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Stefano Gasparri, Arianna Tassinari (Warwick Business School)

[Stefano.Gasparri@wbs.ac.uk](mailto:Stefano.Gasparri@wbs.ac.uk), [phd15at@mail.wbs.ac.uk](mailto:phd15at@mail.wbs.ac.uk)

**Shaping industrial relations in a digitalising services industry: regional report for Southern Europe**

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ZSI-Zentrum für Soziale Innovation  
Linke Wienzeile 246, A-1150 Wien  
ZVR: 757405110

Tel.: +43 1 495 04 42  
Fax: +43 1 495 04 42 DW: 40

e-mail: [institut@zsi.at](mailto:institut@zsi.at)  
<http://www.zsi.at>

Bankverbindung: BankAustria Creditanstalt  
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## 1 Introduction

The UNI Europa project „Shaping Industrial Relations in a Digitalising Services Industry - Challenges and Opportunities for Social Partners“, in cooperation with “ZSI – Zentrum für Soziale Innovation” and promoted by the European Commission, aims to identify and analyse change factors and explore new approaches for social partners on the challenges of maintaining effective industrial relations systems in a digitalising services industry. The project strives to provide policy advice for trade unions, social partners and policymakers on necessary adaptations of institutional frameworks for industrial relations, collective bargaining, social dialogue and capacity building for social partners. Challenges and opportunities are identified and analysed in particular with regard to workers’ representation at company level and collective bargaining as well as the work and organisation of trade unions in general.

Across the project, we are dividing the investigation into three aspects of services that are clearly interrelated.

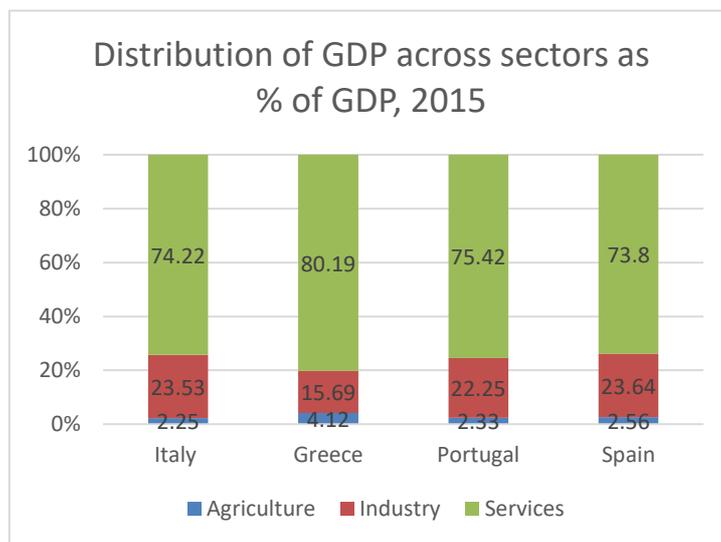
- Under the heading of “**Service markets**” we look at changes in service production and delivery through digitalisation (for example, online services and self-service) and also on the impact of these changes on customers and society at large. It is one of the dimensions where rapid changes, disruptive innovations (for example platforms) need to be addressed. Here, we also address the status of services in “industrial” or economic policy in the context of your respective sector and country.
- “**Service labour markets**” addresses the development of service jobs, their quality and quantity. We focus on jobs with intermediate skill levels, and will also address atypical and precarious employment (including self-employment) in your sector/country, the development of skills and re-skilling and policies of addressing them.
- “**Company strategies and work organisation**” looks at the company level and your union’s information and experience with companies in your sector/country: We will address transnationalisation of service companies at large, outsourcing and offshoring, working conditions and ways of influencing them, interest representation and participation.

## 2 Service Markets in Southern Europe (Stefano Gasparri and Arianna Tassinari, Warwick Business School)

### 2.1 *Background: Services and unions in Southern Europe*

The analysis of process of digitalisation in the service sector in Southern Europe and its implications for employment relations and trade unions must be contextualised against the background of the broader economic structure of the countries under analysis. As Figure 1 shows, the weight of the service sector in the GDP of Southern European economies is considerable, and of comparable magnitude in all four countries - ranging from 73.8% of GDP in 2015 in Spain to 80.19% in Greece. In all four countries the weight of the service sector as a component of GDP has been growing over the last 10 years (see fig. 2). This is also a side-effect of the 2008-2009 global economic crisis and its aftermath, which increased the relative weight of the service sector in Southern European countries, in some cases rather dramatically, as in Greece and Spain, where manufacturing and constructions have been particularly hit.

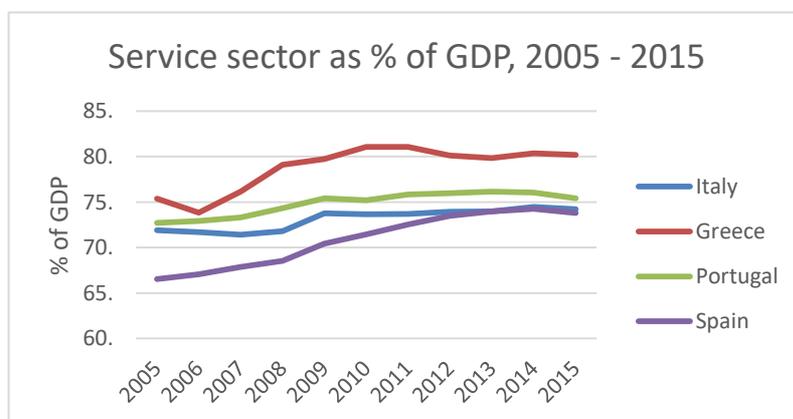
Figure 1 Distribution of GDP across sectors as % of GDP, 2015



Source: World Bank, 2017

In 2015, the service sector accounted for 69.65% of total employment in Italy; 71.45% in Greece; 68.12% in Portugal; and 75.97% in Spain (World Bank, 2017). A large portion of these workers is in SMEs, which are more diffused in Southern Europe than elsewhere. Such high incidence of SMEs in the Southern European productive system is identified as a key factor reducing the level of overall digitalisation of the economy (Eurofound, 2016). In the context of Spain, for instance, a recent study by Siemens (2016) identifies, among the specific challenges associated with digitalisation, the limited penetration and usage of ICT technology in certain branches of the Spanish service sector, and amongst SMEs in particular, which make up 90% of Spanish firms and that tend to have below average levels of implementation of ICT technologies (INE 2016; cf. also Vodafone 2016). In this respect, a key issue specific to Southern European economies that emerges from the literature reviewed is the extent to which firms in different branches of the service sector, and especially SMEs, are able to take advantage of the opportunities offered by digitalisation.

Figure 2 Service sector as % of GDP, 2005 - 2015



Source: World Bank, 2017

The extent of unionisation in the service sector is another important background factor to consider the implications of digitalisation trends for industrial relations. Unfortunately, comparable data on the rate of unionisation in the service sector for the four countries under analysis are typically unavailable (e.g. from the ICTWSS database, Visser 2016). Data from national sources suggest that the rate of unionisation in the service sector varies quite considerably depending both on the country and on the specific branch of activity. In Italy, where the average unionisation rate is 31.6%, according to 2015 data from the Italian Statistical Agency (ISTAT, 2016, p. 160) the rate of unionisation in the service sector is, overall, relatively lower, but it varies considerably from 18.8% in the commerce sector and 24.6% in the information and communication services sector, to 30% in the hospitality sector and a peak of 55.5% in financial and insurance service. In Spain, where the average rate of overall unionisation is generally lower (18.9%), unionisation rates in services varied from 8% in personal services to 10.9% in trade and hospitality, to 23.6% in transport and communications and 26.6% in financial services (Alós et al., 2015, p. 21). In Portugal, the average rate of unionisation is 18.48% (ICTWSS, 2016). In services, the latest available data (reported in Portugal and Vilares, 2013) show that unionisation varies considerably between branches: 4.65% in administrative activities, 8.01% in hospitality, 15.65% in ICT, 31.3% in transports, reaching a peak to 63.8% in the financial and insurance services sector. Finally, in Greece, the unionisation rate is at 21.5% in 2013 (OECD Stat), a data which requires some qualifications: first, it is in constant decline since 1980 (39%), also because of the lower presence of unions in service sector; second, the economic and financial crisis brought a loss of legitimacy of traditional mainstream confederations (GSEE, ADEDY, both with political ties to the main centre-left party PASOK) and the emergence of radical grassroots organisations, focused on the community, industry or company level, often for precarious workers in the service sector (free-lance technicians, cleaners, waiters), but these organisations lack coordination nor influence over the policy-making (Kretsos 2015).

These data on unionisation in Southern Europe show a differentiated picture according to the country and to specific service sectors. At the same time, they confirm insights from the extant literature about some of the challenges typically associated with unionisation in the service sector, such as uneven union density, difficulties in establishing trade union density due to fragmentation and spatial distribution of employment, and uneven patterns of industrial relations between new and more established service sectors. Emerging challenges for unionisation and collective representation of workers in new branches of the service market facilitated by digitalisation (platforms, online labour markets, crowdwork, etc.) will be explored further in the report.

If the high diffusion of SMEs seems to slow down the digitalisation of services markets in all the four Southern European countries, and the relatively weaker trade unions in the service sector seem to be challenged to take their role in the digitalisation process in all the four countries, there are several other factors which account for differences between the four countries. Each country has a particular combination of types of services, such as more knowledge-intensive vs lower-skilled services, immaterial vs location-bound services, and business-to-consumer/personal vs business-to-business services (see the DESI index for some insights and progresses of each country)<sup>1</sup>.

Here we mention only two illustrative examples of such differences, evaluating the challenges and opportunities disclosed by digitalisation and its impact on industrial relations: a) Some sub-sectors within service markets are more digitalised than others. In the Spanish economy, for instance,

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<sup>1</sup> <https://ec.europa.eu/digital-single-market/en/desi>

digitalisation shows a considerable gap in several branches of the service sector (especially health and transport) between the potential opportunities of growth offered by digital transformation and the level of digital maturity of firms (Siemens 2016, p. 8). Other service sectors such as ICT, Tourism and Financial services are identified instead as leaders in 'digital maturity', leading the way in taking advantage of the possibilities for the reconfiguration in their business models offered by e-commerce, social networks, big data and automation. Given the characteristics of the four countries under examination, the business potential of digitalisation on Tourism seems to deserve a special attention, as the new concept of 'smart tourism', of which the literature identifies Barcelona as a best-practice (Boes et al. 2016).

b) Intra-national differences in terms of digitalisation are evident. The case of 'smart cities' in Italy substantiates this point. Following the EP report on Smart City (2014), which defines a Smart City as 'a city seeking to address public issues via ICT-based solutions on the basis of a multi-stakeholder, municipally-based partnership' (p. 24), we note that digitalisation is a key component for economic and social development inasmuch it is understood and implemented holistically. In this regard, the EU notes that Italy has the highest percentage of smart cities in the Continent (followed by Austria, the Nordic Member States, Estonia and Slovenia), but those cities are mostly located in the Northern area, therefore confirming the presence of wide regional differences (p. 38-40).

