



## Working Paper on an analytical framework on industrial relations and social dialogue for adult learning in a changing Europe

### Deliverable 1.1

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## Executive summary

I SKILL (Industrial Relations to Kick-Start Inclusive Adult Learning) is a project that investigates how industrial relations and social dialogue may contribute to the advancement of adult learning in the EU. The project's first deliverable (D1.1) is a working paper with multiple objectives. The inquiry begins by establishing a conceptual framework, including concepts of the adult learning system, the twin transition, and their interrelationships. The twin transition is progressively changing the labour market, with Covid-19 acting as a catalyst. In this context, enhancing adult learning systems is without any doubt the correct course of action.

Nevertheless, the interrelationship between adult learning and the twin transition presents numerous challenges, among which this deliverable describes which are the groups that participate less in adult learning, the reasons behind the limited participation and the development of inclusive strategies to prevent the escalation of inequalities in adult learning participation.

Furthermore, it considers the academic and grey literature, as well as the policy documents, to identify different types of measures that support adult learning. The paper outlines governance structures and actors active in the design, implementation, monitoring, and evaluation of such policy measures. For this aspect, a practical approach has been preferred to see how the selected Member States (Belgium, Bulgaria, Denmark, France, Italy, and Slovakia) design measures that address country-specific requirements (both old and new) in their adult learning systems. Furthermore, a critical review of the learning schemes and accounts is provided.

Finally, the paper focuses on the role of social dialogue and industrial relations, which have to adapt to a forced, quick reorganisation of work, driven by the green and digital transitions and lockdown experiences. The circumstances that enable adult learning to flourish in a fast-changing economy are investigated by going beyond social partners' contributions to establishing the right to adult learning, and by examining their activities for equitable access to quality adult learning opportunities.

**Keywords:** lifelong learning, adult learning (formal, non-formal, and informal), vocational education and training (VET), adult learning systems (ALS), digital transition, green transition, twin transition, upskilling, reskilling, labour market disruption, inclusive adult learning, adult learning specific measures in EU Member States, individual learning accounts, industrial relations, social dialogue, social partners, collective bargaining.

## Introduction

The promotion of adult learning has been a key part of policy discussions since the Lisbon strategy<sup>1,2</sup>. In the last two decades, many binding and non-binding initiatives on lifelong/adult learning and closely connected topics have been launched by European institutions. Inter alia, one can mention the ‘Education & Training 2020 Strategic Framework – ET2020’ (Council of the European Union, 2009), whose aim was to make the EU “the most competitive and dynamic knowledge-based economy in the world” (p. 1)., the ‘Council Recommendation on upskilling pathways: new opportunities for adults’ (Council of the European Union, 2016) that targeted the low-skilled, regardless their working conditions, or the ‘European Pillar of Social Rights – EPRS’ (European Parliament, Council, European Commission, 2017) which, with its first principle, establishes a foundation for a universal right to life-long learning<sup>3</sup>.

The European framework on lifelong/adult learning has been expanded in recent years, emphasising that all individuals have the right to high-quality, inclusive education, training, and adult learning. In July 2020, six months after Covid-19 was declared a pandemic, the European Commission released its ‘Communication on a European skills agenda for sustainable competitiveness, social fairness, and resilience’ (European Commission, 2020b) where advocates “a skills revolution and a paradigm shift in skills policies” (p. 26). It includes 12 flagship actions to be achieved by 2025. Most of the flagship actions are related to skills<sup>4</sup>.

For instance, the Pact for Skills<sup>5</sup> of the European Commission calls on all the stakeholders to give a firm commitment to investing in training to maximise the effect of upskilling and reskilling for all working-age individuals throughout the Union. Also, the ‘proposal for a Council Recommendation on vocational education and training for sustainable competitiveness, social fairness, and resilience’ (European Commission, 2020c) seeks to breathe new life into vocational education and training (VET) – making it more adaptable to the green and digital transitions.

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<sup>1</sup> The heads of State and Government of the Member States of the European Union endorsed the Lisbon Strategy, an economic reform programme, in 2000. The special gathering that took place in Lisbon in March inspired its name.

<sup>2</sup> Even if, for example, Dehmel (2006) already identifies the link between continuing education discourse and European strategies, at least since the 1970s.

<sup>3</sup> The first article reads, “[e]veryone has the right to quality and inclusive education, training and life-long learning in order to maintain and acquire skills that enable them to participate fully in society and manage the transitions in the labour market”. Furthermore, the initial parts of the fourth and fifth principles read respectively: “Everyone has the right to timely and tailor-made assistance to improve employment or self-employment prospects. This includes the right to receive support for job search, training and re-qualification.” And “Regardless of the type and duration of the employment relationship, workers have the right to fair and equal treatment regarding working conditions, access to social protection and training.”

<sup>4</sup> The Skill Agenda 2020 also encourages the adoption of instruments that may help individuals to learn more effectively, such as micro-credentials and personal learning accounts. Furthermore, effective access to learning opportunities is critical, especially for those who would benefit the most from upskilling and reskilling. This is an important component of the Council Recommendation on upskilling pathways (Council of the European Union, 2016), on which a public consultation was recently concluded (Public consultation on Upskilling Pathways, 16 December 2021 – 17 March 2022 at: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12637-Improving-adults-basic-skills-Upskilling-pathways-recommendation-evaluation\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12637-Improving-adults-basic-skills-Upskilling-pathways-recommendation-evaluation_en)).

<sup>5</sup> [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_2059](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2059)

On 4 March 2021, a European Pillar of Social Rights action plan was presented, determining a new EU headline objective of 60 % of individuals (aged 16-64) engaging in training every year by 2030 (European Commission, 2021a). This target was recently confirmed by the Porto declaration<sup>6</sup> (8 May 2021), demonstrating again the greatest degree of political commitment to adult learning. On 31 May 2022, the Council recommended that the Member States put in place individual learning accounts (ILAs) and the corresponding frameworks to enable individuals to engage in training that is relevant to the labour market and is intended to help them join or remain in employment (Council of the European Union, 2022b)<sup>7</sup>.

The main message that can be drawn from the complex set of EU initiatives mentioned above is that adults cannot rely solely on what they learned in their early education and training, because the society we live in is rapidly changing, owing to labour market dynamics that have been accelerated by the Covid-19 pandemic. The skills requirements for many employers have fundamentally shifted and will continue to do so as a result of the green and digital transitions. Skills are pivotal to guaranteeing economic competitiveness, innovative potential, and social cohesion. While the headline targets set by the EU institutions, in terms of adult learning participation, are still far from being met, speeding up the process of upskilling and reskilling seems to be crucial. This conclusion was also reached during the annual conference of the World Economic Forum held in Davos in May 2022, when it was predicted that up to a billion people, at a global level, would need reskilling, training, and adult learning by 2030.

More specifically, in this rapidly changing context, and under the threat that further disruptions may occur, labour and training systems need to address skills mismatches, via upskilling and reskilling initiatives, in a proactive, flexible, and timely way. Mismatches between the supply of and demand for skills are a labour market feature under normal circumstances and even more so in the context of megatrends, including the twin transition, demographic changes<sup>8</sup>, and globalisation. However, when the skills mismatch starts becoming substantial, in terms of both persistence and extent, there are risks of significant costs associated with reduced labour productivity and limited firm innovation, as well as higher chances of unemployment, lower wages, and reduced job satisfaction.

The European Commission, in its recent proposal on individual learning accounts (European Commission, 2021b), pointed out that “[t]he success of both the digital and green transitions depend on workers with the right skills, and the need to act fast puts high demands on Member States’ support systems for continuous learning”. Nevertheless, the upskilling and reskilling processes must be designed with certain criteria, to deal efficiently and effectively with the transitions. In facing skill mismatches, policy interventions need to:

- be guided by the qualitative and quantitative data attained by labour market and skill intelligence (LMSI) which has to be disseminated to all the interested stakeholders;
- be aware that investing in the skills most required by the labour market is a priority – in solid, technical-scientific knowledge and skills on the one hand, and on the other hand, in a series of soft/transversal skills;

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<sup>6</sup> <https://www.consilium.europa.eu/en/press/press-releases/2021/05/08/the-porto-declaration/pdf>

<sup>7</sup> The Recommendation is issued along with the one on micro-credentials (Council of the European Union, 2022a).

