between 20% and 25% of economic growth⁵² with this sector that will provide the highest number of job opportunities, either directly or indirectly, if one also includes related services⁵³. This aspect is supported by the fact those areas where companies allocate significant investments in research usually report the lowest unemployment levels, the highest degree of productivity and resilience in times of job and

⁴⁹ A detailed evaluation of the boundaries between research and relating activities is offered in OECD, *Frascati Manual. Proposed Standard Practice for Surveys on Research and Experimental Development*, cit., esp. 34-45. In literature, see F. MERLONI, *Ricerca scientifica*, in EGT, 1991, XXVII, e G. SIRILLI (ed.), *La produzione e la diffusione della conoscenza. Ricerca, innovazione e risorse umane*, Fondazione CRUI, 2010, p. 191-193.

⁵⁰ See the study by the Department of Innovation, Industry, Science and Research of the Australia Government, *Research Skills for an Innovative Future. A Research Workforce Strategy to Cover the Decade to 2020 and Beyond*, Commonwealth of Australia, 2011, according to which “Success in the 21st century belongs to those societies that value qualities such as creativity, innovation and problem-solving. Societies that invest in the intellectual capacity of their people. At the heart of that capacity lies our research workforce, because it is they who underpin so much of our nation’s innovation effort by pioneering the ideas, applications, products and services of tomorrow”.

⁵¹ Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions of 18 January 2000: Towards a European research area, COM(2000) 6 final, p. 4.

⁵² *Ibidem*.

⁵³ The same approach is adopted by E. MORETTI, *op. cit.*, 215, which points out that the social return resulting from research and development is about 38%. According to Moretti, each research job generates five more positions in traditional industries.

economic crisis⁵⁴. Hence the idea of devising more research-oriented policies⁵⁵ and establishing a genuine “European research space” to facilitate researchers’ geographical and inter-sectorial mobility⁵⁶ and to streamline red tape, especially as regards the portability of social security rights⁵⁷. Another step in this direction has been the formal adoption of the European Charter for Research and the Code of Conduct for the Recruitment of Researchers, which apply to researchers operating in the private and the public sector – without regard to the employment relationship in place between the parties or the legal nature of the employer⁵⁸ – and which openly intend to navigate juridical and sectorial issues hampering “greater integration between public-sector research and industry”⁵⁹.

Regrettably, little has changed since the adoption of these two documents, which are even more relevant today, in consideration of the financial and economic crisis that besets employers and produces a significant reduction in public expenditure. Public and private-sector research across Europe faces a stalemate situation, to the point that “without concerted action to rectify this, the current trend could lead to a loss of growth and competitiveness in an increasingly global economy. The leeway to be made up of the other technological powers in the world will still grow further. And Europe might

⁵⁴ Cf. D. CIRIACI, P. MONCADA-PATERNÒ-CASTELLO, P. VOIGT, *Innovation and Job Creation: A sustainable relation?*, IPTS Working Paper on Corporate R&D and Innovation, 2013, n. 1. See also WORLD BANK, *op. cit.*

⁵⁵ See article 179 of the Treaty on the Functioning of the European Union, according to which “The Union shall have the objective of strengthening its scientific and technological bases by achieving a European research area in which researchers, scientific knowledge and technology circulate freely, and encouraging it to become more competitive, including in its industry, while promoting all the research activities deemed necessary”. Articles 180 through 190 set forth the activities that have to be carried out to achieve this objective, defining the ways the pluriennial programme should develop.

⁵⁶ EUROPEAN COMMISSION, *Mobility of Researchers between Academia and Industry. 12 Practical Recommendations*, European Communities, 2006.

⁵⁷ Pension rights have been seen as the ‘most problematic’ dimension of social security for European researchers, followed by health insurance, unemployment benefits, and family benefits. See EUROPEAN COMMISSION, *Realising a single labour market for researchers. Report of the ERA Expert Group*, European Communities, 2008, p. 37. On the current difficulties concerning the harmonisation of national pension systems and the proposal by the ERA Expert Group to establish a supplementary pension system for researchers operating at the European level, see M. SACCAGGI, *Mobilità dei ricercatori: il nodo della sicurezza sociale*, in *Boll. Spec. ADAPT*, 2016, n. 4.

⁵⁸ Cf. The Recommendation of the Commission of 11 March 2005 concerning the European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers.

⁵⁹ See G. SIRILLI (ed.), *op. cit.*, p. 33.

not successfully achieve the transition to a knowledge-based economy⁶⁰. The situation in Italy is even more worrisome. The lack of substantial investment in R&D is endemic and can be explained by companies' production specialisation⁶¹ and by the fact that some of them fail to keep pace with the development process, mostly because the role of the university in Southern Italy has been downgraded⁶².

One might note that public investments in R&D are shrinking and their allocation often takes place through unclear⁶³ and cumbersome procedures due to poor coordination between institutions operating at the central and peripheral level. This holds true if one considers that it is the Ministry of Economic Development itself that points out the difficulty to access public funds to conduct research, also because of political meddling and excessive red tape⁶⁴.

As evidenced by the relevant literature, the existing gap between Italy and other developed countries cannot be only ascribed to limited investment⁶⁵ and governance issues, but also to skills that become rapidly obsolete⁶⁶ or are not provided at all⁶⁷. This is also due to the absence of career paths and retraining

⁶⁰ COM(2000)6 def., cit., 4. See also the comparative study produced by Deloitte for the European Commission, *Researchers' Report 2014. Final Report*, European Commission, 2014, 16 and ff. and 117 and ff.

⁶¹ See G. FORESTI, *Specializzazione produttiva e struttura dimensionale delle imprese: come spiegare la limitata attività di ricerca dell'industria italiana*, CSC Working Paper, 2002, n. 32. See also, ASSOCIAZIONE TREEELLE, FONDAZIONE ROCCA, *Scuola, università e ricerca. L'Italia nel confronto internazionale*, 2013.

⁶² The reduction of funding allocated to Southern Italy universities and the negative implications resulting from human capital investment have been analysed in (ed.), *Università in declino. Un'indagine sugli atenei da Nord a Sud*, Donzelli, 2016.

⁶³ Cf. *Analisi e Raccomandazioni sui Contributi Pubblici alle Imprese*, rapporto al Presidente del Consiglio e Ministro dell'economia e delle finanze e al Ministro dello sviluppo, delle infrastrutture e dei trasporti redatto su incarico del Consiglio dei Ministri del 30 April 2012 (c.d. *Rapporto Giavazzi*).

⁶⁴ In this sense, see the report by the MINISTERO DELLO SVILUPPO ECONOMICO, *op. cit.*, esp. 4-6. On the fact that tasks are assigned to different institutions randomly, see A. BONACCORSI, *Politiche regionali per la Ricerca & Innovazione in Italia*, in *I&S*, 2011, n. 91, 16-20, who refers to this phenomenon as the "fractal syndrome".

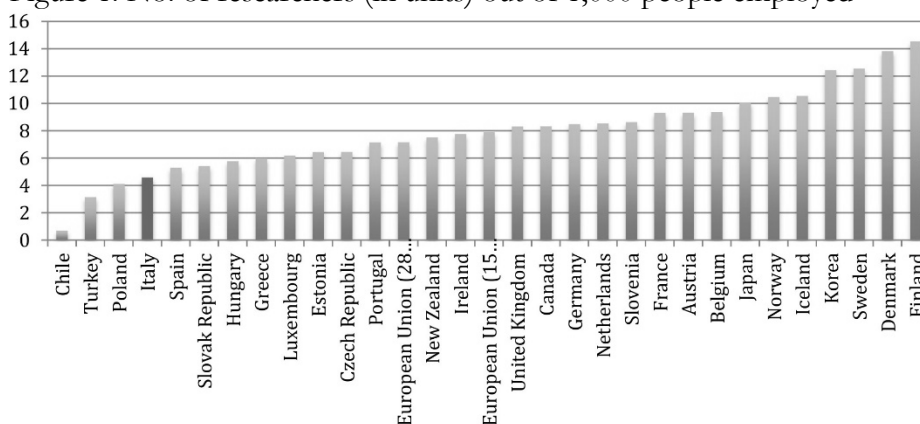
⁶⁵ Cf. the comparison carried out on Eurostat data by D. MANCINO, *Quanto spende l'Italia in ricerca?*, in *Wired*, 15 January 2016.

⁶⁶ See G. BRACCHI, *Rigenerare l'industria creando nuove imprese tecnologiche*, in AA.VV. (ed.), *op. cit.*, p. 330, where an investigation is provided of the ageing of research and development staff in Italy and the reasons hampering turnover, which also causes brain-drain.

⁶⁷ Cf. L. ORSENIGO, *op. cit.*, p. 217 and p. 218 where he states that "a lack of skills can be seen in staff as well as an unwillingness to use research as a tool to classify and deal with problems in many sectors of the economy and society. This phenomenon can be seen not only in

programmes for researchers that can only be devised in an open and transparent labour market (see par. 5) that moves beyond the increasingly weak monopoly of public universities. Tellingly, among the OECD countries, only Chile, Poland and Turkey are far worse than Italy (see Figure 1) as regards the contraction of domestic expenditure on research, the limited amount of public funding⁶⁸ devoted to research and the low number of researchers hired by companies⁶⁹ and the private sector, more broadly (see figure 2)⁷⁰. In figures, this amounts to 4 researchers out of 1,000 people employed, against the OECD average of 10.

Figure 1. No. of researchers (in units) out of 1,000 people employed



Source: Database OECD, 2013

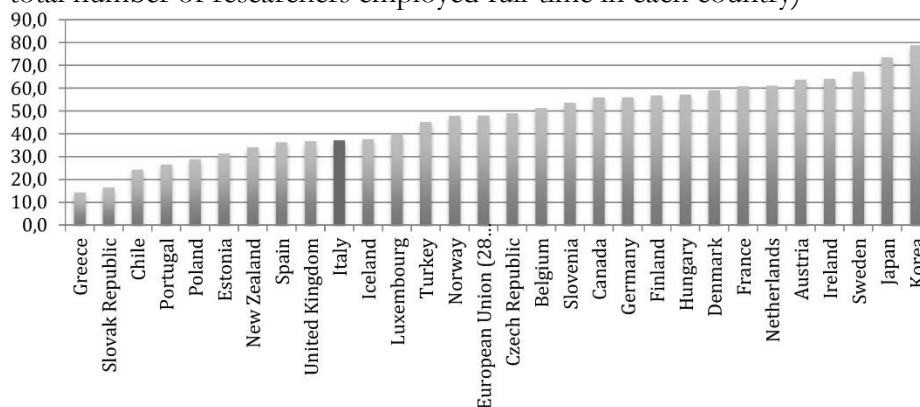
technologically-advanced companies, but also in small and medium-sized enterprises, financial institutions and public administrations”.

⁶⁸ MINISTERO DELLO SVILUPPO ECONOMICO, *op. cit.*, esp. 9.

⁶⁹ See the articles collected by E. PRODI, *Uno, nessuno, centomila: i numeri dei ricercatori in Italia e all'estero*, in *Nova*, blog ADAPT *La grande trasformazione del lavoro*, 12 April 2016.

⁷⁰ A comparative analysis is provided by DELOITTE, *op. cit.*, p. 16 and ff., which also provides a gender-based analysis (30 and ff.).

Figure 2 – No. of Researchers in the private sector (% calculated out of the total number of researchers employed full-time in each country)



Source: Database OECD, 2013

Consequently, as rightly stated by the Ministry of Economic Development “companies do little research, and fewer of them allocate money to it”⁷¹, because Italy’s labour market mostly comprises small and medium-sized enterprises and because the regulatory system presents shortcomings that significantly hamper innovation approaches⁷². Italy’s expenditure on research in companies, universities and other institutions in the public and private sector is as much as €21 billion, that is 1.31% of GDP⁷³, a far cry from the OECD’s average of 2.5% and the 3% set by government representatives during the 2002 Barcelona Development Agenda⁷⁴, during which it was also established that 2/3 of research expenditure had to be funded by the private sector⁷⁵. Innovation performance, which is measured considering the relationship between research input (expenditure), intellectual property (patents) and the

⁷¹ MINISTERO DELLO SVILUPPO ECONOMICO, *op. cit.*, p. 9.

⁷² See p. 10 and 11 in relation to the assumption, for which no empirical support has been provided, that national production systems characterised by small and medium-sized enterprises develop innovation all the same, though in a less organised and clear way. An empirical analysis of research carried out in companies in Italy is offered in G. PETRONI, C. VERBANO, *L’evoluzione della ricerca industriale in Italia. Caratteri peculiari e prospettive*, Franco Angeli, 2000.

⁷³ ISTAT, *Ricerca e sviluppo in Italia. Anno 2013*, 2015.

⁷⁴ Cfr. R. PRODI, *Ricerca, innovazione e competitività: la sfida globale dell’Europa*, a relation presented on the occasion of the inauguration of the 2002-2003 academic year at the University of Genoa. See also EUROPEAN COMMISSION, *An analysis of the development of R&D expenditure at regional level in the light of the 3% target*, European Communities, 2009.

⁷⁵ Cf. D. MANCINO, *op. cit.*, who provides data showing that the gap between Italy and other countries in terms of research is due to the scarcity of private funds allocated to research.

introduction of new products (output) is also below the OECD average, confirming the “absence of established relations between industry and academia”⁷⁶.

This state of affairs explains the attempt to move beyond the time-honoured, ponderous system made up of a deluge of provisions enforced over time and to replace it with a national agency tasked with allocating funds in a more flexible way through calls for applications that cover a number of years and promote cooperation between the public and the private sector⁷⁷. The situation described above also accounts for the Government’s increasing use of provisions (e.g. *norma-incentivo*) aimed not only to promote research activities that might benefit the public and entice investors⁷⁸, but also to serve as a guide for private operators, prompting the need to engage in innovation and research – which is particularly pressing in Italy – and favouring the establishment of “market-oriented research” over traditional “academic research”⁷⁹.

3. Government Support to Research carried out in Companies and the Private Sector: Economic Incentives

Unlike universities⁸⁰ and other publicly-funded research centres⁸¹, Italian law does not set forth specific rules on private-sector research, nor does it provide a proper legal definition for this form of employment. Research carried out in

⁷⁶ In this sense, cf. MINISTERO DELLO SVILUPPO ECONOMICO, *op. cit.*, p. 10.

⁷⁷ This is the proposal of the Gruppo 2003, an association promoting academic research. Cf. S. GARATTINI, G. BUZZETTI, *A un’agenzia italiana la nuova governance*, in *Sanità24 – Il Sole 24 Ore*, 1-7 March 2016.

⁷⁸ A detailed analysis of legal norms promoting employment contracts for research purposes that benefit both clients and the public, more broadly, pursuant to article 9 of Constitution, is offered in cf. E.M. IMPOCO, *op. cit.*, p. 99-107. It is also fitting to refer to V. DI CATALDO, *Il contratto di ricerca – Commento alla l. 17 febbraio 1982, n. 46, Interventi per i settori dell’economia di rilevanza nazionale*, in *NLCC*, 1983, 330 ss., cui *adde* M. BASILE, *Ricerca scientifica (contratto)*, in *Enc. dir.*, 1989, XL, § 8 (i contratti di promozione della ricerca), who provides an analysis of all those contracts concluded for research purposes from the perspective of Italy’s Civil Code.

⁷⁹ G. BRACCHI, *op. cit.*, qui 330.

⁸⁰ Cf. C. MIRIELLO (ed.), *Manuale di legislazione universitaria*, Maggioli, 2013. See also R. MOSCATI, M. REGINI, M. ROSTAN (eds.), *Torri d’avorio in frantumi? Dove vanno le università europee*, Il Mulino, 2010, and P. MONTANARO, R. TORRINI, *Il sistema della ricerca pubblica in Italia*, Banca D’Italia, Questioni di Economia e Finanza (Occasional Paper), 2014, n. 219.

⁸¹ See E. DI CARPEGNA BRIVIO, *Lo status giuridico del personale ricercatore nella ricerca scientifica extrauniversitaria: tendenze di evoluzione di sistema*, in *Amministrazione in Cammino*, 2013, 1-31, and F. TROILO, *Il lavoro negli Enti Pubblici di Ricerca: un primo sguardo d’insieme*, Working Paper ADAPT, 2016, n. 5. Cf. G. GULLÀ, R. PALAIA, *I ricercatori, il sistema ricerca italiano e la crisi del Paese*, in *Analysis*, 2014, n. 1. For some proposals concerning the establishment of an open and transparent “labour market” for researchers, see the Manifesto drafted by ANPRI on 6 March 2014, *Ruolo e valorizzazione dei Ricercatori e Tecnologi degli Enti pubblici di ricerca*.

companies is therefore assessed on a case by case basis and classified according to working schemes typical of salaried workers or those in self-employment. This uncertainty exacerbates the inadequacy of standard legal classifications and contributes to the rise of atypical work and precarious employment through internships, scholarships, research grants and temporary contracts whose legal basis and legitimacy is often doubtful⁸².

One might note that there exist a number of financial and economic measures which, either directly or indirectly, promote company-based research, as well as forms of collaboration between businesses and universities (e.g. “research contracts” that are still poorly used in Italy)⁸³. On closer inspection, many initiatives are in place favouring private-public cooperation either at the national or regional level. Examples include joint research projects, competence centres, industrial, productive, and technological districts, clusters, joint laboratories, science parks, incentives to create innovative start-ups, innovation poles and so forth⁸⁴. Reference should also be made to financial support schemes to promote private investments in public universities⁸⁵, and

⁸² The issue of instability of employment in research has been examined also by the EXPERT GROUP ON THE RESEARCH PROFESSION, *op. cit.*, 10. In literature, see cf. L. ACKERS, L. OLIVER, *From Flexicurity to Flexsequality? The Impact of the Fixed-Term Contract Provisions on Employment in Science Research*, in *International Studies of Management & Organization*, 2007, vol. 37, n. 1, 53-79, and L. OLIVER, T. HOOLEY, *Researchers, fixed-term contracts and universities: understanding law in context*, CRAC, 2010.

⁸³ This issue is such a serious one that scholars of civil law resort to categories used to classify atypical employment. See V. ZENO-ZENCOVICH, *I contratti di ricerca ed il loro «tipo sociale» in una analisi di alcuni dei modelli più diffusi*, in *GI*, IV, 1988, 3-16, and A. CANDIAN, *Ricerca (contratto di)*, in *DDPCin*, 1998, XVII. See also E.M. IMPOCO, *op. cit.*, and the literature therein.

⁸⁴ Cf. MINISTERO DELLO SVILUPPO ECONOMICO, *op. cit.* Some proposals concerning public and private funding are provided in G. BRACCHI, *op. cit.*, 329-336, while an examination of the legal definition of research in the private sector is provided in E.M. IMPOCO, *op. cit.*, and the literature therein.

⁸⁵ Here reference is made to tax incentives and to the opportunity for employers to deduct from their taxable income any fund allocated for research purposes if provided as a contribution or a donation. Save for VAT, no direct and indirect tax shall be paid on money allocated on a gratuitous basis to universities, university foundations and public and private research centers (for private centres MIUR’s monitoring is necessary). In addition, a 90% reduction apply to the notarial fees to be paid to fill out the necessary documentation. See the plan to fund research passed by the Italian Council of Ministers on 6 February 2014 laying down urgent measures to support innovation and research activities in companies (PON Ricerca e Innovazione, in www.faredottorato.it). The plan was subsequently implemented under the Renzi government on 1 May 2016, see: Cf. C. MANCINI, *Programma Nazionale per la Ricerca 2015-2020: Guida alla lettura*, in *Boll. ADAPT*, 2016, n. 17.

measures that ideally⁸⁶ should favour the recruitment of PhD holders and graduates in technical subjects who are engaged in R&D activities⁸⁷, also through employment agencies⁸⁸,

Finally, a passing reference should be made to Law no. 190 of 23 December 2014 (2015 Stability Law), that introduced a tax credit⁸⁹ for employers that invest in R&D activities in the 2015-to-2019 period⁹⁰. This provision is of

⁸⁶ Before being replaced by par. 35, Article 1 of Law no. 190/2014, the economic incentives envisaged in Article 3 of Legislative Decree no. 145/2013 were not implemented for lack of financial resources.

⁸⁷ Cf. Decree-Law no. 83/2012 as converted by Law no. 134/2012, which was followed by the Ministerial Decree no. 13 October 2013. “*Disposizioni applicative necessarie a dare attuazione al contributo sotto forma di credito di imposta alle imprese, per l’assunzione a tempo indeterminato di personale impiegato in attività di Ricerca e Sviluppo*”, published in Gazzetta Ufficiale no. 16 of 21 January 2013. Before its repeal, having effect from 1 January 2015, this provision granted a tax credit to those employers investing on research and development. This tax credit also applied to costs resulting from the recruitment of a PhD or workers having a master’s degree in scientific or technical subjects if they are hired to conduct research activities. The contribution also took the form of a 35% tax credit up to a maximum of €200,000 yearly, concerning the costs borne to hire permanent staff with the foregoing requirements. Similar measures have been put forward in the *FlxO S&U – Alta Formazione e Ricerca* project promoted by Italia Lavoro, according to which a €6,000 contribution is allocated for each worker hired on a full-time apprenticeship contract for research purpose (which is reduced to €4,000 for part-time employment contracts) and an €8,000 contribution for each PhD holder aged between 30 and 35 years old who is recruited on a full-time salaried employment contract, either on a full-time or a part-time basis for at least 12 months (cf. Italia Lavoro, *Guida incentivi all’assunzione e alla creazione d’impresa*, 2016). Another project that is worth a mention is PhD Talents (2015-2018) that has been carried out by the CRUI Foundation for MIUR and in collaboration with Confindustria. The project, that has been conducted on an experimental basis, covered 80% of labour costs for the 2015-2018 period, specifically: 80% in the first year, 60% in the second year and 50% in the third year, with researchers who had to be paid at least €30,000 per year. An evaluation of the difficulties related to the implementation of the project can be found in A. Claudi, A. D’Ascenzio, *PhD ITalents: un progetto lastricato di buone intenzioni*, Associazione dottorandi e dottori di ricerca italiani, 2016 (in www.faredottorato.it).

⁸⁸ This aspect has been defined by Italy’s Tax Authority through Resolution no. 55/E of 19 July 2016. It facilitates cooperation between employment agencies and small and medium-sized enterprises that cannot invest in highly-qualified staff to perform research or to train and retrain them.

⁸⁹ This can be added to the benefits provided by Article 24 of the Decree-Law no. 83/2012 that has been referred to in the previous note. Cf. Article 9 of Ministerial Decree of 27 May 2015, *Attuazione del credito d’imposta per attività di ricerca e sviluppo*, published in *Gazzetta Ufficiale* no. 174 of, 29 July 2015.

⁹⁰ Specifically, Article 3 of Decree-Law no. 145 /2013, as replaced by par. 35, Article 1 of Law no. 190/2014. Pursuant to Ministerial Decree 27 May 2015, the tax credit is granted in consideration of the extra costs borne compared to the average amount of investments made in the tax years 2012, 2013 and 2014 where two different tax rates apply, namely: 25% for costs resulting from laboratory tools and instruments in consideration of the amount of time, the period, and the type of research staff have been used for having a cost per unit of less than

interest in that it applies to all companies – irrespective of their legal entity, industry sector, accounting regime, turnaround – and contains a list of activities falling under the definition of R&D⁹¹, among others:

- a) experimental or theoretical work, the main purpose of which is to develop basic knowledge of observable phenomena and facts;
- b) planned research or critical surveys aimed at gaining new knowledge, to be used to create new products, processes and services, to improve existing ones or to produce components of complex systems which are necessary to industrial research;
- c) the acquisition, combination and structuring of existing knowledge and abilities of scientific, technological and business nature to produce plans, projects or drafts for new, amended, or improved products or services;
- d) The manufacturing or trial of products, processes and services, provided that they are used or transformed for industrial applications or for business purposes.

Regular changes to products, production lines, manufacturing processes, existing services do not count as R&D activities, even when these amendments generate an improvement. One provision that might play a significant role in relation to the present analysis is the lengthy circular issued by the National Tax Office to clarify the scope of application of Article 3 of Law-Decree no. 145 of 23 December 2013, as replaced by par. 35, Article 1 of Law no. 190/2014. The circular provides a wider and up-to-date definition of research work, including that “performed in fields other than scientific and technological ones (for instance, the sociological and historical sector), provided that research is carried out to gain new knowledge, to increase existing one and to create new applications”, therefore “regardless of the entity’s legal nature, industry sector, accounting system and size”⁹².

In considering the aim of this paper, namely the setting up of a full-fledged legislative and institutional framework for private-sector research (see par. 1),

€2,000 (VAT excluded) and for technical skills and industrial property rights for any industrial, bio-technological invention or a new plant variety; b) 50% of the cost of highly-qualified staff (having a PhD degree, enrolled in a Doctoral programme at both an Italian and a foreign university, or holding a Masters’ degree in technical or scientific subjects) and the ensuing costs for concluding research contracts with universities, research centres or equivalent institutions, or other companies including innovative start-ups as specified in Article 25 of Decree-Law no. 179/2012.

⁹¹ Cf. Art. 2 of Ministerial Decree of 27 May 2015.

⁹² See AE Circular no. 5/E of 16 March 2016, *Articolo 3 del decreto-legge 23 dicembre 2013, n. 145, convertito con modificazioni dalla legge 21 febbraio 2014, n. 9, come modificato dal comma 35 dell’articolo 1 della legge 23 dicembre 2014, n. 190 (Legge di Stabilità 2015) – Credito di imposta per attività di ricerca e sviluppo*, qui rispettivamente, par. 2.1 e 1.

the proliferation of economic measures supporting this form of employment should come as no surprise. Though an under-researched topic in national labour law literature⁹³, the incentive-based regulatory approach is a well-established and recommended practice, as far as economic analysis and the evaluation of public support are concerned, particularly as compared to the legislative process, on the assumption that the former “promotes economic efficiency by allowing for decentralised flexibility in conduct research”⁹⁴. Research on productivity, that is increasingly seen as “the ultimate engine of growth in the global economy”⁹⁵ also supports this view and highlights the relevance of public incentives that support R&D activities⁹⁶. Significantly, private companies and institutions engaged in R&D have access to a wider set of public incentives. By way of example, mention can be made of financial aid to companies (incentives based on the activities performed or outcomes, non-refundable loans, loans with low-interest rates, tax credits and reductions, premiums, and so forth), which are envisaged by both Italian and EU law regulating public support for R&D⁹⁷, and tax incentives (reduction of tax rates, tax deductions of R&D-related expenses, tax credits related to innovation, and so forth)⁹⁸. These measures are considerably different from one another in terms of size and scope and also in consideration of company size and industry sector: basic research, applied research, industrial research, experimental development, aid to create and modernise research infrastructure, etc.⁹⁹

⁹³ One cannot fail to refer to E. GHERA, *Le sanzioni civili nella tutela del lavoro subordinato*, in DLRI, 1979, 305-381. Mention should also be made of my monography *Incentivi alla occupazione, aiuti di Stato, diritto comunitario della concorrenza*, Giappichelli, 2002, esp. par. 1 e 2. and the literature therein in relation to definitional aspects.

⁹⁴ See R.B. STEWART, *Regulation and the Crisis of Legalisation in the United States*, in T. DAINITTH (ed.), *Law as an Instrument of Economic Policy: Comparative and Critical Approaches*, De Gruyter, 1988, 104. Cf. R. GÖNENÇ, M. MAHER, G. NICOLETTI, *The Implementation and the Effects of Regulatory Reform. Past Experience and Current Issues*, OECD Economics Department Working Paper, 2000, n. 251, esp. p. 12-14, where emphasis is given to the importance and positive consequences of “incentive-based regulatory approaches” in the regulation of the current labour market.

⁹⁵ OECD, *The Future of Productivity*, 2015, p. 3.

⁹⁶ p. 10 and pp. 53-58. See also E. MORETTI, *op. cit.*, p. 219.

⁹⁷ Cf. the Communication of the European Commission, Regulation on state aid for research, development and innovation (2014/C 198/01).

⁹⁸ Cr. The taxonomy in MINISTERO DELLO SVILUPPO ECONOMICO, *op. cit.*, p. 53 and ff. At the international level, cf. *OECD Business and Finance Outlook 2016*, cit., chap. 3, *Fiscal incentives for R&D and innovation in a diverse world*, and also the report for the European Commission carried out by the CPB NETHERLANDS BUREAU FOR ECONOMIC POLICY ANALYSIS, *A Study on R&D Tax Incentives. Final Report*, Taxation Paper, 2014, n. 52.

⁹⁹ On the maximum amount of each incentive and whether benefits can be accrued, see the definitions laid down in the Communication of the Commission, Regulation for State aid for Research, Development and Innovation, referred to in par. 2.1 of AE Circular no. 5/E/2016 previously mentioned.

Much has been written about the effectiveness of these incentives, which in Italy are frequently allocated sporadically and are penalised by the overlapping between coordination centres at both national and regional level¹⁰⁰. The widespread impression, which is confirmed by authoritative case studies and empirical research¹⁰¹, is that these incentives are similar to mere transfers of money that do not influence business decision-making and are tainted by political meddling, especially at the time of allocating resources¹⁰². This is even more so if one considers Italy's wobbly legislative and institutional context that is subject to regular changes to legislation on incentives. It is enough to say that some recent and important provisions have been passed and then gone unimplemented for lack of financial coverage¹⁰³, giving rise to interminable bureaucracy¹⁰⁴ which has “discouraged business activities”¹⁰⁵ and the willingness of those concerned to apply for funding.

¹⁰⁰ Cf. *Rapporto Giavazzi*, cit., p. 3, where it is argued that “Empirical evidence, both in Italy and elsewhere, points to additional effects in relation to R&D funding, which however concern small and medium-sized enterprises and start-ups. No additional effects have been associated with other forms of funding, for instance, those allocated to companies operating in developing areas”. In a similar vein, and with special reference to the effects of Law no. 46/1982 and further amendments that make provisions for employers' most widespread forms of incentives for research and development, see E. BARBIERI, R. IORIO, G. LUBRANO LAVADERA, *Incentivi alla ricerca e sviluppo in Italia: una indagine sugli effetti della Legge 46/82*, c. MET Working Paper, 2010, n. 3, 1, according to whom empirical analysis and the results obtained “show that the provision scrutinised might not be successful and above all an overlapping seems to exist between incentives pursuing the same purposes”. Cf. S. ADAMO, G. PELLEGRINI, *La valutazione degli effetti degli incentivi alla ricerca applicata sull'efficienza dell'impresa*, in SOCIETÀ ITALIANA DI STATISTICA, *Atti del Convegno intermedio “Processi e metodi statistici di valutazione”*. Roma, 4-6 giugno 2001, CISU, 2001; M. MERITO, S. GIANNANGELI, A. BONACCORSI, *L'impatto degli incentivi pubblici per la R&S sulla attività delle PMI*, in G. DE BLASIO, F. LOTTI (eds.), *La valutazione degli aiuti alle imprese*, Il Mulino, 2008; M. MERITO, S. GIANNANGELI, A. BONACCORSI, *Gli incentivi per la ricerca e lo sviluppo industriale stimolano la produttività della ricerca e la crescita delle imprese? Evidenze sul caso italiano*, in *L'Industria*, 2007, n. 2. Finally, cf. the literature review in C. BURATTI, C. COLOMBO, *Le politiche di sostegno agli investimenti. Una rassegna della letteratura*, Università degli Studi di Padova, 2014, esp. 18-22, dealing with incentives to research and development.

¹⁰¹ See the *Rapporto Giavazzi*, cit., p. 9 and ff. See also R. BRONZINI, E. IACHINI, *Are incentives for R&D effective? Evidence from a regression discontinuity approach*, Banca D'Italia, Temi di Discussione (Working Paper), 2011, n. 791.

¹⁰² Cf. the *Rapporto Giavazzi*, cit., esp. 10, that argues that “the opportunity to receive public funding might reduce the willingness of employers to engage in business management, to create new products and to access new markets as they will focus on how to obtain incentives and on entering the political circles in which these funds are allocated”.

¹⁰³ As in the case already referred to in footnote 93, concerning Article 3 of Decree-Law n. 145/2013.

¹⁰⁴ One example of this is the difficulties to implement the tax credit to hire PhD holders introduced by so-called Monti-Passera Law (Article 24 of Decree-Law no. 83/2012 as

It has been pointed out that when market failures arise allowing for exceptions to EC law on State aid¹⁰⁶, public funding for R&D “gives rise to innovation but also generates more income”. Yet in this case “patents can be used, especially the system to assign them, to prompt companies to engage in a ‘socially adequate’ amount of R&D” so that “public incentives will be saved”¹⁰⁷.

Another aspect that has been underlined is that Italy’s peculiar production structure – i.e. large numbers of small and medium-sized companies – causes “academic research to become overly influential” in the sense that “it entices public administrations to allocate funds for projects having great academic value but little relevance for companies”¹⁰⁸. Without considering political meddling, this happens notwithstanding empirical evidence showing that R&D funds are assigned to small and medium-sized businesses but not to large-sized ones¹⁰⁹.

At any rate, at the time of considering the two forms of public aid allocated to support innovation – namely capital and intangible infrastructure – Italy seems to prioritise machinery and equipment and, to a little extent, intangible assets (e.g. human capital), thus moving in the opposite direction of other developed countries.

The analysis of available data and considerable research on this topic show that tax incentives promoting research in the private sector “have represented an important tool for innovation and have been largely used in many OECD countries”. On the contrary, “public funds to private-sector research in Italy is mostly concerned with direct investment”, non-refundable loans and subsidised funding, thus without providing for a tax relief system for research carried out in companies. This point is also raised by Confindustria (Italy’s General Confederation of Italian Industry), which argues that, save for a few

converted by Law no. 134/2012) containing measures to promote sustainable development and growth. This provisions became operational only in September 2014, concerned recruitments made starting from 26 June 2012 and therefore was not seen as an incentive by employers. On this point, see C. FOTINA, *La beffa del bonus ricercatori: impantanato da due anni al ministero dello Sviluppo*, in *Il Sole 24 Ore*, 28 May 2014, who referred to the hurdles faced by those who applied for funding as a bureaucratic odyssey.

¹⁰⁵ *Rapporto Giavazzi*, cit., esp. p. 10.

¹⁰⁶ At the Community level, this issue is regulated by the Communication of the Commission, Regulation on state aid for research, development and innovation that has been already referred to here. The communication frequently refers to talks “failures of the market”.

¹⁰⁷ *Rapporto Giavazzi*, cit., p. 8. Cf. C. DAHLBORG, D. LEWENSOHN, R. DANELL, C.J. SUNDBERG, *To invent and let others innovate: a framework of academic patent transfer modes*, in *The Journal of Technology Transfer*, 2016, 1-26, available at the link <http://link.springer.com/journal/10961>.

¹⁰⁸ MINISTERO DELLO SVILUPPO ECONOMICO, *op. cit.*, p. 54.

¹⁰⁹ Cf. the *Rapporto Giavazzi*, cit., pp. 13-14.

cases, “Italian industry shows [...] a low willingness to invest in scientific research applied to products and processes, although the country’s high propensity for innovation”.

This is a further confirmation of the Italian paradox that has been referred to earlier, namely high-innovation ability clashing with low R&D expenditure and little funding for the recruitment of researchers. This is also due to the fact that “Italian companies mostly operate in fields where innovation is based on the incremental development of products and manufacturing processes (learning by doing, learning by using and learning by interacting). Accordingly, basic technology used to operate machinery or that certified by patents and licences is purchased from external suppliers, so no need arises to engage in regular scientific research to come up with new equipment”¹¹⁰ and to hire research staff as described above (see par. 2). One should also consider that problems in terms of statistic quality might exist that lead to underestimating the value of research, especially in small and medium-sized companies where research activities are performed now and then¹¹¹. Mention should also be made of the distinction that is made in Italy between official R&D expenditure and expenditure on innovation, which in fiscal terms is not regarded as a form of investment in research but as an item of current expense¹¹². This happens when research staff are hired and assigned the same employment grade as white-collar employees or professionals, for no law or collective agreement regulates this aspect (see par. 4). The fact remains that failing to acknowledge research in institutional terms will also endanger its promotion on the company level. As with academic research, the legal status of researchers operating in the private sector is the most qualifying aspect to recognise this new form of employment. This aspect is confirmed by the fact that a limited number of the 10,000 people that receive a PhD every year would be satisfied with working in a company, also because they think that research can only be carried out in academic

¹¹⁰ *Ibidem*. In similar vein, see G. GAROFOLI, R. & S. nei distretti industriali e nei sistemi di piccola impresa, in A. QUADRIO CURZIO, M. FORTIS, G. GALLI (eds.), *La competitività dell’Italia. I. Scienza, ricerca, innovazione*, Il Sole 24 Ore, 2002.

¹¹¹ G. FORESTI, *op. cit.*, p. 18. In terms of *Main Science and Technology Indicators*, the *Total Researchers in the Business Enterprises* indicator is defined as follows by the OECD: “up to reference year 2007, the source of TBP data was the balance of payment statistics compiled by the Ufficio Italiano dei Cambi, based on the ITRS system (settlement data collection system). On 1st January 2008, UIC ceased to exist and its functions have been taken over by the Bank of Italy. *The data are derived from a new data collection system, mainly based on direct reporting from enterprises*” (OECD, *Main Science and Technology Indicators*, 2016, n. 1, 22, emphasis added).

This clarification confirms that research is underrated, because it is employers who provide this information on a discretionary basis, and no criteria have been agreed upon by companies as to how to define researchers.

¹¹² *Ibidem*.

settings¹¹³. Employers are also wary of hiring PhD holders, for they think that they are not trained to engage in research in companies. This is one of the reasons attempts have been made in Italy to repeat the experience of Danish industrial doctorates¹¹⁴, not so much in terms of establishing quotas in companies to increase the employability of PhD holders¹¹⁵, as to experiment with forms of knowledge transfer, research and innovation based on on-the-job training¹¹⁶.

The significance of an open and transparent labour market for researchers and their acknowledgement in legal and institutional terms enabling them to access employment, advance their career and join re-integration programmes and inter-sectoral mobility, has also been confirmed by some pilot projects carried out by Confindustria. These trial projects have assessed to the extent to which adopting the same production structure as that in France or Germany in terms of business size and specialisation would reduce the gap with other countries in relation to R&D output¹¹⁷. Against all odds, these trials have disproved the assumption that little acknowledgment and use of private-sector research in Italy are due to a higher share of small-sized companies¹¹⁸: “Establishing in Italy companies having the

same size as those based in Germany would rise R&D to 1.18%, against the current 0.98%, thus the gap with Germany will be reduced by a small margin. The same conclusion can be drawn if France is considered”¹¹⁹. It is significant

¹¹³ I have examined this issue in M. TIRABOSCHI, *Dottorati industriali, apprendistato per la ricerca, formazione in ambiente di lavoro. Il caso italiano nel contesto internazionale e comparato*, cit., p. 2.

¹¹⁴ On Denmark’s Model of industrial Doctorates, cf. A. KOLMOS, L.B. KOFOED, X.Y. DU, *PhD students’ work conditions and study environment in university- and industry-based PhD programmes*, in *European Journal of Engineering Education*, 2008, vol. 33, n. 5-6, 539-550.

¹¹⁵ This is what happened following the approach of ANVUR at the time of interpreting Article 11 of Ministerial Decree no. 45 of 8 February 2013 concerning the criteria to authorise institutions and programmes to issue a Doctoral qualification and to set up Doctoral programmes for those institutions that are already authorised.

¹¹⁶ Cf. T. THUNE, *Doctoral students on the university-industry interface: a review of literature*, in *Higher Education*, 2009, vol. 58, n. 5, 637-651, and L. HERRERA, M. NIETO, *Recruitment of PhD Researches by Firms*, paper presented at the 35th *Druid Celebration Conference 2013*, Barcelona, 17-19 June 2013 (in www.faredottorato.it).

¹¹⁷ *Ibidem*.

¹¹⁸ In this sense, see G. FORESTI, *op. cit.*, p. 10, according to whom “a company’s small dimensions do not necessarily entail fewer resources allocated to research at an aggregate level. If fragmentation is the result of a higher division of work among companies (rather than within one company), small size simply reflects different ways of organising the productive unit”.