Overall, the high incidence of service sector employment in Southern European economies means that the issue of employment and job quality in the sector assumes tantamount importance – and confronting potential issues and challenges associated with structural changes in the sector, such as digitalisation, is an issue of high priority. These few background notes also suggest that the impact of digitalisation on service markets in Southern Europe may be significantly differentiated according to the sector of operation and company size, as well as the territorial area. This rather heterogeneous picture corresponds to significant additional challenges for trade unions willing to contribute to and exert an influence over the process of penetration of ICT technologies and correspondent enabling competences in this context.

## 2.2 *Policy initiatives in South European Services*

### 2.2.1 *Addressing the digital infrastructural divide*

Structural issues around the uneven development of ICT infrastructures (e.g. availability of broadband internet connection) and the uneven take-up of ICT technology are a common issue in Southern European economies. Being reluctant digital users contributes to explain the low ranking (3rd out of 4) of these countries in terms of innovation, all of them being considered as 'moderate innovators'<sup>2</sup>. This concern is reflected in the kind of policy initiatives implemented by governments on this topic, which tend to be focused on the promotion of access to digital technologies for firms and enterprises and on the strengthening of infrastructures to strengthen competitiveness and facilitate digital inclusion. In order to address the challenges associated with limited penetration of digitalisation amongst certain sectors of the economy, and especially SMEs, various governments have put in place initiatives aimed at strengthening the infrastructures that can facilitate access to and use of digital technologies on part of firms and workers.

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<sup>2</sup> [http://ec.europa.eu/growth/industry/innovation/facts-figures/regional\\_en](http://ec.europa.eu/growth/industry/innovation/facts-figures/regional_en)

In Spain, a high-profile government initiative, the so-called 'Agenda Digital por España 2015-2020'<sup>3</sup> (Digital Agenda for Spain), has been launched to substantiate the EU 2010 call for a Digital Agenda for Europe and drive forward the penetration of digitalisation in the Spanish economy – although it is important to specify that this is a cross-cutting initiative, not focused specifically on the service sector. The agenda is structured around six major goals: fostering the deployment of networks and services to guarantee digital connectivity; developing the digital economy for the growth, competitiveness and internationalization of Spanish companies; improving e-Administration and adopt digital solutions for efficient provision of public services; reinforcing confidence in the digital environment; boosting the Research, Development & Innovation system in ICT; and promoting digital inclusion and literacy and the training of new ICT professionals. The agenda also includes a 'Plan for digital inclusion and employability' with some involvement of social partner organisations. The plan establishes a set of specific goals structured around four lines of action: (1) Accessibility; (2) Digital inclusion; (3) Equality; and (4) Employability. Focusing the attention in the last one, there are three goals related to employability: (a) Allocating resources to continuing training and acquisition of digital skills; (b) Reorienting ICT-related Vocational Training; and (c) Improving the offer of university training for ICT professionals. Whilst the Spanish social partners are not directly involved in the implementation of 'Agenda Digital por España', there is evidence of trade unions' initiatives in this area. For example, in April 2017 the largest Spanish union confederation, CCOO, launched proposals for a State Pact for the Digitalization of Spanish Society ('Pacto de Estado por la digitalización de la sociedad española')<sup>4</sup>. In response, the Spanish Ministry for Energy, Tourism and the Digital Agenda proposed in April 2017 to open a permanent dialogue table with the social partners and the Ministry of Employment on the issue of digital reform<sup>5</sup>. These developments signal that the topic of digitalisation of the economy is slowly making its way on the agenda of national tripartite social dialogue, although the debate appears to currently be focused in very general terms rather than on specific sectors.

A similar initiative is in place in Portugal, where Agenda Portugal Digital<sup>6</sup> was first launched by the national government in 2012 and then renewed in 2015. The programme foresees six areas of intervention to encourage the digitalisation of the Portuguese economy, which include improving access to broadband and the digital market; improving digital literacy, qualification and inclusion; investing in R&D and innovation in digital technologies; and favouring the use of ICT to combat fraud, tax avoidance and informal employment. More recently, in February 2017, the Portuguese government has launched another comprehensive programme, the 'Programa Interface', aimed at encouraging innovation and technological development in the Portuguese economy<sup>7</sup> through knowledge-transfer between universities and firms and support to investment in R&D. According to the available evidence, there is however no direct involvement of the social partners in the design or oversight of the implementation of Agenda Digital Portugal and of the Programa Interface.

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<sup>3</sup> <http://www.agendadigital.gob.es/agenda-digital/Paginas/agenda-digital.aspx>

<sup>4</sup> <http://ccoo.es//4560efb26f3fd186a4f662aae1d141cf000001.pdf>

<sup>5</sup> [http://ccoo.es/noticia:238245--CCOO\\_se\\_reune\\_con\\_el\\_ministro\\_de\\_Energia\\_Turismo\\_y\\_Agenda\\_Digital\\_para\\_tratar\\_el\\_futuro\\_de\\_la\\_digitalizacion\\_en\\_Espana](http://ccoo.es/noticia:238245--CCOO_se_reune_con_el_ministro_de_Energia_Turismo_y_Agenda_Digital_para_tratar_el_futuro_de_la_digitalizacion_en_Espana)

<sup>6</sup> <http://www.portugaldigital.pt/areas-de-intervencao/>.

<sup>7</sup> <http://www.programainterface.pt/pt>

Also in Italy we found a government-led initiative inspired to the promotion of a Digital Agenda. This is called 'Agenda Digitale Italia' and has been launched in 2012 with an explicit reference to the broader EU initiative<sup>8</sup>. Concretely, with this initiative the government promotes, mostly through financial support, interventions on seven areas: digital infrastructure as next generation broadband; public administration, especially measures on e-procurement; open data, focused on transparency and e-Government; digital skills and up-skilling programmes, in line with the EU Grand Coalition for Digital Jobs; smart cities and communities; internet governance; market innovations as the ones inspired to Cloud for Europe.

Finally, the promotion of a Digital Agenda is present in Greece as early as 2000, when the government launched the initiative 'Digital Local Authority' to promote digital services across the whole of Greece. It follows two other key interventions: 'The Greek Digital Strategy 2006-2013', and the 'National next generation broadband access plan 2014-2020'. Their overarching aim is the full development of digital infrastructure, both for the maximum utilization of private resources (both from within and from abroad) as well as for reasons not strictly related to returns of investments, that is to demonstrate the public support of areas and markets so far under-resourced and where the extension of next-broadband infrastructure would not arrive otherwise<sup>9</sup>. Despite these efforts, as noted in Europe's Digital Progress Report (EDPR) 2016, Greece has made very little steps forward in this regard. In fact, it remains at the bottom of EU countries - 26th out of the 28 in DESI index 2016 - and, although some improvements in the human capital dimension, the levels of digital skills possessed by citizens remain low. Moreover, the prospect of a Greek recovery is undermined by the severe emigration of those people with the right competence to make the most of digitalization, that is, highly-educated young individuals. However, further actions toward the digitalization of Greek economy have been taken, especially as regards public service and e-Government<sup>10</sup>.

Overall, we can see that a common trait of these initiatives is the combined emphasis on investment in digital infrastructures as well as on the development of digital skills to favour digital inclusion (an issue which will be explored in greater depth in the following section on service labour markets). The potential of digitalisation to increase transparency and traceability and thus decrease the incidence of the informal underground economy is also a common trend in Southern European countries, which may have positive side-effects from the perspective of industrial relations.

### 2.2.2 Policy initiatives: Automation and Industry 4.0

In various countries under analysis there has been recent public debate on the potential impact of automation arising from digitalisation on employment and on the structure of domestic markets (which is analysed in greater depth in chapter 4). So far, the main public policy initiatives relevant to the topic of automation are those connected to the development of so-called 'Industry 4.0' strategies. Governmental initiatives focused on favouring the development of Industry 4.0 and the digitalisation of

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<sup>8</sup> <http://www.agid.gov.it/agenda-digitale/agenda-digitale-italiana>

<sup>9</sup> <https://ec.europa.eu/digital-single-market/en/country-information-greece>

<sup>10</sup> On the 21st of September, 2017, after meeting the EU Commissioner for Digital Economy and Society, the Secretary General of Digital Policy, Stelios Ralis, stated that 'Today is a milestone for the public sector, as we take the first and essential step for its digitalization' (see <http://mindigital.gr>).

the industrial sector are in place in Spain (Industria Conectada 4.0, launched in 2015)<sup>11</sup>, Italy (Industria 4.0, launched in 2016) and Portugal (Estrategia para Industria 4.0, launched in January 2017)<sup>12</sup>. These initiatives are similar to each other as they are aimed at supporting the transition of the respective industrial sector towards the so-called 'fourth industrial revolution', based around the development of 'smart systems' for production and on an increased reliance on digital technology and automated systems. However, in all countries, the Industry 4.0 initiatives have been, unsurprisingly, overtly focused on manufacturing rather than on the service sector.

In Portugal, the strategy includes specific initiative to launch digitalisation projects in SMEs (Vale Industria 4.0). Besides, Fiequimetal, the metalworkers' federation of the largest confederation, CGTP-IN, has started organising a cycle of initiatives to discuss the impact of the Industry 4.0 strategy from the perspective of labour. Fiequimetal has lamented the lack of trade unions' involvement in the working groups dealing with the implementation of Industria 4.0 and the over-representation of large multinational firms in the working groups tasked with the implementation of the strategy.

Likewise, in Spain, the second largest confederal union UGT has taken initiatives to demand greater involvement in the development of the 'Industria 4.0' strategy, and has started organising initiatives to discuss the risks, challenges and opportunities associated with it in order to shape a 'just transition'<sup>13</sup>. In the context of public policy debates on pension reform and the sustainability of the Spanish social security system, UGT advanced in October 2016 a policy proposal to introduce taxation on robots in order to fund social security and address some of the risks associated with the employment impact of automation in production processes<sup>14</sup>.

In Italy, the government set up the plan called 'Piano Nazionale Industria 4.0 2017-2020' in September 2016. The move has been unilateral, but the National Steering Committee behind the plan includes several stakeholders and, among them, there are the three main union confederations (CGIL, CISL, UIL). Key targets of the plan are three - innovative investments, up-skilling, enabling infrastructures - and the 2017 Budget Law (232/2016) supported its fulfilment through four types of fiscal incentives (hyper-depreciation, super-depreciation, tax credit, supportive finance)<sup>15</sup>. On their side, unions reacted promoting their common vision of Industry 4.0 in March 2017 and then, separately, their own specific plan. For instance, CGIL launched the plan 'Piano Lavoro 4.0' (May 2017) and a platform 'Idea diffusa' (June 2017)<sup>16</sup>. The metal federation of CISL, FIM-CISL, instead conducted a research on the industrial relations implications of Industry 4.0, underlining the critical factors such as applied research networks, individualised training programs and apprenticeships, concluding with a list of proposals for unions willing to meet these challenges and become 'smart unions' (FIM-CISL 2015). Summing up the debate on Industry 4.0 after one year of its launch, a key criticism looks at the excessive emphasis put on technological upgrade, while limited attention is devoted to factors enabling such upgrade, such as HR

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<sup>11</sup> <http://www.industriaconectada40.gob.es/Paginas/index.aspx>

<sup>12</sup> <http://www.portugal.gov.pt/pt/ministerios/meco/noticias/20170130-mecon-industria-4.aspx>

<sup>13</sup> <http://www.ugt-fica.org/41-ultimas-noticias/1037-la-jornada-sobre-la-industria-4-0-organizada-por-ugt-fica-concluye-con-un-llamamiento-a-una-transicion-socialmente-justa>

<sup>14</sup> [https://economia.elpais.com/economia/2016/12/14/actualidad/1481742348\\_134557.html](https://economia.elpais.com/economia/2016/12/14/actualidad/1481742348_134557.html)

<sup>15</sup> [http://www.sviluppoeconomico.gov.it/images/stories/documenti/2017\\_01\\_16-Industria\\_40\\_English.pdf](http://www.sviluppoeconomico.gov.it/images/stories/documenti/2017_01_16-Industria_40_English.pdf)

<sup>16</sup> <http://www.cgil.it/idea-diffusa-mensile/>

and industrial relations institutions (Prodi et al. 2016). This led social partners to call for the creation of 'competence centres', that is excellent training centres fit to the learning demands arising from innovative machineries.

