

Cowork₄YOUTH | Collaborative and Sharing Workspaces Policies for Youth in EEA Peripheral Regions

Policy Recommendations on Employment Potential through Alternative Economic Sectors

Project Partner:

Rhodes Centre for History and Social Research

Author(s):

Dr Ioannis Papageorgiou, Manolis Mponiatis, Dr Sophia Kanaouti

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1. Introduction

Output 14 (Policy recommendation on employment potential through alternative economic sectors) is part of the Cowork4YOUTH project and therefore inextricably linked with Output 13 (Policy recommendations addressing skills gap and brain drain). Nonetheless, this is not just a management-wise unity but a conceptual one too.

As already noted in the framework of Output 13, the complexity and broadness of the policy analysis process and the requirements for the production of evidence-informed recommendations (Sucha and Sienkiewicz 2020), the Cowork4YOUTH project has been designed in a way that every activity and output – apart from its value and usefulness as a single piece of work – serves to support the construction of the policy recommendations. In other words, the “translation” of all the knowledge provided by the research outputs (mainly pertaining to WP3 and WP4) into practical suggestions that can influence the EU, national or regional policy making. These two fields that the recommendations will focus on (skills gap and brain drain, and employment potential through alternative economic sectors) mirror the structure and subjects of the research that was conducted in previous WPs, and are, consequently, very much dependent on their outputs. The WP3 outcomes, namely the Transnational Research Network (TRN), the Observatory, and the Baseline and Pilot studies intend to provide a solid basis to understand the framework and dynamic impact of EU policies in the fields of interest; subsequently, the WP4 research outputs provide a detailed image of the state of the two fields. Under this particular scope, Output 12 (Paper on the impact of COVID-19 pandemic upon youth employment), is considered as a source of framework information and cannot be grouped with the other outputs according to the WP4 division.

In this highly interdependent framework, the objectives of WP5 are:

- (a) to integrate all this information and knowledge from the previous packages;
- (b) conduct, whenever necessary, additional analysis specifically on the policy making and implementation field that the previous outputs cannot cover; and
- (c) combine all this knowledge to create a cohesive framework that will enable us to detect shortcomings and solutions in the policies adopted at regional, national, or European level.

Those objectives reflect the pertinent key performance indicators set by the Cowork4YOUTH project’s proposal, to assess the effectiveness of the produced recommendations (Number of relevant policies citing impact studies as source/evidence [4]; and Number of national policies and laws influenced [4]), while in general the expected outcome is the increase of the effect that impact studies have on the policy making process.

To achieve these goals the work produced in WP5 satisfies two equally important conditions: First, the recommendations in order to be adopted, have to be specific, (politically) feasible and based on a sound analysis.

Second, at the same time, the analysis and recommendations need to consider the “gaps” that are detected in the employment policy field: the EU, the national and the regional policy making mechanisms. Policy making institutions at those levels of administration are actually taking actions to tackle the problems that Cowork4YOUTH intends to address; thus, WP5 and its outputs can make a substantial contribution in two ways:

- a. by underscoring issues that decision-makers may already be familiar with, but they do not appear clear or high enough in the decision making agenda; and
- b. by expanding this “agenda” to issues that do not draw attention in the current youth employment discussion. The proposed methodology is developed on these two conditions.

Nonetheless, contrary to the way that the Output 13 has been developed, putting forward a necessary, yet lengthy, analysis of the scientific field of policy analysis, the Output 14 needs to follow a different direction. The reason lies with the nascent policy fields of what is coined here as alternative sectors of the economy, that directs any discussion from the analysis of existing policies, to the prediction of the impact of policies under formulation.

The present document, in addition to the present introduction, is structured in 4 chapters. The next one concerns the ‘Alternative Sectors of the Economy’ which provides an account for what is included under the term, namely the Coworking Spaces, the Digital Platform Economy, and the Research and Development. The next chapter will deploy the definition, history and connection to employment by each of the aforementioned alternative sectors. The following chapter will analyse the nature of the sectors as nascent policy areas and/or fields for policy and the impact this nature has upon the discussion for policy recommendations. This report will close with the final chapter on the policy recommendations, building on the previous analysis, and the available data and bibliography.

2. Alternative Sectors

The first task of the output is to decipher the working concept of 'Alternative Sectors of the Economy' in order to define the focus areas of the present study. The project proposal uses the 'Alternative Sectors of the Economy' as an umbrella term for the platform economy, coworking spaces and R&D investments, for which the employment potential would be assessed. Nevertheless, this is only an indicative mentioning, allowing space for "finetuning", focus shifts, and widening or narrowing scope in the study fields.

The preceding submitted outputs of the project concerning the Alternative Sectors (Output 7: Transnational Report on employment potential for young people through alternative sectors. Output 8: Review Paper on Employment potential through alternative sectors) have operationalised the generic approach of the proposal by focusing on:

- The economic sectors related to remote working practices. The latter include co-working spaces, hubs and collaborative workplaces and generally spaces where persons gather and work in a common space, while sharing experience and knowledge. Based on the characteristics of remote working practices (office based, networked etc.) the outputs identify the economy sectors Information and communication (NACE J); Professional, scientific and technical activities (NACE M); Financial and insurance activities (NACE K); Administrative and support service activities (NACE N), as compatible with remote working practices, and provisionally coined as coworking sectors. After this categorisation, the outputs proceed in researching their impact on youth employment rates (Whelan et al. 2023 & Redmond et al. 2023)
- The digital platform economy. Under this, positively or negatively inclined terms including 'sharing economy', 'gig economy', 'collaborative economy' describe a working modus operandi that falls in two typologies. The first by Mehta (2020) and De Stefano (2016) refers either to online freelance work or work-on-demand via an app. The second typology by Pesole et al (2018) refers to online freelancing platforms or microwork platforms for small tasks or, finally, platforms for physical services (see further in Redmond et al. 2023).
- The third sector identified by the abovementioned outputs refers to the 'Green economy'. This is a justified deviation from the suggested sectors of the proposal, given that green jobs tend to be associated with technological advancements (Whelan et al. 2023), and by that an integral part of the Research and Development sector. Green jobs can be divided into two categories: either jobs that design and produce goods or provide services that benefit the environment, or jobs that contribute to more environmentally friendly processes in the production of any product or service (ILO 2016).

The present report will attempt to synthesise the suggestions of the project proposal with the approach of the previous outputs. More specifically, we will remain consistent with the study of remote working and of digital platform economy and will re-adjust focus on Research and

- Development, in order to produce policy recommendations discussing the enhancement of the impact upon employment rates.

3. The contours of the alternative sectors: Definition, history and employment

3.1 Remote Working Spaces

Starting with the broad field of remote working spaces, a terminological note needs to be made. Although coworking spaces refer to something more specific compared to remote working spaces, both terms are interchangeably used here. The reason is that, as will be shown, remote working have only recently been attracting broader attention and the slight differences in the terms have not been widely used yet. Therefore, we use the term coworking space since we assume that is more known. Delving into the aforementioned distinction leads us to a multiplicity of definitions. The simplest, yet inclusive, definition of the remote working space is that of a physical space offering resource, in the sense of facilities and amenities, to their users, in an open, transparent, and collaborative environment (Capdevilla 2018, adapted by Avdikos 2020). Nevertheless, the field remains terminologically nebulous (Nakano et al. 2020).