¹¹⁹ Again, see CENTRO STUDI CONFINDUSTRIA, *op. cit.*, 64. A simulation shows that product specialisation generates significant effects. In other words, “by assuming the same make-up of German manufacturing, Italy’s R&D intensity would increase between 0.91% and 1.32%, reducing by ¼ the gap with Germany. Using French manufacturing, Italy’s R&D intensity would be equal to 1.38%, halving the gap with France”.

that the divide between Italy and other developed countries as regards research is mostly found in large-sized companies and in those operating in technology-rich industries¹²⁰. This aspect might be ascribed to structural shortcomings that hamper the development of research and innovation activities that cannot be promoted only by means of incentive-based policies. If research is entrusted with the exclusive control of public institutions, one should not be surprised that research in the private sector fails to take off and that many agreements favouring public-private cooperation coming down from on high are not implemented because private-sector research is not placed on an equal footing with the public one.

Against this backdrop, the recourse to incentives seems to be a valid option just the same, particularly to compensate the absence of an institutional and legal framework favouring private-sector research and to set the basis for innovation development. Its widespread use, which is based on the economic theory that subsidies to company are effective only when markets are not able to fulfil socially desirable objectives (so-called market failures)¹²¹, reflects the old-fashioned argument, that has also been disproved by economics literature¹²², that innovation follows a linear path whereby research expenditure gives rise to inventions and their adoption by companies. Consequently, it is no coincidence that “the industry-research relation is an area that features many market failures but also many failures on the part of decision-makers”, as also illustrated by relevant literature¹²³.

This state of affairs also accounts for the major shortcomings, in terms of culture and planning, and for the difficulty to guide universities towards the so-called “third-mission”¹²⁴, as though knowledge was still the preserve of the

¹²⁰ pp. 64-65.

¹²¹ See the *il Rapporto Giavazzi*, cit., p. 9 and the literature therein.

¹²² See G. DOSI, *The Nature of Innovative Process*, in AA.VV. (eds.), *Technical Change and Economic Theory*, Pinter, 1988. More recently, see M. MAZZUCATO, G. DOSI (eds.), *Knowledge Accumulation and Industry Evolution. The Case of Pharma-Biotech*, Cambridge University Press, 2006, G. DOSI, R. NELSON, *La natura della tecnologia e i processi di innovazione tecnologica*, in *Parolechiave*, 2014, n. 51. A review of relevant literature is also provided in G. DOSI, R.R. NELSON, *The Evolution of Technologies: An Assessment of the State-of-the-Art*, in *Eurasian Business Review*, 2013, vol. 3, n. 1, 3-46. On this issue, see the widely-debated work of M. MAZZUCATO, *The Entrepreneurial State. Debunking Public vs. Private Sector Myths*, Anthem Press, 2013.

¹²³ G. GAROFOLI, *Le interrelazioni tra ricerca e industria nei sistemi innovativi locali: i fattori critici di successo*, cit., p. 10 and ff.

¹²⁴ Cf. S. BOFFO, R. MOSCATI, *La Terza Missione dell'università. Origini, problemi e indicatori*, in *Scuola Democratica*, 2015, n. 2, 251-272 e 256. It is pointed out that “the great emphasis on the economic role of universities and the fact that the third mission is seen as a way to generate profit end up downplaying, if not overshadowing, other aspects of this mission, among other the services provided free of charge to the community, which are equally in line with the purpose of universities both in Continental Europe and Anglo-Saxon countries”. See also P.

public sector¹²⁵. Regular collaboration between local institutions and companies, particularly in the ongoing transformation of work, is an effective and modern way for university to comply with its educational mission (by means of internships, apprenticeships, school-to-work alternation programmes), for research has no value if it is self-referential and ignores the economy and society¹²⁶. Increasingly, innovation is the result of complex mechanisms that cannot be codified in advance – even less so in legal and contractual terms¹²⁷ – and involves interaction between different actors (universities, companies and institutions)¹²⁸. In order to thrive and translate into learning processes, knowledge and skills, this interaction should take place on an equal basis to create value.

Indeed, the evolutionary models concerning cooperation between industry and research, at least starting from the 1980s and following the decline of production processes typical of the 1900s (See par. 1) “have increasingly stressed the interactive and cumulative nature of innovation supported by forms of gradual learning leading to the rise of integrated and incremental

SANTOS, *Moving the Universities to the «Third Mission» in Europe. New Impulses and Challenges in Doctoral Education*, in *Foro de Educación*, 2016, vol. 14, n. 21, p. 107-132.

¹²⁵ On this perspective, in relation to small and medium-sized enterprises, cf. R. TIEZZI, *Le Pmi vogliono crescere? Chiedano aiuto al mondo della ricerca*, in *Linkiesta*, 26 April 2016, and the reply by C. MANCINI, E. PRODI, M. TIRABOSCHI, *L'innovazione passa dalla ricerca, anche per le PMI*, in *Boll. ADAPT*, 2016, n. 16, where it was argued that “this idea that still places small and medium-sized enterprises in a Fordist scenario, fails to take into account what a company is today, irrespective of size, and what is university education in Italy. This separation between he who researchers and innovates and he who works and performs standardised tasks does not correspond to reality and fails to consider entities such as knowledge networks and districts and the realm of innovative start-ups, freelance workers, and innovators that, also through an open-access approach which the Italian university education seems to ignore, develop change through relations between worlds that are apart only apparently”. On this point, see E. MORETTI, *op. cit.*, 215-216, that highlights that the flow of knowledge spillovers is not unidirectional from universities to companies but “their core parts move from and to private companies”.

¹²⁶ Apparently, this is the same stance as Fondazione CRUI, *op. cit.*, 41, which states that “unlike teaching activities (the first mission, based on interaction with students) and research (the second mission, which rests on the interaction with other researchers and academic communities) the distinctive trait of the third mission is the direct interaction with society”. The 2008 Green Paper *Fostering and Measuring ‘Third Mission’ in Higher Education Institutions* adopts a more straightforward approach, as it argues that “Third Mission’ [...] is not a separate mission at all, but rather a way of doing, or a mind-set for accomplishing, the first two”.

¹²⁷ The topic is nicely dealt with through a review of legal and contractual arrangements promoting innovation in R.J. GILSON, C.F. SABEL, R.E. SCOTT, *op. cit.*

¹²⁸ Cf. C. MANCINI, E. PRODI, M. TIRABOSCHI, *op. cit.*

innovations”¹²⁹. It is impossible to fulfil this goal without an institutional and legal framework underpinning private-sector research that might promote dialogue with universities, especially as the latter are still wary of societal and economic changes currently in place.

Therefore, economic incentives should not be allocated just to fund a given company or a single project but, thanks to the support of specific legislation and institutions, they should be used to establish long-term and flexible processes. This is because incentivising “learning processes specific to each company appears to be more effective than making allocation depending on selecting dynamics among companies”¹³⁰.

3.1. Regulatory Incentives

Originally devised to promote the recruitment of researchers, regulatory incentives¹³¹ have been gradually set aside, even though they were perfectly suitable for this form of employment – where work is based on the fulfilment of projects and objectives – and met the need of the labour market in the Fourth Industrial Revolution (par. 1), that is characterised by high levels of flexibility in hiring and dismissal. One example of this, which bears, even more, relevance in consideration of many legal constraints to temporary work¹³², is Article 14 of Law of 24 June 1997 (so-called ‘Treu Law’). This provision promoted technological and academic research in industry by incentives favouring the recruitment of graduates and PhD holders on the part of companies (particularly small and medium-sized craft businesses), consortia or consortium companies. Researchers could be hired directly by the company on a permanent basis or by temporary posting from a public research centre to carry out specific training and research projects in collaboration with companies¹³³. Mention could also be made of the provisions laid down in par. 16-quinquies, Article 9 of Law-Decree no. 76 of 28 June 2013, as amended by

¹²⁹ See G. GAROFOLI, *Le interrelazioni tra ricerca e industria nei sistemi innovativi locali: i fattori critici di successo*, cit., p. 2.

¹³⁰ G. DOSI, R. NELSON, *La natura della tecnologia e i processi di innovazione tecnologica*, cit., p. 24.

¹³¹ On the distinction between economic incentives and regulatory incentives, see M. TIRABOSCHI, *Incentivi alla occupazione, aiuti di Stato, diritto comunitario della concorrenza*, cit., and the literature therein. More recently, see A. DAGNINO, *Agevolazioni fiscali e potestà normativa*, Cedam, 2008.

¹³² This was particularly the case in a time in which PhD holders were trained to “carry out academic research” pursuant to par. 8, Article 8 of Law no. 28/1980. A. TAMPIERI, *L’occupazione nel settore della ricerca*, in L. GALANTINO (ed.), *Il lavoro temporaneo e i nuovi strumenti di promozione della occupazione. Commento alla legge 24 giugno 1997, n. 196*, Giuffrè, 1997, 354, footnote 1.

¹³³ A detailed analysis of this provision is provided in A. TAMPIERI, *op. cit.*, 353-364.

Law no. 99 of 9 August 2013, aimed at promoting the conclusion of fixed-term employment contracts or collaboration contracts to engage in research projects on technological innovation¹³⁴. Also, reference should be made to Article 28 of Law-Decree no. 179 of 18 October 2012 on Additional Urgent Measures to favour Italy's Growth, as amended by Law no. 221 of 17 December 2012¹³⁵. This provision was passed with the aim of fostering the employability of qualified staff in light of the dissemination of new forms of entrepreneurship and technologies (so-called innovative start-ups) the purpose of which was to develop, produce and commercialise innovative, technology-rich products and services. This could also be done by concluding fixed-term employment contracts without the need to indicate a justifying reason, which is usually mandatory for these contractual arrangements, lasting between 6 and 36 months within the first 48 months from the establishment of the company. These have been major amendments to national legislation that attested to lawmakers' renewed interest towards research carried out in the private sector. Nevertheless, these initiatives are not sufficient if they are not accompanied by an awareness of the significant changes that have taken place in the way of doing business and the factors triggering innovation. In addition, these laws have failed to give company-based researchers¹³⁶ a clear identity and professional status in relation to training, career, employment grade (see par. 4) remuneration, relevant legislation and international and inter-sectoral mobility. In a similar vein, following the enforcement of measures to deregulate the labour market that culminated in the Jobs Act, the provisions referred to above, promoting research in the private sector have been gradually set aside¹³⁷,

¹³⁴ However, lawmakers have established that these provisions only applied to public agencies, universities and high schools which are governed by special regulations, without providing any form of cooperation with the production system and the private sector. This marks a significant difference from the terms of Law no. 196/1997 and many have regarded this move as a step backwards. Cf. G. BUBOLA, *L'utilizzo dei fondi premiali per la stipula di contratti a tempo determinato e collaborazioni coordinate e continuative per attività di ricerca*, in M. TIRABOSCHI (ed.), *Il lavoro riformato. Commento alla l. 9 agosto 2013, n. 99 (Legge Giovannini); alla l. 9 agosto 2013, n. 98 (decreto del fare); alla l. 9 agosto 2013, n. 94 (decreto svuota carceri); alla l. 6 agosto 2013, n. 97 (legge comunitaria) e al d.l. 31 agosto 2013, n. 101 (razionalizzazione P.A.)*, Giuffrè, 2013, 385-388.

¹³⁵ Cf. A. BALSAMO, *Start up e Pbd: l'impresa della ricerca*, in *Boll. ADAPT*, 2014, n. 5. An examination of the implementation measures concerning this provision is provided in ORDINE DEI DOTTORI COMMERCIALISTI E DEGLI ESPERTI CONTABILI DI BOLOGNA, COMMISSIONE DI STUDIO IMPOSTE DIRETTE, *Il punto sulle opportunità previste per le Start Up innovative (ex D.L. 179/2012) e sulle problematiche delle imprese in fase di start up. Convegno del 29 gennaio 2014*, 2014.

¹³⁶ See the Head of Global R&D di Bracco: cf. F. UGGERI, *Il ricercatore e il lavoro che cambia*, in *Boll. Spec. ADAPT*, 2016, n. 4.

¹³⁷ On the deregulation of recruitments on a fixed-time employment contract as initially provided by Decree-Law no. 34/2014 and then by Legislative Decree no. 81/2015, see L. MENGHINI, *Lavoro a tempo determinato* (art. 1, 19-29, 51 e 55), in F. CARINCI (ed.), *Commento al*

marking a step backwards, particularly regarding the repeal of collaboration contracts related to project work¹³⁸. This notwithstanding the fact that employers in research centres viewed this working scheme (see par. 1) as a useful way to balance the interests of both parties and to adapt to the peculiarities of private-sector research, which is performed through projects, cycles, phases and work plans¹³⁹.

This aspect is also evident if one examines par. 1, Article 2 of Legislative Decree no. 81 of 15 June 2015, according to which those performing “employer-organised work”¹⁴⁰, might be seen as engaged in salaried employment, thus making it more difficult to use “continued and coordinated” contracts to carry out research as laid down in par. 3, Article 409 of the Code of Civil Procedure. On this point, the European Commission also provided its opinion, maintaining that the conclusion of research grants and “continued and coordinated” contracts cannot be included in the calculation of personnel costs in Horizon2020 projects¹⁴¹. This is a further step in the wrong direction, also because remuneration and tax systems consider research in terms of hours

d.lgs. 15 giugno 2015, n. 81: le tipologie contrattuali e lo jus variandi, ADAPT University Press, 2015, 153-196. Presently, the only provision promoting private-sector research is contained in par. 3, Article 23 of Legislative Decree no. 81/2015. This rule specifies that the legal minimum number of workers to be hired on fixed-term employment contracts – 20% of permanent staff – does not apply to “temporary contracts concluded between public universities – which also include branches of foreign universities in Italy – public and private research institutions and on-call workers whose work concerns teaching, research in scientific or technological areas, research-related technical advice or management [...]. The fixed-term employment contracts to perform academic research on an exclusive basis can have the same duration as the research project for which they have been concluded”.

¹³⁸ Cf. A. VALLEBONA (ed.), *Il lavoro parasubordinato organizzato dal committente*, Colloqui Giuridici sul Lavoro, 2015, and G. SANTORO-PASSARELLI, *I rapporti di collaborazione organizzati dal committente e le collaborazioni continuative e coordinate ex art. 409, n. 3, c.p.c. (art. 2)*, in F. CARINCI (ed.), *op. cit.*, 9-28.

¹³⁹ One might note that the approval of the Jobs Act and the repeal of project work were followed by an outcry led by Silvio Garattini, the well-known director of the Milano-based Mario Negri Institute. Cf. S. GARATTINI, *op. cit.*, e anche V. ULIVIERI, *Stop ai co.co.pro? Addio ai ricercatori*, in *La nuvola del lavoro – Corriere della Sera*, 16 December 2015.

¹⁴⁰ An analysis of the much-discussed par. 1, Article 2 of Legislative Decree n. 81/2015 is provided in M. TIRABOSCHI, *Il lavoro etero-organizzato*, in M. TIRABOSCHI (ed.), *Le nuove regole del lavoro dopo il Jobs Act. Commento sistematico dei decreti legislativi nn. 22, 23, 80, 81, 148, 149, 150 e 151 del 2015 e delle norme di rilievo lavoristico della legge 28 dicembre 2015, n. 208 (Legge di stabilità per il 2016)*, Giuffrè, 2016, 261-268.

¹⁴¹ See EUROPEAN COMMISSION, *H2020 Programme. Guidance on List of issues applicable to particular countries*, 2016, 4.

worked and not in terms of projects completed, thus regarding this form of employment as the same as traditional white-collar jobs¹⁴².

The parliamentary debate accompanying “phase 3 of the Jobs Act” has been yet another missed opportunity to regulate agile working arrangements and, therefore, private-sector research. At the time of discussing Draft Bill no. 2233 of 8 February 2016, Measures safeguarding “non-entrepreneurial” self-employment and promoting the flexibility of salaried employment, no consideration was given to the proposal that staff “working continuously (including posted workers and apprentices) in industrial and knowledge districts, clusters, technological poles, certified business incubators, innovative start-ups, and certified business networks”, as well as collaborators and employees permanently engaged in research, planning and development activities for private companies, clients or employers” shall be included among those performing agile working¹⁴³.

Following the repeal of project work, ensuring working time flexibility to those performing research in companies is possible by referring to those cases when Legislative Decree no. 66 of 8 April 2003 does not apply, which however are difficult to implement for this type of work and might not be effective without a legal and institutional framework that governs private-sector research. Specifically, par. 1, Article 17 of Legislative Decree no. 66/2003 provides that exceptions can be made to rules on daily rest, breaks and night work in collective agreements concluded with the most representative trade unions in comparable terms. However, no collective agreement is in place regulating research in the private sector (see par. 4), so the only option, which has been poorly explored, would be that of introducing derogations to certain criteria used to assess the maximum duration of one’ performance. Yet this could be done only by means of a decree issued by the Ministry of Labour and Social Policies upon request of the most representative trade unions in comparable terms and for certain specific activities, among which is R&D (par. 2, let. 6 of Article 17 referred to above)

¹⁴² Cf. M. BARTOLONI, *La scure di Bruxelles sui ricercatori italiani: no agli assegnisti nei progetti di Horizon 2020*, in *Scuola 24 – Il Sole 24 Ore*, 5 February 2016.

¹⁴³ In this sense, see Draft Bill no. 229/2016 tabled by a number of Italian senators (Sacconi and D’ascola among others), *Adattamento negoziale delle modalità di lavoro agile nella quarta rivoluzione industriale*. Article 6 (Research) of the law proposal established that work performed by researchers in the private sector should be regarded as agile working and be included in those forms of business model specific to Industry 4.0.

3.2. The New Apprenticeship Contract for Research Purposes

The new apprenticeship contract for research purposes deserves a specific analysis. This working scheme is regulated by Article 45 of Legislative Decree no. 81/2015 and ideally represents an attempt to deal with all the issues described above, either in terms of economic incentives (special subsidies and contribution exemptions) or regulatory benefits (e.g. reduced red tape, work flexibility, the possibility to classify workers into a lower employment grade than that established in the collective agreement or to calculate apprentices' remuneration as a percentage of their length of service).

Not much research has been carried out or is available in the literature on this contractual relationship, which is governed by Legislative Decree no. 167 of 14 September 2011 (the so-called Consolidated Text on apprenticeships). The latter is an attempt to further evolve the “apprenticeships for higher education” as regulated by Article 50 of Legislative Decree no. 276¹⁴⁴ of 10 September 2003 which, following the changes made to par. 3, Article 23 of Law-Decree no. 112 of 25 June 2008, as amended by Law no. 133 of 6 August 2008, already provided for the opportunity to enter into apprenticeship contracts to obtain a PhD degree¹⁴⁵. The little appeal held by this form of employment to industrial relations actors¹⁴⁶, regional institutions¹⁴⁷, and employers – particularly in relation to its costs and bureaucratic hurdles when implementing¹⁴⁸ it and accessing to relevant incentives¹⁴⁹ – prompted Italy's

¹⁴⁴ A comparison with legislation in other countries is provided in P.A. VARESI, *Il ruolo delle Università nella promozione dei tirocini formativi e di orientamento e dell'apprendistato “alto”*, in P. REGGIANI GELMINI, M. TIRABOSCHI (eds.), *Scuola, Università e Mercato del lavoro dopo la Riforma Biagi. Le politiche per la transizione dai percorsi educativi e formativi al mercato del lavoro*, Giuffrè, 2006, 419-430. See also L. MENGHINI, *La disciplina dell'apprendistato per l'alta formazione*, in M. BROLLO, M.G. MATTAROLO, L. MENGHINI (eds.), *Contratti di lavoro flessibili e contratti formativi*, Ipsoa, 2004, 215 and ff., and more recently, F. CARINCI, *E tu lavorerai come apprendista (L'apprendistato da contratto “speciale” a contratto “quasi-unico”)*, Working Paper CSDLE “Massimo D'Antona” – IT, 2012, n. 145.

¹⁴⁵ Cf. M. TIRABOSCHI, *L'apprendistato di alta formazione*, in M. TIRABOSCHI (ed.), *La riforma del lavoro pubblico e privato e il nuovo welfare*, Giuffrè, 2008, 101-110, esp. 105-106.

¹⁴⁶ This topic has been discussed at length in M. TIRABOSCHI, *Dottorati industriali, apprendistato per la ricerca, formazione in ambiente di lavoro. Il caso italiano nel contesto internazionale e comparato*, cit., par. 4.

¹⁴⁷ Few Regions regulated and implemented advanced-level apprenticeship contracts. An overview of regional legislation for this working scheme is provided in www.fareapprendistato.it.

¹⁴⁸ The hurdles to implement advanced-level apprenticeships, which are partly due to the fact that regional authorities and collective bargaining fail to apply relevant legislation, are detailed in ISFOL's reports. As documented by these reports, this working scheme is still poorly used despite it has been in place for more than eight years. Only 50 out of the 446,227 contracts

lawmakers to introduce the Consolidated Text¹⁵⁰ and a simplified form of apprenticeship for research purposes. In many respects, the latter resembles the “third-level apprenticeship contract”¹⁵¹ implemented in Italy and gives access to a number of those incentives referred to when discussing the Fixo project managed by Italia Lavoro¹⁵². This contractual scheme is purposely unrelated to the formal education system (e.g. that enabling one to pursue higher education or doctoral degrees) as it aims at promoting the establishment of private research centres and facilities¹⁵³ and hence the creation of “intermediate labour markets” favouring industry-university collaboration (see par. 1) as is the case in other countries¹⁵⁴.

Simply put, following the amendments contained in the 2011 Consolidated Text, third-level apprenticeship contracts¹⁵⁵ can now serve a dual purpose. They can be used to engage in higher and postgraduate education and to conclude employment contracts for research purposes that, however, will not provide any qualification. Therefore, and unlike what was originally established by Article 50 of Legislative Decree no. 276/2003, this second option is

concluded in 2014 concerned advanced-level apprenticeships (in 2015 they were 100 out of a total of 410,213). Cf. ISFOL, *Verso il sistema duale. XVI monitoraggio sull'apprendistato*, 2016, 89-90.

¹⁴⁹ I know from personal experience that accessing the financial and tax benefits available at regional level related to apprenticeship contracts to pursue a Doctoral degree is an exhausting and time-consuming process and procedures are often unclear.

¹⁵⁰ A detailed analysis is offered in M. TIRABOSCHI, *Impianto e quadro regolatorio*, in M. TIRABOSCHI (ed.), *Il Testo Unico dell'apprendistato e le nuove regole sui tirocini. Commentario al decreto legislativo 14 settembre 2011, n. 167, e all'articolo 11 del decreto legge 13 agosto 2011, n. 138, convertito con modifiche nella legge 14 settembre 2011, n. 148*, cit., 367-375. See also E. RENDA, A. SALERNI, *L'apprendistato di alta formazione e ricerca: luci e ombre*, in *Quaderni di Economia del Lavoro*, 2013, n. 99, 49-72, and D. GAROFALO, *Gli interventi legislativi sul contratto di apprendistato successivi al T.U. del 2011*, in *DLRI*, 2014, n. 143, 427-459.

¹⁵¹ Cf. C. ROMEO, *L'apprendistato di alta formazione e di ricerca*, in *MGL*, 2012, n. 4, par. 4.

¹⁵² *Supra*, footnote 91.

¹⁵³ C. ROMEO, *op. cit.*, seems to neglect this point, perhaps because of the biased views characterising academic research.

¹⁵⁴ See the comparison provided in M. TIRABOSCHI, *Dottorati industriali, apprendistato per la ricerca, formazione in ambiente di lavoro. Il caso italiano nel contesto internazionale e comparato*, cit., par. 5. See also the comparative analysis provided by EUROPEAN COMMISSION, *Study on higher Vocational Education and Training in the EU. Final Report*, European Union, 2016.

¹⁵⁵ This approach can be seen in Article 6 of Legislative Decree no. 167/2011 establishing that training schemes entered by those concluding advanced-level apprenticeship contracts considered public training standards, while apprenticeships for research purposes were considered to be as similar as vocational apprenticeships. In this latter case, training standards were defined in national collective bargaining. On this point, see L. RUSTICO, M. TIRABOSCHI, *Standard professionali e standard formativi*, in M. TIRABOSCHI (ed.), *Il Testo Unico dell'apprendistato e le nuove regole sui tirocini. Commentario al decreto legislativo 14 settembre 2011, n. 167, e all'articolo 11 del decreto legge 13 agosto 2011, n. 138, convertito con modifiche nella legge 14 settembre 2011, n. 148*, cit., 423-444. See also the Circular no. 29 of 15 November 2011 issued by the Ministry of Labour.

specifically provided to train young researchers that will be recruited in the private sector. Consequently, both the apprenticeship contract for research purposes and advanced-level apprenticeships to pursue a doctoral degree introduced by the 2008 reform were seen as an opportunity for small and medium-sized enterprises, to invest in research and innovation, to give new momentum to business productivity and renewal and to facilitate the establishment of spin-offs, business networks and research infrastructure allowing for private-public collaboration which still lacks in Italy. It was also for this reason that it was established that apprenticeship contracts for research purposes could be concluded not only by universities but only by “other research and educational bodies, included those officially authorised at regional or national level to engage in activities related to business, work, training, innovation and technological transfer”¹⁵⁶. This wording made reference to the provision helping to match labour demand and supply contained in Article 6 of Legislative Decree no. 276/2003 as amended by Law-Decree no. 98 of 6 July 2011 and by Law no. 111 of 15 July 2011, according to which research-based apprenticeships were not intended as mere employment contracts but as placement tools necessary to establish a system matching labour demand and supply in private-sector research¹⁵⁷.

However, judging from the poor implementation of this working scheme and the few provisions governing it laid down in regional regulations¹⁵⁸ and collective agreements¹⁵⁹, the apprenticeship reform has been nowhere near to

¹⁵⁶ Par. 2, Article 5 of Legislative Decree 167/2011.

¹⁵⁷ On this point, cf. S. SPATTINI, *Riforma dell'apprendistato e nuovo placement*, in M. TIRABOSCHI (ed.), *Il Testo Unico dell'apprendistato e le nuove regole sui tirocini. Commentario al decreto legislativo 14 settembre 2011, n. 167, e all'articolo 11 del decreto legge 13 agosto 2011, n. 138, convertito con modifiche nella legge 14 settembre 2011, n. 148*, cit., 126-130. See also C. CORDELLA, *Note in tema di profili formativi nel contratto di apprendistato*, Working Paper CSDLE “Massimo D’Antona” – IT, 2014, n. 224, 33.

¹⁵⁸ Sardinia, Apulia, Abruzzi, Lazio, Marche and the Autonomous Province of Trento are the only administrations that have put in place specific measures to regulate apprenticeships for research purposes unrelated to academic programmes in higher education. See ISFOL, *op. cit.*, 95, *Quadro 4.1 – Tipologia di percorsi di apprendistato di alta formazione e di ricerca previsti negli Accordi di cui all'art. 5 del D.lgs. 167/2011*. Yet these working schemes could be implemented without regional regulations on apprenticeships. Pursuant to Par. 5, Article 5 of Legislative Decree no. 167/2011: “absent provisions at the regional level, apprenticeship contracts for research purposes can be concluded by means of specific agreements between employers, their representatives and universities, vocational schools, research and training bodies as specified in par. 4, without this translating into new or additional costs for the national government”.

¹⁵⁹ At the time of concluding specific inter-confederal agreements on apprenticeships and renewing existing collective agreements, the parties failed to regulate advanced-level apprenticeships and those for research purposes, leaving these working arrangements without an effective legal framework – particularly as regards employment grade and remuneration –

fulfilling the objectives set down by lawmakers¹⁶⁰. This failure can be explained by the lack of a culture promoting company-based research careers by employers and public institutions, which has led many to confuse apprenticeships for research purposes with those used to obtain a PhD degree¹⁶¹.

Compounding the picture is the new provision on apprenticeships contained in Article 45 of Legislative Decree no. 81/2015 (the Jobs Act) that repeals the rules laid down in the 2011 Consolidated Text¹⁶² and adds further bureaucratic and operational hurdles to conclude apprenticeship contracts for research purposes¹⁶³. Specifically, while the Consolidated Text streamlined apprenticeship legislation, among others leaving to regional authorities and social partners more leeway to implement this contractual scheme, the Jobs Act goes in the opposite direction¹⁶⁴, favouring more centralised regulation which entails higher red tape and administrative burdens¹⁶⁵. The entry into

encouraging employers to make use of this form of employment. An overview of collective bargaining on apprenticeships is offered in *www.fareapprendistato.it*.

¹⁶⁰ No monitoring activity is in place specifically addressing the use of apprenticeship contracts for research purposes, and even the Isfol reports referred to above considers all types of apprenticeships in an indiscriminate way. Some statistics can be extrapolated from the report of Italia Lavoro (updated to June 2016) concerning the use of benefits within the *FlxO* programme. As of June 2016, incentives have been claimed for 715 apprenticeship contracts (this figure includes both advanced-level apprenticeship contracts and apprenticeship contracts for research purposes). Arguably, most of them are apprenticeship contracts for research purposes, particularly because of the low numbers of apprentices on advanced-level apprenticeship contracts reported by the Isfol report.

¹⁶¹ On this point, see for example C. ROMEO, *op. cit.*, who stresses the confusion among experts and employers, particularly as regards some theoretical aspects. Cf. Decree no. 7400 of 27 July 2016 issued by Regione Lombardia, *Avviso pubblico per l'apprendistato di alta formazione e di ricerca (art. 45 d.lgs. 81/2015)*. While making continual reference to apprenticeships for research purposes, this provision ends up confusing this working scheme with advanced-level apprenticeships.

¹⁶² The repeal of the 2011 Consolidated Text on apprenticeships is still widely debated, especially because Legislative Decree no. 81/2015 does not regulate the shift from the previous to the new legal framework while awaiting new rules and collective agreements concluded at the regional level.

¹⁶³ Cf. D. GAROFALO, *L'apprendistato nel decreto legislativo n. 81/2015* (art. 41-47), in F. CARINCI (edit), *op. cit.*, 241-293 and esp. 273-276. See also M. TIRABOSCHI, *L'apprendistato dopo il Jobs Act*, in F. CARINCI (ed.), *Jobs Act: un primo bilancio. Atti del XI Seminario di Bertinoro-Bologna del 22-23 ottobre 2015*, ADAPT University Press, 2016, 306-330.

¹⁶⁴ Cf. L. BOBBA, *Jobs Act e apprendistato, la svolta c'è*, in *Boll. ADAPT*, 2015, n. 30. See also A. BIANCOLINI, A. SIMONCINI, *Il nuovo ordinamento dell'apprendistato di primo e terzo livello*, in *FOP – Formazione Orientamento Professionale*, 2016, n. 1, 14-19.

¹⁶⁵ Cf. M. TIRABOSCHI, *Apprendistato di terzo livello: la semplificazione può attendere*, in M. TIRABOSCHI (ed.), *Le nuove regole del lavoro dopo il Jobs Act. Commento sistematico dei decreti legislativi*

force of the bulky Inter-Ministerial Decree of 12 October 2015¹⁶⁶ made apprenticeships more cumbersome to implement, because it applies to all higher-education apprenticeship contracts¹⁶⁷ wholesale, and requires the conclusion of a protocol between the training body¹⁶⁸ and the employer specifying the responsibilities of both parties. A sample of the protocol is provided by the Inter-Ministerial Decree and, however adaptable to each case, is a rather lengthy document that fails to provide operators and labour inspectors with parameters to be used if one moves away from the indications contained in the provision.

To sum up, the employer who wants to hire apprentices to carry out research must demonstrate to possess the necessary requirements as regards infrastructure, expertise and training. The employment relationship shall last between 6 months and 3 years and can be further extended “if special needs arise related to the research project”. Apprentices’ training consists of on-the-job and off-the-job training, the latter being carried out by the training body. Training content and duration are defined in the individual training plan¹⁶⁹ and depend on the apprentice’s research project and tasks at the company.

nn. 22, 23, 80, 81, 148, 149, 150 e 151 del 2015 e delle norme di rilievo lavoristico della legge 28 dicembre 2015, n. 208 (Legge di stabilità per il 2016), cit., 204-211.

¹⁶⁶ “Definizione degli standard formativi dell’apprendistato e criteri generali per la realizzazione dei percorsi di apprendistato, in attuazione dell’articolo 46, comma 1, del decreto legislativo 15 giugno 2015, n. 81” published in Gazzetta Ufficiale no. 296 of 21 December 2015.

¹⁶⁷ Many authors (e.g. A. BIANCOLINI, A. SIMONCINI, *op. cit.*, p.16) have credited the Jobs Act with providing “a uniform set of rules that apply to all types of apprenticeships”. Nevertheless, this might turn into an obstacle in practical terms, because these apprenticeship schemes are significantly different from one another, especially apprenticeship contracts for research purposes, which cannot be used to obtain academic degrees.

¹⁶⁸ Besides providing a list of high-school institutions, training and vocational centers, those dealing with adult education, vocational schools, universities and centres specialised in music and dance education, the Inter-Ministerial Decree of 12 October 2015 also refers to “other research and training bodies which have been authorised at the regional, national or Community level to foster entrepreneurship, employment, professions, innovation and technological transfer”. These latter bodies are those that are interested the most in concluding apprenticeships for research purposes, because they are engaged in activities not leading to the issuing of academic certifications having legal value.

¹⁶⁹ The sample of the individual training plan attached to the Interministerial Decree no. 12 October 2015 is overly school-oriented. Aspects like learning units, training hours and related credits might sound like foreign concepts to employers in the private sector where research is developed according to objectives and results. At a first glance, those hired through apprenticeship contracts for research purposes are not under the obligation to compile the individual training plan, which is mandatory for the other two apprenticeship schemes, due to their links with the national education system. For this reason, the decision of Regione Lombardia to make individual training plans mandatory also for apprenticeships to carry out research is puzzling. See no. X/4676, section 3, par. 1.2 of the Decree of Regional Committee

Somewhat surprisingly, the provision contained in par. 11, Article 5 of Inter-Ministerial Decree of 12 October 2015 determines that on-the-job training for apprentices hired on apprenticeship contracts for research purposes shall be at least 20% of their annual working time, while off-the-job training is not mandatory. This rule adopts a “quantitative” approach, in the sense that all apprentices, regardless of their activities and the industry they operate in, have to undergo a certain amount of on-the-job training. Furthermore, the fact that the training body is no longer required to provide off-the-job training, questions the original aim of this form of employment and deprives it of its research content, which was the underlying principle of the 2011 Consolidated Text. Concluding an apprenticeship contract without the obligation to cooperate with a high-level training body seems pointless and increases the risk to make a fraudulent use of this working scheme just to access generous benefits at regional and national level and to enjoy tax credits, as permitted by the law¹⁷⁰.

Notwithstanding the shortcomings referred to above, the Inter-Ministerial Decree of 12 October 2015 has the merit of defining a comprehensive set of rules on research-based apprenticeships that might be implemented without specific regional provisions, thus reasserting the autonomous nature of this working scheme as compared to apprenticeship contracts entered into to obtain a PhD¹⁷¹. One cannot fail to note that making this form of employment fully operational will once again depend on collective bargaining at a sectoral

specifying that “Pursuant to par. 5, Article 45 of Legislative Decree 81/2015, for the purposes of concluding an apprenticeship contract, either those for research purposes or advanced-level ones, the training institution and the employer should compile the relevant protocol (Annex 1), the individual training plan (Annex 1a) and the individual report (Annex 2) enclosed to the Interministerial Decree no. 12 October 2015”.

¹⁷⁰ Par. 3, Article 45 of Legislative Decree no. 81/2015 provides for remuneration to be paid to the apprentice that does not include the hours they engage in off-the-job training, whereas the hours spent in on-the-job training are paid as a percentage of total remuneration (10%). The actual hours worked by the apprentice are paid according to the traditional calculation (i.e. the possibility to classifying workers into a lower employment grade than that established in the collective agreement or by calculating apprentices’ remuneration as a percentage of their length of service). The fact that apprentices hired to carry out research are not under the obligation to take part in research activities might encourage employers to make use of these working schemes only to have access to financial benefits.

¹⁷¹ Par. 3, Article 10 of Inter-Ministerial Decree of 12 October 2015 establishes that the provisions therein shall be enforced within six months from its entry into force. This transitional period ended on 22 June 2016, starting from which the Regions that have not laid down a specific set of rules on apprenticeships will be compelled to apply the Interministerial Decree. At the time of writing, only the following regions have ratified the indications contained in the Interministerial Decree, namely: Piedmont, Lombardy, Friuli Venezia Giulia, Emilia Romagna, Basilicata, and Sicily.

level, which however does not seem to be interested in this working scheme, among others because of the lack of a network of private companies that can recruit apprentices at the end of their educational path¹⁷².

Against this background, where negative aspects outnumber positive ones, a provision that is worth a mention is the Interconfederal Agreement on Apprenticeship concluded pursuant to Articles 43 and 45 of Legislative Decree no. 81/2015, that was concluded by Confindustria, Cgil, Cisl and Uil on 18 May 2016. The agreement contains few, though essential, terms defining when research-based apprenticeships¹⁷³ can be used, also in relation to remuneration, an aspect that has generated controversy and limited the use of this contractual scheme¹⁷⁴. Equally important is the well-established practice to make reference by analogy to legislation regulating vocational apprenticeships laid down in the Interconfederal Agreement of 18 May 2016 for all those aspects not covered by collective agreements.

4. In search of Identity: What Collective Bargaining does (and does not) say about Researchers in the Private Sector

Collective bargaining does not provide any element to define researchers in the private sector, therefore they are still “figures in search of identity” and, if the public sector is excluded, without a labour market where they can find employment¹⁷⁵. Undoubtedly, researchers in Italy are still trained to pursue an academic career¹⁷⁶ or to join public research centres. They struggle to find

¹⁷² Among the few regulatory interventions related to this issue, mention should be made of the renewal of the collective agreement of 12 May 2016 by the national association of cultural institutions (Federculture), that attempted at providing a contractual framework regulating apprenticeship contracts for research purposes. The full version of the collective agreement is available at www.fareapprendistato.it. For a comment on this collective agreement, see R. BERLESE, *L'apprendistato nel settore culturale. Il rinnovato ccnl di Federculture*, in *Boll. ADAPT*, 2016, n. 22.

¹⁷³ The agreement is not concerned with apprenticeships for research purposes on an exclusive basis, but it refers to all types of apprenticeship schemes leading to an academic qualification, though the one in place to pursue research can be considered more like a kind of vocational or trade apprenticeship. A critical analysis of the agreement and its effects is offered in A. BALSAMO, *Apprendistato “duale”. Prime valutazioni sull'accordo interconfederale e i suoi effetti in materia di retribuzione*, in *Boll. ADAPT*, 2016, n. 18.

¹⁷⁴ The agreement provides that apprentices engaged in research can be given up to two employment grades lower than those established by the collective agreement in the first half of the apprenticeship contract. For the latter half, the apprentice can only be given one employment grade lower than that determined by law.

¹⁷⁵ I share this view which was the same expressed in G. SIRILLI (ed.), *op. cit.*, p. 32.

¹⁷⁶ I have discussed this topic at length in M. TIRABOSCHI, *Dottorati industriali, apprendistato per la ricerca, formazione in ambiente di lavoro. Il caso italiano nel contesto internazionale e comparato*, cit., par. 1.

employment in the private sector¹⁷⁷ and they regard this possibility as a second best or even as “a failure, because they have not managed to obtain a university job”¹⁷⁸. The unclear identity of this professional figure, either in terms of career or remuneration, also affects the match between labour demand and supply, which is not systemised and is difficult for both employers¹⁷⁹ and graduates.¹⁸⁰ Unlike the public sector¹⁸¹, no national collective agreement is in place for employers and companies (including foundations, non-profit and for-profit institutions) operating in the private sector performing research. The only exception which is frequently referred to in literature, though applying to a narrow area¹⁸², is the Autonomous Province of Trento. Starting from 2005, this province has converted research centres – which were previously equated to provincial bodies – into non-profit foundations as far as staff remuneration and regulation were concerned, by concluding a specific collective agreement¹⁸³. This was done in compliance with the European Charter for

¹⁷⁷ Whatever the evaluation of project work, what is certain is that the lack of resources makes researchers’ transition from a master’s or a doctoral degree to stable employment particularly challenging also in relation to pension rights, economic safeguards and gender issues (e.g. disadvantages in employment terms resulting from maternity). See G. SIRILLI (ed.), *op. cit.*, esp. 36-37.