Greece is catching up with these debates about Industry 4.0. Some promising initiatives reveal connections and partnership between university and companies, as the ones by the Laboratory for Manufacturing Systems and Automation (LMS) of University of Patras ([www.lms.mech.upatras.gr](http://www.lms.mech.upatras.gr)). On one side, the focus is on how to apply tools, algorithms and platforms for supporting Greek companies, especially in Consumer Good, Robotics and Mold-making sectors. On the other, this approach acknowledges the fact that a fully-fledged digitalisation requires also general reforms of the education system, because Industry 4.0 goes hand in hand with Education 4.0. The impression drawn from a review of the few existing documents on the subject is of a relatively softened and understated discourse about the potential of digitalisation for what it promises in terms of economic and social development. In this regards, the Greek government seems still to be prioritizing how to tackle deep social issues such as high unemployment and poverty.

Overall, in the three countries (Spain, Portugal, Italy) where the government adopted a specific strategy about Industry 4.0, this has been mainly done unilaterally or in partnership with private sector firms and employers' organisations. The involvement of trade unions has instead been rather limited, causing some discontent, especially where unions - as it occurred in Italy - have put aside their ideological differences to support a shared position. Specific policy or social partners' initiatives focused on the impact of automation on the service sector remain so far absent in the Southern European context.

### 2.3 *Emergence of new actors in service markets: the rise of the platform economy*

The increased availability of internet technology and connectivity has led over the last ten years to the emergence of another major disruptive trend in service markets, i.e. the emergence of new players – often grouped under the general heading of 'platforms' – which have developed new models of service delivery in sectors as diverse as transport, logistics or business services. Under the heading of the 'platform economy' lies a heterogeneous multitude of different service activities with different configurations of relationships between users, businesses and service providers (e.g. P2P, P2B, B2C, B2B). Scholars in the field have thus far generated several typologies in order to differentiate among them (for a recent review see Kilhoffer et al, 2017). That said, the first and most effective differentiation is that between 'crowdwork' and 'gig work' (De Stefano, 2016; Schmidt, 2017). Crowdwork refers to work arrangements where job tasks are carried out solely online, through platforms that connect an indefinite number of organisations and workers through the internet; whilst gig work refers to location-specific traditional work activities (e.g. transport, cleaning, delivery) that are channelled through platform-managed apps which intervene in setting quality standards and in the selection and management of the workforce. A related trend is the emergence of commercial platforms that use digital technology and act as intermediaries to put users exchanging goods and services in touch with each other. These exchanges are monetised but based on a peer-to-peer exchange relationship rather than a traditional provider-consumer relationship. It is clear that the potential impacts of the emergence of different kinds of platforms on established service markets are considerable. Many of these platforms act as direct competitors to established service providers operating through a traditional model, and they are usually able to offer cheaper services by relying on highly atypical employment arrangements or considerably reducing the costs of service provision by getting users or crowdworkers to use their own assets (i.e. bike, cars, apartments, tools) to provide services.

Unfortunately, there are no conclusive data on neither the size of the 'platform economy' in Southern European countries or on its impact on the profitability of established service activities. According to a

recent study on the collaborative economy in Spain conducted by EY Foundation, the economic impact of activities associated with so-called ‘sharing’ platforms in Spain is estimated at around between 1 and 1.4% of GDP, and is expected to rise to 2 to 2.9% by 2025. Micro-tasking services are identified as those with the greatest growth potential (EY Foundation, 2017, cited in Govup, 2017, p. 3). Many of the major players operating in the platform economy in Spain are organised in the association SharingEspaña, promoted by Adigital (Asociación Española de la Economía Digital), and their publications provide evidence of the large and diversified number of platforms operating in this sector in Spain (cf. Adigital/SharingEspaña, 2017). It is interesting to note that these firms describe themselves as part of the so-called ‘sharing economy’, even though the vast majority are actually large commercial platforms such as Airbnb and Uber operating on a for-profit basis. The available evidence on the size of the platform economy in Italy and Portugal is also only anecdotal, but the progressive expansion of the operations of large platforms – such as in transport (e.g. Cabify, Uber, Lyft) or in accommodation (Airbnb above all) – has provoked various debates in public policy about the appropriate model of regulation.

Policy debates in Southern European countries surrounding the entry of new ‘digital’ players (i.e. platforms) in service markets have been mainly focused on defining appropriate regulatory models for the operation of these platforms, arising from concerns around the issue of unfair competition for established service providers and the threat of social dumping. Indeed, the rise of the platform economy represents a considerable disruption for the established framework of industrial relations across all countries. As Kilhoffer et al. (2017) point out, the operating model of platforms disrupts or conceals the traditional employee-employer relationship and makes existing models of collective representation and bargaining difficult to apply. The risk of undercutting of working conditions, unfair competition and social dumping arising from the operation of these platforms in established markets are also well documented, and have entered national debates in all the four countries under consideration, as we will see below.

In all Southern Europe, the public policy debate has centred around the appropriate model of regulation of transport platforms such as Uber and Cabify, or of ridesharing platforms such as Blablacar, and the alleged risks of unfair competition these imply for established operators in the transport sector, especially the private hire vehicles sector in the case of the first and the bus transport sector in the second. Specifically, in Spain, in response to pressures by associations of taxi drivers, the government has adopted a fairly restrictive regulatory stance so far, introducing rules in 2015 (Real Decreto Ley 1057/2015) which regulated the private hire vehicles market limiting the operation of platforms such as Uber and Cabify by restricting the number of licenses and limiting their territorial portability.<sup>17</sup> This law was appealed against in the Supreme Court by the National Commission for Markets and Competence (CNMC), a regulatory body which has been at the forefront of the push for greater liberalisation of the service market in the transport sector. However, in September 2017 the Spanish government has restated its intention of regulating the private hire vehicles sector to protect the taxi sector and limit speculation on PHV licenses through platforms like Uber and Cabify.<sup>18</sup>

Similar issues have arisen in Portugal and Italy. In Portugal, Uber started operating in 2014 and was subsequently subject to a ban by the Court of Lisbon in April 2015 after one of the main taxi drivers’

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<sup>17</sup> <http://www.elmundo.es/economia/empresas/2017/07/11/5964b5c8ca4741851b8b45d1.html>

<sup>18</sup> [https://economia.elpais.com/economia/2017/09/01/actualidad/1504285143\\_430467.html](https://economia.elpais.com/economia/2017/09/01/actualidad/1504285143_430467.html)

associations, Antral, presented a claim of unfair competition against the platform. Also in Italy Uber has been banned in 2015, though it partly turned legal again in 2017, providing that drivers are listed in an apposite record, as done by the service Uber Black<sup>19</sup>. In both cases, the issue is not fully settled and the governments are called to approve a specific law on the matter. In the meantime, protests from taxi drivers against Uber's continued - though partial - operation in the countries have continued, and the issue remains insofar unresolved.

Overall, these protests and conflicts around the regulation of operations of new players in established service markets are indicative of some of the tensions that developments associated with digitalisation in the service sector can bring about.

#### 2.4 *Cross-border trading of services and e-commerce*

The increased availability of digital technology for the management of supply chains has led to two distinct but related developments in the service sector, namely growth of cross-border trading of services and of e-commerce and online sales. As for the former, the most relevant issue consists of the EU proposal of the introduction of an e-card for services (link). This proposal has been advanced by the European Commission in January 2017 and would affect mostly sectors as construction, insurance, cleaning, and engineering. Trade unions in Southern Europe have not reacted so promptly to it and, despite few sporadic interventions by union functionaries on the social media, their official position is not fully clear yet. Apart from this, there are many other policy areas affecting how services are traded among countries, beginning with competition law and rules about contracting out.

As regards e-commerce and online sales, the available evidence proves that the increased availability of ICT technology and internet connectivity is shaping practices in the established tradable service sector in Southern European economies especially for what concerns increased digital access to clients, leading towards a greater incidence of e-commerce and online sales. For instance, in the Spanish case, survey data from the National Statistical Institute (INE 2017)<sup>20</sup> show that, in 2016/17, 24,5% of Spanish service sector businesses with more than 10 employees made sales through e-commerce, against an average of 20% for the overall economy. However, this figure is reduced to only 4.45% for firms with less than 10 employees. The incidence of e-commerce seems nonetheless to be growing amongst SMEs as well: a recent Spanish study by business consultancy SAGE, based on a survey of 1,800 Spanish SMEs, found that the volume on online retail sales made by SMEs increased by 29.2% between 2015 and 2016 (SAGE, 2016), and that 8% of SMEs had realised sales online in 2016. It is clear however that the potential for growth in this area has not fully realised its potential yet. The impact of digitalisation in this respect appears however to be differentiated according to firm size, and to be less advanced in SMEs, which make up the overwhelming majority of service sector firms in the countries under question.

The implications for industrial relations arising from the growth of e-commerce and online sales are not clear-cut. On one hand, given the low incidence of unionisation in SMEs, the emergence of larger semi-monopolistic players in the e-commerce sector may provide new opportunities for trade union intervention and unionisation in the sector. However, this trend may also be associated with challenges.

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<sup>19</sup> <http://www.ilsole24ore.com/art/notizie/2017-04-14/uber-non-sara-piu-illegale-lunedì-tribunale-sospende-stop-151412.shtml?uuid=AEor4a5>

<sup>20</sup> [http://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica\\_C&cid=1254736176743&menu=ultiDatos&idp=1254735576799](http://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176743&menu=ultiDatos&idp=1254735576799)

The growth of online sales and e-commerce could lead over time to a decline in face-to-face retail employment, thus raising issues associated with downsizing of the retail workforce. It may also increase the importance on services associated with online sales, such as logistics and just-in-time delivery, leading to the possible fragmentation of supply and delivery chains and increasing trends of outsourcing and automation which could pose challenges for unionisation and collective bargaining in the sector; as well as leading to an intensification of working conditions for workers in the sector.

## 2.5 Conclusion

The digital transformation is seen as the biggest challenge for the competitiveness of the European economy in the medium and long run. In Southern European countries, this is fostering debates around the impact of digitalisation and associated technological developments on service markets, mainly focused on two broad issues: Firstly, on the impact of the increased availability of ICT technology on the potential for innovation, market expansion and labour replacement in the service sector, and on the structural challenges arising from this. Secondly, on the impacts arising from the emergence of new players in the service market – especially platforms operating in the ‘on demand’ economy - on the structure and strategies of the established, ‘traditional’ service market.