<sup>8</sup> E.g. ageing population.



- be ready to support, with the right adult learning tools and methodologies, the development of skills suitable for the workers of the future. Jobs will be less and less tied to specific tasks and will require interconnected skills.

The EU has introduced a sizeable number of initiatives, rules, and directives to support the transitions to both a digital and green economy. Nevertheless, as underlined in the ‘Annual Sustainable Growth Strategy 2021’ (European Commission, 2020d) “the recovery and transition process needs to be fair for all Europeans to prevent growing inequalities, ensure support from all parts of the society, and has to contribute to social, economic and territorial cohesion”. Social fairness in the digital transition will also be crucial for public acceptance of the efforts and adjustments required (including at the individual level) for the EU to fully enjoy the benefits of this shift, both locally and internationally. In this perspective, policymakers must continue to effectively plan and envisage the efforts needed to guarantee that the twin transition is socially equitable and benefits everyone, and does not aggravate poverty and economic disparity (or social exclusion).

Social dialogue and industrial relations can contribute to adult learning systems (ALS) in several ways (OECD, 2019a; 2019b). Industrial relations and collective bargaining can set binding provisions and promote workers’ rights to education and training (Heyes, 2007; OECD, 2019c). Social dialogue can contribute to shaping and enhancing policies for upskilling and reskilling, anticipating common skills needs, establishing priorities, and designing effective implementation. Social partners can help firms and workers to benefit from these policies, promote a learning culture and access to training at the workplace, and monitor the quality of adult learning opportunities. Social partners can also steer private investments, mobilising the capacity of all actors to deliver on skills development (Kennedy et al., 1994; Koch et al., 2019).

Still, the role of social partners in adult learning is subject to Member States’ specificities. It can depend on (i) the industrial relations and social dialogue model (OECD, 2019b; Winterton, 2000); (ii) the level of governance (i.e. national, regional, sectoral) and policies for adult learning (Winterton, 2007); and (iii) the overall skills ecosystem and interactions with other parties (Hazelkorn and Edwards, 2019). Depending on the policy, the role of social partners differs, ranging from a management and implementation function for training funds (e.g. in Belgium), to an assistance and counselling role in accessing individual learning accounts - ILAs (e.g. France) (Baiocco et al., 2020).

This working paper is divided into three chapters. **Chapter 1** is broken down into two sections. Section 1.1 deals with the main notions that will be used in this specific deliverable (D1.1) and the whole project. It touches on the concepts of adult learning (along with VET and ALS), the digital and green transitions as well as the twin transition, upskilling and reskilling, the accelerating effect of Covid-19 on the twin transition and a selection of strategies for promoting adult learning. Section 1.2 deals with the interconnection between the adult learning system and the twin transition, highlighting and analysing in depth some of the areas where the enhancement of ALS seems to be more urgent. More specifically, after broadly explaining the reasons why participation in adult learning is fundamental, it looks at the participation and lack of participation in adult learning, accounting for the reasons behind the non-participation), and refers to some possible measures for inclusive adult learning.

**Chapter 2** defines some aspects of the economic policy/governance of adult learning and then takes a practical approach to describe adult learning measures in the six countries under scrutiny in the I SKILL project (Belgium, Bulgaria, Denmark, France, Italy, and Slovakia). The rationale for selecting these Member States and the set of criteria for



selecting national measures are outlined. For Belgium it has been selected the ‘sectoral training funds’, for Bulgaria the ‘vouchers for employees’, for Denmark the ‘industry’s competence development fund’., for France the ‘individual learning account’, for Italy the ‘new skill fund’ and for Slovakia two measures of provision of education and training for employees under the ‘provision of a framework of active labour market policy measures’.

**Chapter 3** delves further into the literature on industrial relations and social dialogue structures, tools, and actors in adult learning. More precisely, the roles of social partners are mapped in diverse settings and for different levels of governance, distinguishing among those centered on creating rights, guaranteeing access, and assessing quality (highlighting different types of involvement). The chapter introduces key definitions and concepts, explains the history and development of social dialogue over time and presents an industrial relations typology.

## 1. Adult learning in the age of twin transition and the challenges to make it more inclusive.

### 1.1 Adult learning and the twin transition: a general framework

**Adult learning and the twin transition are strongly interconnected. The twin transition requires and is fed by the availability of workers equipped with the right skills which, in turn, are a requisite for the workers to join in the transition, stay employable, and participate in society.** The concepts of adult learning and those of the digital, green, and twin transition (along with green/digital skills) will initially be considered separately, then in their close interconnection. Upskilling and reskilling, as specific forms of lifelong learning, take on a more important role. Indeed, for the twin transition, accelerated by Covid-19, they are a key tool in the social governance of the transformation. Their role is twofold: (i) avoiding the new potential risks of stratification and social exclusion (especially for those with low skills or employed in occupations with low added value), and instead (ii) promoting the values of the just transition – which means guaranteeing environmental, economic and, above all, social sustainability. With these aims, lifelong learning, including VET, has to be rethought for different aspects that will be explored in depth with some references to the specific cases of upskilling and reskilling green skills and digital skills.

#### 1.1.1 Adult education/learning

It is acknowledged that, as Boyadjieva and Ilieva-Trichkova (2021, p. 36-37) put it, “adult learning and education also has a heterogeneous character which often results in ‘intangible conceptual tensions’ (Milana et al. 2018, p. 1) and ‘poses a challenge to empirical research making it difficult, maybe even impossible, to draw general conclusions regarding the effects of adult education and training’ (Weiss 2019, p. 409). [...] Even a brief glance at the literature, however, reveals that there are different definitions of adult learning and education. Some authors use adult education and adult learning or adult formal education and adult formal learning interchangeably (Kilpi-Jakonen et al. 2015; Vono de Vilhena et al. 2016). Torres (2013) coins the term ‘adult learning education’. The authors of the well-received volume on life-course perspective on adult learning in modern societies define it as referring to both formal and non-formal learning activities (Kilpi-Jakonen et al. 2015,). The editors of the Palgrave International Handbook on Adult and Lifelong Education and Learning (Milana et al. 2018) prefer the generic concept ‘adult education and learning’. This is in line with UNESCO’s definition, according to which adult learning and education: ‘denotes the entire body of learning processes, formal, non-formal and informal, whereby those regarded as adults by the society in which they live, develop and enrich their capabilities for living and working, both in their own interests and those of their communities, organizations and societies’ (UNESCO 2016a, p. 6). It has to be further emphasised that the definitions of adult education applied in different countries in their legislation and policy documents vary widely (UNESCO 2016b)”.

In addition, UNESCO refuses to define the meaning of adult. Acknowledging that “the boundaries of youth and adulthood are shifting in most cultures”, it accepts that the “term ‘adult’ denotes all those who engage in adult learning and education, even if they have not reached the legal age of maturity” (UNESCO, 2016a, pp. 6-7).

**Among international organisations and from a policy perspective it is widely accepted that learning includes a triad – formal, non-formal, and informal.** The European Commission (2001) in its ‘Communication on Making a European area of lifelong learning a

reality' outlines that "lifelong learning should include the whole spectrum of formal, non-formal and informal learning, which constitutes the life wide dimension of lifelong learning". This difference, meanwhile, is debatable in scholarly literature. As a result, Hodkinson (2010) notes that there is not a clear-cut boundary between formal and informal learning and that the same learning strategy may be categorised in many ways by various authors.

For instance, according to Colley et al. (2003), informal and formal components are combined in most learning activities. The authors claim that a particular activity's goals, procedure, and setting might all be classified as informal, but its content could be described as formal. Rubenson (2019) finds that the terms formal, non-formal, and informal merely describe the environment in which learning occurs and not the nature of learning itself.