¹⁷⁸ J. SUGARS, E. PEARCE, *Competenze trasferibili e occupabilità dei dottori di ricerca: Indagine sul panorama attuale (Report finale)*, DOCENT – Doctors in Enterprise, 2010, WP1/D1.3, p. 8, where reference is made to an old-fashioned, though prevailing, mentality. Yet Italy represents an exception in the international context. Cf. K. VANDEVELDE, *Intersectoral Mobility*, Report from the 2014 ERAC mutual learning workshop on Human Resources and Mobility, 2014, 15.

¹⁷⁹ As rightly pointed out by G. SIRILLI (ed.), *op. cit.*, p. 34 “on-the-job training is enough for employers to qualify a professional as a researcher, even when they do not have academic qualifications: it is not unusual in industry to find researchers that only possess a high school diploma”. At the community level, par. 1.3 of the Communication from the Commission referred to above concerning the regulation on state aid for research and development and innovation defines “highly qualified personnel” as staff having a tertiary education degree and at least five years of relevant professional experience, which may also include doctoral training.

¹⁸⁰ They still confound research in the private sector with academic research. In this sense, it is significant that par. 7 of the Commission recommendation of 11 March 2005 specifies that “enhanced and more visible career prospects also contribute to the building of a positive public attitude towards the researchers’ profession, and thereby encourage more young people to embark on careers in research”.

¹⁸¹ Cf. The national collective agreement for non-executive staff of bodies and institutions engaged in research and experimentation for the 2006-2009 period and the 2006-2007 financial period, 13 May 2009, published on the Aran website, heading: *Contrattazione*, voce *Comparti, Ricerca*.

¹⁸² Cf. G. SIRILLI (ed.), *op. cit.*, 32, and A. CRIVELLI, *Ricerca privata: quale contratto?*, in *Trieste Città della Scienza Magazine*, 2010, n. 12, *Ricerca e Carriera*.

¹⁸³ Cf. the collective agreement concluded at local level concerning staff working at foundations as laid down in Law no. 14 of 2 August 2005 and concluded on 28 September between Fondazione Edmund Mach, Fondazione Bruno Kessler and Cgil, Cisl, Uil.

Researchers already mentioned in the previous chapters (par. 2)¹⁸⁴ concerning some important aspects related to research: acknowledgement of private-sector researchers' qualifications, employment grades, career advancement, incentives and inter-sectorial mobility.

Little information is available as regards other companies. In some cases, no collective agreement is in place, as is the case of the *Istituto italiano di tecnologia* based in Genoa¹⁸⁵; in other cases, the collective agreement used in the services sector¹⁸⁶ is implemented, which however does not make provisions for researchers in the private sector (e.g. this is the case of the “*Mario Negri*” *Istituto di ricerche farmacologiche* and the Telethon Foundation¹⁸⁷).

One should also note that a number of agreements concluded at the company level have been concluded to help researchers to move out from unstable working conditions (e.g. project work), to provide them with stable employment¹⁸⁸ and to avoid that workers hired to perform employer-organised work are in fact engaged in salaried employment, as laid down in Article 2 of Legislative Decree no. 81/2015¹⁸⁹.

¹⁸⁴ Cf. par. 3, Article 2 of the collective agreement mentioned in the previous footnote.

¹⁸⁵ This is what I was told during a personal communication with IIT's HR director that has laid down a legally classification of private-sector research as a form of collaborative and coordinated work performed on a project-by-project basis.

¹⁸⁶ The national collective agreement concerning staff working in the services and distribution sector concluded on 30 March 2015 makes a passing reference to the “research executives” in relation to advertising agencies, without providing any further information on the tasks they carry out.

¹⁸⁷ As one can read in the disciplinary system published on the website of the Foundation (Section: *About us*, heading: *Code of Ethics and Model 231*), Telethon “draws on the national collective agreement concluded in the tertiary section and, for some staff, to that of journalists, executives operating in manufacturing and executives working in trade”.

¹⁸⁸ An example of this is the supplementary collective agreement concluded on 18 September 2015 by the *Istituto scientifico romagnolo per lo studio e la cura dei tumori (IRST)* involving 44 collaborators engaged in research activities, 32 staff engaged in research and technology support activities and 10 collaborators operating in the field of managerial technology. Out of a total of 54 collaborators, 17 were hired on open-ended employment contracts and 37 were recruited through fixed-term employment contracts. The additional cost for the institutions was some €382,000 per year, minus a saving of €376,000 for the following three year resulting from exemptions from paying contributions if staff were recruited on open-ended employment contracts in 2015, pursuant to par. 118 ff. of the single article of Law no. 190/2014.

¹⁸⁹ Cf. the Agreement of 28 December 2015 between Federculture, FP Cgil, Cisl FP, Uil FPL and Uilpa concerning institutions engaged in cultural events, which makes provision for researchers. On this point, see L. IMBERTI, *L'eccezione è la regola?! Gli accordi collettivi in deroga alla disciplina delle collaborazioni organizzate dal committente*, in *Diritto delle Relazioni Industriali*, 2016, n. 2, 393-430.

A detailed analysis of a database containing as many as 1,500 collective agreements concluded at the company level¹⁹⁰ reveals that a little number of them regulate and promote this peculiar form of employment, regardless of what is stated in the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers¹⁹¹. Among them, mention should be made of the collective agreement concluded on 23 July 2007 between Sincrotone Trieste S.C.p.A. and trade unions operating at company and local level (Fiom-Cgil, Uilm-Uil e Ugl Metallmeccanici). By derogating from the national collective agreement¹⁹², the agreement lays down measures enabling one to “autonomously determine his/her working time between 00.00 am and 12.00 pm¹⁹³, providing vocational training as a way to promote horizontal mobility that shall be registered in a ‘booklet for vocational training and retraining’¹⁹⁴”. Importantly, the agreement under discussion sets down specific clauses allowing for harmonisation of and deviation from the provisions laid down at the national level, with the only purpose of “taking into account the peculiarities of laboratory personnel and with the aim of defining programmes facilitating its growth both in terms of skills and remuneration”¹⁹⁵. In the agreement, mention is also made of complex forms of variable pay¹⁹⁶ linked to remuneration items that “cannot be associated to those laid down by the national collective agreement currently in force”¹⁹⁷ as specifically related to research.

Analysing the few studies on research in the private sector, there seems to be a lack of awareness that speaking of “human resources for global competition”

¹⁹⁰ See ADAPT’s database collecting collective agreements concluded at company and local level in www.farecontrattazione.it.

¹⁹¹ This is the case of Sincrotone Trieste S.C.p.a (see the following note) which has ratified the European Charter of Researchers and since 2006 has adopted the relative Code of Conduct.

¹⁹² In particular, see par. 5, Article 1 of the Agreement of 23 July 2007 between Sincrotone Trieste S.C.p.A. and trade union representatives operating at the company level. It is specified that “the terms of the present agreement, which derogates from the national collective agreement, have been agreed upon by the parties taking into account the company’s specific organisational needs and production” which is built upon an internationally-recognised research laboratory specialised in the production of synchrotron light and its usage in the field of materials science. As detailed in the premises of the agreement “the company mission is to promote cultural, social and economic growth; basic and applied research in major fields; scientific and technical training; knowledge and technological transfer”. An analysis of this case study in terms of industrial relations is provided in A. Crivelli, op. cit.

¹⁹³ Accordo Sincrotrone Trieste 23 July 2007, cit., art. 7, *Orario di lavoro del personale impegnato in attività di ricerca*, par. 2.

¹⁹⁴ Art. 31, *Formazione e aggiornamento professionale*, par. 7.

¹⁹⁵ Cf. la *Dichiarazione delle parti* contenuta all’art. 3.

¹⁹⁶ Art. 42, *Premio di risultato*.

¹⁹⁷ Art. 43, *Elemento aggiuntivo di professionalità*, par. 2.

means first and foremost training valuable professionals, i.e. researchers, “dealing with generating, advancing, disseminating and implementing technological and scientific knowledge and that either possess higher education qualifications or have gained skills through work experience and training”¹⁹⁸. Yet collective bargaining in the private sector, that should regulate the match between “marketable skills” and “their market value”, does not facilitate researchers’ training¹⁹⁹ and employment²⁰⁰. No support is provided by collective bargaining to researchers at the initial stage of their career (i.e. during apprenticeships, see par. 3.2) or later on, for instance in the context of employment grading systems, within which this occupation is not contemplated as regards tasks, duties, professional profile, career advancement, mobility and remuneration. Consequently, in terms of employment grading, researchers are equated to lower-level professional figures, usually white-collar workers or middle managers²⁰¹, thus downplaying their role.

Besides the lack of collective agreements regulating research in the private sector, the 400 collective agreements concluded at the national level do not provide measures to promote research in each sector. This aspect is even more serious if one considers that industrial relations actors have spoken many fine

¹⁹⁸ See G. SIRILLI (ed.), *op. cit.*, 29, who makes reference to research carried out by R. FLORIDA, I. TINAGLI, *Europe in the Creative Age*, Demos, 2004, promoted and financed by the Heinz School of Public Policy and Management of the Carnegie Mellon University, according to which intellectual competition will be the real challenge for the global economy in the new millennium.

¹⁹⁹ I have already provided evidence in support of the resistance of the industrial relations systems towards doctoral programmes carried out in companies and apprenticeship contracts for research purposes, notwithstanding the generous benefits provided by the *FLxO* programme referred to in footnote 91. Cf. M. TIRABOSCHI, *Dottorati industriali, apprendistato per la ricerca, formazione in ambiente di lavoro. Il caso italiano nel contesto internazionale e comparato*, cit., par. 4. On the prejudice of the social partners towards in-company training see G. BERTAGNA, *Apprendistato e formazione in impresa*, in M. TIRABOSCHI (ed.), *Il Testo Unico dell'apprendistato e le nuove regole sui tirocini. Commentario al decreto legislativo 14 settembre 2011, n. 167, e all'articolo 11 del decreto legge 13 agosto 2011, n. 138, convertito con modifiche nella legge 14 settembre 2011, n. 148*, cit., 105-125.

²⁰⁰ On this point, which plays a key role in relation to inter-sectorial mobility and career prospects, cf. OECD, *Transferable Skills Training for Researchers. Supporting Career Development and Research*, 2012.

²⁰¹ See for example the job classification and grading system for technical experts and researchers consisting of a basic level (white-collar workers), expert level (white-collar workers), and senior level (middle management) and their related remuneration levels (ranging between a minimum of €21,000 to a maximum of €60,000) detailed in Annex B of the supplementary collective agreement concluded on 21 June 2007 between the representatives of CRS4 and trade union representatives operating at the company level. See also the supplementary collective agreement of 23 April 2013 between Guglielmo Tagliacarne, Filcams-Cgil Roma, Fisascat-Cisl Roma, and company-level trade unions.

words about key aspects such as innovation and productivity²⁰² in the last 15 years. These concepts also appeared in a number of relevant documents, among others the agreement between Cgil, Cisl and Uil for a modern industrial relations system concluded on 14 January 2016, stating that “the growing added value of production and services, which is essential for quality-based competitive development, calls for a significant investment *in research, innovation and human resources*” (emphasis added).

At a national level, few collective agreements make reference to researchers, which are usually classified as white-collar workers or middle managers. For illustration purposes, mention should be made of the national collective agreement concluded on 5 December 2012 by Federmeccanica-Assistal and Fim-Cisl, Uilm-Uil, Fismic, Ugl Metalmeccanici, which places researchers at level 7 of the relevant collective agreement and defines²⁰³ them as workers who perform activities “following general instructions and with the necessary knowledge of relevant industries, planning and operational processes to fulfil business objectives and to implement and to develop them by devising work plans and by searching for innovative methodologies and cooperation with other workers, if needed”. Some collective agreements in other sectors (e.g. the food, craft, services, energy, building, and agricultural industry) also make provisions for professionals that make use of their skills to develop new processes and products, yet without providing a legal and conceptual framework, also concerning performance assessment, that takes account of the specific nature of research carried out in the private sector, especially in relation to tasks, skills, career advancement and remuneration²⁰⁴. These collective agreements examined in this sector fail to take into account the evolution of researchers, particularly the fact that “the complexity of research careers today demands a new type of researcher, whom we would like to describe as an “entrepreneurial researcher”. This implies that a researcher

²⁰² Significantly, empirical evidence shows that the current structure of collective bargaining has given rise to a detrimental form of “guaranteed profit” reducing employers’ willingness to promote productivity through investments in innovation. The compromise arrived at between remuneration strategies aimed at limiting labour costs and the little use of decentralised bargaining enabled companies, even small-sized ones, to remain competitive without innovate. On this point, cf. L. TRONTI, *The Italian productivity slow-down: the role of the bargaining model*, in *International Journal of Manpower*, 2010, vol. 31, n. 7, 770-792. On the links between investments in research and productivity, see OECD *The Future of Productivity*, cit., esp. 53-58.

²⁰³ On the unsuitability of the national collective agreement in the mechanical sector to define the particulars of research, see the enlightening research by A. CRIVELLI, *op. cit.*

²⁰⁴ These few provisions in collective bargaining are not sufficient to do justice to researchers’ wealth of knowledge. Cf. M. ORI, *Lezione di employability/7: management e leadership, le competenze di un ricercatore*, in *Boll. ADAPT*, 2013, n. 32. See also the Table in OECD, *Transferable Skills Training for Researchers. Supporting Career Development and Research*, cit., 20.

should be innovative, risk-oriented, prepared to take leadership and respond to different tasks in parallel, often even holding more than one position at a time”²⁰⁵.

The national collective agreement concluded on 15 October 2015 between Federchimica-Farindustria and Filctem-Cgil, Femca-Cisl, Uiltec-Uil deserves a special mention, in that “it puts in place a system that best fulfils research needs”²⁰⁶. Article 4 (Personnel Classification) makes reference to researchers’ skills and grades²⁰⁷, detailing their career path ranging from the “apprentice” researchers²⁰⁸ to senior scientists, including positions like research unit or lab coordinator and specifying their tasks.

Equally important is the collective agreement concluded in the rubber and plastics industries concluded on 10 December 2015 between *Federazione Gomma Plastica, Associazione Italiana Ricostruttori Pneumatici* (AIRP) and Filctem-Cgil, Femca-Cisl, Uiltec-Uil. This agreement defines the researcher as the worker who is required to perform “research into new reactions, processes and materials to define the use of experimental methodologies and measurement techniques and mathematical methods of simulation”. The researcher is also tasked with “planning in detail the different operational stages, defining with the principal and other bodies concerned ways to conduct trials and experimentations, selecting appropriate techniques, methods and appraisal”, overseeing “trials and elaborations”, processing “experimental data obtained by verifying methodologies and calculation strategies on the basis of the objectives set down”, and drafting “final and intermediate reports on the topics analysed” that will be discussed with the principal.

5. The Need for Legislative Action to Acknowledge and Establish a Labour Market for Researchers in Companies and the Private Sector. A Proposal for System Regulation and a Legal Framework for this form of Employment

Following the reasoning developed thus far and in view of putting forward some operational proposals, it might be useful to recall that the concept of a “researcher” bears relevance not only in social and professional terms (e.g. tasks performed, skills and responsibilities) but also in legal terms, in that “it

²⁰⁵ EXPERT GROUP ON THE RESEARCH PROFESSION, *op. cit.*, 29.

²⁰⁶ A. CRIVELLI, *op. cit.*

²⁰⁷ As is known, the national collective agreement concluded in the chemical and pharmaceutical sector was one of the first arrangements to move beyond the old grading system which is no longer suitable for the new business organisational models.

²⁰⁸ The national collective agreement concluded in the chemical and pharmaceutical sector is one of the few arrangements regulating apprenticeship contracts for research purposes.

reflects an employee's status as defined and regulated at a national level"²⁰⁹. If this approach is taken, and with collective bargaining failing to clearly define this professional profile and its market value, it is not surprising that Italy's legislation and public opinion mostly think of "researchers" as "those working at universities and public research centres"²¹⁰. Besides clashing with reality – especially if one considers the way innovation has developed²¹¹ – this assumption conflicts with many EU initiatives intended to establish a fully-fledged "European Research Area" (see par. 2) which still struggles to take off. A number of EC policy documents, the European Charter for Researchers referred to before and the Code of Conduct for the Recruitment of Researchers take a more straightforward position and move beyond the traditional distinction between the public and private sector, pursuing the objective to eliminate distinctions between industries and barriers to researchers' geographical and professional mobility²¹² to promote further cooperation between public-sector and private-sector research. As things stand now, this appears to be the only way to create "a single labour market for researchers"²¹³ that is acknowledged by companies and workers because it is built on specific training and qualifications (e.g. industrial PhDs set up in agreement with companies or apprenticeship contracts for higher education and research), which also ensure researchers fair remuneration and proper status²¹⁴, adequate social protection²¹⁵, effective career paths and retraining

²⁰⁹ G. SIRILLI (ed.), *op. cit.*, 33.

²¹⁰ *Ibidem*.

²¹¹ Cf. S. JOHNSON, *Where Good Ideas Come from. The Natural History of Innovation*, Riverhead Books, 2010, according to whom innovation is not the result of researchers working in ivory towers or disruptive strokes of genius. Historically, innovative ideas originate from shared processes, connectivity and the ability to combine insights from different settings. A connected mind is the engine of innovation leading to scientific and technological progress.

²¹² Researchers' inter-sectorial mobility which «in the broadest sense of the term, refers to all possible bridges that can be built between university, industry and other sectors of employment» is covered in the detailed analysis by K. VANDELDE, *op. cit.*, 2014, *passim*, p. 3.

²¹³ This is indeed the main objective of the European Area for Research. Cf. EUROPEAN COMMISSION, *Realising a single labour market for researchers. Report of the ERA Expert Group*, *cit.*, and also EXPERT GROUP ON THE RESEARCH PROFESSION, *op. cit.*, p. 8.

²¹⁴ See the EXPERT GROUP ON THE RESEARCH PROFESSION, *op. cit.*, esp. 20, where it is argued that "pay and remuneration remain some of the main factors that reduce the appeal of research careers and encourage graduates to develop their careers elsewhere" and that "the gender pay gap in research persists, failing one of the basic beliefs of the research profession, meritocracy". A comparative analysis concerning researchers' remuneration and rules is provided in IDEA CONSULT, *Support for continued data collection and analysis concerning mobility patterns and career paths of researchers. Deliverable 8 – Final report MORE2*, 2013, esp. 100 and ff. and 204 and ff. See also DELOITTE, *op. cit.*, 69 and ff.

²¹⁵ As already pointed out in footnote 60, social security coverage is a major obstacle to researchers' inter-sectorial and geographical mobility. Cf. anche K. VANDELDE, *op. cit.*, p. 14.

programmes without considering differences between the private and the public sector. EU institutions' emphasis on "the contribution that researchers can provide in terms of knowledge innovation and development", as well as the focus on "intra-European mobility and the blurring of both sectoral and geographical boundaries"²¹⁶ entail "the dismantling of current recruitment processes and working conditions, which should be updated for the sake of a common approach where no dividing line exists in legal and geographical terms"²¹⁷. This is particularly the case if one aims at establishing a single labour market featuring skills and expertise which are specific to researchers²¹⁸.

Putting forward proposals to give back dignity to this form of employment also in the private sector and catch up with other countries is challenging. An essential starting point is acknowledging this profession²¹⁹, as the European Charter of Researchers clearly points out: "this should commence at the beginning of their careers, namely at postgraduate level, and should include all levels, regardless of their classification at national level (e.g. employee, postgraduate student, doctoral candidate, postdoctoral fellow, civil servants)"⁽²²⁰⁾.

Absent this bottom-up process, which should be promoted by the industrial relations system as was the case in the 1980s at the time of defining the category of middle and top management²²¹, it is up to lawmakers to promote the acknowledgment of those engaged in research and to fully implement the European Charter of Researchers and the Code of Conduct. This does not mean giving the researcher formal recognition, but setting up rules regulating recruitment and evaluation practices, professional profiles, careers, working conditions, mobility and re-training programmes, skills certification and thus forth²²².

²¹⁶ G. SIRILLI (ed.), *op. cit.*, p. 33.

²¹⁷ G. SIRILLI (ed.), *op. cit.*, 33. The same approach is taken by K. VANDEVELDE, *op. cit.*, 4., where it is stressed that "fostering inter-sectorial mobility of researchers has triggered new methods of research training and development, making researchers better suited for the challenges of the current labour market; it has fostered research collaboration; continues to build sufficient critical mass; and intensifies R&D activity in particular areas".

²¹⁸ Cf. K. VANDEVELDE, *op. cit.*

²¹⁹ Cf. the Recommendation of the Commission of 11 March 2005, *cit.*, heading: *General Principles and Requirements for Employers and Financers*

²²⁰ *Ibidem.*

²²¹ On the political and trade union events leading to the acknowledgment of "middle-managers" as a legal category see P. TOSI, *Commento alla legge n. 190/1985*, in *NLCC*, 1986, 1 ff., and A. GARILLI, *Autonomia sindacale e riconoscimento normativo dei quadri d'azienda: a proposito della recente legge 13 maggio 1985, n. 190*, in *Rivista Critica del Diritto Privato*, 1985, 369 and ff.

²²² On the need to establish a "research" system, see EXPERT GROUP ON THE RESEARCH PROFESSION, *op. cit.*, p. 15.

Against this background, the harmonisation of professional paths in the private and the public sector and the recognition of the key role of inter-sectorial mobility leave no room for repealing and overhauling current legislation on researchers, which is strictly based on the academic career²²³, and call for the setting up of a new set of rules for research in the private sector²²⁴. Once implemented, this new and comprehensive system could favour the elimination of legal barriers between private-sector and public-sector research which cannot take place merely through formal and legal procedures.

One might note that the Jobs Act reasserts the relevance of legal categories used to classify workers²²⁵ – though the former are doomed to disappear following the evolution of professional profiles and trades²²⁶ – and opens up to the possibility to include researchers in the list provided in Article 2095. This move would make researchers the cornerstone of the new classification system, as has been the case with middle-managers following changes to work organisation occurred at the end of the last century²²⁷. This is a necessary choice to prevent that researchers operating in the private sector fall within

²²³ Cf. Law no. 240/2010 *Norme in materia di organizzazione delle università, di personale accademico e reclutamento, nonché delega al Governo per incentivare la qualità e l'efficienza del sistema universitario*, published in the supplementary document no. 11 of Gazzetta Ufficiale n. 10 of 14 January 2011.

²²⁴ In order to better understand the scope and the content of the regulatory proposal drafted in the considerations that follow, see the Draft Bill *Riconoscimento e valorizzazione del lavoro di ricerca nel settore privato* that I wrote for ADAPT and Gruppo Bracco which is available in Osservatorio ADAPT - *Il lavoro di ricerca nel privato* (in <http://moodle.adaptland.it>). The legal framework was subsequently used as a starting point for two draft bills submitted to the Parliament during the XVIII Legislation, namely the Draft Bill no. 3654/2016 tabled by a number of members of the Parliament (among whom were Vignali and Palmieri), titled *Modifica all'articolo 2095 Cod. Civ., concernente l'introduzione della figura del ricercatore, e disciplina dell'attività di ricerca nel settore privato* and the Draft Bill n. 2229/2016, cit.

²²⁵ This aspect can be seen in the new rules laid down by Article 3 of Legislative Decree no. 81/2015 concerning changes to one's tasks, which is possible only within the same legal category. See the criticisms made by P. Ichino, *Appunti irriverenti sui nuovi decreti attuativi della riforma del lavoro*, in www.pietroichino.it, 27 July 2015. See also C. Pisani, *La nuova disciplina del mutamento di mansioni*, Giappichelli, 2015; F. Liso, *Brevi osservazioni sulla revisione della disciplina delle mansioni contenuta nel decreto legislativo n. 81/2015 e su alcune recenti tendenze di politica legislativa in materia di rapporto di lavoro*, Working Paper CSDLE "Massimo d'Antona" – IT, 2015, n. 257; M. BROLLO, *Disciplina delle mansioni* (art. 3), in F. CARINCI (ed.), *Commento al d.lgs. 15 giugno 2015, n. 81: le tipologie contrattuali e lo jus variandi*, cit., 29-90.

²²⁶ On this topic, see A. GARILLI, *Le categorie dei prestatori di lavoro*, Jovene, 1988, esp. 237-301.

²²⁷ As pointed out by F. UGGERI, *op. cit.*, "In the past, it was workers classified by the Civil Code as middle-managers who produced a significant change in work organisation. Today, researchers aim to obtain legal status, which is as necessary as unavoidable. This will serve as an example to review the world of work, as current organisational models hamper cooperation between the demand and the supply side. Making use of them is counterproductive and anachronistic. Globalisation has eliminated those barriers that have never existed for researchers. History has taught us that wall exist only to be broken".

those legal and conceptual categories used to classify researchers in the public sector, especially now that recognition of private-sector research is still pending.

In this sense, and judging by the views of most legal opinion and case law, legal categories have always “marked the position of workers, in that it sums up their professional status and as such is an essential element of the employment relationship”²²⁸. This point has been made by a number of authors when commenting on the emergence of highly-skilled occupations²²⁹ and also characterises the development of the legal classification of work in our country. If based on the logic of status underpinning Article 2095 of the Civil Code, labour legislation regulating research would bear great political and cultural significance, particularly in relation to the promotion of this form of employment in the private sector. In other words, and as exemplified in the 1985 law enforced to acknowledge middle and top managers, including researchers in the legal category of the employee “constitutes a return to the very principles of labour law, or at least goes in that direction, as a shift takes place from one’s contract to status”²³⁰ with the latter that is the distinctive trait of those engaging in research, rather than remuneration or applicable legislation.

Classifying private-sector researchers making use of the legal categories employed for workers should prompt collective bargaining, also that carried out at the company level, to determine which professional qualifications are needed in each sector to define researchers’ remuneration and applicable rules. In line with what is stated in the European Charter for Researchers and the proposal for a European Framework for Research Careers²³¹, legislation and collective bargaining might to some extent move away from what is laid down in individual employment contracts and classify researchers in consideration of their merit, qualifications, length of service, responsibilities, experience and skills also in managerial and coordination roles.

The particulars of research in the private sectors shall be regulated by the parties in compliance with legislation and the relevant collective agreement, though it is also possible to perform research on an autonomous basis through project work – as laid down by Article 61 and following of Legislative Decree no. 276/2003 – if this way of working is consistent with work performance in organisational terms. Research can also be conducted autonomously or on a project-by-project basis by teams that have been awarded national or

²²⁸ A. GARILLI, *Le categorie dei prestatori di lavoro*, cit., p. 3.

²²⁹ p. 4.

²³⁰ *Ibidem*.

²³¹ EUROPEAN COMMISSION, *Towards a European Framework for Research Careers*, 2011, p. 2.

international tenders to carry out technological development and research until funding expires²³². Taking into account the peculiar nature of this form of employment, it is essential to devise special training and re-training schemes, skills certification systems, and programmes helping researchers to re-enter the labour market pursuant to Article 23 of Legislative Decree no. 150 of 14 September 2015. Further measures should also be devised in relation to business networks, industrial districts, and the posting of research staff to promote private-public cooperation. Specifically, the provisions on business networks should also apply to teams established following the awarding of tenders to engage in technological development and research. Ad hoc economic incentives shall also be allocated to companies and public-sector institutions favouring senior researchers' mobility and recruitment and helping them to promote dialogue between private and public research entities, which still struggle to interact. Still, on this issue, amendments could be made to the regulation of production districts and business networks laid down in Article 3 of Decree-Law no. 5 of 10 February 2009, as converted by Law no. 33 of 9 April 2009, to allow public and private universities, laboratories, research centres to join them, whatever their legal nature.

The Minister of Labour and Social Policies should also set up a database of researchers hired by private companies to monitor compliance with relevant legislation and collective agreements. This database could also be used to allocate economic incentives to companies or researchers, and to facilitate mobility or re-employment of the latter, especially if the database is integrated with the national employment information service (Article 15 of Legislative Decree 276/2003). Lastly, a problem might arise concerning the moral and economic rights of private-sector researchers' creative works that might need attention and regulation²³³. This is a particularly pressing issue in a time when research is often carried out cooperatively and through disruptive technology that might clash with the strict norms on intellectual property currently in place²³⁴.

²³² This is the perspective taken by MoP Capua in the Draft Bill no. 1962 tabled by the Presidency of the Chamber of Deputies on 16 January 2014, *Disposizioni per la valorizzazione della ricerca indipendente*.

²³³ A first attempt to deal with the issue is offered in G. BRASCHI, *I diritti sulle opere dell'ingegno create dal ricercatore che lavora in azienda e nel settore privato in generale*.

²³⁴ A fascinating analysis of the issue is provided in B.H. HALL, *Open Innovation & Intellectual Property Rights. The Two-edged Sword*, in *Japan Spotlight*, January-February 2010 (which is also available in the Osservatorio ADAPT *Il lavoro di ricerca nel privato*, in <http://moodle.adaptland.it>). Cf. also B.H. HALL, *Is intellectual property important for future manufacturing activities?*, Future of Manufacturing Project Evidence Paper, 2013, n. 12; N. LEE, S. NYSTÉN-HAARALA, L. HUHTILAINEN, *Interfacing Intellectual property rights and Open innovation*, in M. TORKKELI (ed.), *Frontiers of Open Innovation*, Lappeenranta University of Technology Research Report, 2010, n.

225; J. HAGEDOORN, A.-K. RIDDER, *Open innovation, contracts, and intellectual property rights: an exploratory empirical study*, UNU-MERIT Working Paper, 2012, n. 025.

Perceived Precarious Employment in Malta

Manwel Debono and Vincent Marmarà¹

Abstract Purpose. The purpose of this paper is to shed more light on the phenomenon of precarious employment by examining the nature and level of perceived precarious employment in Malta.

Design/methodology/approach. The paper is based on a telephone survey carried out among a sample of 388 employees.

Findings. Results indicate that perceived and objective precariousness do not necessarily tally, and due to its subjective aspect, precariousness is a relative term. The extent to which perceptions of precariousness are anchored in objective reality might be debatable, but their effects are nonetheless real. While the link between precariousness and socio-demographic data is not straightforward, persons with lower levels of education or in fixed-term employment contracts are significantly more likely to experience precarious employment.

Research limitations/implications. The research proposes that it is in the interest of both employers and employees to have an agreed definition and measure of precarious employment. A definition which includes both objective and subjective aspects of the phenomenon would enable researchers to examine situations where the subjective and objective aspects of precariousness do not match.

Originality/value. This study highlights the value of viewing precariousness as having both objective and subjective dimensions. It gauges the often-neglected perceptions of workers towards the important through not clearly understood phenomenon of precarious employment.

Paper type. Empirical research.

Keywords: *Precarious Employment, Subjective Perceptions, Quantitative Research.*

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1. Introduction

The topic of precarious employment has increased in salience in scholarly research in recent years. The prevalence and form of the phenomenon has been studied in many developing countries, including China,² Mexico,³ Vietnam,⁴ India,⁵ South Africa,⁶ and Argentina,⁷ to name but a few, and across more advanced countries such as Canada,⁸ Japan,⁹ South Korea,¹⁰ the USA¹¹ and Europe.¹² Such research indicates a growth of precarious employment across the world, in both developing and more advanced countries.

A decade ago, the term precarious employment was largely unheard of in Malta. Then, in the wake of the international economic downturn starting in 2008, Maltese unions spearheaded by the General Workers Union, Malta's largest union, started voicing their concern about the apparent rise of precarious employment. Despite the employers' associations' attempts at playing down the issue, unions were successful in moving precarious employment up on the public agenda. Indeed, while in 2005 there were no articles referring to precarious employment or precarious work in the Times of Malta,¹³ Malta's most accessed website, the number peaked to over 250 articles in 2013. By then, the major social partners, politicians and other stakeholders

² Y. Zhou, The State of Precarious Work in China, in *American Behavioral Scientist*, 2013, Vol. 57 no. 3, 354-372.

³ T. Aguilar-Ortega, Migración y Desarrollo en el Noroeste de Michoacán, 1995-2005 (Spanish), in *Convergencia: Revista De Ciencias Sociales*, 2011, vol. 18, no. 55, 135-160.

⁴ D. Arnold, Social Margins and Precarious Work in Vietnam, in *American Behavioral Scientist*, 2013, vol. 57, no. 4, 468-487.

⁵ D. Maiti, Precarious Work in India: Trends and Emerging Issues, in *American Behavioral Scientist*, 2013, vol. 57, no. 4, 507-530.

⁶ F. Barchiesi, Wage Labor, Precarious Employment, and Social Inclusion in the Making of South Africa's Postapartheid Transition, in *African Studies Review*, 2008, vol. 51, no. 2, 119-142.

⁷ N. Menéndez, La Múltiple Dimensión de la Precariedad Laboral: El Caso de la Administración Pública en Argentina (Spanish), in *Revista De Ciencias Sociales*, 2010, vol. 128/129, 119-136.

⁸ P.M. Evans, (Not) Taking Account of Precarious Employment: Workfare Policies and Lone Mothers in Ontario and the UK, in *Social Policy & Administration*, 2007, vol. 41, no. 1, 29-49.

⁹ M. Osawa, M. Kim, J. Kingston, Precarious Work in Japan, in *American Behavioral Scientist*, 2013, vol. 57, no. 3, 309-334.

¹⁰ K. Shin, Economic Crisis, Neoliberal Reforms, and the Rise of Precarious Work in South Korea, in *American Behavioral Scientist*, 2013, vol. 57, no. 3, 335-353.

¹¹ A.L. Kalleberg, Precarious Employment, Insecure Workers: Employment Relations in Transition, in *American Sociological Review*, 2009, vol. 74, 1-22.

¹² H.C. Broding, A. Weber, A. Glatz, J. Büniger, Working Poor in Germany: Dimensions of the Problem and Repercussions for the Health-care System, in *Journal of Public Health Policy*, 2010, vol. 31, no. 3, 298-311.

¹³ Times of Malta Website, available at: timesofmalta.com (accessed December 6, 2015).

were actively discussing precarious employment and trying to find ways of combating this phenomenon. Among others, the previous government enacted the Employment Status national Standard order¹⁴ through which it sought to curb bogus self-employment. The ruling Labour Party¹⁵ included the ‘fight against precarious employment’ as one of the objectives of its Electoral Manifesto, and has over the last years started implementing measures to tackle the issue.

However, despite the increasing popularity of the concept in Malta, it is still not well defined and there is hardly any local scientific data about it. This study aims to shed more light on the nature and level of precarious employment in Malta by analysing data gathered from a survey carried out among a representative sample of employees.

2. Defining Precarious Employment

In Malta, there is not yet a commonly agreed definition of precarious employment. This point has often been emphasised by employers’ associations including both the Malta Employers’ Association (MEA)¹⁶ and the Malta Chamber of Commerce Enterprise and Industry (MCCEI).¹⁷ Their reasoning is that the concept of precarious employment is murky and can mean anything or nothing. The employers’ logic is that since there is no agreed definition of such concept, one cannot measure it, and so one should not implement new measures (especially legislation) trying to tackle it, since these may lead to more harm to the economy than to positive outcomes. To sustain this line of thought, MEA rightly points out that locally, precarious employment has often been conflated with flexible or atypical work including part-time work, fixed-term contracts and self-employment.¹⁸ On its part, the MCCEI states that in the local context, “there is no distinction between precarious and illegal employment”.¹⁹ As will be discussed below, international literature disentangles the concepts of precarious and illegal employment. However, by conflating the two concepts, the MCCEI attempts to distance precarious from flexible

¹⁴ Government of Malta, *Employment Status National Standard Order*, 2012, <http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=11844&l=1> (accessed December 6, 2015).

¹⁵ Labour Party, *Malta Tagħna Lkoll – Manifest Elettorali 2013*, Labour Party, Malta, 2013.

¹⁶ Malta Employers’ Association, *Position Paper on Illegal and Atypical Employment Practices*, 2013, <http://www.maltaemployers.com/Portals/22/Precarious%20employment.pdf> (accessed December 6, 2015).

¹⁷ Malta Chamber of Commerce Enterprise and Industry (MCCEI), *Position Paper on Precarious Employment*, MCCEI, Malta, 2013, unpublished position paper circulated among social partners.

¹⁸ MEA *op. cit.*

¹⁹ MCCEI *op. cit.*

employment, and at the same time ties it up to something that social partners in Malta agree upon, namely that illegal work should be curbed. While the main employers' associations in Malta assert to be in favour of safeguarding acceptable employment conditions,²⁰ they appear to concur that the issue of precarious employment is "a problem blown out of proportion".²¹

On their part, as stated in the introduction, trade unions have been vocal in trying to sensitise workers and the government about precarious employment. Employers have argued that by sensationalising the issue and creating alarm, unions are doing more harm than good as they are sowing negative sentiments in workers' minds. However, whether or not one agrees with them, unions have been effective in placing the issue high on the public agenda and government policy. Over the last years, many if not most Maltese adults have heard about precarious employment and have developed their own ideas of what it constitutes. This point leads to an important element relating to the concept of precarious employment, namely, the element of subjective perception. Precariousness is not only about unmet absolute thresholds relating to working conditions; it is also about subjective feelings and thoughts experienced by workers. In other words, the phenomenon does not only exist as an objective fact outside the individual but may also exist in workers' minds. The objective and subjective dimensions of precariousness may exist in parallel and may not necessarily correspond to each other. This fact may be viewed as supporting the logic of employers' associations who warn against sensationalising too much the issue.

Acknowledging the impasse on a shared definition of precarious employment in Malta, it is useful to turn to foreign literature for an understanding of how the concept has developed and is understood internationally. Over the years, researchers across the world have used different terms to describe notions similar to the concept of precarious employment, including 'contingent work',²² 'flexibilisation',²³ 'pauperisation',²⁴ 'marginalisation', 'informalisation',²⁵

²⁰ MCCEI *op. cit.*

²¹J. Piscopo, Employers' Association Against Further Legislation on Precarious Employment, *Maltatoday* 3 July 2013, <http://www.maltatoday.com.mt/news/national/28053/precarious-employment-employers-association-against-further-legislation-20130703#.Vapi0Pn05IE> (accessed December 6, 2015)

²² M. Quinlan, The 'Pre-Invention of Precarious Employment: The Changing World of Work in Context, in *The Economic and Labour Relations Review*, vol. 23:4, 3-24.

²³ J. Breman, An Informalised Labour System: End of Labour Market Dualism, in *Economic and Political Weekly*, 2001, vol. 36, No. 52 (Dec 29, 2001 - Jan 4, 2002), 4804-4821.

²⁴ W. Morehouse, D. Dembo, *The Underbelly of the US Economy: Joblessness and Pauperisation of Work in America*, 1995, Council of International and Public Affairs, Apex Press, New York.

‘deregulation’ and ‘casualisation’²⁶. Researchers have highlighted varying aspects of precarious employment, including low statutory entitlements, lack of social benefits, low wages, high risk of ill health.²⁷ Uncertainty, unpredictability and risk from the point of view of the worker are also commonly mentioned with reference to precarious employment.²⁸ Perhaps the best term that summarises all these different aspects is that of ‘insecurity’. Precarious work may lack security in employment, security of job descriptions and career paths, security of safety and regularity of work conditions, security of gaining and using new skills, and security of income.²⁹ Indeed, the International Labour Organisation defines precarious work as a “work relation where employment security, which is considered one of the principal elements of the labour contract, is lacking”.³⁰

However, one can still argue for the need of an outline of specific and more detailed aspects of precarious employment that render the definition more practical in nature. The resolution issued by the European Parliament in 2010 aptly provides an answer to this concern. The resolution states that:

precarious work refers to ‘non-standard’ forms of employment with any of the following characteristics: little or no job security owing to the non-permanent, often casual nature of the work, with contracts containing poor conditions or without any written contract, for instance in the case of temporary, involuntary part-time contracts, unclear working hours and duties that change according to the employer's will; a low level of remuneration, which may even be unofficial and unclear; no social protection rights or employment-related benefits; no protection against discrimination; limited or no prospects for advancement in the labour market; no collective representation of workers; a working environment that fails to meet minimum health and safety standards.³¹

²⁵ R. Munck, The Precariat: A View from the South, in *Third World Quarterly*, 2013, Vol 34, no. 5, 747-762,

²⁶ J.D. Schmidt, Flexicurity, Casualisation and Informalisation of Global Labour Markets, 2005, Institute for History, International and Social Studies, Aalborg University, Denmark.