The impact of digitalisation on service markets in Southern Europe has to be contextualised against a number of structural factors which set this cluster of countries apart from its North European or Anglo-Saxon counterparts. The high predominance of SMEs and the deep regional discrepancies in the level of development of digital infrastructure (e.g. with regard to access to broadband) means that the uptake of digital technologies amongst service sector firms and the incidence of innovation associated with digitalisation has so far been uneven, deeply differentiated between branches of the service sector and between large firms and SMEs and, on average, comparatively less advanced than in other clusters of European countries. It is therefore not surprising that a key focus of government policy initiatives, such as the various ‘Digital Agendas’ launched across all four countries, has been on favouring the uptake of ICT technology by firms and addressing some of the structural challenges that may limit the innovation potential associated with digitalisation.

Despite these structural distinctive factors, there is evidence to suggest that many of the same macro-trends affecting service markets in Europe as a whole are relevant in the Southern European context as well. As we have seen, there are different aspects of the broad ‘digitalisation’ trend that may have an impact on the established service markets in Southern Europe.

The available evidence regarding the potential impact of automation and availability of labour-replacing technologies on South European service markets is not conclusive, but suggests that the labour-replacing effects arising from technological developments in various branches of the service sector could be considerable, especially for low-skilled workers in low-pay sectors. Public policy initiatives focused on managing the transition towards more automated production systems are present in all four countries (usually under the Industry 4.0 heading), but they have been so far disproportionately focused on the manufacturing sector, whilst limited attention has been paid to managing the technological transition in the service sector. There is however evidence of some new cross-sectoral policy initiatives aimed at tackling the digital divide from a skills perspective, promoting training and re-qualification to increase digital employability.

The increasing presence of new digital players such as platforms has started to disrupt established service markets and led to heated national policy debates around the appropriate models of regulation, in order to ensure fair competition and avoid undercutting and social dumping vis-à-vis established service providers. However, the policy dilemmas around regulatory models are in most cases yet to be

resolved. The industrial relations implications arising from the increased incidence of cross-border trading in services and e-commerce are yet not clear, even in relation to controversial proposal by the EU such as the creation of a European e-Card for Services.

Finally, across the board, we note that, bar a few notable exceptions in the Italian and Spanish cases, the involvement of trade unions in national policy initiatives around the issues of digitalisation and automation in service markets and in the economy as a whole has so far remained limited. This is despite the common attempts on part of trade unions to influence the public debate through policy proposals and initiatives, in various cases formulated jointly by different union confederations. Social dialogue across all four countries have come under considerable strain during the crisis and post-crisis period (cf. Guardiancich and Molina, 2017), as governments have often deliberately attempted to reduce the influence of unions over the policy process. The development of structured tripartite social dialogue channels to manage the process of digitalisation and its multiform impacts in a negotiated manner is therefore still limited and hampered by political difficulties. Finding appropriate mechanisms to exercise voice in the public policy debate remains a common challenge to be addressed for industrial relation actors across all four countries.

### **3 Digitalisation and labour markets in services: main issues, challenges and responses**

#### *3.1 Automation and polarisation of services employment*

In various countries under analysis there has been recent public debate on the potential impact of automation arising from digitalisation on employment and on the structure of domestic labour markets, following the publication of research on this issue estimating the potential for automation and computerisation of jobs. The evidence is still tentative and varies considerably depending on the approach adopted in the studies. For sure, the long-term trends towards greater automation of job tasks have a potentially strong impact on various branches of the service sector. Besides, in light of the above-mentioned digital infrastructural divide present in Southern Europe, the ETUI noted that the lower a country position in broadband infrastructure development, workers' e-skills, use of internet and digital public services, the more its jobs will be threatened by digitalisation (Degryse 2016: 24-5).

A 2017 report by McKinsey Global Company highlights the potential impacts of automation on jobs across the world by analysing occupations on the basis of their constituent activities and the susceptibility of individual activities to automation. The McKinsey report (2017, p. 5) highlights how, on average, at least 60% of jobs in the economy have at least 30% of activities within them that are susceptible to automation. The activities identified as most susceptible to automation are data compiling, data processing and predictable physical activities; whilst management and interpersonal relationship activities are the least susceptible. McKinsey analysis (2017) estimates that Spain and Greece's automation potential (defined as the percentage of working time spent on potentially automatable activities) is 48% (equivalent to 8.7 million employees in Spain and to 2.1 million employees in Greece); this figure increases to 50% (11.8 million employees equivalent) for Italy. Data for Portugal is not available from the McKinsey study. According to McKinsey (2017), the branches of the service sector where automation could have the biggest impact in terms of substituting employment are the retail sector, where 50% of work activities in Spain and Italy and 48% in Greece have the potential to be automated (equivalent to 1.1 million FTE employees in Spain, 764.800 in Italy and 289.200 in Greece); accommodation and food services, where the percentage of automatable activities increases to 62% in Spain and Italy and to 58% in Greece (equivalent to 861.500, 764.800 and 210.900 FTE employees respectively); and health care and social assistance, where 39% of work activities in Spain and Italy and 37% in Greece can potentially be automated (equivalent to 553.800, 583.300 and 92.900

FTE employees respectively). As an example, according to the largest union in the Italian retail sector (FILCAMS-CGIL), the automation is behind the job loss in supermarkets, where cashiers have been passing from 30% to 20% of total employment.

A 2016 OECD study by Arntz et al. (2016) uses instead a different methodology to estimate potential impacts of automation on employment, based on analysis of the risk of automatibility of different job tasks (which are derived from individual-level data from the OECD Survey of Adult Skills - PIAAC 2012). This study shows less dramatic results than the McKinsey one, with a lower share of workers being identified as being at high risk of automation (i.e. workers whose automatibility based on their job tasks is at least 70%). According to these results, 12% of jobs in the Spanish economy are potentially at risk of automation – putting Spain at the 3rd place in terms of exposure to the risks of automation amongst OECD countries; whilst this percentage decreases to 10% for Italy. The study highlights, in general, how the potential negative labour-saving effect of automation on employment levels may actually be compensated by positive macro-economic effects, such as productivity increases, arising from the efficiency effects of the use of technology. Arntz et al. (2016, p. 24) point out that as long as the use of technology is associated with increased productivity, this should lead to increased wages and income for workers, thus causing an increase in demand for new products and services which would in turn result in a boost in labour demand. The study, however, also points out that whilst employment effects may not be as negative as expected, it is mostly low skilled and low-income individuals who face the highest risk of being automatable.

Another major trend associated with the spreading of ICT technology is that of employment polarisation in labour markets. Employment polarisation refers to the progressive loss of jobs in sectors with average wages or mid-skill levels, coupled with the simultaneous growth of jobs at the extreme ends of the labour market, low-paid and low-skilled on one hand, and highly-paid, highly skilled jobs on the other (Eurofound 2013; Cirillo 2016). This process has several drivers, but technological change and digitalisation are often identified as some of the most significant ones. Indeed, as the evidence reviewed above has shown, the increased availability of ICT and automation technologies reduces demand for workers carrying out routine tasks that can be easily mechanised or computerised (so-called 'routine-biased technological change'; cf. Goos et al 2009; Acemoglu and Autor, 2011). These tend to be over-represented in the average wage band (La Caixa Research 2015) and in the low to mid-skills category (Cirillo 2016). According to analysis by Cirillo (2016), which focuses on an analysis of changes in the European occupational structure according to skills, the polarisation trend affecting European labour markets is especially driven by developments in the service industries, whilst manufacturing has mainly experienced a process of skills upgrading over the last 15 years. Unlike in manufacturing where low skilled jobs are progressively automated in the process of technological change, in the service sector the growth in highly knowledge-intensive skilled jobs arising from digitalisation is accompanied both by the destruction of mid-skilled routine-jobs (e.g. banking jobs), but also by ongoing growth in less knowledge-intensive but non-routine jobs which mainly require interpersonal skills (e.g. hospitality and care) and that cannot be automated. This contributes to an overall polarisation and 'hollowing out' of the employment structure (ibid., p. 12).

Recent research evidence shows that employment polarisation has affected the four Southern European countries to different extents over the last 20 years (cf. Eurofound 2013 for a comparative analysis; Anghel et al 2014 for Spain; Fonseca et al 2015 for Portugal; Cirillo 2016 for Italy). In some countries, this trend became significantly more marked during the recession years (post 2007). For example, Eurofound (2013, p. 12, 30) found evidence of strong employment polarisation (by wage quintiles) in Spain and Greece in the period between 2007 and 2013. This must however be considered in the context of high

overall levels of employment destruction during the Great Recession, and cannot therefore be solely attributed to digitalisation. Spain continued to experience strong polarisation in the 2011-2015 period (Eurofound 2016, p. 13), whilst Greece experienced relatively greater growth at the bottom of the wage distribution. The polarisation trend during the crisis was less marked in Italy and Portugal. Over the crisis period, Italy experienced what Eurofound (2013, 2016) describes as a unique process of downgrading of the employment structure (with job destruction concentrated at the top of the employment structure in 2007-2012, and job creation at the bottom in the 2011-2015 period). Portugal, on the other hand, exhibited a less clear pattern of employment change in 2007-2012 (Eurofound 2013, p. 30), and some evidence of upgrading in the 2011-2015 period (Eurofound 2016, p. 13).

Whilst most job losses during the crisis were concentrated in manufacturing and construction, private knowledge-intensive services experienced a less pronounced decline than other sectors, thus accounting for the majority of employment growth in the high-paid segment of the labour market in the EU as a whole (Eurofound 2013, p. 14; p. 37). Even in Greece, where since the crisis the labour market has been particularly weak, some high-skilled professions have benefited from the opportunities offered by digitalisation to improve their services, as occurred to doctors thanks to the e-Prescription project (EDPR Greece 2016, p. 4). Less knowledge-intensive services suffered instead marginal declines, contributing to the polarisation trend (Eurofound 2013, p. 35). For example, Spain suffered a very significant wave of job destruction during the crisis in the mid-pay, less knowledge-intensive segment of the service sector, which had instead grown significantly before the recession. The significant fall in low- to mid-paid jobs in services was largely attributable to the retail and wholesale sectors, and especially concentrated in occupations with high routine content (Anghel et al. 2014). In this service subsector, however, there were also many non-routine jobs which had expanded massively in numbers in the pre-recession years, and that were not destroyed during the crisis. These jobs tend to occupy the very bottom of the wage distribution – thus contributing to employment polarisation (Eurofound 2013, p. 35). Still for the case of Spain, more recent evidence (La Caixa Research 2015) shows that even in the recovery (post 2014), economic sectors with a lower average wage continue to contribute relatively more to creating jobs in comparison to other sectors, thus aggravating the polarisation trends. Growth in non-routine service sector jobs, especially in tourism and hospitality, is the main driver for this trend (Anghel et al, 2014), which is expected to continue in the future according to Cedefop's skills forecast (Cedefop, 2015).