Furthermore, this triad is criticised as providing limited usefulness in practice and in cross-national settings for distinguishing forms of adult learning because of the differences between countries' educational systems (Desjardins, 2020). Relying on UNESCO's definitions, formal adult education could be understood as "[e]ducation specifically targeted at individuals who are regarded as adults by their society" and which "occurs as a result of experiences in an education or training institution, with structured learning objectives, learning time and support which leads to certification" (UNESCO, 2009, p. 27). The main characteristic "of non-formal education is that it does not lead to certification for the acquired level of education; however, it is structured in terms of learning objectives, learning time, and learning support. Thus, formal and non-formal education are both institutionalised, although to differing degrees; both are also intentional from the learner's perspective" (Boyadjieva and Ilieva-Trichkova, 2021, p. 38).

Although it can be difficult to distinguish between formal and non-formal adult education and learning, it is still important to try because, as numerous prior studies have demonstrated, there are important differences between the effects of these two types of adult education and learning in their benefits for both individuals and societies (Blossfeld et al., 2014; Kilpi-Jakonen et al., 2015; Boyadjieva and Ilieva-Trichkova, 2017). Moreover, Boyadjieva and Ilieva-Trichkova (2017) highlight that adult non-formal learning is more heterogeneous than adult formal learning because it comprises a variety of forms and programmes. That is why, in all studies, it is critical to explicitly describe how adult non-formal learning is operationalised.

### Box 1 Lifelong education and lifelong learning paradigms

"[Even a glimpse at] the discussions on lifelong education/learning inevitably will be fraught with two problems:

- there are a number of closely similar concepts: 'permanent education', 'continuing education', 'recurrent education', and 'adult education'; and each of these concepts has its own history (e.g. Jarvis 2004);
- the development of the concept of lifelong education/learning has passed through different stages which have connected it with various paradigms.

The existing paradigms relevant to lifelong education/learning differ importantly in three respects: (1) as regards their views on the meaning and direction of educational processes; (2) as regards the state's and the market's given role related to learning; and (3) in terms of which institutions should initiate and promote education. The two main paradigms are *lifelong education* and *lifelong learning*" (Boyadjieva and Ilieva-Trichkova, 2021, p. 21, emphasis in the

original).

“Most authors take a negative view on the substitution of the ‘lifelong education’ concept with ‘lifelong learning’. They believe that the first of these concepts emphasises ‘education’, while the second stresses ‘lifelong’. Moreover, lifelong education is linked with ‘to be’, not ‘to have’; it is concentrated in the public sphere, focuses on equality and civil society, and is understood as a process aimed at growth, at achieving the qualitative development of individuals and their social life. Lifelong learning, for its part, includes all kinds of learning regardless of their quality, and is focused on the private sphere, on individuals as clients of education services, and is most often limited to continuing education and professional development (Boshier 2001; Wain 2001; Grace 2004). Some, less numerous, authors believe that the concept of lifelong learning is preferable to that of lifelong education because the former asserts the active position of individuals in the educational process, unlike the understanding of education as a purposefully supervised activity in which individuals are mostly passive performers of another’s will (see Wain 2001, p. 188)” (Boyadjieva and Ilieva-Trichkova, 2021, p. 24).

Learning, compared with education, is a broader concept. Not all learning is education, “education is processed, i.e., *planned*, learning” (Rogers, 2014, p. 12, emphasis in the original). It is an “institutionalized learning process” (Jarvis, 2004, p. 41), “learning that is deliberate, intentional, purposeful and organized” (UNESCO, 2015, p. 17).

“Bearing in mind the ongoing debate about the proper terminology, either lifelong learning or lifelong education (e.g. Wain 2001; Tuijnman and Boström 2002; Jarvis 2009; Holford and Milana 2014), we follow Peter Jarvis’s argument that ‘lifelong education became lifelong learning’ (Jarvis 2009, p. 36) and prefer using the term ‘lifelong learning’ for [two] main reasons. First, whereas education refers to the provision of learning opportunities in an institutionalised and planned manner, learning is a wider term that could encompass not only formal but also non-formal and informal forms of learning. Second, by moving the focus from structures and institutions to individuals, it emphasises the agency aspect of the educational and learning processes and the active role of the individual in them.” (Boyadjieva and Ilieva-Trichkova, 2021, p.21)

This is crucial, particularly when taking into account the types of education that follow compulsory schooling and occur later in people’s lives. The substitution of lifelong education with lifelong learning also emphasises “core concepts such as *learning to learn*, and other characteristics required for subsequent learning, including motivation and capacity such as *foundation skills*. This contrasts with recurrent education which had focused on *education* by providing a strategy to spread formal education opportunities over the lifespan to mitigate the consequences of a lengthening of front-loaded education. Further, the idea of alternating work with formal education on a cyclical basis was replaced by strategies to promote *learning while working* and *working while learning*” (Desjardins, 2020, p. 11, emphasis in the original).

Lifelong learning arises as a notion that encompasses composite realities in the context of late modernity. Recognizing the hybrid nature of lifelong learning involves admitting that it is a learning and education concept that leads to the formation of an assembly of multiple practices and that it contains various types of knowledge and skills from various perspectives. (Boyadjieva and Ilieva-Trichkova, 2021). Thus “the lifelong learning paradigm offers a master concept for thinking about the whole of education and training systems including all learning from early childhood education and care, initial formal education, higher education, vocational education and training, and other adult education” (Desjardins, 2020, p. 10).

“The concept, practices, and policies of lifelong learning can be regarded as a reflection of

certain major socio-structural characteristics of societies of late modernity [...]. The shifted institutional order, increased ‘permeability’ between different social spheres, new status of knowledge, and constant change becoming an essential characteristic of the economy and social life explain both the hybrid character of lifelong learning and its importance for individual and societal well-being” (Boyadjieva and Ilieva-Trichkova, 2021, p. 298).

### 1.1.2 Vocational education and training (VET)

**Among education and training programmes, VET occupies a prominent place and it is rightly acknowledged that VET is a broad concept, whose definitions vary from country to country and among leading international, European, and global organisations** (Markowitsch and Helfer, 2019). Analyses show that from the last decade of the 20<sup>th</sup> century there has been a change in both the scope of VET and its rationale. The scope of VET has changed from putting stress on specific (re)training for particular jobs to a very broad concept, which also includes general and secondary education, adult learning and training through active labour market measures, higher education, and lifelong learning in general. Regarding its rationale, VET is no longer considered a compensatory measure, but is seen as a driver of economic development and a factor (although not fully effective) of social cohesion (West, 2012).

A survey of national VET definitions and conceptions<sup>9</sup> on how the latter have changed reveals that “[t]he past two decades have witnessed remarkable diversification of VET in terms of providers, levels and target groups, increased horizontal and vertical permeability, renewed emphasis on work-based elements, coalescence of initial and continuing VET, and hybridisation of systems and programmes” (Cedefop, 2017, p. 4). The survey also revealed that there are over 30 alternative definitions of VET in Europe, demonstrating that VET takes numerous forms and is the least unified of education sectors. It is worth noting the usual difference between generic and specific skills, in which “general education usually aims to enhance skills (such as literacy or numeracy) that are useful in all occupations, whereas VET aims to develop skills for a particular set of occupations, a specific occupation or even a single enterprise, has been recently contested” (Cedefop, 2017, p. 7). Cedefop identifies four patterns of VET: “VET understood as work-based or dual initial training; initial vocational education; further training; and as (part of) lifelong learning” (Cedefop, 2017, p. 26).

For its part, continuing vocational training (CVT) is a planned learning process. It refers to “a training process or activity which has as its primary objective the acquisition of new competences or the development and improvement of existing ones, and which is financed at least partly by the enterprises for their employees” (NRDC, 2011). Since 1993, the European Commission has supported the collection of data on continuing vocational training and enterprises’ investment in it through the Continuing Vocational Training Survey (CVTS)<sup>10</sup>. Random learning and initial vocational training (IVT), as well as people employed holding an apprenticeship or training contract, are excluded.

<sup>9</sup> In EU Member States, Iceland and Norway.