Although the remote working space runs a 20-years history, given that the first space recorded as a coworking space appeared in 1999 (Avdikos 2020), it has gained wider acknowledgement during the 2010s decade. The continuously increasing number of such spaces leads to two observations. The first one underscores their transforming capacity in terms of the working conditions. If these spaces increase it can only be connected to their success in offering what they deliver, namely the opportunity to a user to be productive while reducing the cost of his/her operational costs, or the opportunity to have access to non-material resources (e.g. know-how, advice, networking etc). The second one regards the continuous commercialisation of remote working spaces with large, incorporated companies being a significant share of the market, compared to bottom-up cooperative remote working spaces (see further in Avdikos 2020). Unlike other cases, where commercialisation follows social innovation, IWG, probably the present leader in this market (measured by the space offered), was established in 1989 (as Regus) and was incorporated right from the beginning, noting a commercialisation mindset.

In the bibliography on the coworking spaces (indicatively: Nakano et al. 2020, Avdikos 2020, Avdikos & Merkel 2019, Avdikos & Papageorgiou 2022, Pitts et al. 2023, Avdikos et al. 2022, Papageorgiou et al. 2022) a recurring issue concerns the 2008/2009 economic crisis and the subsequent recession that marks a turning point. The outsourcing of key services from the private sector turned a number of former employees to freelancers, with a different set of needs (compared to traditional employees) to be addressed (need for affordable workspace, training, networking, loneliness etc). The coworking spaces after covering those needs become widely visible (Avdikos 2020, Nakano et al. 2020). Nonetheless, this has been far from a straightforward evolution. During the first years of the economic crisis coworking spaces have been seen as a potential outlet for the integration of the youth into the labour market, attracting EU funds to pilot pertinent solutions (Avdikos & Papageorgiou 2022); a rather short-sighted perspective especially in the case of South Europe given

that the predominant political understanding of the crisis was from the supply side rather than demand side or from the structural point of view (see also Output 13). The gradual emergence out of the crisis (at least in western and northern Europe) saw the wide commercialisation of the field with large corporations (Regus, WeWork, HQ etc) displacing the community-led efforts. Due to the displacement from the urban centres and having proven their transformative potential, the community-led coworking spaces now expand to the periphery offering a more socially directed role (with information from Avdikos & Papageorgiou 2022). Besides the issue of the pendulum moving between community-led and incorporation, at the typology level, currently remote working spaces would include, along with the coworking spaces, living labs, fab labs, makerspaces, hackerspaces, work collectives, incubators, accelerators, and creative hubs (Avdikos 2020, Nakano et al. 2020).

A recurring issue in pertinent literature connects coworking spaces with the labour market in a multitude of ways (see for example de Peuter et al. 2017, Avdikos & Papageorgiou 2022). The aforementioned evolution of the concept in relation to the 2008/9 economic crisis confirms this. Yet, Nakano et al (2020) approach this relationship more as a working hypothesis, rather than an established truth. More specifically, they underline the fact that the lack of clear definition of what a coworking space is prevents the outlining of the impact upon employment. Nevertheless, despite such concerns, the truth is that those spaces, exactly because of their primary role as coworking spaces, do have a leverage in the local, regional, and national economy. Therefore, even if not clearly defined, the connection with the labour market is not questionable. This is why previous policy recommendations attempts have noted their role in brain drain, youth unemployment and training (Avdikos & Papageorgiou 2022) or in addressing rush hour traffic congestion, house price and rental inflation, greenhouse gas emissions from car usage as a remote working practice (The Three Regional Assemblies of Ireland 2020. See also Avdikos & Papageorgiou 2022).

3.2 Platform economy

As noted by Redmond and McFadden (2023) the term platform economy is in many cases used interchangeably with terms such as “gig economy”, “sharing economy” and “collaborative economy”. The Commission’s Joint Research Centre (JRC) is consistently avoiding the use of such terms as they may bear a normative element and instead refers to the concepts of Digital Platform Economy and Digital Platform Labour (DPL) (e.g., Pesole et al., 2018). In the following we use the term Platform Economy to refer to the Digital Platform Economy and we adopt the definition provided by the Eurofound (2015) that described the concept of DPL as “an employment form in which organisations or individuals use an online platform to access other organisations or individuals to solve specific problems or to provide specific services in exchange for payment.” A basic categorization of platform economy concerns the nature of the services provided: the COLLEEM survey, undertaken in the framework of the JRC initiative for mapping the conditions in the platform economy, discerns between web based and on-location services; activities that can be considered as part of the platform economy can be web-based when the client and the person that

is providing the service are matched digitally, payment is conducted digitally via the platform and the work is location-independent, web-based, or on-location/in person respectively.

Following the increasing levels of internet access for households and organizations, the platform economy does not have a long history, but it has admittedly experienced a rapid development. Urzi Brancati et al, (2020) track the emergence of DPL in 2005 with the launch of Amazon Mechanical Turk. The study by Fabo et al (2017) provides evidence for the significant spread of this practice only from 2010 onwards. The first wave of the COLLEEM survey in 2016 (Pesole et al, 2018), estimated that about 1.78% of the EU working age population was earning a substantial part of their income through the platform economy. The second wave in 2017 while indicating a slightly lower rate (estimated around 1.4% - which can possibly be considered a correction to the first results) at the same time showed a clear and significant rise in the proportion of the working-age population that had been providing services via digital platforms on a monthly basis that reached 11% (Urzi Brancati et al., 2020). As highlighted by Redmond and McFadden (2023), it is very possible that the COVID-19 had an accelerating effect on platform economy. The 2021 Commission's Staff Working Document that was prepared in order to support the development of a directive for the DPL working conditions, estimated the number of people working through platforms in the EU at 28 million. Furthermore, according to the analysis, the number of active digital platforms exceeds 500, from which about 360 are SMEs, while a similar proportion of them provide on-location services (European Commission, 2021).

Indeed, these numbers, even though they might seem striking, can be adequately explained by the increasing use of the internet among the general population, mirroring a societal shift and they are certainly in line with the concept of digital transition. The use of digital platforms bears apparent benefits for the consumers of the services, as in principle, they can make more informed decisions and reduce costs that are related to physical movements. At the same time, web-based practices can be a very attractive choice for service providers as well, especially freelancers. As suggested by Broughton et al (2018) platform workers prefer this method and value the flexibility that it offers in terms of location and work-life balance. An additional psychological benefit is highlighted by Urzi Brancati et al, (2019), who, analysing the second wave of the COLLEEM survey, observe (to their surprise) the possibly controversial finding that even on-location workers who are expected to provide low-skilled and more strictly restricted services value very highly the feeling of "being a boss of oneself".

A major issue that the discussion focuses on concerns -as indicated by the attempt to regulate DPL with the recent EU Council and Parliament proposal for a directive (Council of the European Union, 2023)- the status of employment: as underlined by the Commission SWD (European Commission, 2021), there are concerns that from the estimated 28 million of platform workers, about 5.5 million may be misclassified (i.e., providing services as freelancers while the working relationship should be considered dependent work) This situation can result in workers being mistreated in terms of employment rights and compensation. The European Union information agency for occupational safety and health has raised concerns as early as 2015 (EU-OSHA, 2015) on the issue of working conditions for web-based platform work, as well as for the potential misclassification of the

employment status and the related condition of precariousness, which apart from the financial impact on platform workers, can have serious implications for their health as well, both regarding their physical health as for example when safety equipment is not provided, as well as psychologically (EU-OSHA, 2017). The issue of precariousness is unanimously recognized as a main problem in the DPL (European Commission, 2021).