Recent trends in collective bargaining in Southern Europe also raise questions about the ability of existing bargaining structures to govern effectively the transformation of services labour markets brought about by digitalisation and to deal with the effects of polarisation by preventing divergence in standards and working conditions. In countries such as Spain, Portugal and above all Greece, structural labour market reforms implemented during the crisis have pursued the decentralisation of collective bargaining at the company level and reduced collective bargaining coverage (Eurofound 2013). This challenges the capacity of trade unions to act through the channels of collective sectoral agreements to ensure uniformity in conditions across different segments of the service sector, as increasing number of workplaces fall outside of their remit.

In Italy there are contradicting trends in this respect. On one hand, the existing national services sector CBA already covers 73% of high skilled ICT workers (TradeLab 2013, p. 24), while other CBA as the one for workers in professional offices have been partly extended to include precarious forms of contracts such as 'legal assistants' and 'law interns'. This has been possible also thanks to unions which have become interested in these categories of workers in the last few years - especially CGIL with campaigns such as 'Con il contratto' ('With the contract'). On the other hand, some more subtle transformations

have been taking place within this framework, such as the growth in firm-level bargaining. Company level agreements are increasingly providing integrative welfare measures, an opportunity which is being encouraged by the government through fiscal incentives (Mallone 2015: 63). As a result, despite formally even, the landscape emerging from the re-articulation of collective bargaining is one of growing inequality between 'high performing' sub-segments of the service sector, where these integrative agreements have mushroomed, and low-value added segments, where the sectoral agreement remain the only, increasingly lighter, point of reference.

Furthermore, as the development of adequate new responses remains in its infancy, the process of digitalisation in relation to automation and labour replacement is likely to follow existing industrial relations practices, in some cases stretched to cover new phenomena. This is, for instance, the case of 'work-reduction scheme' in Italy, also known as Cassa Integrazione Guadagni. This widely used wage protection mechanism for temporary reduction of working hours helps companies to undertake organisational restructuring, technological improvements, and re-skilling, and needs to be negotiated with the union at the company level. There are three versions of this 'work-reduction scheme': the 'ordinary' version was traditionally available only for large companies in manufacturing and construction; the 'special' version for large companies in commerce and transport; finally, as a post-2008 crisis measure, an 'exceptional' version ('CIG in deroga') was introduced to cover any sector, without restriction but upon authorization by the Secretary of Labour. In 2015, the labour market reform known as "Jobs Act" reformed these work-reduction schemes, tightening the criteria (funding; duration) for the ordinary/extraordinary forms; phasing the 'exceptional' version out, with effects coming in place in 2018; and reducing the role of social partners in the management of these schemes. Given these recent changes, it remains still partly unclear how in the near future company crises, including cases of restructuring due to automation with the risks of massive layoffs, will be dealt with.

In order to respond to the potential disruptive effect of recent policy changes, the three major Italian trade union confederations (CGIL, CISL and UIL) and the employers' confederation Confindustria have presented joint proposals to the government in September 2016 asking for exceptional funding in order to manage cases of complex industrial restructuring, proposing a set of measures that combine active labour market policy measures (i.e. the re-placement and re-training of displaced workers) with a re-strengthening of traditional income support measures, coupled with a continued central role of collective bargaining in setting up and managing plans for the management of restructuring. This shows a preference on part of the social partners on defending the established system of income protection through reduction of working hours, which is considered necessary to manage restructuring processes as the system of active labour market policies remains still severely underdeveloped. Again, this debate remains however overtly focused on the manufacturing sector, whilst instruments to deal with cases of complex restructuring in services remain so far underdeveloped.

There are however also examples of unions starting to take action to combat employment polarisation in the service sector through a focus on up-skilling and vocational training and on employment quality. These initiatives are reviewed in the next two sections.

### 3.2 *Skills shortages, skills utilisation and vocational training*

As a consequence of digitalisation, digital technologies are being introduced into a growing number of workplaces in the service industry. For instance, almost 60% of employees in the banking sector report the introduction of new technologies into their workplaces during the 2011-2014 period (Eurofound 2014). Employees require specific competences to become proficient operators of digital technology (EESC, 2015). Furthermore, the evidence discussed above on employment polarisation suggest that digital skills and high levels of human capital are increasingly important to access emerging job

opportunities at the higher end of the service labour market, where demand for ICT professionals is growing considerably (Berger and Frey 2016, pp. 25-26). However, official data from the European Commission Digital Skills Indicator points to major bottlenecks in the area of digital skills formation in Southern Europe (European Commission 2017).

All four Southern European countries are generally characterised by an above average incidence of low-skilledness amongst adults (Cedefop, 2017). In Spain, it is estimated that around 21% of the population has no digital skills; this proportion grows to over 30% for Portugal, Greece and Italy (with Italy ranking 3rd behind Bulgaria and Romania in the EU28 for the highest level of adult population with no digital skills) (European Commission 2017). In many countries (e.g. Spain) there is a paradoxical coexistence of an increasing volume of job vacancies in the field of ICT without effective coverage, and the high volume of unemployment (Eurofound 2016, p. 33). The emergence of 'digital skills gaps' is also confirmed in the case of Portugal by the recent European Digital Skills Survey (European Commission, 2017), according to which 54% of companies with more than 250 employees report digital skills gaps in the workforce (ibid., p. 177). Along with wasting opportunities for job creation, this "skills mismatch" may hamper the development of the digital economy and thus harm competitiveness if left unresolved (EESC, 2015). This means that curricula in vocational education and training need to be updated accordingly and related training measures implemented.

The problems associated with skills mismatch and incidence of low-skills in Southern European economies arise from long-standing structural weaknesses in the system of Vocational Education and Training (VET); and are compounded by a problem of skills obsolescence that mainly affects the workforce over 50 and which arises from low incidence of life-long learning and on-the-job training. Indeed, recent research by Cedefop on low skilled adults (2017, pp. 16-17) shows how Italy, Spain and Greece all belong to a cluster of countries that adopt a primarily regulatory policy approach towards the issue of low skills, with high levels of employment regulation aimed at preventing employment destruction for vulnerable workers, coupled with low levels of investment in education and training and lower than average rates of adult participation in lifelong learning. According to Cedefop (2017), Portugal is instead characterised by a remedial policy approach, with high levels of EPL but also higher investment in ALMPs, training and direct job creation to deal with the issue of low-skilled adults.

Despite some differences between them, addressing the issues of low-skills – and lack of digital skills in particular – is a central challenge for all Southern European economies, requiring structural interventions in the VET and ALMP systems. It is thus not surprising that many initiatives by governments and social partners in recent years have been concentrated on reforming skills formation system and on addressing the digital skills divide and skills obsolescence arising from digitalisation. The extent to which this is being done through tripartite channels, fully including unions in the process, is however varied.

### 3.2.1 Initiatives led by governments

In Spain, a far-reaching reform of the vocational training system for employment at the workplace was undertaken in 2015 (Law 30/2015). The reform introduced changes in the social partners' responsibilities for the management of the system of vocational training for employment, reducing them considerably. Under the previous system, social partner organisations used to be tasked with the direct management of training programmes and funds. Under the new system, instead, they are only involved in multi-year strategic planning of training initiatives and forecasting of skills needs in the economy by state authorities, whilst the role of private training providers in direct provision has been strengthened. With regard to the improvement of professional skills and employability of workers, and

to increase the productivity and competitiveness of enterprises, the law establishes the goal of expanding the benefits of information and communications technologies to workers, promoting a reduction of the digital divide and ensuring accessibility of ICT technologies (Eurofound 2016, pp. 17-18). The law also foresees the creation of joint sectoral structures, established through collective bargaining, to address sectoral training needs of the workforce. Due to the reduction of the role of social partners in VET provision, this reform has however been strongly criticised by the main social partner organisations, and was eventually implemented by the government unilaterally following a breakdown in social dialogue in 2015. The confederal union CCOO has strongly criticised the impact that the new law has had, arguing that the new model of provision has led to a decrease in the number of workers who can access workplace training. The Spanish case shows that addressing the reform of VET systems and finding the right balance in roles and responsibilities between the state and the social partners can be a delicate and politically difficult process, and thus represent a key challenge for unions in Southern European countries whose VET systems are in need of reform.

A wide-ranging reform of the system of professional training has also been included by the current Portuguese government in its 2016 National Reform Programme, which has the improvement of the levels of qualifications of the Portuguese adult population as one of its main pillars. The union confederation UGT has expressed a positive opinion of the government plans in this area, whilst CGTP-IN has maintained a more critical stance, emphasising how interventions on strengthening qualification levels must be accompanied by interventions aimed at improving employment quality and reducing precariousness. The government has followed up on this commitment by launching in 2017 a new government-run adult training programme, the so-called QUALIFICA Programme, which includes in its objectives guaranteeing that 50% of the active population has concluded secondary education, and achieving a rate of participation of adults in life-long learning of 25% by 2025. Whilst this initiative has a cross-sectoral focus, some sectoral trade union federations, including in the service sector, are involved in promoting and co-delivering some of the vocational training programmes as part of QUALIFICA.

In Italy the VET system has also been profoundly reformed in the recent years, given that its chronic weaknesses and scarce popularity have been considered a factors driving youth unemployment to a soaring level and determining skills mismatches in the Italian labour market. Reforms focused on two key instruments such as apprenticeship-type schemes and internships. The legal framework, set up by labour market reforms in 1997 and 2003, distinguishes between three types of apprenticeships: one for the integration between high school education and first on-the-job training; another for vocational 'professional' training; and the last one for the attainment of higher education certification, up to a doctoral degree, after conducting research within companies. Competences related to apprenticeship were set partly at the national level and partly at the regional level. This mixed attribution resulted into a governance whose complexity, according to key observers, discouraged the use of this instrument. In 2011, a reform of apprenticeship was implemented following a tripartite agreement, with the objective of clarifying the issue by assigning to collective bargaining agreements at industry level a definitive role, especially as regards the definition of training plans and wage levels for apprentices. Beyond this, the 2011 reform confirmed the fiscal incentives tied to the recourse of apprenticeship, by exempting employers from paying the full social security contributions for apprentices. Further modifications were introduced in 2012 and 2014 with the aim of limiting the abuse of these convenient apprenticeship contracts by employers. Overall, despite the attempts to make apprenticeships a more widespread tool for skills development, most recent data proves that the 2011 reforms failed its main goal, since the number of apprentices in Italy keeps declining, especially of the two forms strictly related to education certification (ISFOL 2015).

An instrument which has instead been growing in the Italian context are internships, another VET-related instrument which is however much less regulated and structured than apprenticeships. In 2012, a reform of internship was approved, with the aim to prevent its abuses. It clarified the types - for high school students (unpaid); for university students (generally unpaid, sometimes with reimbursement of travel and food costs); for everyone (paid, according to parameters set at the regional level, at least 300-400€ monthly) - and the criteria each type of interns must meet. Unlike in apprenticeship, social partners are not involved in the management of internships, since these are set up through an agreement signed at the company level between the employer/sponsor and the interns. Besides, interns are not subject to an employment contract, and thus prone to substantial abuses. As a matter of fact, data shows that internships, in all their forms, are massively growing, also thanks to the incentives provided by EU's Youth Guarantee scheme. The diffusion of internship meets harsh criticisms by unions, which contest the abuses and complain about the lack of involvement in the regulation of the instrument, and is one of the main targets of students' protests, lastly in October 2017.