<sup>10</sup> <https://ec.europa.eu/eurostat/web/microdata/continuing-vocational-training-survey>

### 1.1.3 Adult learning systems (ALS)

**An ALS perspective draws attention to the institutions (political, economic, and social) and different stakeholders underlying the governance, provision, and financing of adult learning. It considers how they shape and affect different forms of adult learning and skills formation, their validation, and the relationship between them.** ALS “refer to the mass of organised learning opportunities available to adults along with their underlying structures and stakeholders that shape their organisation and governance. This helps to move well beyond the simple distinction of formal and non-formal by focusing on actual structures that relate to adult learning” (Desjardins, 2020, p. 14). It should be emphasised that ALS interact not only with formal education structures but with the economic and production system as well (Desjardins and Ioannidou, 2020).

From a political economy perspective, Desjardins and Ioannidou (2020) claim:

- “ALS are embedded in specific economic and social arrangements ... [a]s such, they are linked to a range of stakeholders (associations, chambers, communities of interest, industry) according to the historical origins of adult education and training in each country, the type of educational governance, and the type of skill formation regime” (pp. 150-151);
- “ALS differ considerably across countries, more than the regular cycle of formal education does” (Desjardins and Ioannidou, 2020, p. 146);
- “in many other countries, ALS are lacking some of the institutional features necessary to even be considered a system per se” (p. 146);
- “ALS are in general not only less regulated but also less homogeneous than the regular cycle of formal education regarding their institutional structure, function and target groups” (p. 146);
- “[ALS] include [...] Adult Basic (and General) Education (ABE/AGE), Adult Higher Education (AHE), Adult Vocational Education (AVE), and Adult Liberal Education (ALE)” (p. 146).

The most influential classifications in comparative research by far, such research on education included, are the typology of welfare states by Esping-Andersen (1990, 1998) and the ‘Varieties of Capitalism’ approach by Hall and Soskice (2001). Desjardins (2017) proposed a taxonomy of ALS in some of the most industrialised countries, building on the ‘Varieties of Capitalism’. “Mainly based on the distinction between state vs market involvement in the existence (supply) and take-up (demand) of adult learning opportunities, he distinguishes between market-led adult learning regimes, state-led regimes, stakeholder-led regimes and state-led regimes with a high degree of stakeholder involvement” (Desjardins, 2017, pp. 25–31).



#### 1.1.4 Digital and green transitions

The phenomenon of green and digital transitions <sup>11</sup> has to be understood as a slow process, characterised not only by the generation of environmental impacts but also economic and social ones. These require an approach that goes beyond a mere analysis of the impacts on employment in the most affected sectors. A holistic view is needed to generate policies based on collaboration and the participation of different actors and institutions, from the international to local levels.

Among the various definitions of the **green transition**, the International Labour Organization (ILO) identifies it as a “transition to environmentally sustainable economies and societies” (ILO, 2019a p. 202). This definition is then linked to that for the process of greening the economy “[t]he process of reconfiguring businesses and infrastructure to deliver better returns on investments of natural, human and economic capital, while at the same time reducing greenhouse gas emissions, extracting and using fewer natural resources, creating less waste and reducing social disparities” (ILO, 2019a, p. 202).

The **digital transition** “entails the pervasive adoption of digital technologies in production and consumption activities that rely on a significant dimension of data development and data analysis” (European Commission, 2019a, p. 15). Also relevant is that the “[d]igital transformation refers to the economic and societal effects of digitisation and digitalisation. Digitisation is the conversion of analogue data and processes into a machine-readable format. Digitalisation is the use of digital technologies and data as well as their interconnection that result in new activities or in changes to existing ones. Together, digitisation and digitalisation make up the digital transformation” (OECD, 2019, box 1.2)

#### Box 2 Digital and green skills: some definitions

**For the green and digital transitions, it is not possible today to trace a univocal definition of green and digital skills. Nevertheless, it is possible to recognise a progressive broadening of these concepts, which come to encompass soft, socio-emotional, and non-cognitive skills as determining factors for the successful adoption of the new socio-economic paradigm.**

**Green skills.** Cedefop (2012) defines green skills as “the knowledge, abilities, values, and attitudes needed to live in, develop and support a sustainable and resource-efficient society”. OECD and Cedefop (2014) take a step further and define green skills as “the skills needed by the workforce, in all sectors and at all levels, in order to help the adaptation of products, services and processes to the transformations due to climate change and to environmental requirements and regulations” (as reported in Vidican Auktor, 2020, p. 13). Cabral and Dahr

<sup>11</sup> The term ‘transition’ according to Kangera et al. (2020) refers to a long process that takes place over time and concerns the transition from one socio-technical system to another. The same authors define the latter as a certain configuration of actors, rules, and technologies for the fulfilment of a particular social function. A transition does not, therefore, concern only the transformations taking place in the labour market or the impact of certain technologies on employment, but has an impact on society, involving, in the first instance, systems of common rules and institutions called upon to accompany this same transition, which takes place gradually over a period of time of varying length.



(2021) proposed, based on a literature review on the topic published between 1997 and 2017, to consider 'green' not only skills but also to think of it as a construct consisting of six interrelated dimensions: green knowledge, green skills, green abilities, green awareness, green attitudes, and green behaviour. Green skills, for example, are defined by the authors (taking up Coeckelbergh, 2015) as **"skillful engagement with our (natural) environment"** (p. 90) – a definition, therefore, that encompasses the technical and specialised dimension as well as the transversal dimension of these skills.

**Digital skills.** Initially, these skills were referred to as 'internet skills', and were purely technical and related to the use of the functionalities introduced by the internet (Van Deursen et al., 2014). **The concept has evolved, and it has been emphasised that it also includes socio-emotional and communicative skills:** digital does not simply concern a technological niche, but imposes a change on our common way of communicating, living, and working. There have been different definitions of digital skills over the last 15–20 years (van Laar et al., 2017). In 2017, the authors, based on a comprehensive literature review of more than 1 500 articles, introduced the concept of **21<sup>st</sup> century digital skills and proposed a framework of seven core digital skills** (technical, information management, communication, collaboration, creativity, critical thinking, and problem-solving) **along with five contextual digital skills** (ethical awareness, cultural awareness, flexibility, self-direction, and lifelong learning)<sup>12</sup>. These skills are thus technical and transversal. A study by Goulart et al. (2021) also highlights this important difference and complementarity: **beyond the always complex adaptation of technical skills**, which are subject to more or less rapid obsolescence, **it is crucial to focus on transversal digital skills.**

### 1.1.5 Twin transition

**The twin transition is one of the core strategies behind the Commission's proposal for a European Recovery Plan to address the socioeconomic implications of the Covid-19 crisis (Bianchi, 2020). The twin transition is a transversal phenomenon, a true socio-technical paradigm shift whose complexity cannot be reduced to readings that consider only the direct economic and employment impacts. Furthermore, in the literature, it also emerges that whether talking about the twin transition, circular economy, or sustainability, the challenge seems to be that of a just transition that succeeds in guaranteeing environmental, economic, and above all, social sustainability.**

There are many points of contact, if not overlap, between the digital transition and the green transition. Numerous authors use the expression twin transition (Renda et al., 2021; Sabato and Fronteddu, 2020) to highlight the connection between strategies aimed at the digitalisation of processes and services, along with the objectives of lowering the environmental impact linked to strategies for better environmental sustainability.

The twin transition is linked to policies and strategies that, in particular since the Paris Climate Agreement of 2015 (Glanemann et al., 2020), aim to provide resources and pathways for the concrete realisation of this process. The reference can only be to the

<sup>12</sup> For a detailed definition of all the digital skills mentioned see van Laar et al. (2017, Table 4 and Table 5).

Sustainable Development Goals<sup>13</sup> (SDGs) promoted by the United Nations and have as a time horizon the 2030 goals<sup>14</sup> or the European Green Deal (European Commission, 2019b).