3.3 Research and Development

In defining the contours of Research and Development, we use here the latest revision of the Frascati Manual (OECD 2015) for Research and Research and Development definition and metrics, which admittedly sets the standards in a worldwide context. Further to the definition of research, which is the "creative and systematic work undertaken to increase the stock of knowledge", research and development "comprise creative and systematic work undertaken in order to increase the stock of knowledge - including knowledge of humankind, culture and society - and to devise new applications of available knowledge". In that framework, research and development is characterised by novelty, creativity, uncertainty, systematic approach, and transferability/ reproducibility (OECD 2015).

Three types of activity are covered by research and development: Basic research, namely experimental or theoretical work undertaken to acquire new knowledge of underlying phenomena without any particular application in view. Applied research, namely the investigation undertaken to acquire new knowledge, although with a practical use in mind. Experimental development draws on existing knowledge and produces new knowledge directed towards either the production or the improvement of products or processes (OECD 2015).

Employment rates cross research and development in two ways; a direct one and an indirect. In terms of the direct way, the research and development metrics identify and measure the personnel employed in the pertinent activities. According to the Frascati Manual (OECD 2015) the pertinent staff include "highly trained researchers, specialists with high level of technical experience and training and other supporting staff who contribute directly to carrying out research and development projects and activities". The latter category includes managers, administrators, technicians and clerical staff; this coincides with the Eurostats approach in that matter (Eurostat 2023) which counts all the personnel directly involved in the field of research and development, including managers, administrators and clerical staff. An important difference between OECD and Eurostat in that subject matter is the distinction between internal and external R&D personnel that is found solely on the first statistical approach. More specifically, the Frascati Manual (OECD 2015) identifies as internal research and development personnel those contributing to the statistical unit's (e.g. the research centre or university) intramural activities. The external personnel is also counted in the overall metrics, yet refers to salaried/waged personnel offering services in the statistical unit but not paid from the statistical unit (e.g. visiting researchers).

The indirect way of understanding the impact of research and development on employment rates is more abstract and regards the production of job positions as a result of already completed research and development activities, towards two directions; on the one hand, the creation of more R&D job positions in local or sectoral level (spillover effect) and on the other hand the general impact upon employment rates in the local or sectoral context. Contrary to the measurement of employment in the research and development sector in the direct way, in the two directions econometric approaches are employed using a variety of proxies ranging from R&D investments, to patents and R&D intensity. It is true that the spillover effect direction is of lesser impact in terms of employment rates; nonetheless, abundant literature identifies a tendency for pertinent investments to expand between several R&D actors, including the academia and the private sector, leading to more job positions, taking into consideration also the fact that Full Time Equivalents (FTEs) in R&D are a standard index for the state of R&D (see for example Bakhtiari and Breunig 2016).

Of higher importance is the general impact of R&D upon employment rates, which pertains to a discussion in economic theory developing since the early 19th century. Since the Luddite movement in England technological change has been causing fear for the replacement of jobs by machines. The 'compensation theory' developed by Karl Marx, based on previous economic thought and further refined in the meantime, proves theoretically that technological change may potentially destroy certain jobs but also creates a number of them offsetting the relevant rate (see for example Mondolo 2020, Bogliacino et al. 2014, Piva et al. 2017). R&D being cardinal for technological change, its significance for the creation or destruction of jobs is underlined. In this framework, a central note is the difference between product and process innovation; the first leading to job creation (according to the compensation theory) and the latter to job destruction. Compensation theory has been criticised for the lack of universal application since what is product innovation to one sector, can be process innovation to another in an inter-sectoral or macro-approach (Mandolo 2020). Moreover, factors like competition and demand elasticity (Mondolo 2020, Bogliacino et al. 2014, Bogliacino and Vivarelli 2010, Piva et al. 2017) can be viewed either as limitations to the compensation theory, or qualitative diversifications, that can further inform policies.

The identification of those limitations has been the objective of a large number of empirical studies applying different methodologies in national, EU, and sectoral levels, that further recurrently underline the overall positive correlation between employment and R&D expenditure (Mondolo 2020, Bogliacino et al. 2014, Bogliacino & Vivarelli 2010, Piva et al. 2017, Shah et al. 2021, Yang et al. 2008). Nevertheless, as they delve into the data they offer a more refined perception of this correlation. A common conclusion is that the correlation is not only strong in high tech manufacturing and services (Bogliacino et al. 2014, Mandolo 2020, Yang et al. 2008 reach the same conclusion for R&D-intensive industries), but also with high elasticity (Piva et al. 2017). Piva et al. (2017) in an EU-wide firm-level approach conclude that correlation is high when the market is characterized by competition, higher demand elasticity, and higher degree of substitutability between production factors. Shah et al. (2021) in a national-wide sectoral approach (Japan), amongst others, applied tests measuring the elasticity of R&D investments to employment when the source of R&D investments is taken into consideration. They found a significantly higher elasticity in the case of intramural and self-financed expenditure, compared to the external one.

■ Mandolo (2020) in examining the correlation reaches similar, although more refined results, by moving further than the firm or the sector and examining the skill-biased technological change (SBTC) hypothesis (concentration of high/low skills) and the routine-biased technological change hypothesis and the task-based (RBTC) approach (concentration of routine/non routine tasks) per sector.

4. Nascent Policy Areas/ Fields for Policy

As already mentioned in Output 13, the role of the policy conjuncture is cardinal in view of successful policy recommendations.

Based on Lunn and Ruane's (2013) paper, three types of policy areas in relation to their "inertia" to change are identifiable at the national or EU level. Mature policy areas are characterised by settled systems, where path-dependence dynamics should be taken into consideration. Settled policy areas under systematic reform, which present a certain degree of openness to change. The third type of policy areas concerns recent fields of policy, in other words fields in which have occurred after a recent turn of a public issue into a theme in the public agenda. Those fields have no agreed upon aims or principles and therefore are very much dynamic. Therefore, this categorisation of policy areas leads to staggered levels of difficulty in their transformation. Irrespective of the degree of "rigidity", the complexity of the system is also a factor that further perplexes the readiness of the policy area to accept changes. In addition to the categorisation of policy areas, the specific policies can be also organised into existing, evolving and new (Lunn et al. 2013), with, yet again, differing levels of openness to change. Against this categorization, the question arising is where the 'Alternative Sectors' addressed fall in.