²⁷ L. McDowell, A. Batnitzky, S. Dyer, Precarious Work and Economic Migration: Emerging Immigrant Divisions of Labour in Greater London's Service Sector, in *International Journal of Urban & Regional Research*, 2009, vol. 33, no. 1, 3-25.

²⁸ A.L. Kalleberg, *op. cit.*

²⁹ G. Standing, 2011 in P. Frase, The Precariat: A Class or a Condition? in *New Labor Forum (Murphy Institute)*, 2013, vol. 22, no. 2, 11-14.

³⁰ International Labour Organization, *ILO Thesaurus*, 2011, <http://www.ilo.org/thesaurus/defaulten.asp> (accessed December 6, 2015).

³¹ European Parliament, *Precarious Women Workers: P7_TA(2010)0365* (2010/2018(INI), 2010, <http://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P7-TA-2010-0365&language=EN> (accessed December 6, 2015).

An agreed definition of precarious employment would facilitate the quest to scientifically measure the objective extent of the problem. A working definition of precarious employment would establish the parameters of the concept and clarify the aspects that compose it. From a research perspective, a good definition would increase the reliability and validity of studies. From a practical perspective, an agreed definition of precarious employment would ensure more consistency when the responsible authorities treat employment cases that might fall or not fall within such definition. However, it is clear that there is no political will for the stakeholders in Malta to agree on what constitutes precarious employment, a phenomenon whose perceived size depends on whether one is an employer or a trade unionist. Since employers and unions have different agendas, they might continue not agreeing on what constitutes this notion. Thus, as will be elaborated in the methodology, this study investigates the phenomenon from a different perspective than that adopted by the European Parliament – from the subjective perceptions of employees.

3. The Rise of Precarious Employment

Despite the difficulty in agreeing on a shared definition of the concept, it is still worth studying precarious employment as it negatively affects the lives of a growing number of workers and their families. Besides, as will be discussed in this section, precarious employment is difficult to curb as it is intimately connected to capitalism.

Researchers have traced the roots of precarious work to the current economic structure, through the “refinement of manners of exploitation that characterize the whole history of capitalism”.³² Economic crises lead to precarious employment.³³ The economic slowdown which has been affecting the European Union since 2008, has worsened the working conditions in many countries including Malta in recent years. Evidence points to a deepening of inequalities in European countries.³⁴ The growth in long-term (and structural) unemployment experienced in Europe has exacerbated precarious employment, as unemployed persons are more desperate to find any type of job, even if with poor conditions. A rise in nonstandard employment in many countries was brought about by balancing labour market demand and supply in a difficult economic environment. Temporary or fixed-term contracts are used

³² I.F. Borsoi, *Vivendo para Trabalhar: Do Trabalho Degradado ao Trabalho Precarizado*. (Portuguese), in *Convergencia: Revista De Ciencias Sociais*, 2011, vol. 18, no. 55, 113-133.

³³ H. Hsiao, Precarious Work in Taiwan: A Profile, in *American Behavioral Scientist*, 2013, vol. 57, no. 3, 373-389.

³⁴ D. Vaughan-Whitehead, *Work Inequalities in the Crisis: Evidence from Europe*, 2012, International Labour Organization, Geneva.

by employers to adjust the workforce to meet the fluctuating demand in the market at lower cost and in a way that their work is easily discontinued.³⁵ On the other hand, it is also interesting to note that even economic growth fuels precarious employment. For example, Maiti writes that “workers in India are becoming increasingly precarious in spite of its significant economic growth during the past two decades”.³⁶ An often uneven economic development coupled by difficulties in creating sufficient decent jobs for a growing labour supply may be among the main causes of the apparent rise in precarious work in some countries.

The politico-economic model of less state interventions in the private sector adopted by many governments across the world has also been blamed for the rise in precarious employment. For example, discussing the situation in Thailand, Hewison and Tularak argue that an economic liberalisation movement after 1997 “delivered policies and practices that have weakened unions, kept wages low, and expanded the use of contract and agency-supplied labour”.³⁷ The trend in the liberalisation of the labour markets is leading to more workers in atypical contracts and a consequential reduction of trade union membership.³⁸ The marginalisation of the trade union movement inevitably increases the risk of precarious employment. Multinational organisations, with their ability to shift production from one country to another appear to contribute considerably to precarious employment. For example, “food and clothing retailers source their products through extensive global supply chains, with a very strong negotiating position over their suppliers. This enables them to dictate terms and conditions of supply and to create the low-cost, flexible supply chain that they seek”.³⁹

Whereas in their role of regulators, governments might not be sufficiently curtailing the rise of precarious employment in the private sector, in their role of employers, governments are at times promoting precarious employment, especially through outsourcing.⁴⁰ The practice of outsourcing, which is meant to reduce the expenses of the public sector and increase the effectiveness of the services provided, increases the risk of inappropriate working conditions that

³⁵ N. Arunatilake, Precarious Work in Sri Lanka, in *American Behavioral Scientist*, 2013, vol. 57, no. 4, 488-506.

³⁶ D. Maiti, *op. cit.*

³⁷ K. Hewison, W. Tularak, Thailand and Precarious Work: An Assessment, in *American Behavioral Scientist*, 2013, vol. 57, no. 4, 444-467.

³⁸ K. Shin, *op. cit.*

³⁹ T. Kidder, K. Raworth, 'Good Jobs' and Hidden Costs: Women Workers Documenting the Price of Precarious Employment, in *Gender & Development*, 2004, vol. 12, no. 2, 12-21.

⁴⁰ I. Tjandraningsih, State-Sponsored Precarious Work in Indonesia, in *American Behavioral Scientist*, 2013, vol. 57, no. 4, 403-419.

lead to precarious employment. Aware of this issue, the Maltese government acted to improve the working conditions of contracted workers, by among others setting up a Commercial Sanctions Tribunal with the competence to blacklist contractors breaching public procurement regulations.

The level of precarious employment varies among and also within countries, with some regions hit worse than others. Besides, particular categories of workers appear to be more prone to suffer from precarious employment.⁴¹ Undocumented migrants are at risk of precarious employment due to lack of awareness of rights, lack of skills, and language barriers.⁴² Ethnic origin is also related to the phenomenon.⁴³ Women also experience a higher risk of precarious employment,⁴⁴ which may stem from having to combine domestic responsibilities and work.⁴⁵ Due to their full-time parenting responsibilities, single parents (who are often mothers) might be unable to find decent jobs with sufficiently flexible conditions and may often end up in low paid jobs with no vacation leave and no bonuses⁴⁶ among others. Young inexperienced workers lacking qualifications and those overqualified for the available jobs are at a higher risk of precarious employment, since it could be their only way of getting employed and gaining experience; hence they may be under-qualified or over-qualified for the available jobs.⁴⁷ ⁴⁸ Eurostat data indicates that the number of young people who are constrained to work part-time as they could not find a full-time job increased in recent years.⁴⁹ Older long term

⁴¹ D. Vaughan-Whitehead, *op. cit.*

⁴² United Nations, *Report of the Special Rapporteur on the Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health, Anand Grover, 2013*. General Assembly (A/HRC/23/41).

http://www.ohchr.org/Documents/HRBodies/HRCouncil/RegularSession/Session23/A_HRC_23_41_ENG.pdf (accessed December 6, 2015).

⁴³ F. Barchiesi, *op. cit.*

⁴⁴ T. Kidder, K. Raworth, *op. cit.*

⁴⁵ N. Kabeer, *Women's Economic Empowerment and Inclusive Growth: Labour Markets and Enterprise Development, Discussion Paper 29/12*, Centre for Development Policy & Research, School of Oriental & African Studies, 2012, <http://www.soas.ac.uk/cdpr/publications/papers/file80432.pdf> (accessed December 6, 2015).

⁴⁶ P.M. Evans, *Challenging Income (In)security: Lone Mothers and Precarious Employment*. Inequality and Development in a Globalised Economy - The Basic Income Option, 12th BIEN Congress, Dublin, Ireland, June 20-21, 2008.

⁴⁷ Global Unions Forum, *Towards Social Justice: Applying Labour Standards to Precarious Work*. International Labour Organization (ILO), 2008, <http://www.global-unions.org/IMG/pdf/WelcomeAddressPrecariousWorkForum.pdf> (accessed December 6, 2015).

⁴⁸ World Youth Report, *Youth Employment*, 2003, <http://www.un.org/esa/socdev/unyin/documents/ch02.pdf> (accessed December 6, 2015).

⁴⁹ Eurostat website, <http://ec.europa.eu/eurostat> (accessed December 6, 2015).

unemployed persons are also at risk of precarious employment since they lack transferable skills.⁵⁰

Precarious employment in Europe, as in other parts of the world, appears to be on the rise. However, due to the lack of a commonly agreed definition and the consequent lack of internationally recognised criteria for measuring the phenomenon, it is difficult to estimate its magnitude. There exist links between the growing atypical or non-standard work and precarious employment. However, it is apparent that many workers with atypical contracts are not and do not feel vulnerable and so are not in precarious employment. Very atypical work (VAW) is definitely more strongly related to precarious employment. VAW includes non-written contracts, part-time work of fewer than 10 hours a week, very short fixed-term contracts of six months or less, on-call work and zero hour contracts.⁵¹

While no data exists about on-call and zero hours working in Malta, data about the other three aspects of VAW is available. The Fifth European Working Conditions Survey indicates that Malta has a very high ratio of persons working without a contract (27.3% in Malta when compared to a much lower 4.7% across the EU 27).⁵² While in Malta it is legally possible to work without a written contract (as long as there is a verbal one), the high proportion of persons working without a contract indicates a large shadow economy. In 2014, 2.5% of all workers in Malta had a part-time work of less than 10 hours a week, whereas 3.6% of all workers worked on very short fixed-term contracts as their main occupation.⁵³ While the ratio of workers working without a contract decreased over the years, that of part-time workers of less than 10 hours a week and very short fixed-term work increased. Besides, whereas a higher percentage of men than women in Malta work without a contract, the situation is reversed with regards to part-time work with less than 10 hours a week and very short fixed-term contracts. The degree of overlap of the above-mentioned percentages of workers in very typical work is unknown. However,

⁵⁰ European Commission, *Study on Precarious Work and Social Rights*, Working Lives Research Institute (VT/2010/084), 2012, <http://ec.europa.eu/social/BlobServlet?docId=7925&langId=en> (accessed December 6, 2015).

⁵¹ European Foundation for the Improvement of Living and Working Conditions, *Very atypical work: Exploratory analysis of fourth European Working Conditions Survey*, 2010, http://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1010en.pdf (accessed December 6, 2015).

⁵² European Foundation for the Improvement of Living and Working Conditions, *EWCS 2010 - Data Tables*, 2013, <http://www.eurofound.europa.eu/surveys/ewcs/2010/datatables> (accessed December 6, 2015).

⁵³ National Statistics Office, (NSO), Unpublished data provided specifically for the use of this study, 2015.

one assumes that work which includes more than one of these five aspects is more likely to be precarious in nature. Meanwhile, 5.9% of the workers in Malta are at risk of poverty.⁵⁴ The ratio of workers at risk of poverty is higher among men, individuals in the 25-54 age bracket, with a lower level of education, working part-time, in temporary occupations, and with dependent children.⁵⁵

Specific research on precarious employment in Malta is very rare. An EU-funded study examined the situation of vulnerable workers in the tourism, cleaning and language schools sectors in Malta.⁵⁶ More than half of the vulnerable workers were found to have a secondary level of education. While the majority of vulnerable workers in the tourism and language school sectors were aged between 15 and 29 years, most of those operating in the cleaning sector were aged 40 and over and were mostly women. Whereas 9% of vulnerable workers in the language school sector were not formally engaged, the figure increased to 34% and 33% in the cleaning and tourism sectors respectively. Nearly half (45%) of the respondents said that they were not entitled to sick leave, while only 24% of male and 16% of female workers received the mandatory government bonus. Union representation was found to be low. Most vulnerable workers (69%) stated that they were being paid on an hourly basis, while 14% alleged to be paid less than the statutory minimum wage.⁵⁷

4. Methodology

The above review of literature indicates the apparent growth of precarious employment and also the difficulties in agreeing on a precise definition of the term. In the absence of locally agreed definitions of what constitutes precarious employment, this study intends to investigate the perceptions of the Maltese employees about the precariousness of their work. As was discussed earlier, the subjective perception is an important component of precarious employment.

A brief questionnaire enquiring about demographic details and perspectives relating to precariousness in employment was developed. After being pilot tested, the questionnaire was administered through telephone interviews among a sample of 388 employees representing the adult Maltese employed population (aged between 16 and 65 years). Interviews were carried out during

⁵⁴ Eurostat website, *op. cit.*

⁵⁵ Eurostat website, *op. cit.*

⁵⁶ National Commission for the Promotion of Equality (NCPE), *Entrepreneurs and Vulnerable Workers in Malta*, in *Unlocking the female potential*, Malta, NCPE, 2012, 64–120.

⁵⁷ NCPE, *op. cit.*

May 2013. This study has a confidence interval of 4.97% and a confidence level of 95%.

The random sample was selected from the government's Electoral Register using stratified random sampling by district in order to ensure geographic representation. - In total 620 persons were approached and 388 accepted to be interviewed over the phone. The sample selected coincides fairly accurately with the official statistics as published by Malta's National Statistics Office (NSO).⁵⁸ In fact, according to NSO, during the last quarter of 2013, 63% of all employed persons were men while 37% were women. 14% of the employed persons were aged between 15 and 24, 53% were aged between 25 and 44, while 32% were aged between 45 and 64 (NSO). 88% worked full time-whereas 12% worked part-time in their main occupation.⁵⁹ Besides, according to NSO, 73% of all employed persons in Malta were employed within the private sector while 27% were employed within the public sector at the end of 2013.⁶⁰ While most of these figures are close to the statistics in Table 1, the sample collected was weighted according to NSO statistics to ensure that the sample's answers are representative based on age, gender and sector of employment.

Table 1 illustrates the composition of the sample divided by gender, age, level of education, type of contract and sector of employment. The largest groups of respondents were in the 45-65 and 25-44 age brackets (45% and 44.3% respectively). While 65.7% of the respondents had a primary or secondary level of education, 34.3% had a post-secondary or tertiary level. The majority of respondents were in full-time employment and on permanent contracts, while a minority were in part-time employment and on fixed-term contracts. Whereas two thirds of the respondents worked in the private sector, a third were public sector employees.

Table No. 1 - Respondents' Demographics

		Count	%
Gender	Males	257	66.2
	Females	131	33.8
Age Bracket	16-24	43	11.1
	25-44	172	44.3

⁵⁸ National Statistics Office, (NSO), *Labour force survey: Q4/2013*, 2014, https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_C2/Labour_Market_Statistics/Documents/2014/News2014_057.pdf (accessed September 14, 2016).

⁵⁹ NSO, *op. cit.*

⁶⁰ National Statistics Office, (NSO), *Labour force survey: Q4/2013*, 2014, https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_C2/Labour_Market_Statistics/Documents/2014/News2014_086.pdf (accessed September 14, 2016).

	45-65	173	45.0
Level of education	Primary/ Secondary	255	65.7
	Post-Secondary/ Tertiary	133	34.3
Type of contract	Full-time	323	83.2
	Part-time	65	16.8
	Permanent	311	80.2
	Fixed-term	70	18.0
	No contract	7	1.8
Sector	Public	127	32.7
	Private	261	67.3

Descriptive and inferential statistics were derived through the Statistical Package for the Social Sciences (SPSS).

5. Results

As can be seen from Table No. 2 below, whereas the large majority of respondents (87.5%) believe that their current work is not precarious in nature, a significant minority (12.5%) believe to be in precarious employment. Chi-Square analysis reveals that there is no significant gender difference in this regard: $X^2(1, N = 384) = 1.12, p > 0.05$.

Similarly, age bracket does not appear to be strongly related to perceptions of being in precarious employment: $X^2(2, N = 384) = 4.39, p > 0.05$. On the other hand, employees with a lower level of education are significantly more likely to believe to be in precarious employment than those with a higher level of education: $X^2(1, N = 384) = 7.63, p < 0.05$. Employees working full-time or part-time experience relatively similar levels of precariousness: $X^2(1, N = 384) = 1.54, p > 0.05$. However, employees on fixed-term contracts are significantly more likely to believe to be in precarious employment than those on permanent contracts: $X^2(1, N = 377) = 4.09, p < 0.05$. Finally, whether one works in the public or private sector is not significantly related to perceptions of being in precarious employment: $X^2(1, N = 384) = 0.89, p > 0.05$.

Table No. 2 - Whether respondents believe to be in precarious employment

		Yes		No		N	χ^2 - value	p-value
		Count	%*	Count	%*			
Gender	Male	35	13.8	219	86.2	384	1.12	0.29
	Female	13	10.0	117	90.0			
	Total	48	12.5	336	87.5			
Age bracket of employees	16-24	8	18.6	35	81.4	384	4.39	0.11
	25-44	15	8.8	156	91.2			
	45-65	25	14.7	145	85.3			
Level of education of employees	Primary/Secondary	40	15.9	212	84.1	384	7.63	0.01
	Post-Secondary/Tertiary	8	6.1	124	93.9			
Type of contract	Full-time	43	13.4	277	86.6	384	1.54	0.21
	Part-time	5	7.8	59	92.2			
	Permanent	34	11.1	273	88.9	377	4.09	0.04
	Fixed-term	14	20.0	56	80.0			
Sector	Public	13	10.2	114	89.8	384	0.89	0.35
	Private	35	13.6	222	86.4			

*N=Number of participants; P=Pearson Chi-Square; * Percentage within the same*

Out of the respondents who stated to be working in precarious conditions, at some point in their career, two thirds filed a report about their precarious conditions to their manager (See Table No. 3). On the other hand, a sizable third did not do so. Half of the latter were afraid of having their job terminated.

Table No. 3 - Whether respondents ever filed a report about their precarious conditions to their manager

	Count	%
No	16	33.3
Yes	32	66.7
Total	48	100
<i>Reasons for not filing report</i>		
<i>Fear of job termination</i>	8	50.0
<i>Too much hassle</i>	2	12.5
<i>Other (not specified)</i>	6	37.5
<i>Total</i>	16	100

6. Discussion

This study indicates that a significant minority consisting of 12.5% of Maltese employees believe to be working in precarious employment. This figure is considerably higher than the ratio of persons employed in part-time work of less than 10 hours a week, on very short fixed-term contracts, or at risk of poverty as reported in the above review of literature. This indicates that the general feeling of employees during the data gathering exercise was considerably worse than what transpires from more objective criteria that can be associated with precariousness. Before the 2013 general election, employees were constantly bombarded with news about precariousness in Malta's places of work. As was indicated in the introduction of this study, the number of references to the concept of precariousness in the local media increased steadily over the years leading to 2013. This period of time marked the final months of the Nationalist party in government, and the then party in opposition placed the topic high in its political discourse. In a way, precariousness might have started symbolising many employees' unhappiness with the previous government, which, by the end of its term was marred by controversy. The heightened awareness and increased sensibility of the general public towards precariousness could have been artificially inflated to some extent. This leads to the first point arising in this study, namely that perceived and objective precariousness do not necessarily tally.

Such discrepancy might be accentuated by the lack of a commonly agreed definition of precariousness in Malta. While one may argue that different Maltese workers will inevitably have somewhat different perceptions of what constitutes precariousness, the subjective opinions of more than one in every ten Maltese employees should not be brushed off and merit further attention. Their perceptions and feelings are important as they translate into overt action.

The complex links between attitudes and behaviour are well documented and have been researched for the past 50 years.⁶¹ Ajzen and Madden's theory of reasoned action shows how attitudes together with perceived social pressure predict intentions, which in turn determine behaviour.⁶² Indeed, two thirds of the respondents in the current study who felt to have precarious working conditions took action about their situation by filing a report to their manager. They felt sufficiently aggrieved to take risks in order to rectify their situation. The risks most probably included the fear of losing their jobs, since this was the most common fear reported by the employees who decided not to take action about their perceived precarious employment. As indicated earlier, vulnerable workers tend not to be unionised, thus making it harder for them to defend their rights.

Beyond the findings of the current study, a negative evaluation of one's employment situation may also lead to a more conservative approach towards spending, thus potentially resulting in reduced retail activity. Consumer confidence surveys carried out across the world (such as the European Commission's Consumer Confidence Indicator) are based on the assumed link between attitudes and behaviours. Unhappiness with work may also lead to unhappiness with life in general, through what is known as the 'spill-over effect'. It has been argued that one aspect of precarious employment, such as lack of control over working hours, may lead to greater work-life conflict.⁶³ It has also been shown that lack of paid sick leave may lead workers to participate less in preventive health care services such as cancer screening.⁶⁴ Feelings of precariousness may also lead to changes in voting patterns in a bid to improve the political and economic situation, as appears to have happened in Malta's 2013 general election. The second point arising in this study is that feelings of precariousness are important as they may lead to objective consequences.

As expected, employees in Malta with a lower level of education (primary or secondary) are significantly more likely to experience precarious employment than those with higher qualifications (post-secondary or tertiary). The latter tend to have higher status occupations such as managers, professionals and technical jobs. When compared to other occupations, these tend to provide

⁶¹ R.H. Fazio, Multiple processes by which attitudes guide behavior: The MODE model as an integrative Framework, in *Advances in experimental social psychology*, 1990, vol. 23, 75–109.

⁶² I. Ajzen, M. Fishbein, *Understanding Attitudes and Predicting Social Behaviour*, Englewood Cliffs, N.J.: Prentice Hall, 1980.

⁶³ M. McNamara, P. Bohle, M. Quinlan, Precarious Employment, Working Hours, Work-Life Conflict and health in Hotel Work, in *Applied Ergonomics*, 2010, vol. 42, 225–232.

⁶⁴ L. Peipins, A. Soman, Z. Berkowitz, M. White, The Lack of Paid Sick Leave as a Barrier to Cancer Screening and Medical Care-Seeking: Results from the National Health Interview Survey, in *BMC Public Health*, vol.12:520, 1–9.

better working conditions, such as greater security in terms of employment, career pathways, income, and health and safety. Despite the above, higher qualified employees are not totally immune from the phenomenon of precarious employment. While objectively, the working conditions of this group tend to be much better than those of lower qualified individuals, precariousness has an important subjective dimension which renders the phenomenon a relative one. Hence, the graduates' feelings of precariousness might derive from their assessment of their current job in comparison to their ideal work situation or to the work conditions of their peers. The latter is in line with Festinger's (1954) theory of social comparison processes which explains how self-evaluation is based on comparison with other persons.⁶⁵ The increasing underemployment of university graduates in Malta⁶⁶ may also accentuate feelings of relative insecurity. Thus, the third point to be stressed in this discussion is that due to its subjective nature, precariousness is a relative term.

Unlike what is reported in foreign literature,⁶⁷ Maltese male and female employees experience similar levels of precarious employment. This finding appears to be related to the fact that in Malta there is a low female activity rate (52.1% when compared to the EU 28 average of 66.5% in 2014). In general, older and less qualified women in Malta are likely to be inactive, whereas there is a high activity rate of younger and more qualified women. This translates into an imbalanced labour market in which on average, female employees are more qualified than their male peers. Consequently, while women in Malta, as in other countries in general, tend to experience more discrimination and other gender-related difficulties at work than males, their higher qualifications might be compensating for their disadvantages by for example, enabling them to get better jobs. In fact, the proportion of working women who are in professional occupations is nearly double that of males (21.4% and 12.8% respectively).⁶⁸ Conscious of their disadvantages and despite the fact that trade unions tend not to be sufficiently geared towards women, working women in Malta are as likely as men to join trade unions.⁶⁹

Employees also feel relatively similar levels of precariousness whether they work in the public or the private sectors. This finding would have been

⁶⁵ L. Festinger, A Theory of Social Comparison Processes, in *Human Relations*, 1954, vol. 7, no. 2, 117–140.

⁶⁶ M. Debono, A. Debono, N. Caruana, *Career Outcomes of Graduates 2004*, Euroguidance Malta, Malta, 2005.

⁶⁷ T. Kidder, K. Raworth, *op. cit.*

⁶⁸ Eurostat website, *op. cit.*

⁶⁹ M. Debono, *A National Survey on Trade Unions in Malta – November 2015*, The President's Foundation for the Wellbeing of Society and the Centre for Labour Studies, Malta, 2015.

surprising up to decade ago, when a public sector job was normally viewed as ‘a job for life’. However, subsequent governments have embarked on policies meant to reduce the size of the public sector, through liberalisation, privatisation, subcontracting and other initiatives. These changes might have somewhat eroded the traditional feelings of security relating to jobs in the public sector. Having said that, it has been noted that some industries in the private sector, such as the seasonal agriculture and hospitality, tend to be more insecure than others.⁷⁰ A more detailed focus on specific industries might shed more light on such aspect.

Feelings of precariousness exist across different age groups and no significant differences were found in the three age categories under consideration. Objectively, younger individuals (16-24 years old) tend to have lower paid and less secure jobs. For example, in 2014, the median income of 16 to 24 year olds was 5.4% lower than that of persons aged between 16 and 64 years.⁷¹ Besides, in 2014, 19% of the 15 to 24 year old employees were in fixed-term contracts when compared to a much lower 7.7% among all workers (aged 15 to 64 years).⁷² However, this group of workers might feel less the burden of the lower working conditions than older workers who tend to have greater life responsibilities relating to their family, house loans and so on. As mentioned earlier in the review of literature, Maltese workers in the middle age bracket are objectively more likely to be at risk of poverty than the oldest or youngest workers. While the oldest category of workers (45-65 years old) would normally be less financially burdened than those in the 25-44 age group, they still experience feelings of precariousness. These might stem from a variety of reasons such as unfulfilled employment expectations, accentuated fears of unemployment (considering that older workers experience greater difficulties to be re-employed) and insufficient financial security vis-à-vis their approaching pensions.

Since fixed-term contracts by their very nature do not provide employment security, it comes as no surprise that employees on fixed-term contracts are significantly more likely to experience feelings of precarious employment than those on permanent contracts. It is only in a minority of occupations which are high in demand, such as computer programmers, engineers and accountants, that fixed-term contracts tend to be viewed as gateways to higher level jobs with better remuneration and working conditions. Against expectations, employees in part-time occupations do not feel to be in a precarious situation

⁷⁰ M. McNamara et al., *op. cit.*

⁷¹ Eurostat website, *op. cit.*

⁷² Eurostat website, *op. cit.*

like those in fixed-term contracts. Local⁷³ and foreign research⁷⁴ indicates that part-time workers have fewer long-term career opportunities. There are indications that many women in Malta choose part-time work in order to be able to balance their work and family responsibilities.⁷⁵ These workers might view less their current occupation as part of a long-term career. Thus, one might hypothesise that a significant number of part-time workers have relatively low employment expectations based on a short-term perspective, which would explain why they do not complain about precarious employment more than full-timers. In support of this proposition, one should note that part-timers are also significantly less likely to be unionised than full-time workers.⁷⁶ The above discussion leads to the fourth point arising from this study, namely that the link between precariousness and socio-demographic data is not straightforward. Indeed, this study confirms the links between precariousness and level of education and fixed-term/permanent employment. However, some of the social and employment categories that previous research associates with greater risk of precariousness, such as women, middle aged workers, part-timers and workers in private sector, might not feel to be significantly more in precarious employment than other workers.

7. Conclusion

Research tends to view precariousness as a set of external employment and institutional factors which exert stress on the individual. This perspective is reflected in mainstream definitions of precarious employment such as that of the European Parliament (2010) reviewed earlier. However, there aren't internationally agreed definitions or measurements of the phenomenon. "Claims regarding precarious employment are typically based on different and imprecise definitions and are quantitatively assessed with either proxies or non-integrated indicators that utilize a variety of dimensions".⁷⁷ Despite the salience of the topic, this perspective viewing precarious employment as an objective

⁷³ Employment and Training Corporation, Women and Work: Findings From a Study on the Work Aspirations of Maltese Women, 2007, <https://jobsplus.gov.mt/resources/publication-statistics-mt-mt-en-gb/publications/fileprovider.aspx?fileId=1240> (accessed August 14, 2016).

⁷⁴ J. Wenger, The Continuing Problems with Part-Time Jobs, in *Economic Policy Institute Brief*, 2001. Washington, DC: Economic Policy Institute, http://www.epi.org/publication/issuebriefs_ib155/ (accessed August 14, 2016).

⁷⁵ Employment and Training Corporation, *op. cit.*

⁷⁶ M. Debono, 2015, *op. cit.*

⁷⁷ M. Olsthoorn, Measuring Precarious Employment: A Proposal for Two Indicators of Precarious Employment Based on Set-Theory and Tested with Dutch Labor Market-Data, in *Social Indicators Research Journal*, 2014, vol. 119, 421-441.

set of external stressors has to-date not brought about sufficient clarity to the concept of precariousness.

On the other hand, one could focus precarious employment research on “employment strain”,⁷⁸ that is the subjective effects of precariousness felt by workers. Despite the ambiguity of the concept, the current study indicates that a subjective feeling of working in precarious employment is shared by a significant minority of employees in Malta. As argued in the previous section, precarious employment may result in the implementation of coping mechanisms and spill-over effects. The focus on the subjective strain is increasing in importance since “a feature of a growing number of precarious employment relationships in our labour market is that many of the stressors associated with employment such as ensuring more work and predicting future earnings are transferred to employees and moved outside of the day-to-day workings of a single workplace”.⁷⁹ Indeed, medical and psychological research links work organisation to occupational health outcomes, though the mechanisms of such links remain poorly understood.⁸⁰

One could argue that an internationally-accepted measure of precarious employment based on objective criteria would reduce the salience of the subjective aspect of precariousness. However, the subjective element can never be ignored, since the negative effects of objective external aspects of precariousness (such as low wages) may be felt differently by different individuals. In their qualitative research, Clarke et al. note that “individuals with high levels of employment uncertainty did not all live with the same levels of effort, stress and ill-health”.⁸¹ Indeed, workers appear to respond to precarious work in different ways, according to their expectations. Thus, when they view their situation as transitory and potentially leading to better career prospects, workers show more resilience than when they will remain in the same precarious situation. Besides, the latter group may also be divided according to whether or not employees have learned to accept their difficult situation.⁸² It is apparent that the relation between precarious work and its outcomes is a complex one, affected by the characteristics of the individual worker, social support, work culture, and other aspects.⁸³

⁷⁸ M. Clarke, W. Lewchuk, A. de Wolff, A. King, “This Just Isn't Sustainable’: Precarious Employment, Stress and Workers' Health, in *International Journal of Law and Psychiatry*, 2007, vol. 30, 311-326.

⁷⁹ M. Clarke et al., *op. cit.*

⁸⁰ M. McNamara et al., *op. cit.*

⁸¹ M. Clarke et al., *op. cit.*

⁸² M. Clarke et al., *op. cit.*

⁸³ M. McNamara et al., *op. cit.*

This study provides a valuable contribution to the literature on precarious employment as it gauges the often-neglected perceptions of workers towards the important though not clearly understood phenomenon of precarious employment. It points towards a different conclusion than that implicitly endorsed by employers' associations in Malta, namely that it is not only in the interest of employees but also in the interest of employers to have an agreed definition and measure of precarious employment. This should not only be based on objective aspects of the phenomenon but should also take into account the subjective aspects, thus enabling researchers to examine situations where the subjective and objective aspects of precariousness do not match, as appears to be the case highlighted in the study. An appropriate definition and measure should be general enough to accommodate the fact that the specific elements contributing to precarious employment are constantly in transformation across time and space

Assessing Romania's Labour Market Security Performance

Vasilica Ciucă and Cristina Lincaru¹

Purpose. The purpose of this paper is to assess Romania's labour market security performance in unemployment periods, taking into account OECD's argument that in developed countries: "becoming and staying unemployed is the most significant risk for a worker".

Design/methodology/approach. The paper analyses the literature on Job Quality Assessment in developed countries in the OECD framework and the ILO Methodology based on development theories.

Findings. The paper argues that emerging countries need to adjust OECD's methodology according to the ILO's methodology in order to produce more accurate data.

Research limitations/implications. This research covers only a part of the broader OECD's framework. Romania's job quality profile needs to be supplemented with other dimensions, e.g. labour market insecurity due to low pay, earnings quality and the quality of the work environment.

Originality/value. The paper attempts to focus on the missing link between aspects such as 2014 and 2015 OECD methodology used to assess the risk of migration (work mobility), unemployment, and low pay considering countries featuring highly interconnected systems.

Paper type assessment paper.

Keywords: *Romania, OECD, labour market performance, econometrics.*

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1. General Context Insights on Job Quality and Labour Market Performance Assessment

1.1. Job quality Assessment in Developed Countries. The OECD framework

Since 1992, the European Employment Strategy (EES) is still the “cornerstone of the EU’s employment policy”.² Under its primary aim of creating more and better jobs a joint program on “Defining, Measuring and Assessing Job Quality and its Links to Labour Market Performance and Well-Being”³ was launched in 2013.

The implementation of the program has initiated an extensive process regarding assessment of labour market performance, not only in terms of the numbers of jobs but also concerning the quality of a job.

The Stiglitz-Sen-Fitoussi report⁴ (2009) and the OECD Better Life Initiative (2013) are the basis on which the OECD 2014 framework for measuring well-being was formed. It identifies "jobs and earnings" as one of the dimensions of "material conditions"; and "work-and-life balance" as an aspect of the "quality of life". Work is currently ongoing to incorporate measures of "economic insecurity" in the framework⁵.

Sen⁶ (2008) proposed the “capabilities approach” as the person’s ability to “achieve valuable functioning as a part of living, as a method particularly relevant for the assessment of well-being – in the both achievement and freedom – and for the related problem of judging living standards”⁷.

Among the eight dimensions of well-being⁸ expressed through the “economic performance and social progress”⁹ (Stiglitz et al., 2009, p. 14) three are relevant

² European Commission, *European employment strategy*, European Commission, 2015, <http://ec.europa.eu/social/main.jsp?catId=81&>, retrieved on 1.08.2015.

³ European Commission, *European Commission-funded project “Defining, Measuring and Assessing Job Quality and its Links to Labour Market Performance and Well-Being”* [VS/2013/0180 (SI2.666737)], 2013. It is a joint undertaking between the OECD Directorate for Employment, Labour and Social Affairs and the OECD Statistics Directorate running until the end of 2015. Cited from OECD 2014

⁴ J. Stiglitz, A. Sen and J.P. Fitoussi, *Report by the Commission on the Measurement of Economic Performance and Social Progress*, 2009, www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf, cited by OECD 2014

⁵ OECD, *How’s Life? 2013, MEASURINGWELL-BEING*, OECD – *Better Policies for Better Lives*, OECD, 2013, Publishing <http://dx.doi.org/10.1787/9789264201392-en>;

⁶ A. Sen, *Commodities and Capabilities*, North-Holland Publishing, Amsterdam, 1985

⁷ Sen, Chapter 15. *Capability and Well-Being*, p. 285, Article published in D.M. Hausman (Editor), *The Philosophy of Economics, An Anthology*, Third Edition, Cambridge University Press, New York, 2008, <http://digamo.free.fr/hausman8.pdf#page=276>

⁸, are: i) material living standards (income, consumption and wealth); ii) health; iii) education; iv) personal activities including work; v) political voice and governance; vi) social connections

for employment status: material living standards; insecurity of an economic and physical nature, and personal activities including work. For each of the three relevant dimensions for employment status that are specified by the OECD 2014 Methodology another three complementary aspects of job quality, well-being essential for workers, the quality of earnings, labour market security and the quality of the work environment are included.

The OECD methodology¹⁰ for job quality measurement has been incrementally improved since 2009, starting from defining indicator categories with intrinsic relevance to job quality¹¹ and reaching a broader relevance indicators set that includes labour market outcomes¹² (unemployment duration, unemployment access), etc.

Following the recent economic crisis, the report, *How's Life? 2013: Measuring Well-being*, OECD reinvigorated the international debate on the importance of workers' well-being for policy makers. They state that "modern labour markets are characterised by a continuous reallocation of labour and other productive resources across firms and sectors. While this process of "creative destruction" is one of the engines of economic growth, it may have detrimental effects on people's well-being by lowering workers' sense of job security. In other words, we can say that job security is the second engine of inclusive economic growth. The OECD Job Quality Framework concerning labour market security has recently improved (2015 OECD¹³) by including an aspect of economic security next to labour market risk due to unemployment, a new distinct component – the labour market risk due to low pay as an assessment of the risk of extremely low pay while employed. This new approach is a response to the need for a better understanding of job quality not only for developed countries but also

and relationships; vii) environment (present and future conditions); and viii) insecurity, of an economic as well as a physical nature.

⁹ Measuring social progress and in line with many of the recommendations formulated by the Commission, the OECD Better Life Initiative launched in 2011. Cited from (OECD (2013c), *How's Life? Measuring Well-being*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264201392-en>.and OECD (2011c), *How's Life? Measuring Well-being*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264121164-en>).

¹⁰ <http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm>

¹¹ Including the indicators: job duration; incidence of temporary employment; working time and annual hours worked; incidence of part-time employment; involuntary part-time workers; economic short-time workers; average annual wages per full-time equivalent employee; earnings dispersion, incidence of low pay and relative earnings: gender, age and education gap;

¹² Including the indicators: unemployment rates; employment to population ratio; labour force participation rates; unemployment; employment; labour force; population of working age (15-64); unemployment duration; discouraged workers.

¹³ OECD (2015), *OECD Employment Outlook 2015*, OECD Publishing, Paris. http://dx.doi.org/10.1787/empl_outlook-2015-en

for emerging economies. Considering that "in OECD countries, becoming and staying unemployed is the most significant risk for a worker" (2015 OECD, p. 217) in emerging economies, there is the need to add the already mentioned dimension of the low pay. This particular issue is a result of "the absence or weakness of social insurance schemes, which makes unemployment unaffordable and pushes many workers into jobs of *"last resort"* (mostly jobs with low and often uncertain earnings). A useful and complementary dimension of insecurity is thus the risk of falling into such undesirable jobs, defined here by a threshold of *"extreme low pay"*". (OECD 2015, p.217)

The individuals with jobs at this low level are typically from households where they are the single earner, who works full-time, with net hourly earnings under the threshold of 1 US dollar (PPP-adjusted) income level. This income level represents a threshold for absolute material deprivation that translates into a disposable per capita income of USD 2 (PPP-adjusted). (OECD 2015, p. 217, citing Bongaarts, 2001).

1.2. Measuring Job Quality in Developing Countries – ILO Methodology Based On Development Theories

The recent *World of Work Report 2014 - ILO WWR 2014*¹⁴ illustrates that the traditional indicators of employment growth, unemployment and labour force participation cannot provide a clear image regarding labour market performance measurement, especially in the case of developing countries.

Developing countries have some unique features such as low-income levels, low levels of social protection and social transfers that could generate negative income effects with the negative impact on education participation and not in the least on the failure of growth productivity.

The ILO (WWR 2014, p.15) use the following typology of countries by income level using criteria set by the United Nations and the World Bank:

- Least Developed Countries (LDCs), are those that fall below US\$1,000 average per capita income and include, also, a few countries whose structural characteristics place them within this group. The UN definition of LDCs defined according to the income criterion (GNI per capita <US\$992 for inclusion, >US\$1190 for graduation), human assets index and economic vulnerability index.

¹⁴ ILO (2014), *World of Work Report 2014: Developing with jobs*, International Labour Office, Geneva: ILO, 2014, http://www.ilo.org/wcmsp5/groups/public/---dgreports/---comm/documents/publication/wcms_243961.pdf, (accessed on July 02, 2015, 14:10)

- Lower Middle-Income Countries (LMIs), which include economies where the average per capita income ranges between US\$1,000 and US\$4,000; WB income category: lower middle income (GNI per capita US\$1,026–US\$4,035) and low income (GNI per capita <US\$1,025) countries that are not classified as LDCs.
- Emerging Economies (EEs) with the average per capita income ranging between US\$4,000 and US\$12,000. The World Bank income category: upper middle income (GNI per capita US\$4,036–US\$12,475) with the exceptions of Angola and Tuvalu (LDCs).