Connections are also highlighted in the literature between the twin transition and programmes related to Industry 4.0. Ortega-Gras et al. (2021), for example, triangulates the diffusion of key enabling technologies (KETs) related to Industry 4.0 with the possibility of accompanying the digital transition, which in turn fosters the green transition. This is because digitising products and processes favours, at least theoretically, the fight against the production of waste materials and a lower environmental impact; hence, there is an obvious connection between policies regarding technological and organisational innovation such as Industry 4.0 and the twin transition.

The twin transition is therefore part of a framework of initiatives and strategies developed by public actors that are often used, as seen from the given literature references, as a horizon in which reflections and empirical analyses are placed. However, there is not always a complete overlap between the meaning assumed by terms such as green transition or digital transition in these contexts. That generates, at least, a partial ambiguity that highlights how these concepts do not correspond to a univocal definition at the international level, nor in their reference to phenomena of a complex nature, observable at the institutional, economic, social, and technological levels.

### Box 3 A just transition

A particularly interesting theoretical framework for reading this complexity, and on which various authors have begun to focus their attention again since 2015, is that of the just transition. It too is a stratified concept: as Wang and Lo (2021) point out, there are at least five points of view from which this theoretical framework has been explored: “(1) just transition as a labour-oriented concept, (2) just transition as an integrated framework for justice, (3) just transition as a theory of socio-technical transition, (4) just transition as a governance strategy, and (5) just transition as public perception” (p. 1). The authors, after having explored these different points of view in-depth, reiterate the importance of adopting definitions that manage to keep together the environmental, economic, and more generally, social needs of the production system.

In this sense, the ILO (2015) speaks of a “just transition to environmentally sustainable economies and societies”. The origin of this expression, however, goes back further in time: it was in fact in the 1970s that, in the United States, this term was coined by a trade union intent on claiming the importance of achieving objectives related to environmental sustainability. An example is intervening on the most polluting companies by introducing sanctions or new technologies capable of reducing the impact on the environment, but at the same time protecting and safeguarding the workers employed in these companies. That may include accompanying them in their search for a new job, in the same or another sector, or in the acquisition of new skills able to promote the adoption of technologies with less environmental

<sup>13</sup> See: <https://sdgs.un.org/goals>.

<sup>14</sup> For an in-depth study that also contains an initial monitoring of experience, see Georgeson and Maslin (2018). For a reconstruction also containing operational indications, see Claeys et al. (2019) or the European Commission’s Communication, Shaping Europe’s digital future (European Commission, 2020a).

impact, even in the same sector and companies in which they were already employed. Recalling Wang and Lo's (2021) classification, the origin of the term is thus decidedly labour-oriented.

Over the years, the theoretical frame of a just transition has been enriched with other and broader meanings. Historically, the attention of early commentators focused on what are termed brown activities, as they are highly polluting and often linked to heavy manufacturing or otherwise have a high environmental impact. While highlighting the centrality of interventions aimed at supporting the green transition in such contexts, Wagner (2021) and especially Dekke (2020) allow for a broader view of this phenomenon. Wagner, in particular, underlines the importance of overcoming a purely neoliberal approach to just transition issues, entrusting the regulation of this transition process to the market alone. Rather, according to the author, it is now more crucial than ever to develop coordination systems capable of maximising public and private investments and policies. Dekke (2020), on the other hand, points out that to achieve a just transition, it is now more necessary than ever to overcome definitions that reduce the scope of this process to one or more polluting sectors, understanding it rather as a transversal phenomenon for society as a whole. One of the most important policies, according to the author, is the development of continuing education processes for the development of skills capable of facilitating transition on the one hand, but also promoting employability, re-employment, and career opportunities towards decent jobs on the other (ILO, 2008, later taken up and also included in Goal 8 of the UN 2030 Agenda for Sustainable Development).

Gambhir et al. (2018) also agree that fostering a just transition requires the adoption of clear policies, the development of collaborative processes at the local levels between various institutions, and the deployment of tools tailored to different needs: from economic support to wages of workers directly impacted by corporate restructuring to the development of active policies, career guidance for students, and the construction of lifelong learning, upskilling and reskilling pathways. Particularly interesting is the emphasis placed on the effects generated by policies aimed at limiting the environmental impact of production sites – not only on the most polluting companies and most severely affected by these policies, and their workers, but also on the local communities in which these companies are located. Depopulation processes, increased unemployment, and a general decline in consumption have significant effects on the whole area concerned.

### 1.1.6 Twin transition and skills development: upskilling and reskilling

**The twin transition is a transversal phenomenon concerning more than certain workers or productive sectors and it requires an adjustment of workers' skills<sup>15</sup>. It is in this regard that the link between the twin transition and lifelong learning is substantiated.**

Several studies attempt to estimate the scale of job creation and job destruction in the context of the twin transition, some more alarmist than others. To cite some recent figures, according to the World Economic Forum Report (World Economic Forum, 2020, p. 6) “85 million jobs may be displaced by a shift in the division of labour between humans and machines, while 97 million new roles may emerge that are more adapted to the new division of labour between humans, machines and algorithms”<sup>16</sup>.

While the exact dimension of this phenomenon is difficult to measure, many authors acknowledge that substantial disruptions, at least in some countries, are likely to occur and these processes will turn the provision of adult learning opportunities to ensure upskilling and reskilling into a major challenge for adult learning systems (e.g. Desjardins and Ioannidou, 2020). This is also the view of the European Commission, which in its recent proposal on individual learning accounts (European Commission, 2021b) claims that “[t]he success of both the digital and green transitions depend on workers with the right skills”.

The terms upskilling and reskilling both refer to the development of new skills. However, while reskilling implies acquiring a whole new set of skills in order to prepare for a different job (e.g. within the same organisation), upskilling involves individuals building on current skills and deepening their abilities within their area of expertise<sup>17</sup>.

As for the duration of the training, according to some recent estimates, “40 % of all employees require upskilling or reskilling of six months or less” (World Economic Forum, 2020). These figures refer to a country's average from its Future of Jobs Survey. In particular, they are based on replies to the following question: “Bearing in mind the evolving

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<sup>15</sup> According to Strietska-Illina et al. (2021, p. 13), a skill is the “ability to carry out mental or manual activity, acquired through learning and practice, where skill is an overarching term which includes knowledge, competency and experience as well as the ability to apply these in order to complete tasks and solve work-related problems”. According to Warhurts et al. (2019), “skills are seen as objective requirements demanded by tasks. Task compositions between jobs may vary and thus require different levels of skill”. Skills, attitudes and knowledge are sometimes used intermingled. These concepts can be conceptually separated, in practice they can be hard to disentangle. Skills are often designated as domain-general (‘generic’) and domain-specific (‘specific’). The former skills are transversal across occupations, the latter confined to particular occupations. Sometimes the term ‘skill’ still alludes to possessing and being able to use recognised occupational knowledge obtained via a combination of formal and on-the-job training. Another distinction is between technical, behavioural/social, cognitive, and basic skills. Skills need to be distinguished from qualifications, which are personally developed aptitudes (mainly through education) to perform certain tasks.

<sup>16</sup> The previous edition of the World Economic Forum Report (World Economic Forum, 2018) says that “75 million jobs may be displaced by the above trends, while 133 million additional new roles may emerge concurrently” (p. 9).

<sup>17</sup> Among the possible definitions, McKinsey (2020) describes upskilling as: “taking the essence of what employees do and improving it – helping them become more advanced, more gifted at what they do. And reskilling which is old school: training you in something new” (p. 2). According to Sawant et al. (2022): “Upskilling refers to a constant and indefinite learning process; nevertheless, there may come a time when it is necessary to pursue new process training, new subjects, and disciplines, which leads to reskilling which causes one to learn new abilities while forgetting previous ones” (p. 5).

skill demand, how long do you expect the reskilling/upskilling of your employees to take?" The only EU Member States considered are France and Germany where the results are as follows:

- for France the average reskilling time for the workforce is (i) less than 1 month for 16.2 %; (ii) between 1 and 3 months for 13.5 %; (iii) between 3 and 6 months for 18 %; (iv) between 6 and 12 months for 19.8 %; (v) more than 1 year for 35.2 %;
- for Germany the average reskilling time for the workforce is (i) less than 1 month for 23.7 %; (ii) between 1 and 3 months for 18 %; (iii) between 3 and 6 months for 16.5 %; (iv) between 6 and 12 months for 19.7 %; (v) more than 1 year for 22.1 %.