In Greece, VET has traditionally played a marginal role. Greek society and students favour general education and university study and see VET programmes as a last resort option, even when the aftermath of the crisis left the country with skyrocketing unemployment, at almost 30%, and data showed that VET qualifications improved the chances to find a job (Cedefop 2015). The image of VET as attracting low-achievers is still vivid and proved by the fact that the enrolment to vocational schools - those for electricians, plumbers, car mechanics, computer technicians and hairdressers - dropped by a third from 2002 to 2012. If this is the norm, the Greek government also promoted an exceptional project, focused on women and the improvement of their ICT skills for the employability and entrepreneurship. The project, called ieWomen, started in 2016 thanks to five partners, four of them Greek (the government agency for gender equality, the national research centre, the ICT employers' association and a non-profit organisation) and one set in Norway (The European Centre for Women and Technology) . According to the Europe's Digital Progress Report, the project aims to improve: (a) the design and preparation of training packages that meet current trends and needs; (b) the organisation of webinars for upgrading the skills of women and to encourage the use of the internet and social networks in particular in terms of employability and entrepreneurship; (c) the development of standards and the establishment of a research and innovation centre for women (EC 2017: 6).

### 3.2.2 Initiatives led by social partners

Social dialogue around training-related issues is showing timid signs of renewal, after experiencing significant difficulties during the years of the crisis (cf. Molina and Miguelez, 2016; Guardiancich and Molina 2017). In Spain, various tripartite dialogue tables between the government, the major trade union confederations and employers' organisations on the topic of employment creation, employment quality and vocational training have been started in 2016. Training and lifelong learning have been one of the topics at the centre of the social dialogue agenda. For example, in 2017, UGT has promoted proposals to develop an Emergency Plan for the Employment of over-50s ('Plan de Choque por el Empleo para los mayores de 50 años'), who are particularly at risk from long-term unemployment arising from skills obsolescence. The proposals included measures to improve the training and requalification offer available to unemployed individuals over 50 as part of the ALMP government programme 'Prepara'. Following discussions at the social dialogue table on emergency plan for employment ('Mesa de Diálogo Social del Plan de Choque para el Empleo'), the government agreed in July 2017 to incorporate these measures in their new employment strategy. Moreover, in parallel with the government's 'Plan for digital inclusion and employability', in Spain we find positive examples of union initiatives in the area of skill development. The confederal union UGT, for instance, has launched

in 2015 a comprehensive set of policy proposals aimed at addressing the digital divide in Spain (so-called 'Brecha digital'), focused both on the development of ICT-related skills and on promoting access to the internet. UGT's initiative included both a major study on the issue and proposals for a National Plan of Technological Inclusion. There are also various successful examples of bipartite initiatives at the regional level to encourage training for ICT skills to close the supply/demand gap in digital skills, such as the Basque Vocational Training plan (cf. Eurofound 2016, p. 29).

In Portugal there are various initiatives – both government-led and run by the social partners – focused on encouraging investment in human capital. However, they mainly seem to be run by employers' confederations rather than trade unions. A Coalition for Digital Employability was established in 2015 with the aim of setting up a Strategy and Action Plan for Digital Employability to fill ICT skills gaps in Portugal. Whilst the employers' confederation of services and trade (CCP) is centrally involved in this initiative, it is however not clear whether trade unions are actively involved. As part of the programme of structural investment and economic development 'Portugal 2020', funded by the European Social Fund and by the European Fund for Regional Development, a training initiative aimed at strengthening training provision in SMEs in the tourism sector (Melhor Turismo 2020) is being funded, led by the Confederation of Portuguese Tourism (CPT). Again, it is however not clear the extent to which trade unions in the sector are involved in this initiative. Portuguese and Spanish employers' confederations and vocational training agencies of the commerce sector are also involved in a Europe-wide project, ALL-ECOM, which is a sector skills alliance to set European standards for qualifications and skills in the e-commerce sector.

In Italy, social partners have promoted the creation of so-called 'bilateral agencies' at the sectoral level. These bilateral agencies are organisms run cooperatively by unions and employers' associations, according to rules set by collective agreements and financed through small fees on wages. Their mission is not limited to the provision of training activities, but also includes the coordination of safety delegates and the monitoring of labour market fluctuations. In fact, bilateral agencies integrate public welfare schemes with additional forms of sick leave, unemployment benefits, health and retirement plans or scholarships (Tomassetti and Tiraboschi 2012). Such joint initiatives are far from new in fragmented sectors like construction and craftsmanship, but have also had a long tradition in the hotel and commerce sectors (Leonardi 2005). All the main trade unions federations take part in the bilateral system. CISL is one of the main promoters, whilst one of the other three main commerce sector confederations, Filcams-Cgil, met it with caution, highlighting a twofold risk: the removal of incentives to recruit members, given that 'bilateral agencies' are funded by an automatic deduction on wages; and the risk of further retrenchment of public universal welfare, given that these agencies plan to provide private and sector-based benefits. Another instrument present in Italy and similar to bilateral agencies consists of 'professional funds', made of a small fraction of the social contributions due to company and that can be saved if used for training activities at the company level and to be agreed with unions. Such 'professional funds', common for executives and the largest sectors (including two in the service sector), are increasingly active, although their potential is still far from being fully exploited (INAPP 2017). The November 2016 renewal of the CBA for the metal sector has, for instance, established workers' right to individual training, whose costs are to be covered by the corresponding professional fund. This measure has been considered innovative and might be followed by other similar initiatives in other sectors.

Finally, in Greece social partners enjoy an active role in the delivery of vocational training programs. In fact, while the state provides the financial support, often routing sources from the European Social Fund, and sometimes monitors the quality of the training programmes by certifying the providers, teachers and trainers, it is up to companies and unions to organise - on their own - these training

activities. Specifically, companies might offer in-house training programmes for their employees, chiefly through seminars and accelerated programmes. On the unions' side, instead, the confederation GSEE provides training opportunities to unemployed and workers in the private sector, and especially in tourism, technical trades, construction, education, commerce, environment, consumer protection, social economy, informatics and economics/administration. The content of these training programmes varies and ranges from technical (ICT, safety and quality, sales, energy and environment) to general skills (communications, project management, teamwork, etc.). Apart from upskilling, the aim is to prevent mismatch in sectoral or local/regional labour market, adding to training also guidance, counselling and work placements services'. According to Cedefop, 'the social partners have lately assumed an even larger role in planning and implementing vocational training actions funded by the the European Social Fund (Cedefop 2015, p. 32).

### 3.3 *Precarious and atypical employment*

It is well-documented that some industries and occupational groups within the service sector have historically been characterised by an above average incidence of atypical employment, and below average levels of job quality (Eurofound 2016b). This is particularly true in Southern European countries, which have experienced over the last twenty years a marked growth in atypical employment (temporary, involuntary part-time, bogus self-employment) following the partial deregulation of this segment of the labour market through subsequent reforms.

Spain is characterised by extremely high levels of atypical employment, and this trend is not showing signs of change in the aftermath of the Great Recession. Indeed, in July 2017, 92% of new contracts signed were fixed-term and 37% were part time (CCOO, 2017). The issue of employment quality is therefore high on the policy agenda. In 2017, the Spanish government has opened up a dialogue table with social partners to address issues of employment quality ('Mesa de dialogo para para impulsar la calidad en el empleo'), which however has only had very limited progress so far. The main trade union confederations CCOO and UGT have presented joint proposals to address issues of employment quality, but none of these focus specifically on the potential impacts of digitalisation. There are however proposals concerning employment quality in multiservice firms and the preservation of job quality in cross border trading of services.

In Portugal, the main trade unions' demands to combat low quality employment have focused on increasing the minimum wage (due to be increased to €600 by 2020 according to the government's agenda); on demanding the introduction of tighter regulations for the use of temporary contracts; and on changing the rules to facilitate the conversion of services provision contracts into proper contracts of employment, in cases where the legal criteria apply. A tripartite agreement between one of the two main union confederations (UGT), the main employers' organisation and the Portuguese government was reached in January 2017 on raising the minimum wage. Issues surrounding the legal regulation of atypical contracts are being dealt with through tripartite social dialogue as part of ongoing discussions on a series of government proposals for labour law and industrial relations reform, the so-called "Green Book on Labour Relations" (Livro verde de Relacois Laborais 2016).

In Italy, the use of fixed-term employment contracts by firms was deregulated and facilitated by a labour market reform in 2014. Fixed-term employment as a proportion of total employment reached record levels in 2017 (ISTAT, 2017), accounting for 12.5% of total employment. Alongside fixed-term contracts, the frontier of precarious and atypical employment in Italy consists of an instrument called 'vouchers', which is a form of payment for contracted-out jobs done by self-employed workers, , which includes a flat-rate social insurance contribution of 2.5%. Remuneration through 'vouchers' has been allowed since 2003 and the original rationale was that they should replace untaxed and undocumented

cash payments for seasonal jobs in agriculture and other kinds of occasional and casual work, but as soon as in 2012 the Monti and then in 2014 the Renzi governments lowered the thresholds on their use (more sectors, more than occasional work, higher compensation threshold), the recourse on 'vouchers' boomed (550,000 in 2008, 115,000,000 in 2015) (Fair Labor Association 2016) to the point that the largest union confederation, CGIL, collected the 500.000 signatures necessary to call for a referendum and ask Italians to determine whether 'vouchers' should be abolished. The referendum was scheduled on May 2017 but the government, concerned about the political consequences of the referendum's supporters, scrapped vouchers in March and reintroduced them, although with some more constraints, in July.

In Greece, the aftermath of the crisis had huge negative repercussions on the labour markets, leading to an increase of non-standard forms of employment contract, with only 57% of workers in 2010 with permanent positions, compared to 80% average for the whole EU27. Apart from chronic weaknesses such as the massive presence of informal work and bogus self-employment, the size of flexible types of contract has massively increased (McKay et al. 2012). Several laws, approved before Syriza's government came to power in 2015, had reduced employment protection – originating either from minimum wage provision or collective bargaining agreements – and favoured the individualisation of employment relations. As a result, employers found it convenient to proceed with organisational restructuring and outsource large portions of their workforce, then contracted out through temporary agency work at a notably sensibly lower wage rate. As reported by Bubullima in 2015, this provoked an 'avalanche' of precarious work in Greece.

Besides the long-standing issues associated with a high incidence of low employment quality and low pay in the service sector, digitalisation is also leading to the emergence of new forms of atypical employment associated with the availability of ICT technology. These include new employment forms such as crowd employment (Eurofound, 2016) and 'gig work' (already discussed in section 2.3 on the 'platform economy'). According to Eurofound's (2016) research on new forms of employment, crowd employment platforms in countries such as Spain, Italy and Portugal have grown considerably in the aftermath of the crisis, as many people have started looking for alternative sources of income due to high unemployment rates. The implications of the emergence of platform work for employment quality are numerous and will be further investigated in section 4.3.