Considering these characteristics, the cited report emphasises the following limits:

- I. Employment growth is highly correlated with the growth of the labour force so, "employment growth is then determined more by demographic supply side factors than by economic demand side factors" (ILO WWR 2014, p.48).
- II. The unemployment limit is given by the social protection limited level of development – “given the limited availability of social protection or other forms of transfers” (Majid, 2001, Chapter 7, ILO WWR 2014, p.33).
- III. The labour force participation limit is given mainly by income effect. The following cases could be possible:
 - The negative income effect that encourages labour market participation:
 - Low-income levels induce a compulsory character of entering the labour market with a high level of employment *but under low levels of productivity*. In this case, participation in the labour market is high regardless of the labour force category, including women and youth, with a high risk of early exit from education. The negative income effect manifests through the high risk of poverty;
 - The positive income effect is present in the labour market as:
 - A. It encourages market participation:
 - The high-income households allow educated women to pay “for housework services or technology, *in conjunction with global changes in attitudes towards women working and accepted practices*” (ILO WWR 2014, p.36) while they are active in the labour market. This is the case for emergent economies, where the youth are more likely to remain in education, allowing for increasing productivity growth potential;

B. It discourages labour market participation:

- High incomes in households could enable women to exit the labour force, which is the case in advanced economies.

The ILO methodology for measuring job quality in developing countries is based on development theories¹⁵ and uses three key indicators, including the Millennium Development Goal (MDG) 1b, under the assumption that all these “3 dimensions are correlated with employment informality”:

- “the share of working poor (a headcount of the proportion of workers living below the US\$1.25 poverty line);
- the proportion of workers in vulnerable employment (a headcount of the working population judged to be at greater risk of weak and unreliable incomes). Vulnerable employment: contributing family workers and the self-employed.
- labour productivity (at the macroeconomic level, labour productivity trends provide an important indication of the evolution of output capacity and the use of new technology. Labour productivity indicates potential income for workers (ILO WWR 2014, p.37).

1.3. Romania's Short Profile Based on ILO's Methodology for Job Quality Measuring for Developing Countries

Based on economic growth performance, Romania is an emerging economy (EEs), a subcategory of developing countries that are similar to developed economies (advanced economies) based on the GDP growth rates per capita, according to the ILO's *World of Work Report 2014*. During 2000-2011, EE had economic GDP growth rates per capita higher (on average 5.5%, for Romania it was 5%¹⁶) than advanced economies – AE (0.8% in AE). Before the crisis, during the 2000-2007, EE's rates were 5.4% (and in Romania, it was 6.77%), while emerging economy rates were 1.5%. After the economic crisis, during

¹⁵ Quantum of growth [Mill (1848), Marshall (1890) and Say (1803), Solow (1956, 1957), Harrod (1949) and Domar (1952, 1957)}, Composition of growth Lewis (1954), Verdoorn (1941), Kaldor (1961) and the structural transformationalists, such as Chang (2002), Lin (2012), Rodrik (2005) and Hausmann and Klinger (2006)] and Combination of quantum of growth and composition of growth [(e.g., Arrow, 1962; Becker, 1962; Lucas, 1988; Mankiw, Romer and Weil, 1992). Dutz et al. (2012)] cited from World of Work Report 2014: Developing with jobs, International Labour Office, Geneva: ILO, 2014, p22.

¹⁶ Calculated by authors based on World Development Indicators, The World Bank, 28 July 2015, downloaded on 5.08.2015

2008-2012, a sharp decrease was registered in general for these rates, but accentuated in AE at -0.1%, while in EE countries the average was 4.9% and, in Romania it was still positive of 1.38%.

In Romania, in the past two decades, there are similarities and specific evolutions compared with the *major trends* identified for the Emerging Economies and Advanced Economies, and they could be iterated in the following trends (ILO WWR 2014):

- Working poverty is retreating, and a middle class is emerging.

Under the standard ILO indicator: the share of working poor¹⁷, a headcount of the proportion of workers living below the US\$1.25 (PPP) poverty line, this value was 0% during the period 2004-2012. (But at the beginning of the transition this indicator was at 0.29%, reaching a maximum in 1994 of 4.97%, and in 2003 it was 1.57%). Therefore, following 2004 Romania has achieved the MDG 1b. Goal of eradicating extreme poverty and hunger. Under the ILO's indicator the share of working poor,¹⁸ (a headcount of the proportion of workers living below the US\$2 (PPP) poverty line was 1.59% in 2012, slightly increasing from 1.57% in 2011 (but at the beginning of the transition, this indicator was 0.59%, reaching a maximum in 1994 of 23.25%). Romania as an "EE saw dramatic reductions in both extreme and moderate working poverty, with some expansion of the near-poor group and more rapid expansion of the developing middle class." (ILO WWR 2014, p.41)

Other indicators used in the working poor assessment *indicate the presence of a high risk of working poor*, especially from the developed countries working poor measurement methodology perspective: "The New commonly agreed indicators at the EU level stated at *European Laeken Council*"¹⁹: the in-work at-risk-of-poverty rate for employed persons.²⁰ Romania's value for this indicator was 18% in 2013 for the total population aged 18 and over, slightly decreasing from 19.1% in 2012.

¹⁷ Poverty headcount ratio at \$1.25 a day (PPP) (% of the population), SI.POV.DDAY, WDI Dataset, World Bank, <http://data.worldbank.org/indicator/SI.POV.DDAY>;

¹⁸ Poverty headcount ratio at \$2 a day (PPP) (% of the population), SI.POV.DDAY, WDI Dataset, World Bank, <http://data.worldbank.org/indicator/SI.POV.2DAY>;

¹⁹ L. Bardone, A_C., Guio, In-Work Poverty New commonly agreed indicators at the EU level, Statistics in focus, Population and social conditions, 5/2005, European Communities, 2005. p 11;

²⁰ ***, In-work at-risk-of-poverty rate by age and sex (source: SILC) [ilc_iw01], Extracted on 05.08.15, Source of data Eurostat;

- The share of vulnerable employment in total employment is increasing, and the proportion of wage and salaried workers in total employment is decreasing.

In Romania the share of wage and salaried workers in total employment is decreasing with 1.6pp from 69.4% in 1991 to 67.8% in 2013 and at the same time, the share of vulnerable employment in total employment was increasing from 26.8% in 1991 to 30.9% 2013 (estimates)²¹, a fact that indicates that Romanian workers "move down the income ladder". This tendency was in opposition to the general trend registered by advanced and emergent economies, where the increase of wage employment share in the total employment was accompanied by the decrease in vulnerable employment, a fact that indicates that countries "*move up the income ladder*". We should emphasise that "since 1991, the increase in the incidence of wage and salaried employment has been stronger in EEs than in developing countries." (ILO WWR 2014, p.40)

- Labour productivity is growing, but achieving parity with Advanced Economies levels is still in the distant future (ILO WWR 2014, p.41).

In Romania, labour productivity growth was prevalent especially in the second decade 2000-2013 with an average rate of 5%, (level close to EEs average for this period) that compensates low performance in this indicator realised during 1991-2000 of approx. -1.4%, achieving an average for the last two decades of 2.2%. In the last two decades 1991-2013, the Development Countries' labour productivity growth was on average 3.2% higher than the Advanced Economy's countries that reach an average of 1.4%, Emergent Economies achieved a 3.7% average for the labour productivity (the highest rate among all categories of DCs).

2. Research Question

Romania is an emerging economy that in the last decade almost eradicated extreme and moderate working poverty, and is in a full process of transition towards a developed economy country status (at least as a normative objective). Our primary goal is to assess and compare the Romanian labour market security performance using unemployment as its key features, based on the 2014 OECD's Methodology. The main argument for this approach rests on

²¹ LABORSTA, online statistical database, European Labour Force Survey (Eurostat)

the assumption stated (2015 OECD, p 217) that in developed countries - becoming *and staying unemployed is the most significant risk for a worker*.

Among acceptable tools to measure and assess labour market security²² we apply the "Aggregate outcome measure of job quality" in view to evaluate the "Expected earnings loss associated with unemployment". (Stiglitz et al., 2009, p. 198). This dimension is defined regarding probabilities by two main subcomponents (at the individual level): *unemployment risk* and *insurance against unemployment risk*. In this framework, the unemployment risk depends both on the *risk of becoming unemployed* and on the *expected duration of unemployment*. The second subcomponent, Insurance against unemployment risk, depends on the *eligibility for unemployment benefits* and the *generosity of benefits (replacement rates)*

An assessment of Romania's labour security is completed through evaluating OECD.Stat databases. Romania (as a non-OECD country) is reported in the main indicators used in the mentioned methodology. Romanian data is present in publically accessible databases like the OECD Labour Market Programme database and OECD Taxes and Benefits database.

This research is only a small part of the broad framework described by the OECD toward the assessment of labour market performance regarding both the number and the quality of job opportunities, under the consideration that policies should seek to promote more and better jobs. This article will proceed in three main directions:

- First by presenting an update on Romania's Labour market insecurity due to (extreme) low pay according to the new improved methodology provided by 2015 OECD, launched in June 2015 and focused on enhancing job quality in emerging economies;
- Second through raising concerns on the measurement of both other dimensions of job quality described in the OECD 2014 Methodology, respectively earnings quality and the quality of the work environment;
- The third direction regards the analysis of the main labour market and social policies (employment protection legislation, tax and benefit systems and active labour market policies) that are in a direct relation with job quality under its labour market security dimension.

The pursuit to improve the response of policies related to the well-being of workers, and the opportunities available to people is a highly interdisciplinary process in the development of a multidisciplinary perspective that involves different domains such as the economy, the labour market, education, legislation, taxes and benefits. The success of this process could accelerate the

²² Table 3.1. Broad outcome measures of job quality and their subcomponents, 3. HOW GOOD IS YOUR JOB? MEASURING AND ASSESSING JOB QUALITY, OECD EMPLOYMENT OUTLOOK 2014 © OECD 2014, p.87;

transition towards advanced economies performances from the emerging economy status, in conditions of improvement of the well-being of workers and their families.

3. The OECD Approach to Labour Market Security due to Unemployment Performance Assessment

Based on Green (2011) findings that labour market security is important for individual well-being, the OECD Methodology uses job-quality as a second dimension of "labour market security" the characterisation that "*job insecurity* reflects not only the probability of *job loss* but also its *expected costs*" (OECD, 2014, p.94).

3.1. The Probability of Job Loss or the Probability of Becoming Unemployed

- Job insecurity

The traditional framework for job quality measurement uses two measures as a proxy for the job insecurity (OECD, 2013, p.157):

- a) the proportion of short-term workers in employment;
- b) the incidence of temporary work.

Those two indicators were evaluated and integrated into the job quality assessment scale in OECD 2014 p.94 and were considered relevant as an instrument that allows an objective measurement for the determinants of the probability of job loss.

The incidence of temporary work and short term work is illustrated in Annex 1 and Figure 1 for 35 OECD countries and other countries including Romania as well, using 2013 OECD data.

Because in 2013 there still is a low tendency of correlation (0.07 correlation coefficient), of this trend unchanged with the one emphasised by the (OECD 2013, p.156), we can surmise that the two mentioned indicators correspond to two independent dimensions, both relevant for the job security measurement. This result is contrary to the intuition described in theory, according to which both job tenure and temporary work is dependent on job security. Consequently, *we assume that the job tenure underlines the risk of job loss* and, in its turn, *that temporary work is associated with a fixed term working contract that implies a high probability of job loss.*

- The proportion of short-term workers in employment as a measure of job quality

Job tenure is said to “have the advantage of focusing on the length of time workers have been with their current employer, regardless of the length of their contract. This, for instance, allows for the fact that fixed-term contracts may be renewed with the same employer over extended periods.

Figure 1

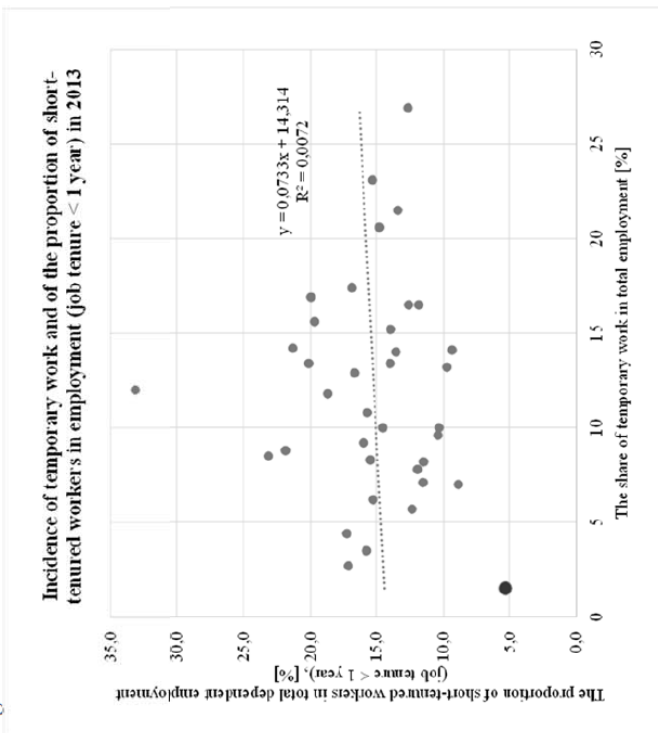
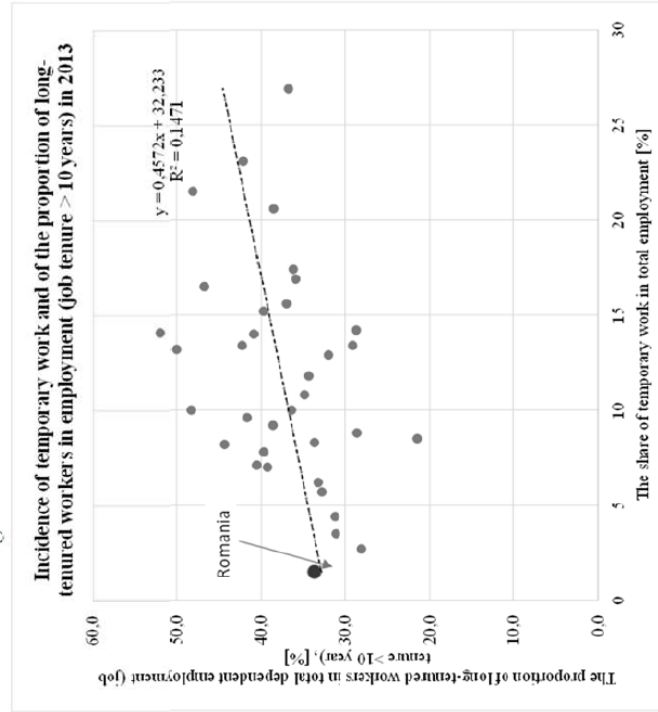


Figure 2



Note: these indicators were calculated for total population, dependent employment.

Data sources: OECD, retrieved from: Employment by job tenure intervals – persons, Incidence of permanent employment; Data extracted on 05 Jun 2015 13:24 UTC (GMT) from OECD Stat Metadata Dataset: LFS - Employment by job tenure intervals – Frequency, OECD Stat – Job tenure is measured by the length of time workers have been working with their current employers. This information is valuable for estimating the degree of fluidity in the labour market and in identifying the areas of economic activity where the turnover of labour is rapid or otherwise.”

Nonetheless,

job tenure indicators measure job stability rather than job security (OECD 2013, 158). In the OECD (2009) it was concluded that people are deciding to leave explained the “account of a large proportion of job losses.”

Another conclusion formulated in the 2013 OECD report, states that short job tenure (<1 year) is highly correlated with involuntary job departures and describes job insecurity more than the incidence of temporary work as an effect of both temporary and regular employment.

This indicator monitors changes in job security over time:

- “the share of workers with very short job tenure has a major drawback for monitoring job security trends as it is highly sensitive to the business cycle (since it reflects net job creation, in addition to worker reallocation across existing jobs). Therefore, changes over time in the share of workers with short job tenure reflect first and foremost fluctuations in economic activity, rather than changes in job insecurity” (OECD 2013, p.158);
- The short job tenure diminishing indicates a slowdown in job creation and higher job losses more than an improvement in job quality;
- This indicator is sensitive to the business cycle and to structural factors “that need to be disentangled before drawing conclusions about trends in employment quality over time” (OECD 2013, p.158).

- The proportion of long-term workers in employment as a measure of job quality

On the other hand, long-term workers (>10 years) explains the voluntary departure, and it is highly correlated with “the stringency of national dismissal rules as measured by the OECD index on employment protection for regular workers” and therefore “could constitute a good proxy of employment security” (OECD 2013, p.158) measurement. This indicator is less sensitive to business cycle variations.

- The incidence of temporary work – an indicator of labour market segmentation

The incidence of temporary work (defined by employment with fixed term working contracts) reflects labour market segmentation aspects rather than job security characteristics. This is a measure for the precariousness of employment (Venn, 2009, cited by OECD 2013, pg. 156), assuming that: “the incidence of temporary work is primarily a measure of labour market duality, rather than an average measure of job insecurity. Indeed, the incidence of temporary work tends to be higher in countries with strict dismissal rules for regular workers, as it often provides firms with a buffer against fluctuations in

demand. This factor may contribute to creating a dual labour market, characterised by both a high share of temporary workers and a relatively high share of long-term workers. By contrast, temporary work is less prevalent in countries with less stringent employment protection legislation; the downside, however, is that regular workers face greater job insecurity as they can be dismissed easily during periods when firms implement reductions in workload.” (OECD 2013, p.157) (Figure 2).

- Romania's job security profile from the perspective of the traditional framework perspective

In 2013, the job security assessment from the perspective of the three indicators, “the proportion of short-tenured workers in employment, the proportion of very long term workers in employment and the incidence of temporary work”, positions Romania in the context of the 35 OECD countries and other countries, as follows (details Annex 1):

- the incidence of temporary work was 1.5% the lowest in the entire set of 35 countries included in our analysis, close to Lithuania and Estonia with 2.7% to 3.5%. In 2013 OECD concludes that in countries with a low incidence of temporary employment at a low-level strictness of dismissal from employment allows release without difficulty. This indicates that workers face a high degree of job insecurity because they can be relatively dismissed. A consequence of the long-term contract reflects the downward trend in job stability in these countries, as well as in Romania. The respective percentage of persons employed in a job for more than ten years tends to be lower. For Romania this level is 34.7%, lower with 2pp than 36.7%, the median level of selection, farthest to the maximum of 48% in Greece, 50% in Italy and 52.1% in Croatia, respectively closest to the minimum of 21.4% in Russia, 28% in Lithuania, 28.6% in Denmark and 28.7% in Iceland);

- the proportion of short-tenured workers in employment (less than one year) in total dependent employment was 5.3%, the lowest value of the whole set of 35 countries included in our analysis, a level close to Slovakia 8.9%, Croatia 9.4% and Italy 9.4%. This low level is correlated with a lower incidence of temporary employment.

- the proportion of very long term workers in employment (more than 10 years) in total dependent employment was 33.7%, a level close to that of Norway (33.7%), United Kingdom (33.3%) and Bulgaria (32.8%), also a close level to the OECD average of 33.4%.

In short, under the traditional framework for job quality measurement, Romania matches the pattern of countries pictured by OECD's (OCED 2013, p. 158). It registered long-term workers and a low incidence of temporary

work, with the lowest proportion of temporary workers that also tend to have a low level of the share of long-term workers. Romania's workers experience a lower (close to extremes among the selected countries analysed) degree of job security than is faced by regular workers from OECD countries. The very low level of incidence of temporary work in Romania reveals, on the one hand, a low level of segmentation of the labour market, coupled with a less stringent employment protection legislation, and on the other hand a low level of fluidity/flexibility of the labour market, indicating a low level of reallocations flows (inside and across economic sectors).

- Romania's job security profile from the dynamic perspective of the incidence of short-term workers and long-term workers

In Romania, the net job creation decreased (monitored through the incidence of short-term workers' variation), during 2005-2010 with 4,4pp from 12.2% to 4.8%. In 2011 there was a brief comeback with 1,1pp comparing to 2010, followed by a very slight decrease to 5.3% in 2013. This downward trend of employment in jobs with low duration does not indicate an increase in the quality of employment, joining the trend with the global trend recorded (OECD 2013, p.158) for 2007-2010 where there is indicated a decrease by 26pp in 14 countries! This tendency rather reflects the impact of the crisis on employment manifested by "slowing job creation and job losses" (Figure 3).

In the last decade, Romania has faced three periods according to the job security criteria (monitored by the incidence of very long term workers' variation). The first period was during 2005-2008 with a downward trend, with a decrease of 4,9pp for the stability of jobs/employment stability and respectively increasing the job insecurity from 35.4% to 30.5%. The second period was during 2008-2010 with a slight comeback of 3,5pp from 30.5% to 34%; and finally, the third period during 2011-2013 there was a very slow trend of job security from 33.2% in 2011 to 33.7% in 2013 (ignoring that in 2011 the job insecurity increased with 0,8pp comparing to its 2010 level). (See also Figure 3)

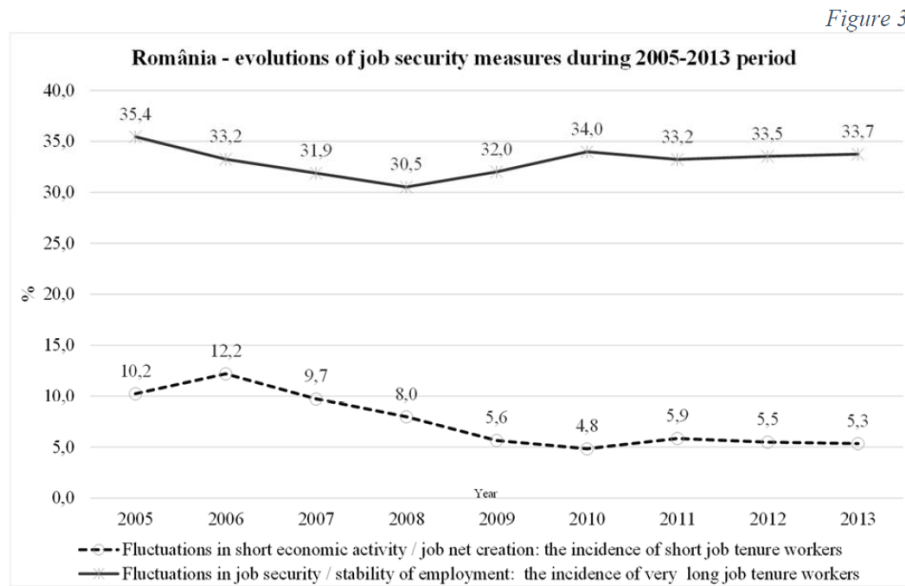


Figure made by authors.

Data sources: OECD, retrieved from Employment by job tenure intervals – persons; Incidence of permanent employment; Data extracted on 05 Jun 2015 13:24 UTC (GMT) from OECD.Stat.

3.2. Labour Market Insecurity and the Expected Costs Induced by the Job Loss

- Methodological aspects regarding the measurement of the expected costs induced by job loss

In literature, the expected costs induced by job loss or the envisaged cost of the job loss was analysed by (OECD, 1997; Anderson & Pontusson, 2007; Cuyper et al, 2008; Green, 2011 et al.), as a function of unemployment risk and the degree to which insurance compensates for lost earnings during unemployment. The new 2013 OECD's methodology expanded the job security assessment under the broad framework of labour market insecurity outcome, taking into consideration not only the inside job security but also outside job security. In consequence, the "overall labour market insecurity is defined regarding the combination of unemployment risk and unemployment insurance" (OECD 2013, p.95) based on two fundamental assumptions that unemployment is involuntary and wage losses due to job displacement can be ignored).

The expected costs induced by job loss are synthesised by an index built of two indicators calculated with micro-aggregated data provided by OECD Stat, respectively: the risk of unemployment (in the absence of unemployment insurance) and the effective unemployment insurance, as follows the risk of unemployment.

- The risk of unemployment

The risk of unemployment represents the cumulated probability C , where $C = A * B^{23}$, the probabilities product of the probability of becoming unemployed and the expected duration of unemployment provides an indication of the overall risk of unemployment. (OECD 2014, p.95) and it gave “an indication of the share of the year that an employed person is expected to spend in unemployment, or alternatively, under the assumption that the value of work only relates to the earnings it generates, of the average expected earnings loss due to the risk of unemployment as a share of previous earnings” (OECD 2014, p.95). The unemployment risk could be expressed as a share of the labour” (the actual unemployment rate) force when “the unemployment inflow and outflow probabilities remain constant” (Elsby et al., 2009; Shimer, 2012, cited in OECD 2014, p.95, 13). The OECD methodology considers the monthly probability of becoming unemployed as a measure of job security and the average expected the duration of completed unemployment spells in months, which is the inverse of the probability of finding a job once unemployed (a measure of employability).

Where there are used the detailed definitions for:

- the probability of becoming unemployed (A) “the ratio of unemployed persons who have been unemployed for less than one month over the number of employed persons one month before” (OECD 2014, Figure 3.3. p.96.), with its second formula as the “Unemployment inflow probability (I) of the unemployment inflow rate defined by the relation: $-\ln(1 - I)^{24}$. (OECD 2010, Figure 1.25, p.79), (see Annexe 2)
- the expected duration of unemployment or in equivalent sentences the expected duration of staying / being in unemployment (B) is defined as “the inverse of the unemployment outflow probability where the latter is defined as one minus the ratio of unemployed persons who were unemployed for one month or more, over the number of unemployed persons one month before.” (OECD 2104, Figure 3.3. p.96.) This is noted as the “Unemployment outflow probability (O) of the unemployment outflow rate defined by the relation: $-\ln(1 - O)$ ”. (OECD 2010, Figure 1.25, p.79), (see Annex 3a and 3b)

²³ OECD Employment Outlook 2014 - © OECD 2014, Chapter 3, Figure 3.3. Unemployment risk and its components in OECD countries, Version 1 - Last updated: 26-Aug-2014

²⁴ OECD EMPLOYMENT OUTLOOK 2010 – MOVING BEYOND THE JOBS CRISIS © OECD 2010

- Effective unemployment insurance

Effective unemployment insurance in the 2014 OECD Methodology is represented by the “*effective* replacement rates based on the combination of benefit coverage and benefit generosity for unemployment insurance and unemployment assistance”. Consequently, “allowing the measuring of the effectiveness of unemployment insurance in absorbing the risk of unemployment in a given country,” describes specific conditions of the generosity of benefit entitlements (OECD, 2014, p.97).²⁵ Therefore, this indicator is, according to the 2014 OECD methodology²⁶:

Effective unemployment insurance²⁷

= the coverage rate of unemployment insurance (UI) * average net replacement rate among unemployment insurance recipients +

+ the coverage rate of unemployment assistance (UA) * average net replacement rate among unemployment (social) assistance recipients

$$F=D*E= =NRR_unempl_UI*UI+NRR_unempl_UA*UA$$

where:

- The average replacement rates for recipients of UI and UA take account of family benefits, social assistance and housing benefits (see notation and formulas in Table 1, Annex 4a and 4b, Figure 9).

“Net replacement rate (NRR) is a measure of work incentives and is published by OECD at the address: www.oecd.org/els/social/workincentives. This indicator “*analyses the effects of labour market transitions on household incomes*”.

NRR= usually defined as the ratio of net income while out of work divided by net income while in work:

²⁵ Source: OECD calculations based on the OECD Benefit Recipients Database, the OECD Labour Market Programmes (database), <http://dx.doi.org/10.1787/data-00312-en> and the OECD Taxes and Benefits (database), <http://dx.doi.org/10.1787/data-00201-en>.

²⁶ Comment: “Cross-country comparisons of unemployment insurance typically focus on the generosity of unemployment concerning the replacement rate of previous earnings over a given reference period and set of household of types” (OECD, 2007 quoted OECD 2014 p. 96). “While such comparisons are very useful for providing an indication of the generosity of benefit entitlements, they do not take account of cross-country differences in the risk and nature unemployment and, therefore, do not allow measuring the effectiveness of unemployment insurance in absorbing the risk of unemployment in a given country” (OECD 2017, p.97).

²⁷ Figure 3.4. Effective unemployment insurance in OECD countries - Percentage of previous net earnings averaged across household types, 2010, 3. How good is your job? Measuring and assessing job quality, OECD Employment, p.97.

$$NRR = \frac{\text{Income_NET_out_of_work}}{\text{Income_NET_in_work}} \Bigg|_{\text{fam_type / children_nr / net_income_per_household}} \quad [A3]$$

The NRR measures the fraction of net income in work that is maintained when becoming unemployed²⁸.

- Unemployment-benefit coverage rates²⁹ are measured as „the share of ILO unemployed persons receiving unemployment benefits”:

$$E = \frac{\text{Number_of_unemployed_with_benefits}}{\text{Number_ILO_unemployed}}$$

These coverage rates are a proxy for “eligibility rates (i.e. the share of unemployed eligible to benefits)” (OECD 2014, p.98, Box 3.4.). This eligibility rate³⁰ is a variable according to unemployment duration. Access exists during the initial eligibility and continuing eligibility period - including even the period when the person is no more entitled to unemployment benefit. The detailed regulations at national level in countries such as Germany, Hungary and Ireland differentiate the coverage for unpaid unemployed receiving social assistance.

- Labour market insecurity

Labour market insecurity is the “unemployment risk time’s one minus unemployment insurance which may be interpreted as the expected earnings loss associated with unemployment as a share of previous earnings”³¹

$$G = C*(1-F)$$

Where for notation and formulas see Table 1:

- (G) Labour market insecurity;
- (C) Unemployment risk;
- (F) Effective **unemployment insurance** is "defined regarding the effective level of risk absorption through the tax-and-benefits system" (OECD 2014 p.100)

²⁸ http://www.oecd.org/els/soc/Methodology_2013.pdf, p.10

²⁹ Chapter 3. HOW GOOD IS YOUR JOB? MEASURING AND ASSESSING JOB QUALITY, OECD EMPLOYMENT OUTLOOK 2014, p 98

³⁰ Where „Eligibility rate: the number of employed persons who have worked the minimum number of months required for initial benefit eligibility during the reference period as a share of the number of employed with complete employment histories for the entire qualification period.” (OECD 2014, p.99, Box 3.4.)

³¹ Chapter 3. How good is your job? Measuring and assessing job quality, OECD Employment Outlook 2014 p. 103

Table 1. Summary of the OECD methodology for measuring labour market insecurity

Labour market insecurity $G = C*(1-F)$			G
Substitution income for the income from work		Behaviour on Labour Market	
Effective unemployment insurance $F = D * E =$ $NRR_unempl_UI * UI +$ $NRR_unempl_UA * UA$	F	Unemployment risk $C = A * B$	C
benefit generosity for unemployment insurance and unemployment assistance NRR_UI family, household, taxation NRR_UA family, household, taxation	D	The probability of becoming unemployed / entering in unemployment (Annexe 1) $A = -\ln(1-I)$	A [Annexe 1]
<i>Formulas, notation and results coordinates</i>			
<ul style="list-style-type: none"> average net replacement rate among unemployment insurance recipients $AS_net_UI = UI_net / Sal_net =$ $= NRR_UI$ family, household, taxation 	NRR_som_UI [Annex 4a] [Annex 4b] [Annex 4c]	<ul style="list-style-type: none"> Unemployment inflow probability $I = \frac{N_{unempl < 1_month}}{N_Empl < 1_month}$ 	I [Annex 1]
<ul style="list-style-type: none"> average net replacement rate among unemployment (social) assistance recipients $AS_net_UA = UA_net / Sal_net =$ $= NRR_UA$ family, household, taxation 	NRR_som_UA [Annex 4a] [Annex 4b] [Annex 4c]		
<i>Other indicators used, sources and values</i>			
- Net income from unemployment insurance for unemployment insurance recipients family, household, taxation	UI_net [OECD, Tax-Benefit Models]	- Number of unemployed persons who have been unemployed for less than one month	$N_unempl < 1month$ [Annex 2a]
- Net income from unemployment (social) assistance for non-insured unemployed persons family, household, taxation	UA_net [OECD, Tax-Benefit Models]	- Number of employed persons one month before	$N_empl < 1month$ [Annexe 1]
- Net income from work before entering into unemployment family, household, taxation	Sal_net [OECD, Tax-Benefit Models]		
Unemployment-benefit coverage rates among unemployment insurance and unemployment (social) assistance recipients (E=UI+UA)	E	the average expected duration of unemployment $B = 1 / [-\ln(1-O)]$	B [Annex 2b]
<i>Formulas, notation and results coordinates</i>			
<ul style="list-style-type: none"> Unemployment-benefit coverage rates among unemployment insurance $UI = \frac{N_UI}{NT}$ 	UI [Annex 3b]	<ul style="list-style-type: none"> Unemployment outflow probability $O = \frac{N_som > 1luna}{N_som < 1luna}$ But we applied $O = \frac{N_som < 1luna}{N_som > 1luna}$ 	O [Annex 2b]

<ul style="list-style-type: none"> Unemployment-benefit coverage rates among unemployment (social) assistance recipients $UA = \frac{N_UA}{NT}$	<i>UA</i> [Annex 3b]		
<i>Other indicators used, sources and values</i>			
<ul style="list-style-type: none"> Number of unemployment insurance recipients Number of unemployment (social) assistance recipients Number of total ILO unemployed people 	<i>N_UI</i> <i>N_UA</i> [Annex3a] <i>NT</i>	<ul style="list-style-type: none"> Number of unemployed persons who have been unemployed for more than one month 	<i>N_unempl > 1month</i> [Annex 2a]

Table source: synthesis made by author based on OECD 2014, Chapter 3.

• **Sources of data used for jobs security and labour market security assessment**

The Unemployment Duration Database of OECD with aggregate data covers a large number of OECD and non-OECD countries, except Romania for this specific indicator (but as presented before reported for all other used in this methodology). These indicators are measured according to the methodology of LFS and allow a better comparability between countries, offering complementary information to micro approaches, with some limits and advantages (Table 2).

Table 2 Sources of data used for jobs security and labour market security assessment according to 2014 OECD Methodology

Data sources characteristics	Advantages / Comments
<p>Sources aggregate data</p> <p>LFS Labour Force Survey – reported by OCED Stat in Unemployment Duration Database for 2013</p> <ul style="list-style-type: none"> * Unemployment risk Specific Indicators: <ul style="list-style-type: none"> - job duration - incidence of temporary work <p>Benefit Recipients Database, the OECD Labour Market Programmes (database), http://dx.doi.org/10.1787/data-00312-en</p> <ul style="list-style-type: none"> - Number of unemployment insurance recipients - Number of unemployment (social) assistance recipients <p><i>OECD Taxes and Benefits</i> (database), http://dx.doi.org/10.1787/data-00201-en</p> <ul style="list-style-type: none"> * The income level by labour market status, family type, taxation, etc. 	<p>Comparability between countries</p>
<p>Sources of data at the individual level (Application Specific Inquiry):</p> <ul style="list-style-type: none"> * Description of patterns/models over the workforce groups * Analytical purposes 	<p>Detailing various socio-economic groups on the risk of unemployment and unemployment insurance, including by the previous status of unemployment</p> <p>Suitable for analysing risk determinants of</p>

	unemployment and unemployment insurance and their impact on subjective well-being of the worker
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Source: Synthesis made by author based on EMPLOYMENT OUTLOOK 2014 © OECD 2014, p.96

- Assumptions and limitations given by methodologies of used data sources induced to 2014 OECD's "Methodology for measuring job quality."

The applied OECD methodology presents some specific assumptions and limitations that have to be taken into consideration in the final analysis:

- "any flows in and out of the labour force are ignored." (OECD 2014, p. 96). Measuring the probability of becoming unemployed or the average expected duration of unemployment is calculated under the assumption that all inflows are exclusively between unemployment and employment.
- "the cross-sectional nature of the data implies that one cannot follow individuals over time and, therefore, document the probability of becoming unemployed and the expected duration of unemployment spells conditional on job status in the last job before becoming unemployed. Thus, it is not possible to construct separate measures of the probability of becoming unemployed and the expected duration of unemployment spells, depending on whether the last job was part-time or full-time or whether it was temporary or open-ended" (OECD 2014, p. 96).

Compensation for these limits was made by the realisation of a set of alternative data calculated in EU-SILC. After comparing the two sets of results, there was obtained a correlation coefficient of over 0.7 which confirmed that "ignoring transitions in and out of the labour force is not a major issue for the purpose of cross-country comparisons of unemployment risk" (OECD 2014, pg.96).

4. Labour Market Security Assessments for Romania in the European Context. Results of Applying the 2014 OECD Methodology

In this section we present the main results achieved by the 2014 OECD methodology for measuring Romania labour market security due to unemployment³² In the European context, using micro-aggregate data (OECD 2014). We recalculated all the indicators iterated in the methodology, for different countries, during 2005-2013, under consideration that if there is any

³² In OECD 2015 in chapter 5 ENHANCING JOB QUALITY IN EMERGING ECONOMIES, p 224 there is treated the case of emerging economies and there is calculated the "Labour market insecurity due to extreme low pay". This will be the subject to our future analysis.

unintentional error, it will be at least homogenous. Our results for the OECD countries differ from the values presented in OECD 2014 report, mainly, because we use the population of 15-64 years old instead of 34-60 years old. The main result of this exercise is the identification of the trend which characterises the security of labour market in general, but based on specific criteria as follows:

- The unemployment risk assessment for Romania in the European Context

Romania presents a high global unemployment risk for 2013 of 11.1%, next to the positions of the Slovak Republic and Spain. (Figure 4) In the rank below Greece and the Slovak Republic,) and "The average expected hierarchy made in the selection of 34 countries (Table 3) Romania is positioned in the 4th position – the first place is occupied by Greece. This position is explained by the high level of probabilities registered by both factors the probability of becoming unemployed and the average expected duration of unemployment. The probability of becoming unemployed is of 0.72% (third rank below Greece and the Slovak Republic), and the average expected duration of unemployment is 15.4%, indicating that the expected duration of unemployment is high - almost 16 months. This points to a stationary lingering risk of long-term unemployment in Romania, where long-term unemployment is fuelled by important entries. The (global) unemployment risk is 11% but at 4pp from the ILO unemployment rate (Table 4), a result from the rule formulated (OECD 2015): the risk of unemployment is approximated by the unemployment rate."

- The labour market insecurity due to unemployment and its components assessment for Romania in the European Context

Romania presents a very high level of labour market insecurity given both by a *high level* of Unemployment risk and by a *low level* of Effective unemployment insurance. We mention the fact that in Romania there are internationally reported data exclusively referring to unemployment insurance while the unemployment (social) assistance does not exist, situation considered in the first round of labour market insecurity assessment and presented in Table 5. On the other hand, we take into consideration the socio-demographic categories with the levels of unemployment.

Table 4. Labour market insecurity in 2013 in Romania by socio-demographic characteristics: gender and age groups.