Disregarding the necessity of upskilling and reskilling may end up in a skills mismatch that is detrimental for both firms and workers. Mismatches are a labour market feature. Yet, when they start becoming substantial, in terms of persistence and extent, there are risks of significant costs associated with reduced labour productivity and limited firm innovation. There are also increased risks of unemployment, lower wages, and reduced job satisfaction.

To meet the challenges of the twin transition and a Covid-19 recession it is vital that companies actively support their current workforces via reskilling and upskilling, that individuals act proactively regarding their lifelong learning, and that governments establish an enabling environment that supports these efforts in a timely and effective manner.

#### Box 4 Adult learning: critical voices

The lifelong learning paradigm has provoked critical voices. "According to some authors, in contemporary western societies participation in lifelong learning and adult education is no longer a matter of free personal choice because there is a growing coercive expectation and demand that adults should be involved in continuing learning and thus lifelong learning and adult education function as a form of social control" Boyadjieva and Ilieva-Trichkova, 2021, p. 41). "Individuals become 'prisoners' of lifelong learning in that respect" (Boyadjieva and Ilieva-Trichkova, 2021, p. 294).

Preston (1999, p. 570) argues that "in more affluent countries the new category of the non-learner, the majority of the population who as yet do not enrol on such courses, is becoming a new way of defining and scapegoating members of marginal and excluded underclasses". He also claims that "in order to ensure individuals' involvement in lifelong learning ... [i]ncentives (possibilities of work experience and certification) and sticks (the withdrawal of benefits) are being used to encourage course registration and new (privatised) bureaucracies are being created to further the process" (ibid).

Boyadjieva and Ilieva-Trichkova (2021), referring to Crowther (2004, pp. 125-127) claim that "[t]he critics of lifelong learning emphasise that it not only has an official agenda, which refers to personal and societal development and well-being, but also a hidden one. The hidden agenda of lifelong learning is that it is a 'less visible form of managing people', which 'acts as a new disciplinary technology to make people more compliant and adaptable for work in the era of flexible capitalism' by focusing on 'creating malleable, disconnected, transient, disciplined workers and citizens". According to Coffield (1999, p. 488, emphasis in the original), "[l]ifelong learning is being used to socialise workers to the escalating demands of employers, who use: 'empowerment' to disguise an intensification of workloads via increased delegation; 'employability' to make the historic retreat from the policy of full employment and periodic

unemployment between jobs more acceptable; and ‘flexibility’ to cover a variety of strategies to reduce costs which increase job insecurity”.

Finally, one of the most common criticisms directed towards lifelong learning is that it “is shifting the responsibility for learning to individuals, undermining welfare, disguising the reduction of the democratic public sphere”, introducing “new mechanisms of self-surveillance”, and reinforcing “the view that failure to succeed is a personal responsibility” (Crowther, 2004, pp. 130, 125).

On another line of reasoning and, focussing on the up-skilling and reskilling policy strategy of the European Institutions, Favero (2022) claims that “the upskilling and re-skilling of the lower skilled and the unemployed – i.e., those that are most vulnerable to precariousness and its consequences – is a process that entails specific obstacles and requires close attention and an active participation of representatives of those interests that are in contention with those produced by the markets. Collective programs for skill development are necessary measures to achieve more quality jobs and the security that would guarantee fair expectations about future prospects for everyone, but they will prove insufficient if not matched with constructive social dialogue with trade unions and a stronger role of the state in enforcing labor rights”.

#### *1.1.7 Covid-19: an accelerating factor of the twin transition*

**Covid-19 has impacted the twin transition and lifelong learning, in the form of upskilling and reskilling. The importance of enhancing the lifelong/adult learning system is a theme that cuts across the literature, considering new possibilities and risks.**

Agrawal et al. (2020) underline how the pandemic can be thought of as a transformative phenomenon for the whole of society, due to its impact on the way of working, living, moving, and producing. The effects on the processes of upskilling and reskilling are therefore multiple. According to the authors, it is now more important than ever to identify training gaps and act fast to address them, even adopting – and thereby supporting – new models of business that have emerged as a consequence of the epidemic. That also applies to customising the training on offer and, above all, protecting public and especially private investment in training, in a historical period in which there may be a tendency to cut costs dedicated to this item. Given the pervasiveness of the transformation, the authors also stress the need to invest in transversal skills to help workers, but in general, to people adapt to face the changing social and work contexts.

New training methodologies – not reducible to the mere transposition of the classroom lesson at a distance – are instead the focus of a contribution by Zou et al. (2020). Kaushik and Guleria (2020) are even more explicit: new ways of working also require new ways of thinking and, consequently, a new way of training for this mindset. Great emphasis is placed on requests to experiment with innovations in the teaching field: massive open online courses (MOOCs), e-learning, asynchronous training, and personalised and tailor-made courses to meet the needs (and desires) of those involved. It almost seems as if Covid-19 has, therefore, favoured the full adoption of lifelong learning, or at least reduced historical limits that impeded its affirmation.

Eschenbacher and Fleming (2020) take up the theme of transformative learning. They point out that also emerging today, alongside employability and active participation in society (which are the two main aims of lifelong learning), is the importance of knowing how to



manage crises, insecurity, and complexity. The challenge of the pandemic has therefore called for learning how to transform the way of thinking and approaching things (including work), which proves to be a crucial driver for the twin transition.

The ILO (2021) also underlines the centrality of training for trainers themselves: today, more than ever, it is critical to equip teachers with new teaching and training skills, as well as technical and specialised ones, since they are called upon to adopt new methodologies and to personalise their training courses even more. Concerning the skills required to deal with the pandemic and subsequent recovery, not only are technical skills identified but also, once again, transversal and socio-emotional skills or skills related to the (new) management of health and safety in companies in light of the risks related to Covid-19.

**The link between the pandemic and the digital transition is particularly strong: the former was a multiplier of the spread of the latter.** Agrawal et al. (2020) noted how the remotening of various occupations was not just accelerated but made necessary by the pandemic, to protect the safety and health of workers wherever possible. This event necessitated immediate investment in the digital skills of workers, who found themselves having to perform their jobs in new ways and often requiring skills not immediately in their possession.

On the risks side, Talmage et al. (2020) highlight the first relevant factor being the ageing population. Older workers are those most impacted by the pandemic: they are most at risk in terms of health, and thus more frequently engaged in remote work, and often have fewer digital skills. This combination can generate dangerous phenomena of exclusion, initially in the workplace and then in society; hence, once again, the importance of the most personalised training becomes clear, in this case, aimed at providing them with enabling skills to carry out the new ways of working. Concern about new forms of social exclusion is also shared by the ILO (2021), which noted how even the youngest, who are engaged in internships or apprenticeships, have experienced an interruption of their experience, due to the impossibility of continuing training in person.

On the opportunities side, Enfield (2021) stresses how the pandemic has accelerated the digital transition, required the adoption of organisational forms long desired (such as hybrid or remote work), and placed at the centre of (necessary) business strategies the value of lifelong learning. The latter must, however, be truly accessible to all, even to workers engaged in occupations with low skill levels. Hamburg (2021) speaks of 'digital lifelong learning' and how achieving the SDG targets (particularly the 4<sup>th</sup>, on access to quality, continuous training) is today determined by a massive adoption of continual upskilling and reskilling processes over time, with new training strategies that manage to engage workers (and others) even at a distance, thanks to digital technologies.

#### *1.1.8 Twin transition and new skills: strategies to promote lifelong learning*

**As previously indicated, continual training is one of the methods most usually connected with the twin transition as a component for containing its negative consequences. Nonetheless, new or revised strategies are required. Some of them are suggested here. While they are generally relevant for both green and digital skills, some authors concentrate on one of the two.**

As Vona and Consoli (2014) highlight, it is necessary to **expand**, as soon as possible, **the number of individuals with enabling and trained skills in direct contact with innovation, rather than the number of already highly skilled workers.** Expanding and fostering



participation, at various levels, in continuing education processes thus becomes a crucial goal. After the initial phase of this cycle, following the introduction of innovation, the new skills are also part of the curricula of school and university courses.