From our research, we were not able to identify particular policies for the remote working spaces at least at the EU level and the countries under focus (see also Avdikos & Merkel 2019). Legal provisions, especially if they are fragmented and reactionary to ongoing developments, do not represent a conceptual unity that could be understood as a policy. The reason is probably the fact that coworking spaces might be conceptual spaces too, but primarily they represent physical spaces (see also Nakano et al. 2020), where only a small deviation from the paradigmatic labour relation takes place, namely the space where labour is provided by the employee. A particular note, however, needs to be made for Ireland. In January 2021 the Department of Enterprise, Trade and Employment issued the Making Remote Work: National Remote Work Strategy (2021). The strategy builds on previous research conclusions from 2019 and by taking into account the new conditions formed by the COVID-19 pandemic sets out a set of actions to increase the participation of the workforce in remote working practices (rather than remote working spaces as above), and at the same time to increase the positive impact of those practices. Nonetheless, given that the main concern regards commuting and CO2 emissions, work-life balance, childcare, and rents, it is apparent that the strategy concerns the improvement of the working conditions of already employed persons, rather being a strategy for transition to work for the unemployed ones. In addition to that, there seems to be a nuanced conflation with issues related to platform economy. For example, the strategy includes a passing reference that remote working can support the participation of people unable to commute in the labour force. Yet, given how the strategy accounts for this solution, it appears that it concerns the platform economy rather than the coworking spaces.

Therefore, despite the innovation potential for the labour relations demonstrated by the coworking spaces, that potential has not been materialised yet at the national and EU levels, that, in any case,

are the inescapable policy formation units, regardless of the globalized nature of such phenomena or technologies. Under the incrementalist model of public policy, given its reactionary nature, the policy makers' attention has not been captured yet (Muller & Surel 2002). Under that light the remote working spaces represent an area beyond the aforementioned three types of policy areas; in other words, in considering the "inertia" to change the policy area in question is neither mature (established systems with path-dependence dynamics), nor settled (with a certain degree of openness to change), and not even recent fields of policy (with no agreed upon aims or principle and thus very dynamic). In fact, even its registration in the public agenda is debatable. For that reason, we use here the term 'nascent policy area'; a field in the public sphere with observable potential for social change that, being in a limbo period, has not evolved to the concept of 'public issue' (Kountouri 2015).

A similar case, although with differences, applies in the platform economy. Platform economy does not represent a small deviation from the legal perception of labour relations, but a whole new method of labour provision. In addition, and as already mentioned, the size of the platform economy in Europe has already turned it into a 'public issue' / 'public problem' (Kountouri 2015). Nonetheless, this is only a stage towards the formation of a policy. The question here is whether the formation of such a policy could be observed. In 2021 a number of national regulations (UK, Netherlands, Germany, France, Spain and Italy) were passed giving employment status to delivery riders. The same year, the European Commission understood the fragmentation of the regulation, given that it only applied to segments of the total workforce employed through digital platforms, but also the danger of 'forum shopping' proposed a new horizontal regulation aiming at fairness, transparency and accountability in algorithmic management; enforcement of the applicable rules; and most importantly worker-status misclassification. The status of the workers as salaried employees instead of freelancers would be judged upon meeting a number of criteria proving the dependent labour. The EU trilogue has been negotiating until mid-December 2023 on the number of criteria that should be met. The deemed consensus was proven fragile when the suggestion for a directive reached the European Parliament for voting. The decision didn't meet the minimum majority for approval, given that the bill was different from the agreement of the European Council (with information from Toh 2021, Aranguiz 2021, De Stefano & Aloisi 2021, Christiaens 2023, In.gr 2023).

It is a well established issue that a policy is something much more than a regulation (Muller & Surel 2002) including aspects of its implementation and its assessment by the political actors. It is true as well that the existence of a normative text is the most definite expression of how the dynamics of the political actors have reached an equilibrium (if they have). The story of the deemed consensus in the EU trilogue, that was reached with certain delay, and that was withdrawn when the bill reached the European Parliament for the final decision, proves emphatically that there are no agreed upon principles and values on the subject matter, let alone a system. The national regulatory frameworks, apart from being segmented geographically and content wise, have triggered concerns about their applicability (see for example Aranguiz 2021). Under that light, we believe that platform economy also falls within the category of nascent policy, although for different reasons. The social issue has already been acknowledged in the public sphere and became a public issue. The

framework, however, is so fluid that not even the general directions for a strategy addressing it could be identified.

Unlike coworking spaces and platform economy, Research and Development is a decades-long (if not a century-old) public issue. In that respect, the involved policy actors usually have an already developed related policy. The system in this case is settled but, due to a wide consensus on the issues touched upon, is also open to change. We are confident to make such generalisations due to the role and the impact of EU's Lisbon strategy 2010 and its commitment to research and innovation in making the European Union the most competitive knowledge-based economy in the world. The strategy and more importantly the funds directed towards research and innovation in the EU (226 billion Euros only for basic research combined in FP7, Horizon 2020, and Horizon Europe) have essentially impacted the way that pertinent policies are being developed at national and regional levels. Pellegrin (2008. See also Todtling & Triple 2005) asserts that, on the one hand it is the regional innovation strategy that has been selected as the way for both regional and EU growth. On the other hand, the basic principles of systemic innovation are unquestionably adopted (for an overview of the definitions see Midgley & Lindhult 2017) converging the principles of the local implementation of policy. Otherwise, the predicate of the Common Research Area would have been unfeasible.

What is interesting in the framework of the present report is that the EU research and development policy is not designed as an active labour market policy, or for any other approach on employment. As already noted, the employment rate in R&D is actually measured. In fact it is an important metric of the R&D policy, used as a proxy. Nevertheless, the spillover effect of R&D and the impact of R&D in the wider economy is not measured and not accounted for, possibly based on the narrative that innovation leads to economic growth, which further leads to job positions. Besides any hypothesis, it is a fact that the employment and the R&D policies have not been connected at the EU level yet. For that reason, we approach R&D not as an employment policy field, namely a field where employment policies are existing and could be analysed or the potential impact could be calculated, but as a field for employment policy, namely a completely new area available for (employment) policy experimentation. Of course, the same applies for remote working spaces and digital platform economy. In addition to being nascent policy areas (or exactly because of that), they are also fields for employment policies.

5. Policy Recommendations

Before the in-depth analysis of the policy recommendations, some introductory remarks need to be made.

The alternative sectors being approached here have already been described as nascent policy areas or a field for employment policy. That leaves no room for policy analysis, and very limited room for the projection of the impact of potential policies. Nonetheless, given that the purpose of the policy recommendations is to be specific, politically feasible and based on a sound analysis, we have adjusted our approach compared to that of the policy recommendations addressing skills gap and brain drain (output 13). Our approach here is missing the narratives used by policy makers that define the horizon of the practicable change by them. On the other hand, in the production of policy recommendations, and in order to avoid an intuitive approach, we have employed desk research working on the structures, the principles, and the data from the previous analyses (in particular Outputs 4, 7 & 8 of the Cowork4YOUTH project), as well as already published bibliography on policy recommendations in the pertinent sectors. By re-analysing the above, we selected policy recommendations on the basis of the minimum change in the overall structure of policies, and of producing the maximum possible effect. Given the nature of the issues touched upon as nascent policy areas/ areas for employment policy, we applied a systemic approach in defining the aforementioned minimum change/ maximum effect. More specifically, we avoided as much as possible new policy instruments, and we opted for the re-directions of existing ones (e.g. subsidies and tax reliefs -an already used policy instrument- applied on new fields). Therefore, we have tried to avoid the case of overregulation on the one hand and inconsistency on the other.

For each theme, we start with a 'public issue statement' that resembles the 'problem restatement' of the output 13. Given that the issues at hand have not been fully recorded in the policy agenda, we cannot characterise them as 'problems', and we cannot 're-state' them. Based on the suggested public issue statement, we proceed to overarching policy recommendations that can be applied at various levels (EU, national, regional).