	Romania			Total	Target Group				
	Year 2013				Socio-demographic group				
	Legend	Notation	Formula		Gender		Age group		
					Male	Female	15-24	25-54	55+
1	2	3	5	6	7	8	9	10	
A	Number of unemployed persons who have been unemployed for less than one month (Thousands pers.)		$N_{unempl < 1month}$	39	19	20	11	26	3
B	Number of employed persons one month before (total employment, (Thousands pers.)		$N_{empl < 1month}$	76	49	27	18	50	8
C	The unemployment inflow probability (I) (Calculated)	I	$I = \frac{N_{unempl < 1month}}{N_{empl < 1month}}$	0,51	0,4	0,7	0,6	0,5	0,4
D	The probability of becoming unemployed / entering in unemployment (Calculated)	A	$-\ln(1-I)$	0,72	0,5	1,3	0,9	0,7	0,5
E	Number of unemployed persons (OECD ILO)	NT		653	400	253	167	441	44
F	Number of unemployment insurance recipients [TEMPO]	N UI		200	111	88	47	128	25
G	Number of unemployed persons who have been unemployed for more than one month		$N_{unempl > 1month}$	614	381	233	156	415	41
H	Unemployment outflow probability [$-\ln(1-O)$], (Calculated)	O	$O = \frac{N_{scm < 11une}}{N_{scm > 11une}}$	0,06	0,05	0,09	0,07	0,06	0,07
I	The average expected duration of unemployment (Calculated)	B	$B = 1 / [-\ln(1-O)]$	15,2	19,5	11,1	13,7	15,5	13,2
J	(Global) Unemployment risk	C	$C = A * B$	11,0	9,6	15,0	12,9	11,3	6,2
K	Unemployment rate ILO - Check	rU		7,1	7,7	6,3	23,7	6,4	3,7
L	Unemployment-benefit coverage	E	$UI = \frac{N_{UI}}{NT}$	30,6	27,9	34,9	28,2	29,0	56,3

	rates among unemployment insurance								
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Date Proxy different sources - calculated by authors

	1	2	3	5	6	7	8	9	10
N	share from median average net wage	S1					86,7	99,4	115,3
O	Unemployment Indemnity 75% and 50% from SRI (MMSF RO, RON)	UI		426	426	426	214	426	426
P	Average net nominal monthly salary earnings	NAW		1579	1640	1579			
Q	Proxy for median average net wage		NAW*S1	1058	1099	1058	1369	1630	1821
R	NRR from 67AW	D		40,3	38,8	40,3	15,6	26,1	23,4
S	Effective unemployment insurance	F	F=D*E	12,3	10,8	14,0	4,4	7,6	13,2
T	Labour market insecurity	G	C*(1-F)	9,6	8,6	12,9	12,3	10,5	5,4

OECD data for NRR

U	Net Replacement Rates for single earner, previous earnings = 67% Average Wage (AW): initial phase of unemployment	D		48	48	48	48	48	48
V	Effective unemployment insurance	F	D*E	14,7	13,4	16,7	13,5	13,9	27,0
X	Labour market insecurity	G	C*(1-F)	9,4	8,3	12,5	11,2	9,8	4,5

Data extracted on 27 Aug 2015 09:43 UTC (GMT) from OECD.Stat

Notes

- C5** Checked it is the same value but not the order of level with the ILO calculated inflow rate is 0.0058 Inflow rate (Elsby et al., 2013) Table 9c. Unemployment flows (ILO estimates), KILM 8th Edition
- H5** It is confirmed with ILO calculated outflow rate is 0.0788 Outflow rate (Elsby et al., 2013) KLIM 8th edition Table 9c. Unemployment flows (ILO estimates)
- I5** 14.1 months, cited Labour Force in Romania: Employment and unemployment - 2013, NSI, Bucharest, published in 2014, pg. 193
- H3** The formula is inverse than the form iterated in Methodology
- F5-F10** Source NSI -TEMPO, indicator TEMPO_SOM101C, released on 27_8_2015
- N8-N10** Eurostat, hourly earnings, all employees (excluding apprentices) by age [earn_ses_pub2a]
- O5-O10** Annual average of average monthly indemnity (RON), Romanian Labour Ministry, <http://www.mmuncii.ro/j33/index.php/ro/transparenta/statistici/date-statistic>
- P5-P7** Tempo NSI, FOM106F - Average net nominal monthly salary earnings by categories of employees, economic activities at level of C.ANE Rev.2 division and by sex

U5-U10

Table 5. Labour Market Insecurity and its Components Assessment for Romania in the European Context

	C_2008	C_2009	C_2010	C_2011	C_2012	F_2008	F_2009	F_2010	F_2011	F_2012	G_2008	G_2009	G_2010	G_2011	G_2012
Portugal	8,03		14,13	20,45	35,33	39,78	48,74	43,69	32,25	33,04	4,83	0,00	7,95	13,85	23,66
Lithuania	20,39	20,38	21,98	19,38	25,14	20,38	27,72	12,92	9,54	10,32	16,23	14,73	19,14	17,53	22,55
Latvia	4,97	8,18	10,62	10,39	13,18	28,17	27,05				3,57	5,97		10,39	13,18
Romania_Eurostat	8,80	12,66	17,56	10,01	12,52	12,41	30,53	32,31	12,82	11,35	7,71	8,80	11,89	8,73	11,09
Romania_INS_TMP O	8,80	12,66	17,56	10,01	12,52	13,97	40,95	27,27	12,00	13,31	7,57	7,48	12,77	8,81	10,85
Slovenia	2,68	6,17	6,88	7,76	10,57	24,28	30,15	29,65	36,02	31,68	2,03	4,31	4,84	4,97	7,22
Switzerland	2,67	4,73	8,12	7,93	7,17	43,58	48,42	46,89	39,90	38,12	1,50	2,44	4,31	4,77	4,43
Bulgaria	1,09	1,80	2,02	3,16	5,19	23,38	39,98	29,62	21,14	22,70	0,84	1,08	1,42	2,49	4,02
Slovak Republic	1,28	2,40	3,14	3,08	4,21	5,37	9,31	6,75	7,17	6,98	1,21	2,17	2,93	2,86	3,92
Hungary	4,70	6,69	6,63	6,32	6,05	29,67	54,57	53,63	51,70	38,98	3,30	3,04	3,07	3,05	3,69
Czech Republic	2,55	4,13	4,10	3,65	3,84	23,78	34,71	27,69	24,34	18,51	1,95	2,70	2,97	2,76	3,13
Estonia	1,92	6,32	5,45	3,52	3,13	17,23	22,97	15,05	11,70	13,05	1,59	4,87	4,63	3,10	2,72
Malta	3,44	4,25	4,25	2,73	2,73	41,10	41,05	36,16	33,22	32,89	2,03	2,51	2,72	1,82	1,83
Sweden	1,09	1,90	1,38	1,24	1,26	24,45	28,30	23,79	20,42	20,20	0,82	1,36	1,05	0,99	1,01
France	1,43	2,21	2,08	1,97	2,22	74,85	65,63	68,46	69,68	67,20	0,36	0,76	0,66	0,60	0,73
Denmark	0,38	1,24	1,66	1,64	1,73	58,98	58,82	57,51	54,33	58,87	0,16	0,51	0,71	0,75	0,71
Germany	2,72	3,34	2,58	2,08	2,08	58,44	61,75	61,95	66,52	70,37	1,13	1,28	0,98	0,70	0,62
Finland	1,08	1,83	1,61	1,47	1,49	55,75	56,70	54,95	54,12	60,39	0,48	0,79	0,72	0,68	0,59
Austria	1,07	1,56	1,21	1,15	1,31	64,99	64,01	66,97	68,57	68,75	0,38	0,56	0,40	0,36	0,41
Belgium	2,57	3,54	3,78	2,76	3,00	93,05	100,35	92,41	102,78	97,78	0,18	-0,01	0,29	-0,08	0,07
Netherlands	0,36	0,81	0,90	0,83	0,80		148,35	127,52	131,65	124,33		-0,39	-0,25	-0,26	-0,20
Australia	0,85	1,24	1,10	1,20	1,17	53,39	41,39	40,49	41,16		0,40	0,73	0,66	0,71	
Greece	8,25	9,81	19,95			25,84	27,08	17,70			6,12	7,16	16,42		
Luxembourg	2,15	3,55	2,37	1,54	2,02	36,56	46,53	55,61	44,58		1,37	1,90	1,05	0,86	
Norway	2,65	4,01	4,59	5,29	5,68	28,88		49,22	46,56		1,88		2,33	2,83	
Poland	3,66	5,24	6,01	5,62	7,29	9,64	11,58	10,29	10,04		3,31	4,64	5,39	5,05	
Spain	0,62	1,23	1,13	1,00	1,04	54,42	49,46	51,60	44,59		0,28	0,62	0,55	0,55	

Source: data OECD 2014, including Romania, values calculated by authors.

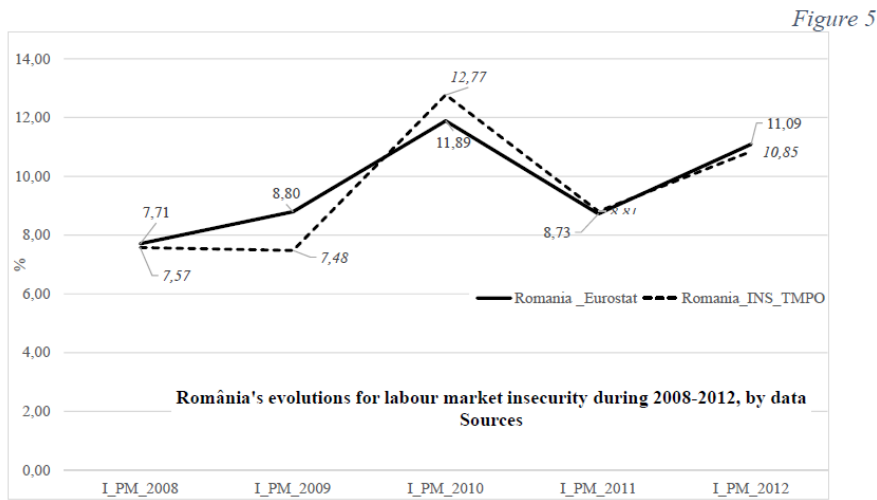
Unemployment Indemnity 75% and 50% from Social Reference Index (MMSSF RO, RON), differentiated by unemployment indemnity and replacement income for compensation for the youth and compulsory military according to Law 76/2002.

Effective unemployment insurance depends on the benefit generosity for unemployment insurance and unemployment assistance and also on the unemployment benefit coverage rates. Because the indicator of some unemployment insurance recipients presented by OECD databases does not include data about Romania, we used the values reported by alternative data sources: Romania's NIS (National Institute of Statistics) TEMPO and Eurostat. Regarding the Effective unemployment insurance, we use in the first round of calculus (the comparative situation presented in Table 4) the net replacement rates for a single earner, previous earnings = 67% Average Wage (AW): initial phase of unemployment provided by OECD. In the second round (Table 4) we use a data proxy from different sources (the Unemployment Indemnity level provided by Labour Ministry, Average net

nominal monthly salary earnings provided by NIS TEMPO, and from Eurostat the share of median average net wage and hourly earnings).

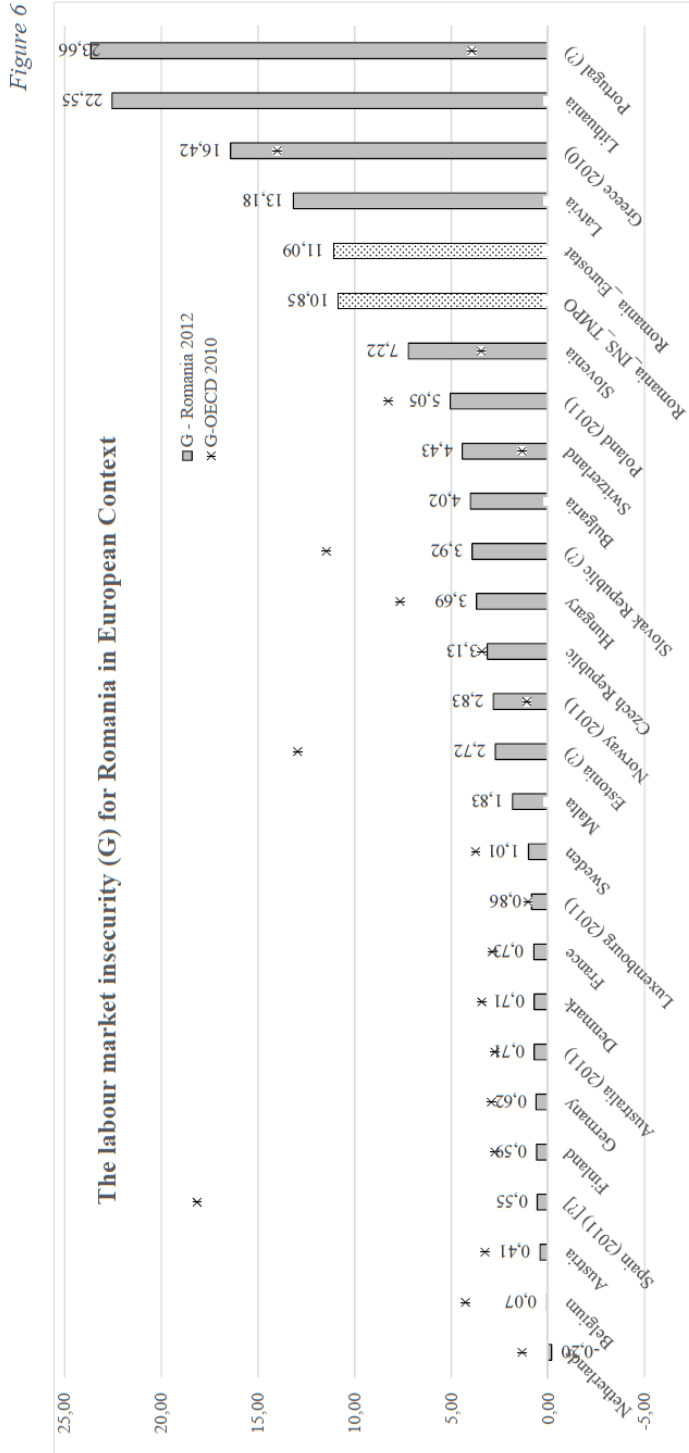
As a consequence of these aspects, we provide two values for effective unemployment insurance (F) and Labour market Insecurity (G) for Romania, emphasising that the calculated values present minimal differences (see Figure 5).

Romania as a general trend³³ confirm the fact announced in the 2014 OECD study, that the effective unemployment insurance is inversely correlated with the risk of unemployment, entering in the countries group with a very low effectiveness of unemployment insurance and high risk of unemployment. With regards to the labour market insecurity level, it is fourth in rank among the set of selected countries in 2012, below Slovenia, followed by Latvia, Greece, Lithuania and Portugal (see Figure 6). Developed countries such as Austria, Germany, Finland, Denmark and France recorded a security of the labour market supported by low levels of risk of unemployment and a high effectiveness of unemployment insurance.



Source: Graph made by authors with data OECD 2014 for Romania, values calculated by authors.

³³ In Figure 7 it is also illustrated the fact that there are four results as outliers in our Methodology compared with the results provided by OECD 2014 for 2010. – Spain, Estonia, Slovak Republic and Portugal



Considering that labour market insecurity may be interpreted as the expected earnings loss associated with unemployment as a share of previous earnings in our assessment, the result is the fact that in Romania we expected at least a 10% loss from earnings! While in developed countries our scale indicates a loss of under 1%.

- Labour market insecurity in 2013 in Romania by socio-demographic characteristics: gender and age groups.

Based on data from the OECD for unemployment, data from Romania exists by gender and age (different than in the OECD 2014 25-49 and 50+, respectively in OECD Stat. for 25-54 years and 55+ years old) (Figure 7 and Figure 8 and Table 4).

- The subcomponents of labour market security by gender

Using as a reference the men as a category, it is clear that in Romania in 2012 compared with the OECD 2010 data, the following occurs:

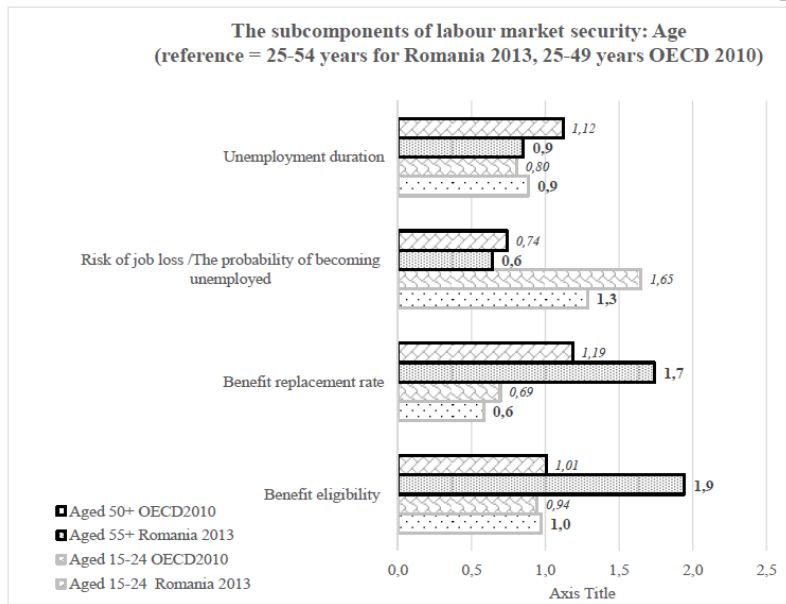
- a) convergent trends for the subcomponents of labour market security by gender for benefit replacement rates and benefit eligibility where the level for Romania tends to be higher with 0.2-0.3pp than the ratios for OECD. A fact that indicates higher gender inequality in Romania. In other words, in Romania, the rate of employment is higher for women than for men, and in relation to replacement rates for women this transition is more efficient (indicating the wages inequalities in the labour market while the unemployment benefit is reported to a standardised floor);
- b) divergent trends regarding the dynamics of labour market by gender. It is indicating a higher flexibility for women in Romania, with almost three times higher probability than men to lose the job, fact in opposition with the OECD trend where the risk of job loss is higher for men than for women with a ratio of 0.74. On the other hand, the duration of unemployment is probable to be almost half for women as compared to men in Romania while in the OECD the average tendency is vice versa, for women, there is a probability of 0.07 higher than that of men to spend in unemployment.

Figure 7



Source: Graph made by authors with data 2010 for OECD average provided by OECD 2014 and for Romania data calculated by authors.

Figure 8



Source: Graph made by authors with data 2010 for OECD average provided by OECD 2014 and for Romania data calculated by authors.

- the subcomponents of labour market security by age groups
Using as a reference the middle category, it is visible that in Romania in 2012 compared with the OECD 2010 data there are:

- a) convergent trends for:

youth by the subcomponents of benefit eligibility and unemployment duration with equal probability with the central age group, and respectively for the benefit replacement (with a 0.6 ratio of probability compared to the central group); the aged by the subcomponent of unemployment duration with equal probability with the central age group;

b) divergent trends for:

youth by the subcomponent of risk of losing the job – is higher in OECD countries than in Romania caused by the very low level of temporary work in Romania;

the aged by the subcomponents of benefit eligibility and benefit replacement rate. The coverage rate is almost double for the 55+ aged worker in Romania compared with workers aged 25-54 years old, while in OECD there is an almost equal probability. With regards to the benefit replacement rate, it is visible that in Romania the replacement rate is higher with 1.7 than the central group, while in OECD countries this ratio is only 1.19 – this fact indicating that in Romania the unemployment insurance is more efficient for aged workers than for middle-aged workers.

In respect of the general labour market insecurity output, the most affected socio-economic categories analysed are women (12.9%) and the youth (12.3%). (Table 4).

4. Final Remarks and Discussions

Romania is a case of an EE that presents contradictory characteristics which increase the difficulties of measurement with calibrated instruments either for developed countries or for underdeveloped countries.

Even if this analysis is only partial, it allows us to make some discussions regarding the fitness of OECD 2014 Methodology in view to evaluate in a comparative manner (based on OECD and Eurostat data). Our results are in line with developed countries results, but with accentuated gaps.

Labour market security in Romania presents a Summary index of 9.4-9.6% regardless of the data source used. The ranking in our scale is partially consistent with the ranking provided by OECD 2014, but we can clearly conclude that Romania presents a low performance in terms of labour market security, close to Greece, Latvia and Lithuania, while Austria, Germany, Finland, Denmark and France present high performance on this dimension, (labour market security is correlated with the employment).

We consider the (under)evaluation of unemployment for Romania as the key issue. In 2015 the annual average unemployment rate was 6.8% with 2.6pp below the EU28 average (this trend was conserved recently; in 2011 it was 7.2% with 7.5pp below the EU28 average³⁴). In absolute terms, the national total in 2015 was of 624 thousand annual average unemployed persons (decreasing from 659 thousand in 2011)³⁵.

The real level of unemployment is strongly underestimated, and therefore the Romanian labour market security performance is much lower if we consider full unemployment, both national and international dimension given by migration or mobility for labour of Romanians citizens:

- Looking only in European, the number of Romanians abroad has reached nearly 3 million³⁶. On 1st January 2014, Eurostat reports³⁷ as the main countries 2120 thousand Romanian citizens as a foreign born : Italy with 1081.4 thousand persons, Spain with 728.3 thousand persons, Germany with 245.2, Portugal with 34.2 thousand persons, Hungary with 30.9 thousand persons. In there were 73.5 thousand persons from other countries, citizens born outside of Romania include: Moldavia with 11 thousand persons, Turkey with 8.1 thousand persons, China with 6.6 thousand persons, Italy with 5.6 thousand persons, Syrian Arab Republic with 3.6 thousand persons, and citizens from other countries working in Romania with 38.6 thousand persons;
- In 2014 Eurostat reports that 376.4 persons are available to work but not looking for it³⁸. From these persons, an important share is working or looking for work abroad. Recently, Romanian Business Leaders (RBL) estimates that “approximately 80,000 Romanian nationals leave

³⁴ Unemployment rate by sex and age - annual average, % [une_rt_a], Last update: 01-03-2016, <http://appsso.eurostat.ec.europa.eu/nui/show.do>

³⁵ Unemployment by sex and age - annual average, 1 000 persons [une_nb_a], Last update: 01-03-2016 <http://appsso.eurostat.ec.europa.eu/nui/show.do>

³⁶ http://www.migrantinfo.eu/news/864/situation_of_Romanian_workers_abroad.pdf

³⁷ File: Main countries of citizenship and birth of the foreign foreign-born population, 1 January 2014 (1) (in absolute numbers and as a percentage of the total foreign foreign-born population) YB15.png, http://ec.europa.eu/eurostat/statistics-explained/images/3/37/Main_countries_of_citizenship_and_birth_of_the_foreign_foreign-born_population%2C_1_January_2014_%28%C2%B9%29_%28in_absolute_numbers_and_a_s_a_percentage_of_the_total_foreign_foreign-born_population%29_YB15.png

³⁸ Supplementary indicators to unemployment by sex and age - annual average, 1 000 persons and % [lfsi_sup_age_a], Last update: 21-01-2016, <http://appsso.eurostat.ec.europa.eu/nui/show.do>

the country annually to work abroad, the equivalent of the population of 24 regions population, most coming from the rural places.³⁹

- The National Institute for Statistics based on the 2011 Census data reports that 385.7 thousand of persons were temporarily absent from their domicile, as abroad (169.7 thousand in Italy, 71.1 thousand in Spain, 29 thousand in Germany, 21.7 thousand in Germany, 19 thousand in the United Kingdom, 14 thousand in Hungary, etc.).

The causes of migration from Romania - The International Organization for Migration highlights the factors that underlie the migration phenomenon:

- *push factors*: low standard of living, poverty, lack of employment, ethnic issues, the existence of crises resulting from natural disasters, technological accidents or terrorism, or financial crises, the political and social conflicts, etc.
- *pull factors*: a higher standard of living, higher wage level, the possibility of finding a better job, the experience of social networks, individual freedom. We can also highlight the non-economic factors (language, cultural and geographic contingency, tradition, history, former colonies).⁴⁰

With this in mind, we can conclude that Romania presents the main risk of the migration for work and its associated risks (illegal work, exits from the social protection umbrella, etc.). While the security of labour market performance is calculated for registered unemployed persons in Romania, there is expected 10% loss from earnings, ten times higher than in developed countries. This low threshold of labour market performance is accompanied by a continuous annual flow of 80 thousand persons that migrate for work annually, accumulating around three million persons that live abroad, which represents more than 15% of the total population of Romania. We have to mention that this process is difficult to evaluate, while the frontier between temporary and definitive setting out is still blurred in statistics. A breaking point that, coupled with a high process of demographic ageing, indicates other kinds of risks (pressure on national social protection systems, difficulty in increasing productivity and being competitive, etc.) with a potential of irreversible processes, catastrophic in the wellbeing of people's life.

³⁹ Marinescu, C. editor: Tilica, O.; EN — author: Voican, M., editor: Pandea, R.A., AGERPRES (RO) <http://www.agerpres.ro/english/2016/03/03/romanian-business-leaders-80-000-romanians-leave-country-annually-to-work-abroad-equivalent-to-24-communes-population-17-09-22>

⁴⁰ ***, Situation of Romanian workers abroad, "Federation Sanitary Solidarity" from Romania, The Social Research and Development Center "Solidarity", http://www.migrantinfo.eu/news/864/situation_of_Romanian_workers_abroad.pdf

Romania's case is a local one, but with a high potential of being a global model, if we take into consideration migration and mobility for work. The labour force movement in a global framework is increasing its numbers in EU28 countries, but more accentuated in developed countries. Recent data figures that on 1 January 2014, the number of people living in the EU-28 who were citizens of non-member countries was 19.6 million while the number of people living in the EU-28 who had been born outside of the EU was 33.5 million. In absolute terms, the largest numbers of non-nationals living in the EU Member States on 1 January 2014 were found in Germany (7.0 million persons), the United Kingdom (5.0 million), Italy (4.9 million), Spain (4.7 million) and France (4.2 million). Non-nationals in these five Member States collectively represented 76% of the total number of non-nationals living in all of the EU Member States, while the same five Member States had a 63% share of the EU's population.⁴¹

On the background of increasing the pressure of migrant movements both 2014 and 2015 OECD Methodologies could become only theoretical case studies. The measurement of labour market security performance realised by the 2014 OECD Methodology, assumes to ignore the low pay, while the labour force flow dimension could be improved if they included the migration and immigration risks alongside becoming and staying unemployed is the most significant risk for a worker. The "missing link between the 2014 and 2015 OECD Methodologies is the migration risk (mainly for work and for a better life), risk that links the unemployment risk with the low pay risk. This approach is requested if the countries become open and more and more interconnected systems.

Romania needs to assess the labour market performance not only from the quantity point of view but as well as from the quality point of view. The inclusion of Romania in large databases of OECD allows us to realise a relatively comparable assessment with the OECD methodology, focused mainly on developed countries.

Romania as an emerging economy is still a country in development, and therefore we consider it from an optimistic perspective that it is at the crossroads between developing and developed worlds. Under the assumption that this transition is normal and desirable, we consider that any policy-building process, therefore, needs to take into consideration both types of methodologies – ILO and OECD. Under this approach, a more precise

⁴¹ http://ec.europa.eu/eurostat/statistics-explained/images/3/37/Main_countries_of_citizenship_and_birth_of_the_foreign_foreign-born_population%2C_1_January_2014_%28%C2%B9%29_%28in_absolute_numbers_and_a_s_a_percentage_of_the_total_foreign_foreign-born_population%29_YB15.png

diagnosis, from the basis of wanting to increase the efficacy and efficiency of policy processes targeted at inclusive and sustainable growth, with outcomes assuring wellbeing are valued.

Labour market security represents the only environment that could ensure the success of the process of creative destruction, as a continuous function critical to stabilising economic growth. It is impossible to be ignored and should be considered as its output increases workers' sense of job security, adding to an assurance of wellbeing.

To support employment performance, there is a need to achieve all three synergic dimensions: next to higher labour market security, quality earnings and a decent working environment.

The Regulation of Immigrant Labour in Spain: Ordinary Migration & Selective Migration

Fernando Elorza Guerrero ¹

Abstract Purpose. The paper calls for a unitary consideration and a single standard for the conditions of access to the labour market which, respectful of human rights, take into account International Migration Law.

Design/methodology/approach. This paper stands for a more comprehensive configuration of the share of workers annually set and authorised by Spain, combined with less restrictive migration policies, sustained on the basis of the international agreements signed by the Spanish Government and the European Agenda on Migration.

Findings. Despite the difficulties, in recent years International Migration Law is clearly oriented towards promoting respect for and support to the rights of immigrant workers. However, national laws and practices often contradict this trend.

Research limitations/implications. The research contributes to the debate on International Migration Law.

Originality/value. The paper provides further material for an ongoing discussion about how migration laws should benefit migrant workers.

Paper type. Issues paper.

Keywords: *Migration, Labour Law, Labour market, Selective migration, Migration of entrepreneurs and investors, Migration of Highly Qualified Professionals*

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1. Introduction

The attraction of human talent and investment has always been a legitimate aspiration of every society. The way and the terms in which it occurs is of course another issue. From a historical point of view, Spain is not known for retaining its human talent. The most recent example of this can be found in recent data published by the Instituto Nacional de Estadística (INE, Spanish Institute of Statistics), which have revealed that, in 2012, the percentage of young people aged 20-29 leaving Spain –confronted to the reality of an unemployment rate of 56.14 percent within this age group– had increased by 40.9 percent with respect to the previous data of 2008, the first year of the economic crisis in this country.

As is well known, the Amsterdam Treaty (art. 79) granted the European Union (EU) the competence to establish binding rules in relation to the migration of all categories of third-country nationals, i.e. citizens from countries not belonging to the European Union or not especially connected with it. Those Community measures and their transposition to the legislation of each Member State of the Union must obviously conform to the principles and rights acknowledged by the European Convention on Human Rights and the European Charter of Fundamental Rights (Groenendijk, 2014, 313).

In this context, the EU has issued over these years more than fifty directives and relevant legal documents on both the asylum and migration of third-country nationals. Among these normative standards, and according to the subject of the present analysis, it is particularly important to underline the following two directives: a) Council Directive 2009/50/EC, of 25 May 2009, on the conditions of entry and residence of third-country nationals for the purposes of highly qualified employment;² and b) Directive 2014/66/EU, of the European Parliament and of the Council, of 15 May 2014, on the conditions of entry and residence of third-country nationals in the framework of an intra-corporate transfer.³

In relation to Council Directive 2009/50/EC, the Spanish Government made its transposition, together with that of another eight Community directives on immigration matters, through the passing of Organic Law 2/2009, of 11 December, reforming Organic Law 4/2000, of 11 January, on the rights and freedoms of foreigners in Spain and their social integration,⁴ in what has been, so far, the last legislative reform of this Law. For the purposes of this work, it is worth noting that the Explanatory Memorandum of Organic Law 2/2009

² OJEU L 155/17, of 18 June 2009.

³ OJEU L 157/1, of 27 May 2014.

⁴ OSG No. 10, of 12 January 2000.

already highlighted as one of its objectives that of ‘perfecting the system of legal and orderly channelling of migratory labour flows, reinforcing the correspondence of the capacity of reception of immigrant workers to the needs of the labour market’. This ambition fully matched that of Council Directive 2009/50/EC to contribute to the achievement of the Lisbon Strategy objectives –in particular that of transforming the EU into the most competitive and dynamic knowledge-based economic area in the world– by promoting the mobility of highly qualified workers through the admission of third-country nationals for the purposes of highly qualified employment and stays of no less than three months. The so-called ‘EU blue card’, which authorised its holder – accompanied by their family– to reside and work in the territory of a Member State in the terms laid down in that directive, was thus created for this purpose. It should also be noted that, in addition to establishing the ‘EU blue card’, Council Directive 2009/50/EC acknowledged the competence of the Member States in maintaining or creating new national residence permits for any employment-related purpose, as well as their right to determine the volume of admission of third-country nationals who enter their territory for the purposes of highly qualified employment. The enactment of Law 14/2013, of 27 September, on the support to entrepreneurs and their internationalization,⁵ a norm that opened a new phase in the evolution of migration law, must be understood in this context.⁶ This law did not focus exclusively on the establishment of new rules in the field of immigration law, but, having the main objective of promoting entrepreneurship, regulated a new selective migration channel to facilitate access to Spain to persons with high professional qualifications or a significant purchasing power.

2. Law 14/2013, of 27 September, on the support to entrepreneurs and their internationalization

It is important to underline that the norm facilitating the entry and residence of foreigners ‘on the grounds of economic interest’ (art. 61 of Law 14/2013) was not generated in the context of a reform of the existing legislation on foreign

⁵ OSG No. 233, of 28 September 2013.

⁶ This legal norm was subsequently amended by Law 25/2015, of 28 July, on the second opportunity mechanism, reduction of financial charges and other social measures (OSG No. 180, of 29 July 2015). This law introduced new details into the legal regime, and amended the regulations for investors and intra-corporate transfers. In relation to this specific matter, its Seventeenth Final Disposition stated that ‘through this law, Directive 2014/66/EU, of the European Parliament and of the Council of 15 May 2014, on the conditions of entry and residence of third-country nationals in the framework of an intra-corporate transfers’ was transposed to Spanish Law.

citizens or, more specifically, of its reference norm in Spain: Organic Law 4/2000, of 11 January, on the rights and freedoms of foreigners in Spain and their social integration. On the contrary, it was integrated in a law that, according to its Explanatory Memorandum, goes beyond the traditional labour market-oriented approach of immigration policies, to focus on the contribution that immigration can make to the economic growth of the country. This conception of the law is clearly reflected in this statement of the aforementioned Explanatory Memorandum: ‘immigration policies are increasingly becoming an element of competitiveness’. Therefore, this particular approach explains why this law is placed by the legislator in a context determined by the ‘need to undertake reforms favouring economic growth and economic recovery’ and enabling ‘to address structural problems in the business environment in Spain, seeking to strengthen the business fabric in a durable manner’. As its name suggests, the law intends to support, under the current economic crisis, entrepreneurs who develop their activities in Spain, especially during their internationalization processes, by establishing, among other legislative measures, ‘systems especially designed to attract investment and talent, characterised by streamlined procedures and specialised channels’, and allowing to solve the problem associated to the lack of managers capable of leading those internationalization processes.

In connection with this justification of Law 14/2013, it is appropriate to take in to consideration the following two facts. In the first place, the use of an ordinary law as a conduit to regulate the entry and stay in Spain of highly qualified professionals reveals an ignorance of the implications that immigration norms have in the field of fundamental rights. Not by chance, the norm regulating the access and stay in Spain of foreign citizens is an organic law –Organic Law 4/2000–, the passing of which requires a qualified majority in the Spanish Parliament, which was not the case of Law 14/2013. One could thus think that the legislative approach of this law is devoid of any consideration on the respect due to the fundamental rights recognised in the Spanish Constitution –all contents concerning fundamental rights must be developed in an Organic Law– and, consequently, to those acknowledged by the Universal Declaration of Human Rights.

Secondly, and in connection with the above, it is interesting to highlight that the law’s approach –immigration as an element of competitiveness– has nothing to do with that of Organic Law 4/2000, which considers that ‘immigration is a structural and permanent reality’ (Monereo Pérez J.L. & Triguero Martínez, L.A., 2012, 5), making thus effective the right to emigration recognised by art. 13 of the Universal Declaration of Human Rights, signed by Spain. The treatment of selective migration is therefore placed in a context devoid of any consideration for the fundamental human rights. It is deemed an

issue of economy, linked to the competitiveness of Spanish companies and, ultimately, of Spanish economy itself, since one of the target groups of Law 14/2013 is, in fact, that of the ‘investors’. Therefore, art. 61 of this law introduces a new ‘international mobility’ regime when, as mentioned before, it specifies that access and residence in Spanish territory are granted ‘on the grounds of economic interests’.

Which groups of immigrants had the Spanish legislator in mind while configuring this selective migration channel? The law identifies five groups as recipients of this selective channel, from which EU citizens and foreigners whose right to free movement and residence is acknowledged by the EU law – as is the case of the citizens of Norway, Iceland, Switzerland and Liechtenstein– are obviously excluded. Undoubtedly, the identification of those five groups gives an important clue on the idea of capital investment and human talent held by the Spanish legislator.

First of all, the law identified ‘investors’ as subjects that may enter and remain in Spain under the conditions established by articles 61 et seq. According to this law, the status of investor is acquired by every person intending to make ‘a significant capital investment’, understood as one including any of the following factors (art. 63):

- a) An initial investment of no less than 2 million euros in Spanish public debt securities, or of no less than 1 million euros in participating or non-participating shares of Spanish capital companies or in bank deposits of Spanish financial institutions. It may also be 1 million euros in investment funds, closed-end investment funds or venture capital funds constituted in Spain, in accordance with Spanish legislation.
- b) The acquisition of real estate in Spain through an investment of no less than 500,000 euros per applicant.
- c) A business project to be carried out in Spain that is proved to be of general interest, which is why the Spanish law establishes that compliance with at least one of the following conditions is necessary: i) the creation of jobs; ii) an investment with a relevant socioeconomic impact on the geographical area where the activity will be developed; iii) a relevant contribution to scientific and/or technological innovation.

However, the condition of investor is also extended by the Spanish law to all foreign nationals directly or indirectly holding the majority of the voting rights and the power to appoint or dismiss the majority of the board of directors of a company with registered office in a territory that is not considered a tax haven under Spanish law, and making a significant capital investment in this country (art. 63.3 Law 14/2013). The law even establishes that access to the residence visa for investors will be granted to ‘the investor’s appointed representative’ for the management of ‘a project of general interest’, provided that the project

meets at least one of the requirements laid down in art. 63.2 c) of the law.

'Entrepreneurs' may also benefit from this differential migration channel. For this purpose, the Spanish norm identifies 'entrepreneurial activity' –and, consequently, an entrepreneur will be the person who develops it– as 'any innovative activity of special economic interest for Spain that has obtained a favourable report issued by the relevant Economic and Commercial Office in the corresponding geographical area or by the Directorate-General for International Trade and Investments' (art. 70.1). The Spanish law also specifies that, for the purpose of the valuation of an activity as 'entrepreneurial', 'the creation of jobs [in Spain] will particularly be taken into account'. It is as well established that, for the assessment of the activity that would justify the entry and residence in Spain of the supposed entrepreneur, such aspects as the following will be valued (art. 70.2): i) the applicant's professional profile, his training and experience as well as their involvement in the project; ii) the business plan, including the description of the project, product or service, and a market and financial analysis; iii) the added value it represents for Spanish economy, innovation or investment opportunities.

The third category of beneficiaries of this selective migration channel is that of the 'highly-qualified professionals' (art. 71). This category includes three different groups of people: a) managers or highly-qualified staff who intend to develop a labour or professional relationship with firms or groups of firms that meet certain characteristics; b) managers or highly-qualified staff participating in a business project under certain conditions; c) graduates and postgraduates of renown and prestigious universities and business schools.

With regard to the first group, managers or highly-qualified staff who intend to develop a labour or professional relationship with companies or groups of companies, the Spanish law links their presence in Spain to the performance of an employment or professional activity in firms or groups of firms with a very specific profile, so this option is not open to any type of undertaking. More specifically, the Spanish norm considers relevant for these purposes those undertakings or groups of undertakings that display any of the following characteristics: a) an average workforce of no less than 250 workers, during the three months immediately prior to the submission of the application for the residence permit; b) an annual net turnover in Spain of over 50 million euros, or a net equity, also in Spain, of more than 43 million euros; c) an annual average foreign gross investment of no less than 1 million euros in the three years immediately prior to the application submission date; d) a stock value or investment position of over 3 million euros according to the latest data of the Registry of Foreign Investment of the Ministry of Economy and Competitiveness; e) in the case of small and medium-sized businesses established in Spain, the fact that they belong to a sector considered strategic,

which is certified by a report issued by the Directorate-General for International Trade and Investment of the Spanish Government.

As pointed out before, participation of the staff in a business project –no mention of companies or groups of companies in this case–, considered and accredited as of ‘general interest’, is also deemed relevant for the purposes of Law 14/2013. However, the project will have to meet the following requirements: a) a ‘significant increase’ in the creation of direct jobs by the company requesting the recruitment; b) the maintenance of employment; c) a ‘significant increase’ in the creation of jobs in the business sector or geographical area where the professional activity is to be performed; d) an extraordinary investment with an ‘important’ social and economic impact on the geographical area where the professional activity is to be developed; e) a relevant contribution to scientific and/or technological innovation; f) the concurrence of interests from the point of view of Spain’s commercial and investment policy.

Fourthly, foreigners who wish to develop training, development, research and innovation activities in public or private entities in Spain may also benefit from this selective migration channel (art. 72). In particular, the Spanish law identifies the following persons: a) research staff, in the terms established in article 13 and the First Additional Provision of Law 14/2011, of 1 June, on Science, Technology and Innovation;⁷ b) scientific and technical staff carrying out scientific research, development and technological innovation work in companies or R&D&I centres in Spain; c) researchers subject to an agreement with public or private research centres, under the conditions set out in the regulations; d) lecturers recruited by universities, higher education institutions and research centres, as well as business schools established in Spain, in accordance with the criteria laid down in the regulation.

Fifthly and finally, Law 14/2013 includes as well ‘workers subject to intra-corporate transfers within the same undertaking or group of undertakings’. However, the Spanish norm defines a specific profile for workers who may benefit from the selective migration channel, which involves fulfilling the following requirements: a) an actual business activity; b) a higher education qualification or an equivalent degree, and, where applicable, a minimum professional experience of 3 years; c) a prior and continuous employment or professional relationship of 3 months with one or several of the companies in the group.