**Among the programmes that, more than others, can contribute to upskilling and reskilling, a prominent place is understandably occupied by VET.** As highlighted by Cedefop (2020b), VET offers individuals a practical and profession-focused path to credentials and the skills the labour market demands and is essential in promoting equitable transitions. It also offers prospects for career advancement in the post-pandemic employment market and, because of its hands-on and work-oriented approach to credentials, plays a critical role in supporting just transitions.

However, Markowitsch and Hefler (2019) point out that VET, at the European level, presents very different degrees of development and effectiveness from country to country, although it is an instrument the European Commission has always believed in as a crucial asset for continental development. The authors, therefore, suggest a **partial rethinking of VET, towards an evolution that makes it more flexible, capable of integrating with national and international research strategies, and able to create new profiles and training opportunities in line with emerging needs. These should be aimed at both young people and workers involved in upskilling and reskilling processes.** All this is possible by first overcoming cultural stigmas, in which these paths represent, even today, a second choice. That feeds processes of social segregation, with VET destined to accommodate the poorest subjects or those with migratory backgrounds – at least in many countries – whereas general and university education is reserved for the privileged.

According to Ahlers (2021), the emphasis that in recent years has characterised community interventions and national policies in support of VET is potentially risky. The author stresses the importance of not overshadowing the specificities of adult education, already highlighted, imagining it as a mere replication for other recipients of courses intended for younger people. At the same time, **adults, too, must be involved in educational pathways, not just training: it is not simply a matter of providing them with the skills required by the market in the shortest possible time, but of promoting their professional and personal growth, also thanks to transversal skills.**

**Policies must make the most of training, broadening the scope of action for learning processes beyond the traditional classroom method. Initiatives should be carried out, for example, based on practical experience and/or directly in the workplace.** As Vona and Consoli (2014) highlight, in the life cycle of the relationship between skills and innovation, the competences generated by the adoption of new technologies or organisational methods are, for the most part, of a tacit nature (see also Polanyi, 1966). As such, they **need**, to be formed, **direct contact with innovation and forms of learning based on practical experience.** There is growing attention to upskilling and reskilling training being managed **according to a logic of proximity and thanks to a work-based training methodology.** Also, Chen et al. (2020) note that the central place of learning for the development of these skills is the work environment; they are therefore mostly attained on the job as they are connected to innovations that necessarily must be experienced first-hand. Hence, the authors call for increased safety in the workplace and the development of training paths coordinated with companies. Similar suggestions are provided by Leahy and Wilson (2014).

- Applied to the green jobs/skills. Bianchi et al. (2022), who present the European framework for green skills ('GreenComp'), state that for green skills it is necessary to

enhance formal learning processes, yet also the non-formal (e.g. carried out in the workplace) and informal ones (connected to any life experience). They argue in favour of a transversal approach, aiming above all at the construction of a mindset oriented to sustainability, to critical thinking, and to a new holistic concept of global health.

- Applied to digital jobs/skills. Leahy and Wilson (2014) claim that digital skills must necessarily be trained not only within formal education but also throughout life, even in non-formal contexts such as the workplace. Moreover, these types of skills also require a different way of training. Immersive learning, based on direct contact with digital technologies, is increasingly needed: only through their use is it possible to develop learning processes that are continual over time and gradual.

In this same vein, Manyika (2017) also underlines that the **strategies elaborated according to the public-private logic can turn out to be crucial**. Lifelong learning based on a renewed alliance and capacity for collaboration between training systems and businesses – the latter being called upon to rediscover their training value, and with it that of workplaces as informal contexts of continual learning – is necessary to ensure a fair transition and foster the employability of workers.

**Upskilling and reskilling cannot be limited to the construction of traditional training paths or the modification of school curricula. It requires a holistic approach, with collaboration between training systems, social partners, and the business world, and experimenting with diversified, customised tools, capable of adapting to the profiles of those involved and to the skills to be trained.** ETUI, Business Europe, SGI Europe, SME United (2021) underline that is not a matter of working in a single direction, but of promoting different strategies to meet different needs in different contexts and production sectors.

**Then there are 'support' instruments, which enable and foster access to and the effectiveness of lifelong learning pathways, such as the certification of skills, which is necessary for their transparency and recognisability on the market.** The Pact for Skills<sup>18</sup> of the European Commission proposed at the EU and sector levels can be an effective tool for implementing coordinated policies for the development of upskilling, reskilling, and training activities consistent with the needs generated by the transitions.

Casano (2019) likewise underlines that the twin transition can be read in light of transitional labour markets. (TLM): in this perspective, transitions are not limited to generating the demand for new skills, but the rethinking of the very idea of the labour market. In the current socioeconomic context, it becomes crucial to **develop transitional protections, capable of accompanying the worker in the multiple transitions** he or she experiences throughout his or her working life. **This means safeguards such as making acquired skills transparent and certifying them, and offering ongoing training, professional orientation, and assistance.**

**Upskilling and reskilling processes must also be included in a broader framework of rethinking the regulation of labour markets, starting with the role played by institutions and, in particular, by the social partners in their relationship with the public sector. The active participation of various stakeholders in the creation of new training opportunities is crucial.** Vidican Auktor (2020) underline the centrality of a transition based on learning. The connection between the two is necessary to realise the paradigm of the just

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<sup>18</sup> [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_2059](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2059)

transition. **Undergoing a transition that is not governed**, which is limited to identifying targets to reach and new technologies to adopt, without assisting workers (and others) to acquire new skills or change jobs or sectors when necessary, is **a risk to avoid**. Hence, there is a need to reinforce the coordination and synergy among the players involved. This view is also confirmed by the ILO (2019b), which dwells on the cruciality of developing public-private partnerships.

**Social governance of the transition also means a renewed centrality of local territories and communities. They must be involved in this process of transformation, with lifelong learning paths whose features can be better determined if decided at the local level and consequently more personalised, as well as open to all.** Krawchenko and Gordon (2021) hold that multi-level governance is necessary, both vertically (state and local authorities) and horizontally (not only training institutions or public agencies but also businesses and social partners). Proactive measures are needed, unrelated to dealing exclusively with crises and instead aimed at anticipating needs. Finally, the horizon needs to be widened by going beyond impacts on employment to include the social costs of initiatives linked to the twin transition. It is precisely this last aspect that, according to the authors, has so far been overshadowed: costs related to the consumption of public land, the impact on services and local economies caused by the closure of production facilities or their reconversion, the increase in local unemployment, and the complete lack of funding for communities, and not only for the companies involved.

Pai et al. (2020), looking at the level of local systems, suggest that where places are most affected by the transition in employment and social terms, it may be appropriate to set up new educational and training institutions to accompany the outplacement, retraining, and training of new professional profiles. In other words, without educational infrastructure, it is difficult to imagine lifelong learning paths accessible to all. At the same time, it is a priority to make information about the labour market available, working to anticipate emerging needs, and above all to analyse the skills possessed by local workers affected by the transition. This priority extends to understanding what skills are lacking and personalising the training opportunity as much as possible.

**Investments need to be congruous, otherwise, there is the risk of them being ineffective**<sup>19</sup>. Chen et al. (2020) argue for diversifying investments: those with shorter terms can have the purpose of mitigating the negative effects of the recession but must be included in a framework of long-term investments aimed at skills training. **National plans must be careful to avoid wasting the resources made available, by adopting clear objectives and above all by putting into practice the long-run and holistic planning that alone can help realise the transition.** According to Zachariadis (2021), the community resources made available following the outbreak of Covid-19 play a key role in the concrete implementation of the twin transition. But, the risk of focusing only on employment impacts and not designing policies within a broader framework – such as the TML framework mentioned by Casano (2019) – is also highlighted in Kangera et al. (2020).