### 3.4 *Conclusions*

The long-term trends towards greater automation of job tasks and the associated employment polarisation/downgrading have a potentially strong impact on various branches of the service sector. If left unmanaged, they can lead to widening differences in working conditions, job quality and wage profiles between different branches of the service sector, if the growth of high-skilled, highly-paid professional jobs related to ICT and digital technology is accompanied by job losses in less knowledge-intensive, routine-based sectors; a displacement of individuals from mid-skilled towards low-skilled jobs; and an increase in low-value added, non-routine jobs at the bottom of the pay scale. Although the evidence is still tentative, recent studies on the topic have triggered some public debate in countries such as Spain and Italy about the potential risks and opportunities associated with automation in the respective economies, but these have so far remained at a general level and not specifically focused on the service sector as such. These discussions of future trends, however, have clearly brought to the fore two potential implications from an industrial relations perspective. On one hand, the process of digitalisation and automation must be politically managed – also at the level of collective bargaining – so that it results in increased productivity and shared benefits for workers in the form of higher wages,

rather than in job destruction. On the other hand, these contradictory trends pose potential dilemmas for service sector social partners in Southern Europe with regard to the strategies to pursue.

In particular, trade unions are faced with different strategic choices. First, unions can either choose to focus on protecting mid-skilled workers whose jobs are at threat of destruction from automation and technological change, by prioritising the strengthening of existing employment protection institutions and income support measures in case of unemployment (which however have been considerably liberalised by the structural labour market reforms implemented during the crisis). Second, unions can opt to re-orient their strategies to prioritise the re-skilling or up-skilling of low-skilled workers, whose jobs may be most at risk due to advancing automation, thus making ALMPs, vocational training and re-qualification key priorities. Third and finally, unions can focus on combating the downgrading of the occupational structure by intervening to cull the incidence of low pay & low quality employment at the bottom of the wage distribution. Overall, the strategies that established trade unions will choose to priorities are likely to vary depending on the institutional, political and economic context of each country; and on the ideological orientation, membership composition and strategic capabilities of individual unions' themselves. At present, we find examples of Southern European trade unions pursuing all three avenues, sometimes in parallel, but with some emerging tensions about the trajectory of change to pursue.

#### **4 Work organisation and company strategies**

The increasing penetration of ICT in the services sector has a number of far-reaching implications for what concerns practices of work organisation within firms and companies' competitiveness and business strategies.

##### *4.1 Impact of digitalisation on working conditions*

Standardisation of work practices and the corresponding decrease in job autonomy is a major trend associated with services digitalisation. This occurs, for instance, in e-commerce logistics centres, where routine-heavy jobs are created. In such forms of work organisation, employees typically receive detailed instructions through digital devices concerning which item to pack into which box. Due to their standardised and relatively simple nature, such routine forms of work create accessible job opportunities for low-skilled people and labour market entrants. However, the quality of such work is often perceived as low because employees feel their skills and abilities are not fully harnessed (EESCO 2015, p. 7, para 4.5-4.6). Standardisation also applies to online crowdwork – for example in the case of micro-tasking platforms. Standardisation of work tasks is often associated with a trend of work intensification and invasive monitoring of targets and productivity enabled by ICT technology (cf. Moore et al, 2017). Overall, this has led some authors to describe these emerging trends in service work as a form of 'digital Taylorism' (Brown et al., 2008).

Large warehouses and logistics companies have often been at the centre of attention for debates around standardisation and work intensification in service sector work, and Southern Europe is no exception. The e-commerce giant Amazon, although less diffused than in other parts of Europe, has experienced impressive rates of growth in the last few years and has come under the spotlight for the problematic working conditions at its distribution centres. Workers in 'picking' and 'packing' jobs in a big warehouse near Madrid described their jobs as 'a battle against the clock', where they are controlled by a device which shows them the location of items and indicates the time to collect the item, which can be as short as a few seconds. Near Milan, workers in the same jobs defined themselves as 'contemporary Charlie Chaplin, equipped with a scanner rather than a wrench'. Such high intensity of work rhythms

leads to health and safety risks. Trade unions have been active in denouncing these issues, especially in Italy and Spain.

In Italy, we identify a two-tier system within e-commerce, with corresponding differences in union responses and collective bargaining developments. On one side, there are those workers directly hired by or present within the facility of a lead company such as Amazon or, to mention another popular brand in the e-commerce sector, Yoox. Those workers, although facing the above-mentioned issues in relation to working conditions and, in the case of Yoox, even mobbing and sexual harassment, seem bound to find a solution following the traditional patterns of workers' collective representation. In fact, once workers' grievances become known and, given the brand visibility, capture the media's attention, here the established union confederations such as CGIL are able to gain a critical mass of members. As a result, bargaining tables are open where it is possible to discuss with the company headquarters better working conditions and the procedures to monitor their implementation. This dynamics has indeed resulted in an agreement signed in December 2016 by Amazon's parent companies (Amazon City Logistica Srl, Amazon Italia Transport Srl, created to handle a store and a secondary hub, respectively), possibly paving the way for a company agreement with Amazon itself, an outcome which would be a turning point for the company's tradition of unilateral industrial relations. To support this option, there is also Amazon's decision to apply the collective agreements valid for the commerce sector, which is relatively more robust than the one for logistics. As for Yoox, the company and confederal unions signed an agreement in September 2017 by which 227 previously contracted-out workers have been internalised and offered permanent positions. On the other side, we find the bottom-end of the e-commerce chains, typically involving outsourced workers in charge of delivering the parcels. These workers are often hired by work cooperatives, an organisational form where workers are not treated as employees but as associate partners. In theory, these associates benefit from a share in the organisations revenue and a say in its decision-making. Concretely, far from the spirit of the traditional cooperative movement present in Italy<sup>21</sup>, many of these organisations are de facto bogus cooperatives, who act as private companies and adopt the cooperative form only to circumvent established labour regulations (such as the applicable minimum wages, employment conditions and social security contributions), whilst their workers do not exercise any influence over the decisions of the company (Eurofound 2017, p. 4). The associates are in an extremely vulnerable position because they lack basic employee rights, as in case of dismissal. Besides, it is also quite recurrent that work cooperatives in logistics close and reopen under a different name, a move which often conceals inappropriate fiscal practices, especially in matters related to social contributions. Bogus cooperatives are a recognised political problem in Italy, and are widespread in the construction and tertiary sectors in particular - not only in logistics but also in sectors such as accommodation, large scale retail trade, cleaning and portage (Eurofound 2017, p. 5). In such hostile context made of high productive fragmentation and layers of sub-contracting activities, the established confederal unions are almost absent and only few autonomous rank-and-file organisations (e.g. USB, COBAS) have been able to gain a sizeable membership and bring companies, often after turbulent picket-lines, with accidents and violent repression by the police, to negotiate better terms for contracting-out practices.

Also in Spain trade unions mobilised against Amazon's poor working conditions and pay. The union CC.OO. has been particularly active in this regard and has begun coordinating with trade union counterparts in other European countries to demand Amazon improvements in its warehouses. Still in Spain,

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<sup>21</sup> [http://www.euricse.eu/sites/default/files/db\\_uploads/documents/1277123347\\_n472.pdf](http://www.euricse.eu/sites/default/files/db_uploads/documents/1277123347_n472.pdf)

Amazon's business strategy is clearly identified as a threat not only by service sector trade unions, but also by established employers in the retail and wholesale distribution sector, which see this as a source of potential unfair competition. The emergence of this "common threat" for the sector has led to the formation of an unlikely alliance in collective bargaining negotiating rounds between unions and employers. For example, in the region of Madrid, the employers' confederation Anged and the four major trade unions have reached a new regional sectoral agreement in May 2017 aimed at 'defending' large shopping centres from the threat of online retail, with the unions agreeing to facilitate the use of temporary contracts in exchange for moderate pay increases. The risk is that the poor working conditions and low pay applied by large e-commerce multinational firms may act as a threat leading to a competitive dumping of employment and job quality in the retail sector as a whole, in order to keep up with the competition.

Beyond targeting specific companies, trade unions have addressed the issue of deteriorating working conditions in service sector jobs, both the Italian union CGIL and the Spanish union CC.OO have also launched - in winter 2015 and summer 2017 - high-profile campaigns against the incidence of precarity in the service sector, called 'The New Order' and 'Precarity War', respectively. The campaigns are not specifically focused on issues associated with digitalisation, but more generally on the poor working conditions that are widespread in both the Italian and the Spanish service sector – from call centres to hospitality to financial services. However, some of the campaign materials seek to highlight working conditions problems which are related to digitalisation in workplaces: such as the growing intensification of work rhythms in call-centre and sales work, and increased monitoring of workers and targets through digital technologies.

The increased incidence of flexible forms of working facilitated by digital technology such as tele-work or "smart working" is also leading to problematic trends with regard to job quality also in 'traditional' branches of the service sector. On one hand, tele-working is often characterised in the public policy debate as a positive innovation which can facilitate work-life balance and also female labour market participation and work family balance. This aspect is particularly stressed in the debate about 'smart working' in Italy, where women with family responsibilities are notoriously discouraged from taking an active role in the labour market. In this regard, a 2017 law - dubbed as the Jobs Act for Free-lancers - introduced the notion of 'smart working' ('lavoro agile'), encouraging employees' flexibility and autonomy and, de facto, adopting some of the key principles of the 2005 EU directive on Teleworking. At the same time, however, constant connectivity to the internet is leading to an increased blurring between working time and private leisure time, thus leading to an intensification of work rhythms, extension of working or quasi-working times, and an increase in psychosocial risks. In response to this, debates around introducing a 'right to disconnection' in labour law have emerged in various countries. In Spain, the union confederation UGT has advanced proposals in 2017 to include a right to disconnection in the Workers' Statute in order to protect work-life balance and workers' health and safety. In Portugal, the issue has entered the public debate in 2017 following the introduction of a similar provision in France. In June 2017, the centre-right opposition party CDS has advanced proposals to introduce a right to disconnection as part of ongoing discussions in the Tripartite Social Concertation Committee. However, the Portuguese government has expressed its preference for leaving this issue to be regulated autonomously by the social partners through company-level collective bargaining rather than through legislation. In Italy, a 'right to disconnection' has been discussed in general but then introduced only in relation to smart-workers and, voluntarily on a company basis.

#### 4.2 *New business models – platforms*

The emergence of new business models operating through ‘platforms’ (discussed in section 2.3 above) is leading to the emergence of several issues relating both to employment quality and working conditions. Many platforms, both those providing virtual services and those providing location-based services such as cleaning, food deliveries, car rides etc. adopt indeed a piecework payment system, which is facilitated by the widespread use of algorithmic matching and management methods. The combination of piecework payment and algorithmic management leads to a process of work fragmentation and intensification, shifting the business risk of low demand completely onto the workers and increasing health and safety risks for the workers. Food delivery workers, for example, are pushed to increase their physical speed whilst cycling in order to carry out more deliveries. Furthermore, the application of algorithmic management methods and the use of GPS tracking to manage the flow of delivery jobs also allow the platform to monitor workers and use the data gathered in a non-transparent fashion for the purposes of performance management and workers’ surveillance. “Gamification” techniques are also commonly used by the platforms in order to incentivise contractors to compete with each other and thus intensify their workflow; and users’ ratings are used by many apps as a mechanism of performance monitoring, which is however intransparent and subject to arbitrariness. Finally, there have been reported cases of workers being ‘fired’ through disconnection from the app, without any due process (Tassinari and Maccarrone 2017).