It should be noted that the objective of the analysed norm is not only achieved, from the point of view of the Spanish legislator, by creating a specific migration channel for highly-qualified professionals, investors and

⁷ OSG No. 131, of 2 June 2011.

entrepreneurs,⁸ but by integrating in this channel the so-called ‘intra-corporate transfers’. This is a migration phenomenon in itself, but one with very specific characteristics, since the reason for migration lies in the need of the company with which the immigrant worker has an employment relationship and not so much in personal motivations, as seen in the other three cases.

In relation to this group of immigrant workers, it is important to underline that the legal regime was subject to a significant modification on the occasion of the reform of Law 14/2013 by Law 25/2015. The reason given by the Spanish legislator for this modification was the will to take advantage of the norm to transpose Directive 2014/66/EU (Seventeenth Final Disposition of Law 25/2015). It is not that Law 14/2013 did not reflect some aspects that would later be integrated in the future directive, but it was, evidently, the 2015 Law that culminated the transposition of the Community rule.

In this sense, the 2015 Law registered as a novelty the establishment of two types of residence permits, one for temporary transfers of no more than three years –called ‘EU ICT Intra-corporate transfer work permit’–, and the other for transfers that exceed the aforementioned duration or do not fit into this category. It also specifies –which was not the case in the original text of the 2013 Law– that such permits may be granted to three specific groups: a) managers, understanding as such every ‘person who has among their duties the management of a company or of a department or sub-division thereof’; b) specialists, meaning a person ‘who has specialised knowledge relating to the activities, techniques or management of the company’; c) and trainee workers, i.e. ‘university graduates who are posted to be trained in the techniques or methods of the undertaking and who receive remuneration for it’.

These intra-corporate transfers may be both individual and collective, so that the law, in its original version of 2013, included the possibility that firms or groups of firms –meeting the requirements of art. 71 a) of Law 14/2013– request the collective processing of the authorizations, according to the planned management of a provisional quota of permits. With the passing of the 2015 Law, however, article 74 of Law 14/2013 was reformed with the purpose of further facilitating the joint management of intra-corporate transfers and established that business organizations may be registered in the so-called Large Companies and Strategic Groups Unit (art. 74.2 of Law 14/2013). This unit is actually a register of companies and groups of companies fulfilling the requirements laid down by the Spanish law in order to

⁸ Article 1 of Law 14/2013 defines the object of this law as ‘supporting entrepreneurs and their business activity, to promote their development, growth and internationalization, as well as the entrepreneurial culture and a favourable environment for economic activities, both in their initial stages and in their subsequent development, growth and internationalization’.

request the above-mentioned intra-corporate transfer. With this instrument, the law seeks to expedite the processing of the corresponding visas and authorizations.

3. Ordinary migration and selective migration, two concepts that should not be opposed

The aforementioned Directive 2014/66/EU recalls, in its first recital, that the Treaty on the Functioning of the European Union reflects the Community claim for the Community institutions to establish measures in the field of immigration that are fair to third-country nationals. Undoubtedly, as expressed in the preliminary statement of this directive, the globalization of the economy, the expansion of trade and the growth and proliferation of multinational groups have led, in recent years, to a significant increase in the movements of managers, specialists and trainees. This interest in facilitating mobility is also applied to investors, with the purpose of stimulating capital investments from third countries. In fact, the above-mentioned Directive 2009/50/EC is to a great extent a consequence of the logic of establishing mechanisms to respond to the needs of the global economy, and of the interest of the EU to develop as a leading economic area and, ultimately, to attract the best talent and investment at a global level. Hence the adoption of measures such as the aforementioned 'EU blue card'.

But the interest of the EU and other major economic powers in the world in attracting talent and investment is not to be mistaken with the opportuneness or justification of the establishment of selective migration channels outside the treatment and regulation of ordinary migration, as in the case of Spain –but also of other countries in Europe such as Germany. In this regard, it should be noted that the decision to create a selective migration channel, laid down in Title V of Law 14/2013, and therefore outside the scope of the Law that has ordinarily regulated the phenomenon of migration in Spain –Organic Law 4/2000– in recent years, is made in a context of transformation of the Spanish immigration policy, from being labour-oriented to identifying, starting with the 2013 Law, with economy-oriented selective migration policies.

Not in vain, the 2013 Law, and its subsequent reform of 2015, speak of the Spanish legislator's interest in promoting or facilitating what has been called in Spain 'high-class economic immigration' (Molina Navarrete, C., 2013, 59). In this sense, the law provides the granting of visas for the development of entrepreneurial activities through fast-track procedures, as compared to those established for ordinary migration, or the granting of special permits to hire foreigners with talent. These conditions are in contrast with the already reported passivity of Spanish authorities with regard to the departure from the

country of the best-qualified young generation in Spanish history.

In the background, the decision of the Government of Malta, which in November 2013 passed a Law to facilitate the access to Maltese nationality of third-country nationals with some purchasing power and proving to have made investments in this country. As is well known, this situation led to the European Parliament's issue of a resolution entitled 'On EU citizenship for sale', which stated that the consideration of citizenship as a simple commodity is unacceptable and made various recommendations for these new immigration policies that are lately being developed in the Union to be consistent with the values that identify this institution.

Of course, it was not in the spirit of the Spanish law to grant the Spanish nationality to third-country citizens with certain purchasing power –in fact, this new Spanish immigration policy implemented some legal actions that already been taken in countries such as Portugal, Hungary, Greece or Cyprus. But it clearly sent the message that people with high qualifications and relevant purchasing power may easily be provided with a permit to access and stay in the country, to the detriment of those third-country nationals who do not meet the requirements to enter such a select club. For this reason, and not by chance, this new immigration model is implemented through an ordinary law, which is far removed from the organic law that still today continues to regulate ordinary immigration in Spain. As noted above, the law is as well devoid of any consideration for human rights and the fundamental rights recognised in the Spanish Constitution. Otherwise, the application of this new regime would have required the enactment of a new organic law.

It seems as if ordinary immigration and selective immigration were opposing or at least incompatible concepts; hence the need for their legal development in separate laws of a different nature and hierarchical rank. And yet, they are not. Not long ago, the European Trade Union Confederation (ETUC) issued, in the framework of these new European migration policies, a document entitled 'Action Plan on Migration' (March 2013),⁹ which claimed for a change in Community migration policies in the direction of abandoning the preference for selective immigration channels in favour of measures that are committed to human rights, equal treatment and full integration of third-country nationals as values that should guide the action of the EU. In the case of Spain, the Spanish Economic and Social Council –a consultative body of the Spanish Government–, in its pronouncement on the draft of Law 14/2013,¹⁰ was also

⁹ See: <https://www.etuc.org/documents/action-plan-migration#.WIEcHVPhC2w>

¹⁰ Pronouncement 6/2013, of June 10. It also stated that '(...) the proposed regulation should take into account the legal framework which it aims to change, which in some cases is of an organic nature, and clarify the derogatory scope of the law in order to avoid the overlapping of rules'.

reluctant to the regulation of the new selective immigration channel through a different law than the one of reference for immigration issues in Spain: Organic Law 4/2000.

As sometimes noted, selective immigration policies in the EU have in recent years led to a paradox whereby, while ‘economic rationality’ is invoked as a factor for the management of the migration phenomenon, in such a way that ‘the prevailing logic in migration policies is becoming increasingly that of the submission to the demands of the internal market (dominated by economic rationality and commodification)’, Europe is incapable of preventing the existence and, in many cases, expansion of ‘an informal labour market where third-country nationals in an irregular situation are exploited’ (Monereo Pérez, J.L., 2013, 13). As a result, the law generates a first-class immigration procedure that undoubtedly aggravates the differences between groups and causes a clear segmentation of the Spanish labour market between rich and highly-qualified foreigners and poor foreigners. From the perspective of those values that have historically guided the construction of Europe, and despite all the criticism that their implementation may arise, this is simply unacceptable.

Some have argued that ‘the consolidation of an international status of highly-qualified migrant worker allows to make a further step toward a rapprochement of the rights of nationals and migrants in the still long hierarchical stairway of personal statuses that separates an alien from a citizen’ (Ushakova, T., 2011, 18). But it is important to keep in mind that, by making that step, there is a risk of leaving behind those foreigners who are lacking high-qualifications or who, not being rich, wish or are forced to emigrate. In fact, the irruption in the Spanish legal landscape of Law 14/2013 brought, in a certain way, a darkening of the reference that Organic Law 4/2000 had until then represented. One law for rich or highly-qualified immigrants, the other one for poor immigrants.

In connection with this last reflection, it should not be forgotten that the analyses on the incidence of the labour reforms implemented in Spain on the occasion of the 2008 economic crisis, indicate, not by chance, that Royal Decree 557/2011, of 20 April, approving the regulation of Organic Law 4/2000, after the reform of this Organic Law by Organic Law 2/2009,¹¹ significantly contributed to restrict migration flows to Spain, as well as to increase by somewhat more than 13 percent –the data correspond to the 2012 Labour Force Survey (second trimester)– unemployment among the foreign population as compared to the Spanish population (Camas Roda, F., 2013, 13). Behind this situation is the rigid use of the ‘national employment situation’, a concept that is instrumental to the management of migration flows seeking to

¹¹ OSG No. 103 (April 30, 2011).

legally access the Spanish labour market and responsible for ensuring preference in employment to Spanish and EU citizens and to third-country nationals residing in Spain.

In fact, the 2009 reform of Organic Law 4/2000, and more specifically its later regulatory development (Royal Decree 557/2011), has increased the relevance of the national employment situation in the granting of work permits. One of the ways provided by the law for the access of a non-resident foreigner to the Spanish labour market is determined by the matching of the foreigner's professional profile with the 'Catalogue of occupations that are not easily covered' –the Organic Law, however, excludes from this mechanism a series of groups including researchers, students, victims of gender-based violence, victims of human trafficking, etc. This catalogue allows identifying the jobs that Spain's domestic labour market predictably will not be able to cover, although article 65.1, sixth paragraph, of Organic Law 4/2000 specifies that 'those occupations that, because of their nature, could be covered by persons registered as jobseekers after their participation in training activities scheduled by the public employment services' are excluded from the list. In other words, the aforementioned catalogue does not take into account those professional profiles for which there are no registered suitable jobseekers and only considers the profiles of the unemployed. It thus ignores the possibility of enriching the human capital of this country. As an alternative to this catalogue, the Ministry of Employment and Social Security (art. 39 Organic Law 4/2000) may approve, according to the national employment situation, an annual provision of occupations and determine the number of jobs that may be covered over a period of time through the 'collective management of hiring in the countries of origin', while granting a certain number of visas 'for job seekers' who are children or grandchildren of native Spaniards, or visas referring to certain occupations. In reality, the use that has been made of this migration channel in recent years has been highly restrictive, because not only the number of visas granted has been very small, but the Government's policy since 2012 has limited the recruitment in origin to 'workers for seasonal agricultural campaigns' and to countries with which Spain has signed an agreement for the regulation of migration flows.¹²

In summary, a selective migration channel –with some significant elements of flexibility in its management and requirements– currently coexists in Spain with a regular migration channel, characterised in recent years by restrictions to the

¹² See Order ESS/2811/2015, of 22 December, which extends the applicability of Order ESS/1/2012, of 5 January, regulating the collective management of hiring in the countries of origin for 2012 (OSG No. 310, 28 December 2015), until December 31, 2016, thus reasserting the Government's decision not to go beyond that limit. The forecast for 2017 was that this restrictive practice would be again renewed.

access to the Spanish labour market for third-country nationals. It is true that the beneficiaries of the channel enabled by Law 14/2013 are not entitled to a privileged legal status concerning access to nationality or long-term residence, and that, as a rule, they must meet the general requirements for the stay and residence of foreigners in Spain, but it is no less true that this group of people is not affected in their entering the country by the national employment situation, which until now has been the instrument serving Spanish authorities to curb the admission of immigrants through the channels established by Organic Law 4/2000. In fact, as recognised by the Government itself in an assessment report on the effectiveness of Law 14/2013 after one year of its being in force, ‘the possibility of modifying the general immigration legislation (Organic Law 4/2000) was considered; however, it was deemed more appropriate to establish an ad hoc regulation in an economic law’.¹³

4. The European Agenda on Migration and the future of Spanish Migration Policy

It is the moment to discuss the future in relation to this issue. In this sense, the first task is to assess the level of effectiveness of the analysed Law 14/2013. For this purpose, it is interesting to consult the ‘Report on the Implementation of the International Mobility Section of the Entrepreneurial Support and Internationalization Law of 27 September 2013’,¹⁴ prepared by the Spanish Government in April 2015 in application of the provisions established by the Eleventh Final Disposition of Law 14/2013. These provisions include the annual elaboration of a report on the degree of implementation of section 2 of Title V of the Law, which is precisely the one regulating the new selective migration channel under the heading ‘International mobility’.

The above-mentioned report provides the following data:

¹³ ‘Report on the Implementation of the International Mobility Section of the Entrepreneurial Support and Internationalization Act of 27 September 2013’, April 2015, p. 22 (see: http://extranjeros.empleo.gob.es/es/destacados/Report_on_the_Implementation_of_the_International_Mobility_Section.pdf).

¹⁴ See http://extranjeros.empleo.gob.es/es/destacados/Report_on_the_Implementation_of_the_International_Mobility_Section.pdf.

Visas and permits issued (Law 14/2013, September 2013 - December 2014)	
Category	Number of visas and permits
- Investors	531
- Entrepreneurs	82
- Highly qualified professionals	1,231
- Training or Research	369
- Intra-corporate transfers	907
Total Categories (art. 61 of Law 14/2013)	3,120
- Family members (art. 62.4 of Law 14/2013)	2,461
TOTAL (Categories + Family members)	5,581

Likewise, the report notes that the estimated value of the investment made due to the work or presence of these persons in Spain has reached 694 million euros, while the creation of jobs is estimated at 12,685 jobs, 8,581 of which were direct employment jobs while the remaining 4,104 were indirectly created jobs.

The valuation made by the Government of the first year after the entry into force of the norm was, as expected, very positive. It underlined the substantial increase of granted permits and visas during the period analysed as compared to those granted in the previous period (September 2012 to September 2013) in categories linked to talent attraction through the procedures for admission and residence laid down in the general rules contained in Organic Law 4/2000.¹⁵ More specifically, it stressed that, in the case of highly qualified professionals, the year-on-year increase after the entry into force of Law 14/2013 was of 230 percent. A 66 percent increment was recorded for intra-corporate transfers, while it reached 266 percent in cases of mobility for reasons of training, research, development and innovation.

¹⁵ I.e. residence and work permits for highly qualified professionals, blue card holders (art. 38 ter), researchers (art. 38 bis) and workers posted in the framework of a transnational provision of services.

Number of permits issued to categories of foreign nationals linked to talent attraction			
Category	Sept. 2012 - Sept. 2013 (Organic Law 4/2000)	Sept. 2013 – Sept. 2014 (Law 14/2013)	Percentage of change
Highly qualified professionals	275	907	229.8
Researchers	50	183	266
Intra-corporate transfers	433	720	66.3
TOTAL	758	1,810	

All in all, the report acknowledges that, while the companies appear to have welcomed with significant interest the possibilities offered by Law 14/2013 on immigration matters, this has not been the case of the entrepreneurs, among which the total number of permits granted (82) only represents 3 percent of the total, a figure that is obviously unsatisfactory. Although the conclusion drawn in the report is that the data reflect ‘the need for greater publicity of the law in this area’, there may be more compelling reasons for it, such as Spain’s currently diminished attractiveness for investors.

There is no doubt that Law 14/2013 has filled a gap in Spanish legislation on migration. As seen in the current work, the issue is not whether the establishment of a selective migration channel responded to an actually perceived deficit. In fact, the study ‘Open for Business’ published by the OECD in 2010 already warned that in 2007-2008, i.e. just before the start of the economic crisis, Spain¹⁶ had lower rates of entrepreneurship among its foreign population than other European countries. As noted before, the issue is therefore how this selective channel is configured and articulated, which is where controversy arises.

In effect, despite the opinion of institutions such as the OECD on the implementation of Law 14/2013, in the sense of considering that ‘this specific model combines a perspective that supports the internationalization of the economy and the promotion of economic growth with the traditional purposes of immigration policies: employment and security’, it is possible to say that this law is particularly focused on the first two aspects –supporting the internationalization of the economy and promoting economic growth–, whereas employment and legal security have been differently managed.

¹⁶

See <http://www.seipa.edu.pl/s/p/artykuly/91/917/OECD%20Migrant%20Entrepreneurship%202012.pdf>.

Thus, the concept of employment applied in Law 14/2013 is associated to the generation of employment, as evidenced by the consideration as beneficiaries of this selective migration channel of entrepreneurs and investors. Organic Law 4/2000 used instead a concept linked to the employment needs detected in the Spanish labour market. The logic is obviously different. Only in the case of intra-corporate transfers the concept of employment applied in Law 14/2013 can be considered similar to that of the Organic Law, in the sense that the transfer is justified by the existing demand of the undertaking or group of undertakings to cover a particular position or develop a specific activity.

As to legal security, the ways in which the two laws face the management of the migration phenomenon are completely different. In the case of Organic Law 4/2000, the aforementioned national employment situation acts not only as a clarifying factor of the workforce needs of the country, but also as a sort of legal barrier that prevents access to the country of workers not meeting the professional profiles referred in it. On the contrary, the legal logic applied in Law 14/2013 is based on the idea that people interested in entering and residing in Spain must apply for it and expose what their intention is and in which conditions they mean to do it –whether as an investor, an entrepreneur, a highly qualified professional, a researcher or a worker appointed for an intra-corporate transfer. The competent administrative body shall determine whether the requirements to access the country as laid down in the legislation and, particularly, in the aforementioned law are met or not, and consequently authorise or deny the foreigner’s access and/or residence in Spain.

The future. Independent of the uncertainty in which the country has recently lived under a caretaker government, it is reasonable to consider that Spanish immigration legislation will be inspired in the coming years by the norms laid down by the European Commission through its European Agenda on Migration (2015).¹⁷ As is well known, this document has its origin in the difficult situation that the European Union is facing with regard to the migration crisis generated by current armed conflicts such as those in Syria, Libya, Afghanistan or Iraq, a crisis that the EU is not being able to manage properly.

According to the need to define ‘a set of core measures and a consistent and clear common policy’,¹⁸ the European Agenda on Migration has identified four levels of action on which the migration policy of the Union will be built in the

¹⁷ European Commission: ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A European Agenda on Migration’, COM (2015) 240 final.

¹⁸ European Commission: ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A European Agenda on Migration’, COM (2015) 240 final, 2.

medium term:¹⁹ a) the reduction of incentives for irregular migration; b) border management, with the focus set on saving lives and securing the Union's external borders; c) a strong common asylum policy; d) a new policy on legal migration. As regards this last level of action, the Commission considers that the future European migration policy must be based on the strong increase that the demand of qualified workforce has experienced in the last few years – 23 percent between 2012 and 2015– and on the estimated 17.5 million people by which the working-age population in the European Union will decrease during the next decade. There is, therefore, a clear commitment to orient the Community migration policy toward the attraction of qualified migrants, which is ultimately a further development of the selective migration channels.

In this regard, the Community document suggests several lines of action for the future: a) development of European programs designed to attract the best talent, such as Horizon 2020 and Erasmus+; b) drafting of a directive on the mobility of students and researchers, which is already a reality: Directive (EU) 2016/801 of the European Parliament and of the Council, of 11 May 2016, on the conditions of entry and residence of third-country nationals for the purposes of research, studies, training, voluntary service, pupil exchange schemes or educational projects and au pairing (recast);²⁰ c) revision of the Directive on blue card holders (Directive 2009/50/EC); d) improvement of the legal security of highly qualified foreign professionals in the services sector who need to travel to the European Union for brief periods of time; e) revision of the Community Code on Visas, i.e. Regulation (EC) No. 810/2009 of the European Parliament and of the Council, of 13 July 2009, establishing a Community Code on Visas (Visa Code), and establishment of a new type of visa, the 'touring visa';²¹ f) implementation of tools to identify the economic

¹⁹ It is important to bear in mind that the common policy of the Union in the field of asylum, visas, border control and immigration has its origin in Title V (Area of freedom, security and justice) of the Treaty on the Functioning of the European Union. However, Protocols 21 and 22 of the Treaty establish that the United Kingdom, Ireland and Denmark do not participate in the Council's adoption of the measures to be implemented under that title of the Treaty. It is for these three states to decide whether or not they wish to join in the adoption and implementation of the measures approved by the Commission in this matter.

²⁰ OJEC L 132/21 (May 21, 2016). This directive includes as well, with effect from 24 May 2018, the derogation of both Council Directive 2004/114/EC, of 13 December 2004, on the conditions of admission of third-country nationals for the purposes of studies, pupil exchange, unremunerated training or voluntary service, and Council Directive 2005/71/CE, of 12 October 2005, on a specific procedure for admitting third-country nationals for the purpose of scientific research, although the Community standard recalls the obligation of the states to transpose both directives to their domestic law prior to their disappearance (art. 41 of Directive 2016/801/EU).

²¹ This new visa is addressed to third-country nationals who are exempted from the visa requirement, as well as to those who are subject to it, having a legitimate interest in travelling

sectors and professions that are facing, or will face, recruitment difficulties or skill gaps, as well as improvement of the existing tools, like the European Job Mobility Portal (EURES); g) development of an ‘expressions of interest system’ in conjunction with the Member States of the Union, which will allow making an automatic initial selection of potential migrants through the use of verifiable criteria, while employers are invited to identify priority applicants from the pool of candidates, so that migration only takes place when migrants have a firm job offer;²² h) support to the development of the countries of origin (Regional Development and Protection Programs).

However, the whole Agenda is built on the basis of a principle that has been central to the Community migration policy from virtually its beginnings, as is the affirmation of the competence in this matter of the Member States of the Union, with the Union assuming a secondary role in support of the actions of these states in the area of migration. Obviously, in the case of Spain –as with the other Member States– the State is called upon to take on a leading role that, beyond the transposition of Community directives that have recently seen the light or of those that may be subsequently generated, confers the capacity to make important decisions on the setting of the national migration legislation.

In the light of the approach of the aforementioned European Agenda on Migration, the future legislative action of the Spanish State may draw on these guidelines:

a) First of all, the claim of the European Agenda on Migration to formulate a new policy on legal migration, which puts the emphasis on the regulation of qualified migration and its streamlining, should lead to rethinking the Spanish legal design that deals separately with ordinary migration (Organic Law 4/2000) and selective migration (Law 14/2013). This should be an opportunity to integrate in a single norm, i.e. Organic Law 4/2000 or a new one that would replace it, the legal regime regulating both ordinary and selective migration.

This legislative integration would also have the virtue of repositioning qualified migration in the same legal area in which ordinary migration is located, linking it to the principles and rights recognised by the Universal Declaration of Human Rights, the European Convention on Human Rights or the European

through the Schengen area for more than 90 days over a period of 180 days (Proposal for a Regulation of the European Parliament and of the Council establishing a touring visa and amending the Convention implementing the Schengen Agreement and Regulations (EC) No. 562/2006 and (EC) No. 767/2008, COM (2014) 163 final).

²² As pointed out by the Agenda itself, ‘this would create an “EU-wide pool” of qualified migrants, accessible to both employers and Member States’ authorities, but with the actual selection and admission procedure remaining national, based on Member States’ actual labour market needs’.

Charter of Fundamental Rights. This would break the aseptic legal logic applied in Law 14/2013 and built on the aforementioned assertion that ‘immigration policy is increasingly becoming an element of competitiveness’, which justified the establishment of a selective channel of entry and residence of foreigners ‘on the grounds of economic interest’ and which seemed to forget the right to emigration recognised by art. 13 of the Universal Declaration of Human Rights.

At the same time, this integration would help resolve undesirable situations, such as those affecting the migration of researchers and highly qualified professionals, which, depending on its characteristics, is sometimes regulated by Organic Law 4/2000 –which, as noted above, regulates in arts. 38 bis and 38 ter the migration of researchers and highly qualified professionals– and sometimes by Law 14/2013.

b) Secondly, the approach of the European Agenda on Migration, which favours qualified migration, recommends a rethinking of the terms in which Organic Law 4/2000 is formulated. Should this law, or its successor, continue to be the legislative reference in the area of migration, it would be logical to reform or reformulate it, not only in order to integrate into a single norm ordinary migration and qualified migration, but to incorporate as well new realities related to the need of temporary or short-term residence. In this regard, it should not be forgotten that, even if the improvement of competitiveness within the European Union and, particularly, in Spain, requires the contribution of highly qualified professionals, the incorporation of workers with lower qualifications will also continue to be necessary, if only because the European population –and the Spanish one is not an exception– is progressively aging, so that in the near future people with all kinds of qualifications will be needed. Finally, the regulation of an ordinary migration channel will remain necessary, not only as a means to cover the specific needs of the country, but also as a realization of the right to emigrate acknowledged by the Universal Declaration of Human Rights.

c) Thirdly, although the 2009 reform of Organic Law 4/2000 intended to add to the Spanish migration model certain principles and a stability that it did not enjoy until that moment, while supporting the social integration of migrants and their recognition as subjects of the law and holders of the fundamental rights, the subsequent economic crisis led to the adoption of a series of legislative measures that have finally restricted the rights of migrant workers in an irregular situation. This is something that Spain must solve in the medium term, because it does not comply with the conventions and treaties signed by this country in the field of humanitarian law. But, at the same time, it puts the focus on an issue that should not be overlooked and is linked to the growth of the phenomenon of irregular migration in Spain, and to the defensive response

of the Spanish Government when it tries to induce people in this situation to leave the country by denying them the status of holders of certain rights while increasing controls in the workplace.

Irregular migration in Spain is a reality that in some cases speaks of this country as a place of transit to other destinations, especially in northern Europe, while in others it is the migrant's final goal. In this latter case, it is important to note how immigrants in an irregular situation residing in this country significantly contribute to the maintenance of Spanish economy, even if performing low-skill jobs in the majority of cases. To the extent that this is so, reality evidences a bad configuration of the aforementioned 'national employment situation', as well as of the 'collective management of hiring in the countries of origin', which, as pointed out before, have been used throughout these years as defensive instruments against the successive waves of migrants rather than as tools for the safety management of migration. In the case of the 'national employment situation, it should be open to accommodate migrants with qualifications that do not exist in this country –curiously enough, this is possible in the case of highly qualified professionals, as allowed by Law 14/2013, but not envisaged for persons with medium-qualifications–, and much more in tune with the real workforce needs of the Spanish labour market. With regard to the 'collective management of hiring in the countries of origin', it seems reasonable to assume that it has to overcome the dynamics that restrict the use of this tool to the field of agriculture, so that consideration should be given to its implementation in the case of other productive sectors.

5. Conclusions

This reflection on the regulation of labour migration in Spain concludes as it started: by stating that the attraction of human talent and investment is undoubtedly a legitimate aspiration of all societies. The question is, however, how it is performed, because it is clear that in this case the end does not justify the means. As pointed out in previous pages, the concepts of regular migration and selective migration should not be considered incompatible, as it happens in Spanish legislation when the legislator decides, in a non-innocent way, to enact a regulation –Law 14/2013, subsequently amended by Law 25/2015– that establishes a selective migration channel different from the one that has historically regulated migration movements in Spain –Organic Law 4/2000. In addition, the regulation of this selective migration channel is dispossessed of any consideration relating to human rights, because otherwise the issue would have been placed within the scope of the above-mentioned Organic Law.

It is understood that the future Spanish legislative action should be marked by the approach of the European Agenda on Migration. And, in that context, one

of the first aspects that need to be overcome is the legislative separation established by the Spanish Government between regular migration and selective migration. Consequently, one of the first legislative measures to be adopted in this field would be the integration of Law 14/2013 in Organic Law 4/2000, and the legislative development of the principles contained in the above-mentioned European Agenda.

In any case, in the medium-term the legislative action in this field will undoubtedly be conditioned by the reform of the Directive on the European Union blue card,²³ the proposal of which, made by the European Commission, was published precisely on the dates on which the Fifth International Conference on Precarious Work and Vulnerable Workers was held in London. As is well known, this reform has its origin in the failure, in recent years, of the European Union's strategy to attract highly skilled workers. Likewise, the future legislative and governmental action should be marked by the approach of the 'Action Plan for the integration of third-country nationals',²⁴ which was also lately disclosed and will certainly have an impact on an issue that is becoming increasingly relevant for the standardization of the management of migration flows as is the integration in European societies of third-country nationals migrating to the European Union.

²³ Council Directive 2009/50/EC, of 25 May 2009, on the conditions of entry and residence of third-country nationals for the purposes of highly qualified employment (OJEC L 155/7, June 18, 2009).

²⁴ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: 'Action Plan on the integration of third-country nationals', COM (2016) 377 final.

The Source of Labour Law on Working Time: A Comparative Perspective

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Abstract Purpose. The study presented here is a comparative analysis examining the links between different sources of labour law, placing a special emphasis on the regulation of working time.

Design/methodology/approach. The analysis considers some key indicators such as working time duration, rest periods, overtime. Working time regulations in some European countries have been analysed, and subsequently compared with those in place in the United States and Japan.

Findings. Although different regulations are in place, some common aspects have been identified, as well as some disparities concerning the relevance of legal sources regulating working time.

Research limitations/implications. The research is part of a debate adding a comparative perspective.

Originality/value. The paper provides further material for an ongoing discussion about how working time is conceived in different countries.

Paper type. Issues paper

Keywords: *Labour law, working time, overtime, rest periods.*

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1. Framing the Issue

Working time is a quintessential matter of labour law, being related to the working activity of the worker who is the holder of the employment contract². The relevance of this topic can be understood if one thinks that the first ILO Convention³ has concerned working time and placed some restraints on daily and weekly hours of work in industry.

Working time regulation is also important in the European legal context: the European Directive 2003/88/EC (also known as the European Working Time Directive)⁴, provides some standard rules, limits the total amount of work to be performed, and attempts to harmonise the EU systems on working time⁵.

This leads us to yet another indication on the importance of the theme: the limitation of working hours is intrinsically connected to health and safety⁶. The ultimate goal of the legal instruments referred to above has been the protection of these two aspects. Even though the impact of working time on health and safety will not be covered in this article, one might note that it plays an important role.

² M. B. HERNÁNDEZ, 2015, “Problemas legislativos en materia de ordenación del tiempo de trabajo: una comparativa con el modelo italiano”, in: *El derecho del trabajo y la seguridad social en la encrucijada: retos para la disciplina laboral*, A. M. C. GIRÁLDEZ [et al.] (Spain: Ediciones Laborum), p. 232.

³ ILO Convention n° 1 of 1919, Hours of Work (Industry). The importance of this Convention is stressed in T. USHAKOVA, 2016, “Algunos aspectos de la ordenación del tiempo de trabajo en el derecho de la Unión Europea”, *Révue européenne du droit social*, n° 4, p. 112.

⁴ Directive 2003/88/EC of the European Parliament and of the Council of November 4th 2003, regarding certain aspects of the organisation of working time. See also the EU Interpretative Communication on Directive 2003/88/CE, of April 26th, 2017 (integrative part of the European Pillar of Social Rights), that aims to provide greater clarity on the Directive provisions in accordance with the successive decisions of the Court of Justice of the European Union, despite not having a binding effect, as the competence to interpret EU Law lies with the Court (article 19 of the Treaty on European Union).

⁵ The harmonisation of working time in European countries has always been controversial and somehow impossible. There have been some unsuccessful attempts to reform the Directive, but the opt-out clause is still a lively debated issue. See F. L. FERNANDES, 2012, “Um breve olhar sobre a Directiva n° 2003/88/CE, relativa à organização do tempo de trabalho”, *Prontuário de Direito do Trabalho*, n° 93, pp. 116-117.

⁶ See T. USHAKOVA, 2016, “Algunos aspectos de la ordenación del tiempo de trabajo en el derecho de la Unión Europea”, *Révue européenne du droit social*, n° 4, p. 97. This is clear considering workers’ rights as regards working time laid down in the new French *Code du Travail*: the right to disconnect (*droit à la déconnexion*), as formulated by articles L. 2242-8 and L. 3121-64, I, which came into force on 1 January 2017 and is mandatory for enterprises with more than fifty workers. See J. RAY, “Grande accélération et droit à la déconnexion”, *Droit Social*, n° 11, pp. 919-920.

Another point that has to be stressed concerns employers' interests within the employment contract. In reality, the regulatory framework allows for derogations to adapt to employers' reasonable needs⁷.

Based on the previous considerations, this article intends to reflect on the state of the art of working time regulation⁸ and the interaction between the different sources of labour law⁹. However, and considering the broad nature of the topic, our comparison will be limited to specific key indicators¹⁰. In this sense, the analysis concerns sources of labour law (state legislation, collective agreements at sectorial level, negotiations at company level, and individual negotiations) regarding: 1) working time duration, especially working hours limits; 2) working time organization¹¹; 3) rest periods, with a special focus on breaks, daily and weekly rests; 4) overtime regulation¹².

This selection of key indicators has been made to provide an overall picture of working time regulations in the legal systems under study. In this sense, each section will comprise an analysis of working time provisions, looking at the sources regulating their terms¹³.

Geographically, the investigation will take into consideration some European countries to assess whether points of contact exist within EU legal systems. The countries under investigation are: 1) France; 2) Germany; 3) Italy; 4) Portugal; 5) The United Kingdom. These countries have been selected according to the framework outlined in a study conducted by Eurofound, according to which four different configurations exist regulating working time within the European limits: a) a purely mandated system (nearly any statutory level, highly decentralized collective bargaining, most individual levels); b) an adjusted mandated system (state plays a dominant role but collective bargaining can provide favourable measures on a sectorial, company or individual level); c)

⁷ J. C. MESSENGER, 2011, "Working time trends and developments in Europe", *Cambridge Journal of Economics* 35, n° 2, p. 313.

⁸ For a broader study on employment regulation theory, see C. INVERSI et al., 2017, "An analytical framework for employment regulation: investigating the regulatory space", *Employee Relations*, n° 3, pp. 291-307, where reference is also made to working time regulation.

⁹ D. SCHIECK, 2017, "Comparing Labour Laws in the EU Internal Market: a Social Actor Perspective", *International Journal of Comparative Labour Law and Industrial Relations* 33, n° 1, pp. 193-194, points out that the convergence of national rules due to EU and ILO legal instruments leads to a challenge within the comparative labour law discipline. However, the same author stresses that the relevance of comparative studies is maintained through interactions between labour law sources (legislation, collective bargaining, etc.).

¹⁰ This study will only cover full-time employment provisions.

¹¹ Working hours arrangements during the day and the week.

¹² In relation to this particular key indicator, we will focus on both the provisions regarding limitations to overtime and the determination of overtime itself.

¹³ Night working, shift working or flexitime regimes are thus excluded.

a negotiated system (collective bargaining agreements at sectoral level, complemented by company-level bargaining) and; d) a unilateral system. In order to draw an overall picture of the working time regulatory framework in Europe, this research will take account of two countries for each configuration, excluding the ‘purely mandated’ system¹⁴.

In addition to those of the European countries mentioned above, the provisions of the United States and Japan will also be scrutinized. This will give us the opportunity to provide an evaluation of working time regulations without the influence of EU regulations, to understand how common law deals with working time (The US case) and to become familiar with the workings of a hybrid system (Japan’s case)¹⁵.

2. Comparative Report

2.1. Working Time Duration

State legislation plays a dominant role in setting rules for working time duration. Even though there are similarities across Europe at this level, Portuguese and French legislation seems to exclude from their legal provisions overtime when calculating working time. Thus, in Portugal, the limit of working time can be found in article 203, n. 1 of the Portuguese Labour Code¹⁶ (8 daily hours and 40 weekly hours) while in France it is article L. 3121-27 of the *Code du Travail* that governs the traditional 35-hour¹⁷ working week (which was not affected by the 2016 reform of the *Code du Travail*)¹⁸.

¹⁴ See EUROFOUND, 2016, *Working time developments in the 21st century: Work duration and its regulation in the EU*, Luxembourg: Publications Office of the European Union, pp. 13-14, that refers to these systems. We excluded the purely mandated system as this system relies on law, not allowing for an understanding of the interplay between different sources of labour law.

¹⁵ D. M. VICENTE, 2008, *Direito Comparado: Volume I*. 2th edition. Coimbra: Almedina, p. 543.

¹⁶ That transposed the Working Time Directive 2003/88/EC. See article 2, point n) of Law n° 7/2009, of February 12th, that approved the Labour Code reform.

¹⁷ The assessment of this rule can be done over a period of reference of a week, as set by article L. 3121-41. On the rule of the 35-hour week in France, see M. ESTEVÃO and F. SÁ, 2008, “The 35-hour workweek in France: straightjacket or welfare improvement?”, *Economic Policy* 23, n° 55, pp. 417-463.

¹⁸ This makes the French legal system an interesting one to analyse, especially when determining whether the new rules are in line with the French trends on working time or constitute a major change from the traditional way of regulating working time. Overall, the *Code* comprises three different set of provisions: 1) the public order provisions; 2) norms related to collective bargaining; 3) default rules, which apply only in case when no enterprise or branch-level agreements are in place. This means that the *Code* itself limits the leeway of collective or individual agreements in this area. Only within the limits allowed by the law can collective bargaining provide regulations for key indicators, such as limits to working time. See

Although different from the European parameters, the Japanese system seems to follow the European pattern in that working time standards are established by law. It should be mentioned that the Japanese Constitution establishes that the worker is entitled to a minimum wage, a working schedule and rest periods, all aspects that have to be regulated by law (article 27, n 2 of the Japanese Constitution). Therefore, the Japanese Constitution leaves the task of regulating the terms of working time to the law, more precisely to Labour Standards Law (Law n° 49, of April 7th 1947, as modified by Law n° 107, of June 9th 1995). Accordingly, article 32 of Labour Standards Law establishes a 40 hour weekly and a 8 hour daily limit¹⁹.

However, collective bargaining can still play a role in regulating working time, as it mostly focuses on increasing the reference period and/or increasing or reducing the limits set by law on working time duration.

In the Portuguese case, collective bargaining can only reduce the limits of working time set by the Labour Code, as long as it does not result in a wage reduction (see article 203, n° 4 of the Labour Code)²⁰, mainly because the rule establishing the hierarchy between the sources of labour law states that statutory regulation can only be derogated *in mejus* by collective agreements when it comes to the maximum duration of daily and weekly work (article 3, n° 3, point g) of the Labour Code)²¹.

Conversely, the German legal system allows for collective bargaining (either at sectorial or company level) to extend the limits envisaged in Section 3 of the Working Hours Act (*Bundesgesetzblatt*)²²: up to 10 hours daily and up to 60

F. FAVENNEC-HERY, 2016, “La négociation collective dans le droit de la durée du travail”, *Droit Social*, n° 11, p. 893.

¹⁹ K. OGURA, 2006, “Contemporary Working time in Japan: Legal System and Reality”, *Japan Labor Review*, n° 3, p. 9.

²⁰ M. LOPES CARDOSO, 2009, “A duração e organização do tempo de trabalho – evolução de 2003 para 2009”, *Revista de Ciências Empresariais e Jurídicas*, n° 15, pp. 294-295. For a report on Portuguese collective bargaining on working time in a broader sense (*i.e.*, with other key indicators), see CENTRO DE RELAÇÕES LABORAIS, 2017, *Relatório Anual sobre a evolução da negociação coletiva em 2016*, available at: <https://www.crlaborais.pt/documents/10182/13326/CRL+-+Relat%C3%B3rio+sobre+a+evolu%C3%A7%C3%A3o+da+Negocia%C3%A7%C3%A3o+Coletiva+2016/c3ff4cd2-1973-4732-9054-a56550cc6c38>.

²¹ This rule nullifies individual agreements and the amendments made to legal standards for working time duration (whether increasing or decreasing them), as article 3, n° 5 of the Labour Code establishes that where the law allows for changes to standards through collective bargaining, the individual agreement does not apply.

²² On working time, the main legal tool is the Working Hours Act (*Bundesgesetzblatt*), enacted on 10 June 1994. As will be demonstrated throughout this article, the German system provides collective bargaining with much latitude, making it the main regulatory source for working time, except for rest breaks. See G. SYBEN, 2016, “Regulation and reality of working time in

hours weekly, bearing in mind that the average of 8 hours per day is preserved over a period of six months or 24 weeks. To increase this period, the employer needs the consent of the works council.