5.1 Coworking spaces

5.1.1 Public Issue Statement:

Coworking spaces, hubs, and collaborative workplaces in general, are not only physical spaces but conceptual ones too. Given their nature as a field for (employment) policies, they have an instrumental significance for the implementation of employment policies. Up to date, this instrumentality has been in place either for entrepreneurship and freelance labour (e.g. work in incubators/ accelerators), or for salaried employment but limited to large companies and just before the covid period.

There is a need for a re-conceptualisation of the use of remote working spaces by:

- Small and Medium Enterprises (SMEs) for their salaried staff. Apart from networking as such, it could support the identification of future employees, in a period when significant staff shortages are being recorded internationally.
- Actors in the Active Labour Market Policies in supporting unemployed persons for the training, mentoring, job matching with SMEs, or setting up new businesses.

5.1.2 Policy Recommendations:

A. Data-driven policy making

A1. As a nascent policy area a data-driven decision-making mechanism is important to be developed. Research and analysis may use data to inform policy making, ensuring that initiatives are effective and responsive to changing labor market dynamics. At the same time a continuous impact assessment is necessary (see also Avdikos & Merkel 2019 and Department of Enterprise, Trade & Employment 2021).

Such initiatives may be applied at EU, national and regional levels by statistical authorities or research centres specialised in social research.

B. Remote working spaces for SMEs

B1. Promote and safeguard employment in remote working spaces

Remote employment can have an instrumental role for the benefit of both SMEs and of the unemployed persons. Nonetheless, remote employment can have detrimental effects upon labour rights, given the obstructed monitoring by labour inspectorate authorities. Therefore, networking needs to be accompanied by the establishment of confidence that labour rights will be applied. Under that prism, policy makers may:

- Promote remote work: Encourage companies to adopt remote work policies, utilizing coworking spaces as satellite offices or hubs for remote teams by streamlining the related administrative burden (e.g. registration of the coworking space as a secondary legal residence of the company).
- Incentivize flexibility balanced with increased Full Time Equivalents (FTE): Companies may offer spatially flexible work arrangements, with subsidies or tax reliefs when each remote worker equals one FTE.
- Redirect labour inspectorate's monitoring in remote working spaces to ensure that labour rights are being observed with particular emphasis on flexible working hours and remote work provisions.

- Tax, or other competent, authorities' monitoring on freelancers working in coworking spaces for the circumvention of the status of salaried employment (see recommendations on the employment in platform economy).

B2. Promote networking for economic growth that provenly leads to job creation

If, historically, the provision of space and infrastructure is the primary role of coworking spaces, the second one is the facilitation of networking to reduce the isolation of remote workers and freelancers (Nakano et al. 2020, see also Department of Enterprise, Trade and Employment 2021). Further in that vein, such spaces became beneficial for SMEs in networking with peers. We suggest here that the same practices can be beneficial for SMEs in identifying talents and capable employees in a period of staff shortages. With that in mind, policy makers can:

- Create conditions of visibility for the coworking spaces. Networking events organized by competent ministries or local authorities could prove very useful in terms of gathering stakeholders, potential users, as well as the private sector (see also Department of Enterprise, Trade and Employment 2021).
- Create a coworking space registry with the obligation for SMEs using such spaces to post their job vacancies in the registry's online matching system.
- Establish coworking spaces in the form of Public - Private - Partnerships (PPPs) comprising Higher Education Institutions (HEIs), Research Centres, Government Agencies, Private Companies and NGOs.
- Suggest industry-specific hubs: Policy makers can negotiate with key actors per sector to collaborate in developing coworking spaces that cater to specific industries, fostering innovation and specialization.
- Financial incentives for coworking spaces and hubs that are linked with the promotion of local traditional industries. Such hubs can serve as repositories for localized tacit knowledge.
- Financial incentives for cooperative coworking spaces with the obligation for a minimum of FTEs.
- Redirect existing funding options or subsidies (tax reliefs, grants etc) for crucial sectors of local economies, determined by the national Recovery and resilience Plans, by adding as an eligibility criterion the increase of FTEs whilst using coworking spaces by SMEs (see also Department of Enterprise, Trade & Employment 2021).
- Redirect EU and state-led equity funding initiatives in encouraging connections of start-ups to coworking spaces and social innovation in collaborative working (see also Avdikos & Merkel 2019).
- Support digital nomads to work in peripheral/rural coworking spaces (Avdikos & Papageorgiou 2022), to support networking and outreach, by accelerating the issue of digital nomad visa when the place of establishment is a coworking space in the periphery.

- Support the networking among coworking spaces (intra-state, inter-state and cross-industry) into EU wide ecosystems of collaborative work clusters in order to maximise the impact.
- Endorse coworking staff mobility through EU funded schemes with the aim of establishing cross national collaborations. This could be achieved through the provision of small grants, mobility grants for personnel for proposal writing, or training sessions.

C. Encourage the participation of unemployed persons in coworking spaces

C1. Training and job matching

Nakano et al (2020) acknowledge the coworking spaces as ‘knowledge disseminators’ where professionals may receive mentoring and upskilling for free or paid. Having established a dynamic field of collaborative and remote workspaces, the issue becomes the activation of the unemployed persons and their “introduction” in the remote working spaces. Under that perspective, such spaces may assume the role of employment agencies (job matching) without any middlemen.

- **Community-Centric Spaces:** Encourage the development of coworking spaces that focus on social innovation and community development, addressing specific local needs, through social cooperative enterprises (See also Manoukas forthcoming). Nakano et al (2020) understand coworking spaces as ‘local coupling points’ acting as focal points for specific issues. Based on this potential, community-centric spaces have been the centerpiece of the third wave of coworking evolution (Avdikos & Papageorgiou 2022). The recommendation here regards the active incentivization of such efforts through grants and subsidies (e.g. from ESF+).
- **Connect makerspaces and fab labs with schools:** By establishing permanent collaborations between schools and coworking spaces, the provision of hands-on training in STEM (e.g. projects: “kids lab”, “code it like a girl”) and in circular economy, makes the transition to the labour market easier, especially for vocational schools (see for example pop-machina project. See also Manoukas forthcoming).
- **Initiate a dialogue, facilitated by the public employment service, between actors of the local labour market and local coworking spaces, where coworking spaces can act as training platforms for their future employees.** For example, fablabs or makerspaces training unemployed persons in welding techniques useful for local industries.
- **Streamline the administrative procedure for the registration of coworking spaces as platforms for training.** Allow and support up-skilling/ re-skilling training programs led by the SMEs using the coworking spaces or facilitate their collaboration with VET providers.
- **Allow synergies between coworking spaces and public employment services, e.g. allow career advisors to remotely work in coworking spaces, in order to effectively form job matching platforms.**

C2. Entrepreneurship and social innovation hubs

In addition to the use of collaborative workspaces for job matching between unemployed persons and SMEs, they can also support the establishment of new enterprises by the former. Coworking spaces have a long experience in catering the needs of freelancers. They can provide a particular direction of the aforementioned up-skilling/ re-skilling training programs for unemployed persons in entrepreneurship. In fact, as Avdikos and Papageorgiou (2022), and Avdikos and Merkel (2019) note, coworking spaces may become those agglomeration facilitators needed in the peripheries both economically and socially, which may support job creation especially for the youth, especially since the high rental prices increase the break-even point of new enterprises and young entrepreneurs.