In many countries, including Italy and Spain, there are growing concerns about the urgency of defining appropriate instruments to legally classify contractors working through platforms and provide them with adequate protections and safety nets (cf. Donini et al, 2017; Todoli Signes, 2017; Aloisi, 2016). Few observers (e.g. in the Spanish debate) have identified potential opportunities to improve employment quality arising from the emergence of platforms. For example, the increased traceability of income and payments is seen as potentially favouring the de-informalisation of work and allowing for easier monitoring of income of self-employed individuals, thus acting as a basis for social security contributions (Govup 2017, p. 14). In practice, at the moment the vast majority of individuals who work through platforms (be they crowd-work platforms or gig-work platforms) are classified as self-employed or independent contractors, or as semi-dependent contractors. From this derives the inapplicability of labour law, especially for what concerns the application of collectively agreed wages (Todoli Signes 2015). However, in many cases, especially in the context of location-specific platform work (e.g. platforms such as Uber or Deliveroo), these contractual arrangements may actually be masking a de facto dependent or semi-dependent employment relationship between the workers and the platform. In the Southern European context, therefore, the emergence of platform work in services appears to be leading to a growth in incidence of pseudo-self-employment and concerns of the legal status of platform workers.

In Spain, the legal status of self-employed workers is generally regulated by the ‘Statuto de Trabajo Autonomo’ (Statute of Autonomous Work). An intermediate category between self-employed and dependent workers also exists to categorise economically dependent autonomous workers (so-called TRADE, *Trabajadores Economicamente Dependientes*), i.e. self-employed workers who however receive at least 75% of their income from the same client. The TRADE category provides the self-employed with some characteristics of traditional self-employment (autonomy, entrepreneurial risk) and some of traditional employment (particularly in matters of social protection and taxation) (Eurofound 2016, p. 6). At the moment, platforms fall within a grey area in terms of labour law regulations (Govup 2017, p. 14). Following the explosion of protests by riders working for the food delivery platform Deliveroo in Madrid and Barcelona over the summer of 2017, who were contesting amongst other issues their classification as ‘autonomos’, i.e. independent self-employed workers, Deliveroo has offered some of its more regular riders the possibility of being classified as TRADE. However, considerable doubts remain

amongst labour experts about whether the TRADE category is appropriate to regulate the status of platform workers – as many may be working for multiple platforms at once (Todoli Signes 2015). Different positions have emerged regarding the appropriate regulatory models to adopt in the Spanish context. Some commentators (e.g. Todoli Signes 2017) argue it is necessary to update existing provisions within the Spanish Workers' Statute to allow for platform workers clearly operating under the supervision of the platform to be classified as employees, and thus be covered by minimum wages and minimum conditions set in collective bargaining agreements; yet permit them to maintain the working time flexibility that characterises these jobs. So far, the Deliveroo workers in Spain who led protests in the summer of 2017 have organised autonomously or through rank-and-file unions such as the Intersindical Autònoma Catalana. However, mainstream unions are starting to take action in order to build alliances with established organisations (e.g. ATA or UATAE) which seek to collectively organise self-employed workers and professionals in new ways. For example, CCOO and UATAE are working together to develop joint proposals on issues of protection of autonomous workers. The largest union confederation, CCOO, has also taken up this issue as a priority. In summer 2017, the union announced that it would “declare war” to “Deliveroo contracts”, i.e. bogus self-employment contracts; launch a large-scale organising drive to unionise platform workers; and develop proposals for the government to adapt current labour legislation to appropriately regulate these new forms of work.

In Italy, similar debates regarding the regulation of platform work have been triggered by the protests of riders working for the food delivery platform Foodora in Turin in October 2016. The workers contested their contractual classification as autonomous contractors; the piecework payment system adopted by the firm; and the unilateral control exercised by the firm on the riders' working time (Tassinari and Maccarrone, 2017). The protest had considerable ripple effects, engendering a high-profile debate on the appropriate regulatory model for this kind of jobs. The regulatory ‘dilemma’ in the Italian case revolves around the supposed difficulty of conjugating working time flexibility, which represents one of the main ‘selling points’ of these jobs from the workers' point of view, with the respect of employment' rights and protections – in terms of minimum wages, social security contribution and sickness coverage. The Foodora workers involved in the protest in Turin demanded to be re-classified as dependent employees rather than autonomous contractors. This demand was backed by a law proposal on part of the left-wing opposition party Sinistra Italiana to classify gig workers who work closely under the supervision of a single firm – as in the case of Foodora or Uber - as dependent employees, by extending the applicability of the “intermittent work contract” which would grant them employment rights and social security coverage whilst allowing for working time flexibility. However, no progress has happened so far in this regard on the legislative front.

The position of Italian trade unions on this issue is instead mainly oriented towards pursuing a solution through collective bargaining channels, rather than introducing new legislative instruments to regulate gig work as such. This would however require an adaptation of existing sectoral collective bargaining agreements to cover the different kinds of app-based gig work in the sector of reference, or the creation of new, ad hoc agreements to cover the specificities of app-based work, with a number of ambiguities that need to be solved (see Faioli 2017 for an overview of the current legal debate). Firstly, it remains to be clearly established whether these workers would fall under the remit of the commerce sector, or other sectors of reference depending on the kind of service they carry out; or whether they would be instead best covered by collective bargaining agreements similar to those relating to temporary work agencies and other forms of atypical work (with related implications for the difficulty in establishing which sectoral union confederations would be best placed to represent them). Secondly, in order for regulation through collective bargaining to come into being, it would be necessary for the platform themselves to either sign up to a sectoral employers' confederation, or to accept setting up a firm-level

collective agreement; both scenarios that seem quite far from reality in the current context. In Italy, unions have already invested considerable organisational resources to create the conditions favourable to collective bargaining for atypical workers. In fact, it is back in 1998 that confederal unions set up new branches tailored to atypical types of work (NIDIL-CGIL, ALAI-CIL, CPO-UIL) (Pulignano et al. 2016). New attempts to unionise online freelancers have also been recently launched, as exemplified by the initiative *Sindacato Networkers* launched in 2015 by the commerce sector federation UIL-Tucs. Beyond them, other professional associations emerged to represent autonomous but economically dependent workers, with the most known case being ACTA, a freelancers' union focused on highly skilled unregistered professionals and part of an international networks of organisations such as the *Freelancers Unions* from the US and the *European Forum of Independent Professionals*.

These attempts to unionise and build up new representative structures for gig workers, freelancers and other service sector workers located at the frontline of the digitalisation transformation testify to the present efforts of Southern European trade unions as actors to adapt to emerging challenges. However, their reach so far remains still limited, and their capacity varies according to national contexts. Whilst the existing structures of industrial relations could be adapted or strengthened in order to deal more effectively with issues arising from digitalisation, a main challenge still persists- as the new players in the digital services sector on the employers' front – such as e-commerce giants and platforms – still need to be brought to the negotiating table.

### 4.3 *Conclusions*

Digitalisation has multiform implications for working conditions and company practices in the service sector. Issues of standardisation, work intensification and workers' monitoring and surveillance enabled by digital technologies are affecting an increasing number of workplaces in various branches of the 'conventional' service sector – primarily in retail and logistics, but not only. In various forms, these emerging trends put on the table the question of how to best regulate and manage the relationship between workers and technology so that algorithms, big data and other forms of digitally-enabled management practices can be subject to democratic scrutiny and brought within the remit of collective determination and bargaining. Simply put, in the words of the General Secretary of CGIL, the largest Italian union, 'it's necessary to negotiate the algorithm'. This move, as we have briefly illustrated, is requiring considerable renewal of strategies of intervention on part of unions, with an adaptation of old instruments and the introduction of new ones.

For what concerns the emergence of new business models, gig work platforms have come under fire for their employment practices, their model of work organisation and the poor working conditions of their contractors. The attention so far has focused particularly on food delivery platforms such as *Foodora* and *Deliveroo*, which have been the targets of workers' protests in both Italy (cf. Tassinari and Maccarrone 2017) and Spain since late 2016. This has also led to very lively public debates around the issue of regulation of working conditions in platform work. Specifically, the debate on the legal status of platform workers appears to be more advanced in Italy and Spain, whilst in Portugal and Greece it has not gained very large traction yet – probably because the scale of platform work is still smaller. What is emerging so far is that established trade unions confederations have still not managed to effectively unionise workers in the emerging platform economy sector, and the few cases of mobilisation have been primarily led either by self-organised workers (as in the case of Italy) or with the support of rank-and file unions (as in the case of Spain). It remains thus necessary for unions to develop new strategies of recruitment and union action, possibly embracing digital tools more actively digital tools, to reach workers in these emerging sectors – although encouraging examples in this respect are starting to emerge. On top of this, the main dilemma for established unions is whether to pursue a strategy that

seeks to reconfigure these new platform-based jobs as proper 'dependent employment relationships', thus regulated through labour law and sectoral collective agreements; or whether to seek to develop instead new instruments and intermediate legal categories that can guarantee a modicum of collectively negotiated rights also to self-employed or semi-dependent workers, outside of the traditional avenues of collective bargaining.

## 5 Overall conclusions

Our findings, mapping out the impact of digitalisation on industrial relations in Southern Europe, are divided in three sections. At the macro level, looking at services markets' developments in general, we find that bar a few exceptions, the involvement of trade unions in national policy initiatives related to digitalisation, such as 'Digital Agendas' and 'Industry 4.0' strategies, has so far remained fairly limited. This is despite noteworthy attempts on part of unions to influence the public debate on digitalisation and 'the future of work' through policy proposals and initiatives. On issues relating to the regulatory models for new digital players (e.g. platforms), the interventions of mainstream trade unions in the public policy debate have also been limited so far, as the formulation of coherent regulatory proposals is still ongoing for the majority of confederations. At the meso level of labour markets in services, there are instead more signs of pro-active union adaptation, where unions, especially in Italy and Spain, have been taking up issues and demands relating to digitalisation (e.g. individual right to training and acquisition of digital skills) as central parts of their collective bargaining and campaigning platforms. However, the extent to which these collective bargaining strategies are sufficient in countering the polarisation trends associated with digitalisation is debatable. Finally, at the workplace level we observe emerging and deepening disparities between sectors with regards to unions' capacity to intervene to govern the ongoing workplace transformations arising from digitalisation; and considerable difficulties in building up power resources and representative capacities in the emerging 'platform economy' segment of the economy.

Overall, we find that unions' strategies and demands so far have been primarily focused on arguing for an extension of traditional forms of protection to deal with the disruptive effects of digitalisation. However, this has been coupled over the last years with some mild innovation in unions' agenda, especially in Italy and Spain, where unions are possibly driven by a desire to re-build their strategic power resources and 'update' their image after having been weakened and delegitimised during the crisis period. Despite some differences in the scope and depth of union responses, issues such as training and skills development have been acquiring increasing importance in unions' discursive repertoires; and a shift in unions' preferences towards more dynamic and universalistic forms of workers' protection can be identified in all four countries under examination. Although preliminary, these findings point to the fact that unions are not passive subjects of the transformations on industrial relations brought about by technological advancements and digitalisation, but can have an active role to play in the process.

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