The possibility to increase working hours also exists in the Japanese system, as collective agreements can rise to 10 hours the maximum duration of daily working time in certain cases (see article 32 of Labour Standards Law).

In the UK and in the Italian system collective bargaining can increase working time limits. In the first system, Regulation 23 of the Working Time Regulation Act²³ provides the opportunity for a collective or a workforce agreement to extend the reference period up to 52 weeks, even though a major trend exists to reduce working hours²⁴. As for the Italian system, it gives the possibility to increase the statutory reference period from 4 months to 6 or 12 months (see article 4 of the *Decreto Legislativo* 66/2003)²⁵.

For an overview of the Italian working time regulatory framework, decentralized collective bargaining shall be taken into account, which is governed by article 8 of Decree Law n° 138/2011, later on converted into Law n° 148/2011 (*contrattazione collettiva di prossimità*). This form of decentralized collective bargaining allows for derogations to the rules on working time set by law and sectoral collective agreements, as long as they comply with the Constitution, and the EU and international rules applicable in Italy, such as those on working time duration²⁶.

However, the UK has a peculiarity concerning the relevance attributed to individual agreements on working time duration, both as regards the reference period rule and the limitation of daily and weekly hours of work. As such, the

Germany: the example of branches represented by IG Bauen-Agrar-Umwelt”, *European Institute for Construction Labour Research News* n.° 3, pp. 6-11, available at: <http://www.clr-news.org/CLR-News/CLR%20News%203-2016.pdf>.

²³ This is the main legal instrument on working time in the UK. See C. FAGAN, 2009, “Working time in the UK: Developments and Debates”, in: *Working Time: in search of new research territories beyond flexibility debates, proceedings of an international conferences*, Japanese Institute for Labour Policy and Training [ed.], p. 43.

²⁴ See C. FAGAN, 2009, “Working time in the UK: Developments and Debates”, in: *Working Time: in search of new research territories beyond flexibility debates, proceedings of an international conferences*, Japanese Institute for Labour Policy and Training, p. 45.

²⁵ That transposed the Working Time Directive 2003/88/EC and implemented the provision of article 36, n° 2 of the Italian Constitution and no. 2107 of the Civil Code, establishing that the limitations of the working week shall be provided by law. See A. TURSI and P. A. VARESI, 2016, *Istituzioni di diritto del lavoro*. 7th edition. Wolters Kluwer, Milan, p. 381.

²⁶ Limitations refer to both the possibility to increase and decrease working time. The decision of the Italian Supreme Court of 14/06/2014, n° 16089 ruled that this instrument cannot be used for converting a full-time employment relationship to a part-time one, as employees’ consent is needed for this. See also A. FENOGLIO, 2012, *L’orario di lavoro tra legge e autonomia private*. Naples: Edizioni Scientifiche Italiane, p. 72.

maximum limits can be amended by individual agreements or workforce agreements, just as long as the 48-hour average is maintained over a 17-week reference period²⁷. The latter can be derogated by individual agreements between employers and workers, because in the Working Time Regulation Act an opt out clause is provided (article 22 of the Working Time Directive) allowing workers to perform work beyond the 48-hour average limit imposed by Directive 2003/88/CE²⁸. In order to legally apply the opt-out clause, there must be a written agreement between employers and workers, from which the latter can withdraw at any time by sending the employer a written notice at least seven days prior to its entry into force (though the time by which the notice period shall be forwarded to the employer can be increased in a number of cases).

Against this backdrop, the US legal system represents an exception. Reflecting the “at will” nature of the employment relationship and its regulation²⁹, regulations on working time are few and far between. A standard 40-hour week is provided only for commerce jobs and is determined by law (Section §207 of the Fair Labor Standards Act of 1938)³⁰. The parties can individually amend the rule, as long as one-half times the rate of the agreed hourly pay compensation is paid.

The conclusion that can be drawn from the analysis of this key indicator is that working time duration is mainly governed by law, though collective bargaining also has a say. There are, however, exceptions, like the UK, that prioritises the role of individual agreements in the determination of working time parameters, and the USA, that has no regulations in general terms.

Another point that should be emphasized is the similarity between the European systems and the Japanese system on working time duration. This can be attributed to the fact that Japan ratified the two ILO Conventions on Working Time (Convention n° 1 and 30)³¹, adapting article 32 of Labour Standards Law to article 4 of the ILO Convention no. 30 and, both establishing that daily working time can be extended up to 10 hours by

²⁷ In some activities (offshore work) this period of reference can be extended to 26 weeks.

²⁸ EUROFOUND, 2015, *Opting out of the European Working Time Directive*. Luxembourg: Publications Office of the European Union, 2015.

²⁹ A. S. BLOOM and C. M. DELLATORE, 2017, “United States”, in: *Employment Law Review*, E. C. Collins [ed.], 8th Edition, p. 715.

³⁰ FLSA does not contain many regulations on working time for the majority of workers. Working time regulation is provided by state and local laws, but their analysis falls outside the scope of study. As the constitutional system dictates, federal law has priority as regards the law-making process. However, state and local laws have the autonomy to create rules and complement this regulation, see A. S. BLOOM and C. M. DELLATORE, 2017, “United States”, in: *Employment Law Review*, E. C. Collins [ed.], 8th Edition, p. 720-721.

³¹ ILO Convention n° 30 of 1930, Hours of Work (Commerce and Offices).

collective agreements. Conversely, the US government did not ratify neither of the ILO Conventions, an aspect that evidently influenced the sources of labour law on working time³².

2.2. Working Time Organization

As for working time organization, both Japan and USA have no provisions on or limitations to the duration and organization of working time. In the US case, this is inherent to the “at will” nature of employment relationship, while in Japan’s case it is an essential feature of the employer’s power.

In Europe, the scenario changes, as different sources of labour law deal with working time organization, though collective bargaining holds a major role in relation to its regulation.

Two points should be stressed: the systems that are based on collective bargaining are not mandatory. In other words, absent the collective agreements, the power to determine the organization of working time will be attributed to the employer. For instance, both the Italian and French systems rely on collective bargaining to set working time organization³³. The difference between the two systems lies in the fact that the first one demands the agreement to be concluded at an enterprise level³⁴. The German system delegates the organization of working time to collective bargaining at a sectorial level, which shall set standard weekly working hours. But the German legal system has a special characteristic, for it attributes power to works councils within the company to co-determine the organization of working time, as laid down by Section 7, paragraph 1, n 2 of Works Council Constitution Act (or *Betriebsverfassungsgesetz*). German law also contains a special provision concerning the organization of working time prohibiting Sunday working (Section 9 of the Working Hours Act) save for special circumstances and provided that workers are paid properly.

Portugal regulations go in the opposite direction. Working time organization is regulated by article 212 of the Labour Code, that states that the employer has to decide, taking into consideration the limits imposed by the law, the operating period of the enterprise, health and safety, work-life balance (in

³² M. WEISS, 2011, “Re-inventing Labour Law”, in: *The idea of labour law*, G. Davidov and B. Langille [eds.], Oxford: Oxford University Press, pp. 52-53, states that some countries show resistance to ratify some ILO conventions.

³³ See articles L. 3121-41 to L. 3121-47 of the *Code du Travail*. See also P. LOKIEC, 2016, “La modulation du temps de travail”, *Droit Social*, n° 11, p. 962.

³⁴ It is also necessary to take into account the role of *Contrattazione collettiva di prossimità*, already mentioned. See A. FENOGLIO, 2012, *L’orario di lavoro tra legge e autonomia private*. Napoli: Edizioni Scientifiche Italiane, p. 72.

accordance with article 59, paragraph 1, point d) of the Portuguese Constitution)³⁵ and workers' participation in courses, technical or professional training. When drafting or amending the working schedule, the employer shall consult the workers' committee or, alternatively, trade unions, workers' commissions or trade union delegates (article 212, n° 3 and 217, n° 2 of the Labour Code).

2.3. Rest Periods

This section will consider the provisions regarding three main aspects: breaks, daily rest periods and weekly rest periods in light of the different sources of labour law. From a comparative perspective, it can be stated that in non-European countries, it is the law that determines the minimum rest periods, even though failing to regulate the three aspects mentioned above. In Japan, for instance, rest periods between two work periods are not mandatory.

As for rest breaks, a common framework is set by law in all the systems examined, with collective bargaining that has the power to increase or diminish rest periods within certain limits.

The German system is the most rigid one in that only the law regulates that. The worker is entitled to a 30-minute rest break if working time is between six and nine hours, or to a 45-minute rest break – or to a number of 15-minute breaks – if workers work more than nine hours (Section 4 of the Working Hours Act).

By contrast, the Italian system delegates to collective bargaining the regulation of breaks in case of workers working more than six hours, as long as a minimum break of ten minutes is provided (see article 8 *Decreto Legislativo* 66/2003).

In other systems, the law lays down the standard duration of the break period, allowing collective bargaining to increase, reduce or even suppress it. Such is the case of France, Portugal and the UK, though collective bargaining operates on different levels when it comes to breaks. France gives this role to collective agreements at the company or at the sectoral level (see article L. 3121-17 of the Code du Travail). The UK's Working Time Regulation Act states that the worker is entitled to a minimum twenty-minute break if the work period exceeds six hours. But in conformity with Regulation 12 of the Working Time Regulation Act, rest breaks can also be determined, reduced or removed by

³⁵ See G. CANOTILHO and VITAL MOREIRA, 2014, *Constituição da República Portuguesa - Anotada - Volume I - Artigos 1º a 107º*. Coimbra: Coimbra Editora, p. 774. The authors also highlight that the Portuguese Constitution does not provide the worker's right to decide on "daily working shifts, weekly rests, annual paid leave".

collective agreements or workforce agreements. Absent a collective agreement, it is up to the employer to regulate rest breaks³⁶. In Portugal, there is no distinction on the level of collective bargaining that should deal with this aspect. Article 213 of the Portuguese Labour Code establishes that the rest breaks cannot be less than one hour and more than two hours, when it comes to workers who perform their activity lasting more than five consecutive hours, or six consecutive hours if the working period is longer than ten hours³⁷. In this respect, collective bargaining can play a major role, as article 213, n° 2 of the Labour Code establishes the possibility to increase (through additional rest breaks)³⁸, reduce or even remove rest periods. Differently from other countries, in these two latter cases the employer must send a request to the labour administrative authority that performs inspection activities (*Autoridade para as Condições do Trabalho*, or ACT), containing the worker's approval and following the communication from the worker's commission and trade unions, justifying such request (for job-related reasons or for reasons related to workers themselves)³⁹.

In relation to the regulation of rest breaks outside Europe, article 34 of Labour Standards Law establishes that the worker is entitled to at least 45 minutes for working periods lasting six hours, or to a one-hour break for work performed longer than eight hours⁴⁰.

In the USA, workers in the commerce sector are covered by specific provisions. Title 29, Part §785.18 of the Code of Federal Regulations

³⁶ In this respect, see the decision of the Employment Appeal Tribunal of 16 November 2016, appeal n° UKEAT/0130/16/DA, that defined the criteria for the conceptualization of a refusal to the twenty-minute break in two steps: 1) the worker has to demand the exercise of the right; 2) the employer has to *de facto* refuse this positive request. The Court also expressed that “*If, however, the employer has taken active steps to ensure working arrangements that enable the worker to take the requisite rest break, it will have met the obligation upon it: workers cannot be forced to take the rest breaks but they are to be positively enabled to do so*”.

³⁷ A. NUNES DE CARVALHO, 2012, “Tempo de trabalho”, *Revista de Direito e Estudos Sociais*, n° 1-2, p. 48, argues that this possibility only applies to working time accounts established by collective bargaining.

³⁸ As for the increase of rest breaks, company practices should also be considered. Recently, Évora's Court of Appeal of 20/04/2017, judge Baptista Coelho presiding, case n° 8617/15.2T8STB.E1, considered that an extra 15 minute break provided to employers for a number of years shall be regarded as working time, being company practices a source of labour law, in accordance with article 1 of the Labour Code. The decision is available at: <http://www.dgsi.pt/jtre.nsf/134973db04f39bf2802579bf005f080b/9ff812f71e326be1802581100033175e?OpenDocument>.

³⁹ Which is considered accepted if the administrative authority does not make a decision within 30 days from the request (article 213, n° 4 of the Labour Code).

⁴⁰ The rule establishes that all workers rest at the same time, but collective agreements at company level can provided exceptions to it.

establishes that the worker can rest from five to twenty minutes and this time is seen as being part of working time. Part §785.19 provides that a worker has to be relieved from his/her duties to eat meals and enjoy what is called a “*Bona fide meal period*” of thirty minutes or more.

Daily rests are regulated by different provisions outside Europe. In the USA, the daily break is only applicable if the worker performs 24 hour or more hours of work, being entitled to a “*sleep time exclusion*” of up to eight hours, which can be established by employers and workers. Japan does not have any rules concerning daily breaks.

In Europe, it is the law that sets a minimum standard for this break, and collective bargaining can also have a say.

Such is the case of Germany and France. In the first, the worker is required to have a rest period of 11 hours between two periods of work (Section 5 of the Working Time Regulation Act), but this can be reduced by two hours by collective bargaining if the work activity requires it and compensation of time is provided (Section 7, n° 1). As for France, the break has the same duration as the one provided in Germany, though exceptions can be made through agreements concluded at enterprise and sectorial level (L. 3131-2), and through the Ministerial consent in exceptional peaks of production (article L. 3131-3 and the *Décret* n° 2016-1551).

Portuguese collective bargaining only allows for *in mejus* amendments (article 3rd of the Labour Code). In the UK, the law sets the minimum standard for this type of break (Regulation 10 of the Working Time Regulation Act), while in Germany priority is given to individual agreements if no collective agreements are in place (Section 7, n° 3 of the Working Hours Act).

Finally, in relation to weekly breaks, two major systems are in place which share the preponderance of law in determining the standard for this break. What differentiates the systems is the involvement of other sources of labour law. In one system, the law sets the main standard for the weekly rest, allowing for the unilateral determination of its average duration. This system comprises Japan and the UK. The discretionary power to determine weekly rests seems more pronounced in the Japanese legal framework, as the employer can determine the break as long as the worker is given four rest days during a four-week period, as stated by article 35 of Labour Standards Law. According to Regulation 11, the employer in the UK can only determine this weekly rest period over a period of 14-days, either by allowing two uninterrupted rest periods of 24 hours each 14-days period or one uninterrupted period of 48 hours in the same time frame.

The other system in place allows for derogations in collective bargaining. This is the case of France, Italy and Portugal, even though differences exist as regards the particulars of collective agreements. For example, in Italy the rule

can only be derogated by collective agreements at national level or by means of agreements at territorial level or enterprise level concluded with the most representative trade unions in comparable terms, in accordance with article 17 of *Decreto Legislativo 66/2003*. France emphasises the role of collective bargaining at enterprise level, with derogations that can only take place if some functional or geographical criteria exist (articles L. 3132-4 to L. 3132-31)⁴¹. Portugal is the only system allowing for collective bargaining to establish *in mejus* amendments and does not make any distinction between collective bargaining levels (article 232 of the Labour Code).

2.4. Overtime

In Europe, some systems simply establish maximum numbers of working hours per day/week (scheduled work and overtime), while others lay down limitations to overtime.

The first group includes Germany and France. Germany gives relevance to collective bargaining, which must establish a limit of ten hours a day and sixty hours per week (as long as the average of the 48-hour week is maintained over a period of six months, see Section 7 of the Working Hours Act).

Under German law, there is no obligation to work overtime, although some exceptions exist, e.g. employers' urgent need. Collective bargaining can deviate from this rule at a sectorial level and through negotiations at the company level, and so can the employer in the employment contract (or individual agreements), thus giving the latter the power to request overtime.

It should also be stressed that the German legal system attributes power to the works councils within the company to co-determine overtime, in accordance with section 7, paragraph 1, n.º 3 of the Works Council Constitution Act⁴². Overall, this regulatory system gives some consultation rights and decision making powers to workers' organizations within German companies.

Likewise, the French *Code du Travail* sets the following limits: 10 daily hours of work⁴³ and 44 weekly hours⁴⁴. It also establishes the possibility to increase the

⁴¹ F. FAVENNEC-HERY, 2016, "La négociation collective dans le droit de la durée du travail", *Droit Social*, n° 11, p. 895.

⁴² Among the few studies on the effect of works councils on overtime determination in the German system, see R. GRALLA et al., 2017, "The effects of works councils on overtime hours", *Scottish Journal of Political Economy*, n° 2, pp. 143-168, that has described such effects as "negative", as these structures do not prevent the conclusion of overtime arrangements. However, the study indicates that they are vital for avoiding excessive long hours of work per week and allow the uniform application of overtime rules across at the employer's premises.

⁴³ Which can be amended in the exceptional cases set down in article L. 3121-18 of the *Code du Travail*.

⁴⁴ See article L. 3121-20 of the *Code du Travail*.

maximum daily working time up to 12 daily hours of work by concluding enterprise or sectoral agreements in the event of production peaks or organisational reasons.

The weekly limit of 44 hours is calculated against a reference period of 12 consecutive weeks up to 46 hours (article L. 3121-23 of the *Code du Travail*)⁴⁵. If collective bargaining (both at sectorial and enterprise level) does not regulate this aspect, the employer can request to amend the limit of forty-four hours and increase it to forty-six hours (article L. 3121-24 of the *Code*). Hence, overtime is set according to the 35-hour week rule and the limitations mentioned above.

The second system is based on limitations to overtime (Italy's case). Article 5 of *Decreto Legislativo* 66/2003 establishes that the main source of overtime regulations in the Italian system is collective bargaining (whether *in mejus* or *in pejus*), as individual agreements between employers and workers can allow the latter to perform more hours than those agreed upon. Consequently overtime can be performed up to a maximum of 250 hours per year (see article 5, n.º 3, point c) of the *Decreto*)⁴⁶.

As for Portugal, par. n.º 1 of article 228 of the Labour Code limits overtime hours according to different factors: i) the size of the company (see article 100 of the Labour Code and point a) and b) of the 228 of the Labour Code); ii) the type of contract (limitations are in place for part-time workers, see point c)); iii) the day on which overtime should be performed (weekly rests, including complementary rest breaks).

Collective bargaining in Portugal also plays a role in increasing the limits of overtime in the first two cases (point a) and b)), to a maximum of 200 hours per year (article 228, n.º 2 of the Labour Code⁴⁷). The same discretion is provided in relation to part time workers (point c)), which can see their hours increased to 200 hours per year through collective bargaining, or up to 130 hours per year by individual agreements (article 228, n.º 3 of the Labour Code).

⁴⁵ F. FAVENNEC-HERY, 2016, "La négociation collective dans le droit de la durée du travail", *Droit Social*, n.º 11, p. 893. In the new wording of the article, this instrument is now called "dépassement" (to surpass) referring to the maximum duration of working time, daily and weekly, which repeals the expression "dérogation" (derogation). Consequently, the system of derogation concerning the maximum duration of working time has been replaced by a system of authorization that goes beyond the maximum duration of working time.

⁴⁶ R. PESSI, 2016, *Lezioni di Diritto del Lavoro*. 7th edition. Torino: G. Giappichelli, p. 317-318.

⁴⁷ In 2015, only 33% of the collective agreements had clauses regarding overtime. CENTRO DE RELAÇÕES LABORAIS, 2016, *Análise dos Instrumentos de Regulamentação Coletiva do Trabalho: Trabalho suplementar, Descanso compensatório, Adaptabilidade, Banco de horas e Horário concentrado*, p. 26, available at: [https://www.crlaborais.pt/documents/10182/13323/CRL-ESTUDOS+-+Impacto+da+Lei+n+23-2012+TS-DC-A-BH-HC++\(Vr+04-03-2016\)/45be58d9-8e40-4274-8fb6-c584ba1ac788](https://www.crlaborais.pt/documents/10182/13323/CRL-ESTUDOS+-+Impacto+da+Lei+n+23-2012+TS-DC-A-BH-HC++(Vr+04-03-2016)/45be58d9-8e40-4274-8fb6-c584ba1ac788).

Only the UK seems to deviate from this European pattern, due to the absence of any specific provisions on overtime. This has two major implications: on the one hand, it means that only the limit of 48 hours applies, which as seen concerns both scheduled working time and overtime. On the other hand, even within these parameters, the possibility to request overtime has to be laid down in individual agreements between employers and workers⁴⁸.

As for Japan and the USA, they share common aspects in overtime regulation. They both provide that, within certain quantitative limits, overtime shall be determined jointly by employers and a collective body representing workers.

In the Japanese case, overtime work may be determined by agreements between employers and trade unions (or a worker representing the majority of workers)⁴⁹. By law (see article 36 of Labour Standards Law⁵⁰) there is no limit to overtime for regular workers (except for underground workers, other occupations that entail health measures and women providing care to children or elder people). However, the Ministry of Health, Labour and Welfare has set a non-binding limit on the maximum hours of overtime, which employers and trade unions need to take into account in negotiations. At the time of writing, this limit comprises: a) 15 hours for one week; b) 27 hours for two weeks; c) 43 hours for four weeks; d) 45 hours for one month; e) 81 hours for two months; f) 120 hours for three months; g) 360 hours for one year⁵¹.

In the USA, FLSA establishes that overtime can be set by agreements between employers and a representative of workers certified by the National Labour Relations Board, with the limit of 1040 hours over a period of twenty-six consecutive weeks or 2240 hours over fifty-two consecutive weeks (see point (b) of the Section §207 of the FLSA).

However, in the American system the main discussion on this topic is related to monetary compensation for these hours⁵². Not all workers are covered by this rule, as there are three main criteria to the entitlement of overtime pay: 1)

⁴⁸ As demonstrated by the ruling of the Court of Appeal *Driver vs. Air India Ltd*, [2011] EWCA Civ 830, of 19/07/2011, available at: <http://www.employmentcasesupdate.co.uk/site.aspx?i=ed8793>.

⁴⁹ T. A. HANAMI and F. KOMIYA, 2011, *Labour Law in Japan*, Netherlands: Kluwer Law International, p. 104.

⁵⁰ See the decision of the Japanese Supreme Court of 16/07/2009, judge Wakui Norio, case n.° 2007 (A) 1951, available at: http://www.courts.go.jp/app/hanrei_en/detail?id=1014.

⁵¹ These limitations, put in place in December 1998, are a response to the *Karoshi* problem, that is not limited to Japan. The problem is a serious one in the country, also because of a lack of limitations to overtime. See K. OGURA, 2006, "Contemporary Working time in Japan: Legal System and Reality", *Japan Labor Review*, n° 3, p. 5.

⁵² Which can constitute a clause preventing the abuse of overtime, not through limitations to its use, but through increasing its costs.

salary⁵³; 2) job duties⁵⁴; 3) workweek⁵⁵. It must be mentioned that the first criterion is currently under revision. On May 23rd 2016, the US Department of Labour Wage and Hour Division approved a new rule regarding the overtime limit that would extend this provision to those workers who earn up to \$47,476 a year, that should have entered into force starting from 1 December 2016⁵⁶. Yet, on 22 November 2016, a preliminary injunction vetoed the effects of this amendment, mainly due to the Department's lack of authority to do so⁵⁷. This means that the extension of these eligibility criteria on overtime payment remains on hold for the time being.

3. Conclusions

Even though this article has focused primarily on the internal regulations of the key indicators mentioned above, international instruments have a major role on the countries analysed. As such, the role of the ILO Conventions n° 1 and 30 should not be taken lightly, as the Japanese system demonstrated some contact points with the European systems on working time regulation.

The same can be said of the European Working Time Directive and for the legal systems in place in the European Union. Indeed, it is possible to see a harmonizing effect on standards and provisions regarding working time limitations, for the purposes of promoting decent work and workers' health and safety. The only system that seems to diverge from the European regulatory paradigm is the UK, which gives much latitude to individual agreements and has put in place the opting-out clause laid down the Working Time Directive. The disparities may increase with the conclusion of the Brexit process, that will perhaps water down the regulation of working time, maybe aligning itself with other common-law countries (e.g. the USA, where working time is mainly regulated by other instruments than statutory law).

State regulations play different roles on governing working time, ranging from setting the entire framework to simply establishing the minimum standard and the background for collective bargaining/individual agreements to operate. Collective bargaining also seems to play a major role in EU countries, though

⁵³ It only covers workers who make less than \$455 a week or \$23,660 a year.

⁵⁴ It excludes executives, administrative or IT professionals or sales workers.

⁵⁵ If the worker works more than 40 weekly hours of work, he will be entitled to 150% compensation for each hour performed over that limit.

⁵⁶ Final Rule "Defining and Delimiting the Exemptions for Executive, Administrative, Professional, Outside Sales and Computer Employees", 81 Fed. Reg. 32391 of May 23, 2016, available at: <https://www.gpo.gov/fdsys/pkg/FR-2016-05-23/pdf/2016-11754.pdf>.

⁵⁷ See the decision of the Eastern District of Texas, judge Mazzant, Civil Action n.° 4:16-CV-00731, available at: www.txed.uscourts.gov/d/26042.

major differences can be seen. In Germany, for instance, the power of collective sources is a direct consequence of the co-determination principle concerning the key indicators. Conversely, in the UK, collective agreements have to be implemented through individual agreements.

Even within countries where collective bargaining has much room for manoeuvre, there are differences in terms of how collective bargaining can operate. Some systems demand a certain type of agreement (this is the case of France, where the new *Code du Travail* reasserted the role of agreements at company level), while others do not make any distinction in terms of collective bargaining level (e.g. the Portuguese system).

Undoubtedly, a trend exists to regulate working time through collective bargaining, as more flexibility can be provided at the time of meeting employers' and workers' needs.

Individual agreements play a residual role, and in some case they do not even have validity. The UK case is particularly telling in this connection, following the application of the opt-out clause of the European Working Time Directive 2003/88/EC.

Okun's Law Revisited Within the Context of High Eurozone Unemployment: A Note

Vince Hooper¹

Abstract Purpose. The purpose of this paper is to empirically investigate Okun's Law that proposes an inverse relationship between the rate of unemployment and economic growth. In other words, the higher the unemployment rate the lower the economic growth for a given country which represents lost production opportunities.

Design/methodology/approach. The paper analyses 185 countries around the world. In particular, the average economic growth rate over 5 years [from 2011 to 2015] is regressed against the average unemployment rate over the same period.

Findings. The paper discovers that or 185 countries in the world, a strongly negative association [26% Correlation at a 1% significance level] is found. More importantly, the results strongly support Okun's Law: that a 1% drop in unemployment leads to a ¼ % increase in growth, in crude terms, across the globe.

Research limitations/implications. The research uses a parsimonious but robust analytical framework and invites future empirical investigation that uses a cross-sectional time series approach.

Originality/value. The paper suggests that from the rudimentary but robust analysis, there is a strong link between unemployment and economic growth.

Paper type. Empirical paper.

Keywords: *Unemployment, Economic Growth, Okun's Law, European Unemployment, Eurozone, Ben Bernanke, Brexit, Social Costs.*

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1. Introduction

With unemployment in the Eurozone running at over 10%, with some countries like Spain and Greece experiencing in excess of 45% youth unemployment, the loss in potential economic growth is huge. This is coupled with high unemployment's damaging social cost which brings depravity to millions.

The purpose of this note is to bring attention to the link between economic growth in unemployment across the globe then apply that to the EU member states by analysing this issue from a global perspective.

Okun's law "is intended to tell us how much of a country's gross domestic product (GDP) may be lost when the unemployment rate is above its natural rate"². It explains that "the logic behind Okun's law is simple. Output depends on the amount of labor used in the production process, so there is a positive relationship between output and employment. Total employment equals the labor force minus the unemployed, so there is a negative relationship between output and unemployment (conditional on the labor force)"³.

Bernanke summarizes Okun's law basic concepts in a speech at the National Association for Business Economics Annual Conference, Arlington, Virginia, March 26, 2012⁴:

That rule of thumb describes the observed relationship between changes in the unemployment rate and the growth rate of real gross domestic product (GDP). Okun noted that, because of ongoing increases in the size of the labor force and in the level of productivity, real GDP growth close to the rate of growth of its potential is normally required, just to hold the unemployment rate steady. To reduce the unemployment rate, therefore, the economy must grow at a pace above its potential. More specifically, according to [the] currently accepted versions of Okun's law, to achieve a 1 percentage point decline in the unemployment rate in the course of a year, real GDP must grow approximately 2 percentage points faster than the rate of growth of potential GDP over that period. So, for illustration, if the potential rate of GDP growth is 2%, Okun's law says that GDP must grow at about a 4% rate for one year to achieve a 1 percentage point reduction in the rate of unemployment.

² Okun, Arthur M. *Potential GNP: Its Measurement and Significance*, American Statistical Association, Proceedings of the Business and Economics Statistics Section, p. 98–104. 1962.

³ Wen, Y. and Chen, M. "Okun's Law: A Meaningful Guide for Monetary Policy?", *Economic SYNOPSIS, short essays and reports on the economic issues of the day*, Number 15, Federal Reserve of St. Louis, https://research.stlouisfed.org/publications/es/12/ES_2012-06-08.pdf. 2012.

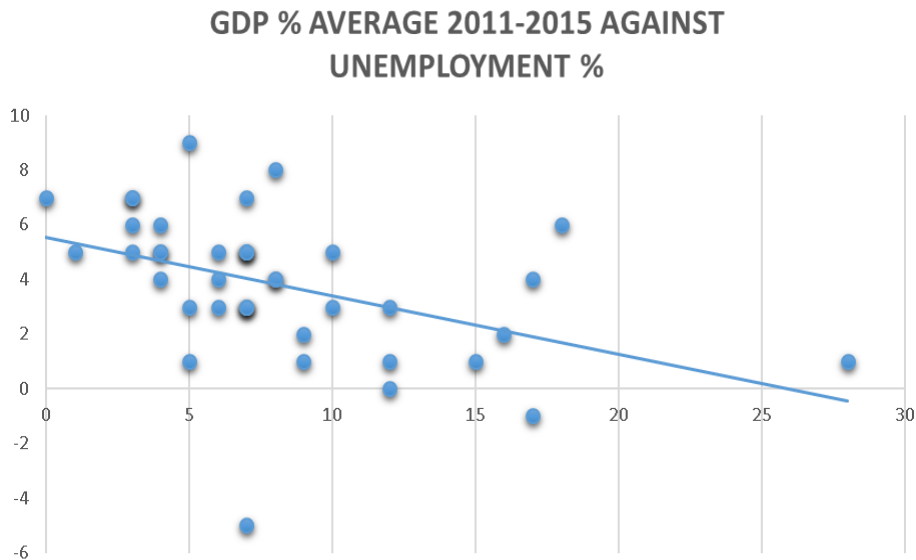
⁴ Bernanke, B. S. *Recent Developments in the Labor Market*, Speech at the National Association for Business Economics Annual Conference, Arlington, Virginia, March 26, 2012.

2. Research Method

In order to test parsimoniously the cross-sectional relationship between unemployment and economic growth, the following univariate regression is estimated:

$$\text{Economic Growth as Measured by GDP Growth \%age [average over 5years]} = \alpha + \beta_1 \text{\%age Unemployment} + \varepsilon$$

Data is sourced from the World Bank Economic and Social Indicators Database.



3. Results

For 185 countries in the world [in the Chart above], a strongly negative association [26% Correlation at 1% significance level] is found. More importantly, my results strongly support Okun's Law: that a 1% drop in unemployment leads to a ¼ % increase in growth, in crude terms, across the globe.

Quite clear from the rudimentary but robust analysis is that there is a strong link between unemployment and economic growth. The high levels of unemployment in the Eurozone member states needs to be addressed within

the context of economic reform so as to alleviate the pain and suffering among the long-term disempowered youth as a priority.

***The Co-Operative Firm Keywords*, edited by Andrea Bernardi and Salvatore Monni. A Review**

Peter Norlander¹

The Co-Operative Firm: An Alternative Right in front of our Eyes

For those seeking alternatives to the excesses of capitalism and state intervention, building sustainable, democratic, and efficient organizations that provide a sustainable, just, and efficient solution is a critically urgent task. It must be proven that a better way is possible.

The solution articulated throughout the book, “The Co-Operative Firm,” is the co-operative form of organization. In co-operatives, members (typically workers) have “the right to make corporate decisions and the right to a share of the profit” (84). Principles of co-operatives are listed as: 1) voluntary and open membership 2) democratic member control 3) member economic participation 4) autonomy and independence 5) education, training, and information 6) co-operation among co-operatives and 7) concern for community (39).

In practice, what this means is that workers, and in some cases consumers, are members of the co-operative, with full-voting rights (one member / one vote) enabling them to control the governance of the firm, and giving them rights to residual profits as owners. Co-operatives typically compete with minority shareholder dominated firms and public firms in markets, and must offer a competitive service or product while also “put[ting] people before capital” (Birchall, 2011; qtd. on page 89).

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Pessimism and insecurity about co-operatives are expressed throughout the book. Challenges, including the free-rider problem, abound. In 1794, Oliver Goldsmith wrote “it is extremely difficult to induce a number of free beings to co-operate for their mutual benefit” (77). Co-operatives must provide workers voice and representation to deliver a superior social result, and competent experts to deliver a competitive product in the marketplace. When co-operatives fail to elicit voice, they lead to “oligarchy,” without “enough representation,” co-operatives are “unaccountable,” and without “expertise” they are “incompetent” (31). These central problems of governance are confronted directly in the book.

For those to whom co-operatives may sound far-fetched and idealistic, it is reasonable to wonder: how would the co-operative firm keep the lights on?

In the United States, at least, 900 co-operatives are already lighting the homes of 42 million in 47 states (92). The chapters of this book demonstrate that co-operatives operate successfully in many contexts around the world, and have for many years. Twenty percent of Italians are members of a cooperative, which represent 8% of Italian GDP (19-20). Seven thousand U.S. firms have employee ownership, involving over 13.5 million U.S. employees (25). Despite free-rider concerns, co-operatives imbue their member-owners with responsibility, but also “higher capability to participate in decision-making” in general (42). Despite competitiveness concerns, electricity consumers belonging to co-operatives pay less than the market price in the U.S.A, U.K., Germany, and Italy (94).

If most large co-operatives are well governed (29), and the co-operative model is tested, it is still not Teflon capitalism, for which no criticism is admissible, educated people assume there is no alternative, and to which nothing sticks.

A useful chapter on quality demonstrates this: “When a negative event occurs in a co-operative, due to mistakes made by its executives, a shadow is drawn on the co-operative sector in general as if everything has gone wrong, just because of a mistake that one of its many members has made” (123).

A recent illustration of this occurred in coverage of the emissions scandal at VW in *The New York Times*. A finance professor was quoted attributing the crisis to the co-determination structure at VW, never mind recent scandals at GM (pre-bailout) and Toyota. As the book states: “If there is an incident at a joint-stock company or a traditional investor-owned company, nobody questions the entire genus” (ibid).

Despite discussion of the need for solidarity among co-operative members, along with organizational identification, commitment, and cohesion (130), it would seem that advocates of status quo organizational structures exhibit far more cohesive group behavior than those who advocate more co-operative forms of organization. The amplification of small differences that often act as a major barrier to the furtherance of alternatives and wind up supporting the status quo in practice is a feature throughout the book.

For example, worker ownership in the U.S. through ESOPs, while given due coverage, does not count as a pure co-operative organization, as firms are still typically owner/management run by a minority shareholder (25). “Even in Germanic-type co-management, [worker rights] are minority rights compared with the powers of the company owners/shareholders, which are decisive” (84). While not pure co-operative firms, these more capitalist friendly forms of co-operation, shared prosperity, and democratic governance, are on the co-operative spectrum, and, in the U.S., are within the realm of possibility. It is commendable that the book treats well the different varieties of co-operative form. It is concerning, but a good reflection of reality, that the book also treats “false co-operation” (154, 170), and reaches out to other, perhaps more staunch critics of organizations, and seeks to promote co-operation among co-operatives.

In the U.S. context, it was only 40 years ago, after all, when management guru Peter Drucker prophesied the rise of *Pension Fund Socialism* if then-present trends continued and workers grew to acquire controlling interests in the major companies. Of course, the trends have gone in the other direction since then. In the political environment of the U.S. today, small increases in the top marginal tax rate that could actually reverse inequality trends, while paying for wars and pre-existing safety net commitments (never mind new ones), are argued by some to represent the road to serfdom. Still, even the incoming Trump administration (and many Republicans) have expressed an interest in expanding worker ownership.

A fascinating chapter on the Gung-Ho co-operative movement in China delivers more insight on the various alternative forms of co-operation. For those who are concerned that flirting with co-operative models means socialism or worse, the finer shades of co-operatives are fleshed out.

“Maoism has represented a deviation from the western, or, indeed, international notion of co-operation” (52). Before Mao, British and US governments supported Gung Ho due to “a social democratic political and economic alternative to the increasingly powerful Chinese Communist Party” (54). Under Mao, Gung-Ho was repressed, and “the

memory of forced collectivization and limits placed on the growth of a proper civil society are far from helpful to the revival of co-operation in China” (57).

The book is explicitly positioned to “reach some of the people involved in the protest movements that followed the financial crisis of 2008 or those actively involved in community projects of social entrepreneurship” (9). While those engaged in social entrepreneurship may find the book interesting, it is not a “how-to” guide, as useful chapters on international and national regulations point out the many peculiarities and lack of harmonization across borders even within the EU, making such a global, single guide implausible (71).

For those who protested with the Occupy movement, as well as the much larger population upset by the “the economic recession and an ideological crisis of Western capitalism” (12), this book is timely in suggesting a promising direction, already active and capable of drawing from international and domestic legacies and forces in nearly every part of the world.

In the period after the Great Recession, it was possible to think, for a few years, that an epochal shift from the market back toward the state was occurring. Extravagant over-reaching by the market had so harmed society that re-regulation was inevitable, in line with Polanyi’s predicted double movement. Globally, the failures of the minority-shareholder owned firms were so manifest that state regulation was likely to return to reverse trends of inequality, unemployment, privatization, outsourcing, the decline of stable work, and worsening jobs.

For better or worse, “the worldwide protest movement [that developed after the 2008 financial crisis has] been ineffective in delivering an impact on policies and providing a feasible alternative” (12). Further, the authors in this book argue that this represents a missed opportunity. By imposing a “substantial limit to the private appropriation of the wealth produced” (21) and introducing “innovative elements of pluralism and democracy to the market” (ibid), co-operative ideas by all rights should have captured the imagination or the energies of those seeking change.

It seems, however, that 2009-2016 was only a brief interregnum in a forty-year swing toward the market in societal and industrial relations. The United States, and the world, is moving more toward market relations, faster and in more far-reaching ways, it would seem, than was imaginable even in pre-crash days.

In this volatile environment in which the future direction of society is so rapidly veering back and forth between alternating idols of populist nationalism and neoliberal globalization, the authors of the present book

have delivered a worthy resource. The goal of the book is to “spread the idea of co-operatives to as many people as possible and above and all to those who knew nothing about them” (7). In its totality, this book provides the novice reader with an excellent starting point for discussion and the experienced one with interesting cases, facts, and experiences from Colombia, Italy, and other parts of the world.

The book is organized in an unusual and interesting fashion, by “keywords,” each written by a different author(s). Each chapter is thematically linked with others, although the keywords are ordered alphabetically. While a helpful introduction provides useful summaries and pointers for chapters to read, and companion chapters that could be read alongside those, this reader could sustain the back and forth flipping only so much, and then returned to the front of the book and read straight through the chapters missed. Each proved worthwhile.

Impending ecological catastrophes, the next financial crisis, political instability in liberal democracies and developing nations, rising international conflicts, and general doom and gloom appear to be on the horizon. It is possible that the failures of our current institutions will simply lead to inchoate rage and failure after failure.

The possibility for an equilibrium point a stable society and relationship among government, society, and markets has been elusive. At the end of World War II, Kerr’s “pluralistic industrialization,” and at the end of the Cold War, Fukuyama’s “end of history” through liberal democracy, both failed to deliver the promised quietude. The ideals espoused by the co-operative movement, however, speak to that hope for a median position between excesses in which we can muddle onward better, in a fashion more consistent with the ideals of sustainability, efficiency, and democracy

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