- **Start-up Incubators:** Establish and support coworking spaces that specifically cater to startups by former unemployed persons, providing them with infrastructure, mentorship, and networking opportunities through their role as global pipeline connectors (Nakano et al. 2020. See also Manoukas forthcoming). The various programs for the support of the first steps in entrepreneurship by unemployed persons can incentivize the use of coworking spaces for newly established companies. The use of coworking spaces as boosters for the creative industries, innovation and entrepreneurial growth in the recent past is known (Avdikos & Papageorgiou 2022) with mixed results. Building on that experience, coworking spaces may act as start-up incubators for unemployed persons with the support of commercial banks focusing on SMEs (e.g. through their corporate social responsibility program).
- **Microfinance Programs:** Establish microfinance programs specifically targeting micro-SMEs, established by former unemployed persons, operating within coworking spaces. Based on the “clientele” built by the previous recommendation, banks may capitalise on their CSR programs.

5.2 Platform economy

5.2.1 Public Issue Statement:

Platform economy presents a dual flexibility. On the one hand a procedural/ systematic one that, through the decentralisation offered by the online service provision, and through the transparency offered by the e-commerce (ratings, reviews etc.), allows for overcoming geographical barriers and unfair competitions in a globalised market. Indeed, a product or a service could be, theoretically, provided by a freelancer based on a remote island to a multinational company based in a metropolis, and vice versa. In that respect, the digital platform economy tends, theoretically again, towards perfect competition.

On the other hand, flexibility is also present in the flexible and precarious labour relations; dependent employment legally formed as freelancing, flexible working hours, on call/ on demand employment etc. tilt flexibility in favour of the demand side, that can also be held unaccountable

due to ‘forum shopping’. Hence, flexibility is currently materialised as predominantly procedural/systematic.

Under that prism, a balanced approach is needed between the two flexibilities. More specifically, a balance lingering between, on the one hand, the regulation of labour relations, and on the other hand, the support of the digital platform economy in harnessing the benefits stemming from quality labour relations. In addition to that, the support of a new hybrid form of platform economy, based on cooperative practices could effectively merge the two flexibilities.

5.2.2 Policy Recommendations:

As in the case of the policy recommendations in remote working spaces, the nature of the digital platform economy as a nascent policy area, calls for investing effort from the policy making mechanism, on research initiatives aiming to monitor the impact of the digital platform economy on employment rates. The obvious purpose is to inform evidence-based policy decisions and the assessment of their impact. It is true that several research initiatives, including the EU Observatory on the Online Platform Economy, have attempted to grasp the relationship between digital platform economy and employment with remarkable results at the local level. Nevertheless, a wider approach is needed with metrics suitable for comparisons.

A. Regulation of labour relations

A1. Sector wide regulations

Towards the first direction of interventions, the synchronization of labour relations in digital platform economy with labour relations in the traditional sectors of the economy is a sine qua non. With a prohibitive approach, the aim is to restore confidence in a widely unregulated labour market.

As already explained, previous regulation attempts do exist; either segmented (e.g. “riders law” in Spain) or blocked in the policy formation process (e.g. the draft directive submitted to the EU Parliament in December 2021). This doesn’t retract the status of nascent policy area, but makes those recommendations even more important, given the warnings issued by social actors or the changing financial environment in terms of the various digital platforms (e.g. Getir pending bankruptcy in Germany or deliveroo withdrawal from Belgium). The general idea of previous regulation attempts is a list of criteria the fulfillment of which turns a freelance employee status into a dependent employment one. As already shown, such provisions have been criticised, on the one hand for the sternness of the regulation (e.g. the number of criteria that should be fulfilled), and on the other hand for the essential lack of an implementation mechanism since the employees could only pursue their rights through litigation. Given the proven interest on the issue by the general public and the part of the policy makers, and the indications for limited impact in the national attempts, policy makers, at the EU level, need to:

- Circumscribe, as widely as possible, the employment status of platform workers to determine eligibility for labor protections, benefits, and rights. In that framework, a diversification between location- or internet-based employees might be of use. Given the nature of the labour, a hybrid employment status could also be expedient.
- Introduce special regulations for freelancers to avoid circumvention of potential dependent employee status. In the framework of the aforementioned hybrid status, an equalization of the overall cost of dependent employee and freelancer would lead to the same level of protection, regardless of the status.
- In the same vein, introduce minimum wage and working hours for employees, as well as freelancers working in the platform economy to prevent their exploitation. At the same time flexible contracts ('on call' and/or 'on demand') should be abolished in the case of the platform economy.
- Provide full access to benefits such as health insurance, retirement plans, and paid leave, regardless of the employment status and the date that it was assumed.
- Establish the portability of benefits that workers can carry with them across different platforms regardless of the place of legal residence of employees and platforms.
- Support workers' organizations to negotiate fair terms, conditions, and wages by laxing the minimum requirements for the establishment of trade unions and decision making in them, at the national level.
- Establish feedback mechanisms to allow workers to report issues and grievances at the national and the EU levels.
- Oblige digital platforms to introduce transparency requirements for the provision of clear information about task requirements, payment structures, and risks for employees before the employment contract and during it in the aforementioned mechanism.
- Empower employees to participate in collective bargaining for better working conditions without fear of retaliation, through the active intervention of the national labour mediation organisations at the previous mechanism.

A2. EU wide management

As already mentioned, the basic characteristic of the digital platform economy is its flexibility, that can be also expressed as 'forum shopping'. If the legal residence of a company offering services through digital platforms is not "suitable", it can change creating unfavourable conditions for employees and states that wish to abide by the regulations. The failed EU initiative is in the right direction. Nonetheless, leading digital platform companies (e.g. deliveroo) have already left certain jurisdictions and threaten to leave others that will implement the restrictive regulations. For that reason EU policy makers need to:

- Reintroduce the aforementioned provisions as Regulation, rather than Directive for immediate and across the EU implementation to avoid ‘forum shopping’. In this framework it is essential for politicians and policymakers to entrench the process from lobbying.
- “Flexibilise” the provisions to allow a non rigid interpretation. Given that technology and social relations are ever-evolving, while the policy process is evidently slower, it is essential to activate the (existing) negotiations between European Judges and National Judges, in the framework of European governance, for the common interpretation of the provisions.
- Introduce the compliance to the aforementioned regulations as eligibility criterion for EU funding, subsidies, grants etc for platform economies.

B. Incentivization for quality labour relations

Given that the “stick” is rarely ever sufficient, the “carrot” is always important. In that sense, companies active in the digital platform economy can also harness the benefits from quality labour relations.

B1. Training subsidies

- Policy makers can establish subsidies or expand tax incentives (e.g. the already existing VAT relief for education) for companies active in the digital platform economy to invest in training their employees. By fostering a culture of skills development within the platform economy can not only increase the income of the platform making it more effective and profitable, but can make trained employees necessary. That would lead to higher bargain power from the supply side and thus more stable employment relations.

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B2. Data ownership

- The same schema applies to data ownership. By a simple, yet of immense importance, regulation with wider implications beyond the present recommendations, policy makers can lead to more stable and quality labour relations. If the employees could have access and ownership to the data that they produce, in combination with guidelines for its fair use, they would have higher bargaining power leading necessarily to the more stable labour relations.

B3. Acknowledge proper labour relations

- A simple, yet tested solution would also have a wider impact. The EU policy makers could introduce a ‘quality labour relations’ sign to signify the companies that abide by ethical and legal requirements in the widely unregulated area of the digital economy. Along with consumers’ awareness, it would work in the benefit of employees.

C. Cooperative companies in digital platform economy

A third direction of solutions could be the endorsement of cooperative platforms in the above economic areas. Their benefit is that they grasp the benefits of systemic/ procedural flexibility, without the dangers of labour flexibilisation. As enterprises born down-top, with their employees being also shareholders, there isn't, in principle, any benefit from turning against the rights of the employees. The subsidisation of such attempts by the European Social Fund or national social cohesion could prove immensely beneficial.

5.3 Research and development

5.3.1 Public Issue Statement:

It has already been noted that R&D is not a nascent policy area just like the remote working spaces and the digital platform economy. But just like those policy areas is a field for employment policy. Employment crosses R&D by means of the personnel employed in the R&D activities of a firm, of a sector, or of a national economy or through the impact in the wider economy. Although the overall positive correlation between employment and R&D expenditure is confirmed, higher correlation and elasticity is identified in the case of high tech manufacturing and services, mostly in the case of product innovation rather than process innovation, that is being financed internally, namely at firm-level, rather than externally. Moreover, the correlation is significant in jobs requiring high skills and non-routine tasks.

In that framework, the policy question about the investments in R&D is not about "how much" (will be invested), but rather "where" and "how" (will be invested), in order to maximise the impact upon employment rates by R&D.

5.3.2 Policy Recommendations:

Under that light, we organise the policy recommendations according to the geographical level of implementation, namely at regional, national, and EU level.

A. Regional level planning

As already shown, the regional level planning in R&D is significant for the achievement of growth in both the regional and the EU levels. The purpose of recommendations at the regional level planning is to maximise the elasticity of the impact upon the wider economy by taking into account the local conditions, without upturning the principles of systemic innovation adopted by the EU. In that framework, it is recommended that policy makers:

- Organise a regional task force to develop a plan with impact upon employment in mind. The existing plans (e.g. Regional Innovation Smart Specialisation Strategy - RIS3) are of major

importance. Nonetheless, their aims, KPIs and action plans need to be scrutinized locally to achieve higher accountability and chances of bringing about real change. To that end, RIS3 reports need to avoid classic swot analysis and focus on strategic targets considering the international technological and economic changes or in other words they need to focus on place-based and endogenous dynamics (see also Avdikos & Papageorgiou 2022).

- To address the medium and low levels of elasticity, RIS3 needs to direct R&D efforts to more focused research and innovation in local needs and conditions.
- Capitalise on the local skills mapping/needs' projection analyses (see output 13) and identify the high tech skills/ non-routine tasks suitable for the local conditions to attract R&D based firms that will make use of them, in order to address unemployment.
- Regional planning on R&D needs to emphasise product innovation rather than process innovation. This is especially important for tourism-dependent regions and regions in transition. Process innovation's labour saving is still a working hypothesis; but product innovation's creation of job positions is repeatedly confirmed.
- Bringing the research and innovation actors in the equation of R&D is a sine qua non. In that respect the decentralisation of research is needed. More Research Centres or their institutes should be established in different regions. The question of proximity among knowledge intensive activities is a caveat, that is, however, addressed by hybrid work methods. In that way, the actors can have insightful contribution in the formation of RIS3 plans customised in the local needs/conditions.
- In peripheral regions scoring low in research and innovation the decentralisation of research may be achieved through Public Private Partnership (PPPs) Hubs comprising Higher Education Institutes (HEIs), Research Centres (RCs), Banks or Venture Capitals (VCs) and private companies as innovation mediators. One-stop-shops for research and innovation in those regions could be the first step towards the Public Private Partnership.
- Regions in transition, either tourism-dependent or in lignite phase-out, and generally scoring low in Research and Innovation should network in search of best practices.

B. National level planning

On a national level, the purpose is on the one hand the coordination of research and innovation and on the other hand a certain incentivisation that would facilitate the spillover effects of R&D in employment, both in the narrow and in the wide perspective. In view of that, policy makers can:

- Promote temporary staff exchanges between HEIs/RCs and private companies especially in regions scoring low in R&D, instead of supporting the transition of staff from the academia to entrepreneurship that removes valuable and highly specialised human capital from much needed research fields.
- Reformulate the incentives (e.g. already existing tax reliefs or research grants - see further in Teichgraeber & Reenen 2022) to companies for R&D investments, by adding an eligibility criterion regarding the retainment of R&D staff for a period, not just as FTE but as

personalised job position. In that way even external funding for R&D will have a substantial impact on employment.

- Central government should refrain from direct R&D activities, allowing space for HEIs, RCs, and PPPs. Purpose of that recommendation is the support of bottom-up development, supported by public funding, that leaves research and innovative inspiration free.
- At the same time central governments may trigger the market and maximise the spillover effect of R&D by establishing public procurement for innovative products/services.
- Instrumental to the coordination and incentivisation of R&D spillover effect is the liberalisation of the status of research and the researcher. The state needs to essentially acknowledge the profession of the researcher not only as a civil servant and not only as a tax or statistical category. This requires the acknowledgment of collective bargaining rights and the status of the doctoral and post-doctoral students as dependent employees and not freelancers - a case very common in Greece.

C. EU level

On the EU level, the maximisation of the impact of R&D in employment rates comes through coordination and management activities taking place in the national and regional levels. More specifically, policy makers can:

- Conduct research on the impact of R&D upon employment at regional level, produce suitable metrics and incorporate them into the regular regional innovation scoreboard applied.
- Promote the collaboration of R&D for social cohesion through dedicated calls in the various funding calls of the European Research Area.
- Promote networking & clustering of research infrastructures that study the spillover effect of R&D in employment.

Bibliography

- Aranguiz A. (2021, September 2). *Platforms put a spoke in the wheels of Spain's 'riders' law*. Social Europe. <https://www.socialeurope.eu/platforms-put-a-spoke-in-the-wheels-of-spains-riders-law>
- Avdikos V. and Papageorgiou A. (2022). Public support for collaborative workspaces: Dispersed help to a place-based phenomenon?. *Local Economy*. 36:1.
- Avdikos V., Papageorgiou A., Kalogeresis A., Pettas D., Merkel J. (2022). Policy Brief 1: Coworking trends in Athens and the impact on the city. *UrbanCowork*.
- Avdikos V. (2020). Collaborative Work Spaces: Characteristics, tendencies and policy recommendations. *Research Papers IME GSEVEE*. 15.
- Avdikos V. and Merkel J. (2019). Supporting open, shared and collaborative workspaces and hubs: Recent transformations and policy implications. *Urban Research & Practice*. 13:4.
- Bakhtiari S., and Breunig R. (2018). The Role of Spillovers in Research and Development Expenditure in Australian Industries. *Economics of Innovation and New Technology*. 27:1.
- Bogliacino F., Piva M., Vivarelli M. (2014). Technology and Employment: The job creation effect of business R&D. *Vita & Pensiero*. 122:3.
- Bogliacino F., Vivarelli M. (2010). The Job Creation Effect of R&D Expenditures. IZA Discussion Papers, No 4728, *Institute of Labor Economics (IZA)*.
- Broughton A., Gloster R., Marvell R., Green M., Langley J., Martin A. (2018). *The Experiences of Individuals in the Gig Economy*. Department for Business, Energy & Industrial Strategy.
- Capdevila I. (2018). Knowing communities and the innovative capacity of cities. *City, Culture and Society*. 13.
- Christiaens T. (2023, October 26). *Dangers ahead for the platform-work directive*. Social Europe. <https://www.socialeurope.eu/dangers-ahead-for-the-platform-work-directive>
- De Peuter G. (2011). Creative Economy and Labor Precarity. *Journal of Communication Inquiry*. 35:4.
- Department of Enterprise, Trade and Employment (2021). *Making Remote Work: National Remote Work Strategy*. Government of Ireland. <https://enterprise.gov.ie/en/publications/publication-files/making-remote-work.pdf>
- De Stefano V. (2016). Crowdsourcing, the Gig-economy and the Law. *Comparative Labor Law & Policy Journal*. 37:3.
- De Stefano V & Aloisi A. (2021, December 9). *European Commission takes the lead in regulating platform work*. Social Europe. <https://www.socialeurope.eu/european-commission-takes-the-lead-in-regulating-platform-work>
- Eurofound (2015). *New forms of employment*. Publications Office of the European Union.
- EU-OSHA (2015). *A Review on The Future of Work: Online Labour Exchanges, Or 'Crowdsourcing': Implications For Occupational Safety And Health*. OSHA Discussion paper.

EU-OSHA (2017). *Protecting Workers in the Online Platform Economy: An overview of regulatory and policy developments in the EU*. Publications Office of the European Union.

European Commission (2021). *COMMISSION STAFF WORKING DOCUMENT IMPACT ASSESSMENT REPORT Accompanying the document Proposal for a Directive of the European Parliament and of the Council On improving working conditions in platform work*. Brussels, 9.12.2021 SWD(2021) 396 final European Council (2023) - proposal for directive

Eurostat (2023). *Glossary: Research and development (R & D) personnel and researchers*. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Research and development \(R %26 D\) personnel and researchers](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Research_and_development_(R_%26_D)_personnel_and_researchers)

Fabo B., Beblavý M., Kilhoffer Z., Lenaerts K. (2017). *An Overview of European Platforms: Scope and Business Models*. JRC Science for Policy Reports.

ILO (2016). Green jobs. *International Labour Organization*. <https://libguides.ilo.org/green-jobs-en>

In Newspaper (2023, December 23). *Με πρωτεργάτη τη Γαλλία και τη συμβολή της Ελλάδας, καταρρέει η συμφωνία για τους εργαζομένους σε πλατφόρμες*. In.gr. <https://www.in.gr/2023/12/23/world/protergati-ti-gallia-kai-ti-symvoli-tis-elladas-katarreei-symfonia-gia-tous-ergazomenous-se-platformes/?fbclid=IwAR0-N6Za13F7G0NFQYn ETi9oO KEOhkYsK50ZOhxUJP-7QnJN rDkP2yV8>

Kountouri F. (2015). *Public Problems on the Political Agenda*. Athens: Association of Greek Academic Libraries.

Lunn, P., Ruane F. (2013). When and How Can Evidence Inform Policy?. Lunn, P., Ruane F. (eds) *Using Evidence to Inform Policy*. Dublin: Gill & MacMillan.

Manoukas D. (forthcoming). *Impact of youth employment policies with emphasis on co-working & RnD policies*. Cowork4YOUTH Output 4.

Mehta B. S. (2020). Changing Nature of Work and the Gig Economy: Theory and Debate. *FIIB Business Review*. 12:3.

Midgley G., Lindhult E. (2017). *What is Systemic Innovation?*. Centre for Systems Studies. Research Memorandum 99. Hull University Business School.

Mondolo J. (2020). The Composite Link between Technological Change and Employment: A survey of the literature. *Journal of Economic Survey*. 36.

Muller P. and Surel Y. (2002). *L'analyse des politiques publiques*. [Greek edition] τυπωθείτω, Athens. Original edition: Paris (1998): Montchrestien.

Nakano D., Shlach M., Koria M., Vasques R., dos Santos E. G., Virani T. (2020). Coworking Spaces in Urban Settings: Prospective roles?. *Geoforum*. 115.

OECD (2015). *Frascati Manual: Guidelines for collecting and reporting data on research and experimental development*. OECD Publishing.

Papageorgiou A., Merkel J., Avdikos V., Michailidou M. (2022). Policy Brief 2: The impact of coworking spaces on coworkers' well-being and skills' development. *UrbanCowork*.

Pellegrin J. (2007). Regional Innovation Strategies in the EU or a Regionalized EU Innovation Strategy? *Innovation*. 20:3.

Pesole A., Urzi Brancati M.C., Fernandez Macias E., Biagi F., Ginzalez Vasquez I. (2018). *Platform Workers in Europe Evidence from the COLLEEM Survey*. Publications Office of the European Union.

Pitts F. H., Borghi P., Murgia A. (2023). Organising the self-employed: combining community unionism, coworking and cooperativism across contexts. *Open Research Europe*. 3:80.

Piva M., Vivarelli M. (2017). Is R&D Good for Employment? Microeconometric Evidence from the EU. IZA Discussion Papers, No. 10581, *Institute of Labor Economics (IZA)*.

Redmond P. and McFadden C. (2023). Review Paper on Employment Potential for NEETs. *Cowork4YOUTH*.

Shah I. H., Kollydas K., Lee P. Y., Malki I., Chu C. (2022). Does R&D Investment Drive Employment growth? Empirical evidence at industry level from Japan. *International Journal of Finance & Economics*. 29.

Sucha V. and Sienkiewicz M. (2020) (eds). *Science for Policy Handbook*. Elsevier.

Teichgraeber A., Van Reenen J. (2022). *A Policy Toolkit to Increase Research and Innovation in the European Union*. Discussion Paper No 1832. Centre for Economic Performance. London School of Economics and Political Science.

The Three Regional Assemblies of Ireland (2020). *Regional Co-Working Analysis*.

Todtling F., Trippel M. (2005). One size fits all? Towards a differentiated regional innovation policy approach. *Research Policy*. 34.

Toh J. (2021, February 25). *UK gig drivers recognised as workers—what next?*. Social Europe. <https://www.socialeurope.eu/uk-gig-drivers-recognised-as-workers-what-next>

Urzi Brancati C., Pesole A., Fernández-Macías E. (2020). *New evidence on platform workers in Europe. Results from the second COLLEEM survey*. Publications Office of the European Union.

Urzi Brancati C., Pesole A., Fernández-Macías E. (2019). *Digital Labour Platforms in Europe: Numbers, Profiles, and Employment Status of Platform Workers*. Publications Office of the European Union.

Whelan A., Staffa E. and Banahan C. (2023). *Determinants of Regional Youth Employment in Greece, Ireland, Italy, and Spain: Transnational Report on employment potential for young people through alternative sectors*. Cowork4YOUTH.

Yang C. H. & Lin C. H. (2008). Developing Employment Effects of Innovations: Microeconometric evidence from Taiwan. *The Developing Economies*. XLVI:2.

List of Revisions

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