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<sup>19</sup> The EU funding instruments for upskilling and reskilling are listed here: <https://ec.europa.eu/social/main.jsp?catId=1530&langId=en>

## 1.2 Challenges to enhancing adult learning systems

Enhancing adult learning systems is becoming an increasingly pressing challenge, especially in the face of the digital and green transitions that, in turn, have been accelerated by the systemic shock of Covid-19. Both workers and companies are called upon to confront this challenge and, along with them, social partners, adult learning providers<sup>20</sup>, and supranational and national institutions – each with different, but complementary roles. While involving various actors, the issues are multifaceted and closely interconnected. This study has selected as main topics of interest: a discussion of the limitation of the most commonly used indicators for measuring the involvement in adult learning, the identification of the groups that participate less in adult learning along with some explanations about some of the possible sources of inequalities, a classification of reasons behind this status quo and the possible ways forward that have been already adopted to ensure an inclusive adult learning path.

### 1.2.1 Measuring adult learning participation: some remarks

The most commonly used measure for involvement in adult learning is the **participation rate, which may have some limitations**. When discussing disparities in adult learning involvement across groups, a majority of studies refer to the participation rate, an ex-post measure providing information on whether the individual de facto accessed an adult learning path. While this measure is also used by European institutions as a benchmark indicator and is a compelling one for conducting empirical analyses, it has some limitations. On the one hand, **is debatable how participation is conceptualised**. Just to cite an example the duration of participation is an important characteristic of participation. Data show not only that there are cross-country differences regarding the level of participation in adult learning, but that in countries with lower levels of participation, the hours spent by adults in learning could be higher. Furthermore, it has been argued that **participation rates are may not very reliable measures** and the problem have been discussed by comparing data from different surveys (Desjardins, 2015; Boeren, 2016; Boyadjieva and Ilieva-Trichkova, 2021). Authors have developed some indexes to better capture the inequalities in participation in adult learning. Thus, Cabus and Stefanik (2019) have suggested an index of inequality in access to adult education. It reflects whether adult education and training is clustered among low or high educated and between those with low and high income among the employed. However, the index is calculated only for employed people and the influence of education and income is not controlled for other factors such as gender, place of residence, etc. Boyadjieva and Ilieva-Trichkova (2017, 2021) developed two indexes – index of inclusion and index of fairness – to measure equity in adult education for four social groups – people with low and high levels of education and employed and unemployed people. The results show that countries differ in terms of the inclusiveness and fairness of adult learning for different social groups and that the most inclusive countries are not always the fairest, and vice versa. So, increasing participation does not necessarily imply equitable access to adult learning, as explained in Milana et al. (2018). Indeed, aspects such as equality in treatment and the quality provided are undoubtedly important as well. Moreover, **the participation rate may**

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<sup>20</sup> That, more specifically, can be individual instructors, professional training agencies and universities (also in collaboration with companies), freelance, highly specialised consultants such as a chief digital officer, digital transition manager, or digital transition officer, who can guide the company during the transition.

**be seen as merely one aspect of a much more complicated phenomenon.** Participating in adult learning is a personal choice that may be based on a cost-benefit analysis. Literature and data about the barriers and limitations provide more information about where the different actors involved in the adult education systems need to intervene to limit inequalities.

### *1.2.2 Inequalities in adult learning participation: individual characteristics*

**The research dedicated to analysing disparities in the adult learning participation rate is quite heterogeneous in different aspects, yet it comes to relatively similar conclusions about which groups have a lower level of involvement.** The sources of heterogeneity in the literature range from the country and time coverage, to the adult learning concept, used (e.g. formal, non-formal, and informal) and the empirical methodology adopted. Mainly relying on descriptive statistics, or more advanced econometric methods, the studies generally exploit the Eurostat Labour Force Survey, the Eurostat Adult Education Survey<sup>21</sup>, the OECD PIAAC<sup>22</sup> (Programme for the International Assessment of Adult Competencies)<sup>23</sup> and UNESCO GRALE monitoring survey data<sup>24</sup>.

Looking at individual characteristics, **the following categories tend to participate less in adult learning as identified by the literature:**

- women<sup>25</sup>;
- middle-aged and older adults<sup>26</sup>;
- individuals with a lower level of education/qualifications<sup>27</sup>;
- individuals with a disadvantaged parental background / low education level<sup>28</sup>;
- members of ethnic minority groups, young refugees, and migrants<sup>29</sup>;
- blue-collar workers<sup>30</sup>;
- workers whose occupation is at risk of automation<sup>31</sup>;

<sup>21</sup> "The Adult Education Survey (AES) covers adult participation in education and training (formal, non-formal and informal learning) and is one of the main data sources for EU lifelong learning statistics. The survey covers the resident population aged 25-64. The reference period for participation in education and training is the 12 months prior to the interview. The survey provides the following information: i) Participation in formal education, non-formal education and training and informal learning; ii) Characteristics of the learning activities; iii) Volume of instruction hours; iv) Reasons for and obstacles to participation; v) Access to information on learning possibilities; vi) Employer financing and costs of learning; viii) Self-reported language skill. The Survey was carried out in 2007, 2011 and 2016, with results published in Eurostat's online database. The next survey is planned for 2022." Source: <https://ec.europa.eu/eurostat/web/microdata/adult-education-survey>

<sup>22</sup> PIAAC, in addition to its primary purpose of conducting direct skills tests in the areas of reading, numeracy, and problem-solving in technologically rich contexts, gathers information about involvement in formal and non-formal adult learning and education during the preceding 12 months.

<sup>23</sup> And its predecessors, the International Adult Literacy Survey (IALS) and Adult Literacy and Lifeskills Survey (ALL). For more information on these two, see Desjardins et al. (2006).

<sup>24</sup> "<https://uil.unesco.org/adult-education/global-report-on-adult-learning-and-education/national-reports-grale-3>" \l "data-for-researchers and <https://uil.unesco.org/adult-education/global-report>

<sup>25</sup> E.g. Lavrijsen and Nicaise, 2015; Cedefop, 2020.

<sup>26</sup> E.g. Desjardins et al., 2006; Paccagnella, 2016; UNESCO, 2019; Cedefop, 2020.

<sup>27</sup> E.g. Desjardins et al., 2006; Boeren, 2009; Roosmaa and Saar, 2012; Kyndt and Baert, 2013; European Commission, ECEA and Eurydice, 2015; Cedefop, 2020; European Commission, ECEA and Eurydice, 2021.

<sup>28</sup> E.g. Lavrijsen and Nicaise, 2015.

<sup>29</sup> E.g. Kersh et al., 2021.

<sup>30</sup> E.g. Desjardins et al., 2006



- workers under non-standard contracts<sup>32</sup>;

A combination of some of the above characteristics, as explained by Boeren (2009), can generate an even lower participation rate.

**On participation/non-participation in adult learning, there are many attempted explanations.** With the caveat that the conclusion drawn about the reason behind a certain trend in adult learning participation may reflect the reality in a certain group of countries and a certain period, it is common for authors, when deriving a specific result in terms of participation rate, to directly provide an explanation or refer to specific theories that could fit the case. In establishing which are the causes behind these results sometimes there may be different interpretations. To cite some examples referred to the individual characteristics: about gender it is fairly agreed that women participate less because they have a greater share of family responsibilities and/or less employer support. For the older individuals they may have fewer long-term prospects in the labour market or may have lost the required key competencies to successfully engage in training. As for the individuals with a lower level of education/qualification Lavrijsen and Nicaise (2017) refers that in: “the literature, two main perspectives have been developed to explain why low-educated respondents participate less in LLL than other groups. First, the ‘rational choice’ perspective highlights that the evaluation of the costs and the benefits associated with LLL might differ depending on one’s personal situation. Hence, a straightforward explanation is that LLL is particularly beneficial in those jobs which require continuously updated high skills, and hence both employers and employees will be more eager to invest in the LLL of the highly educated. ... Secondly, the psychological dimension stresses that personal experiences influence the attitude towards learning and hence the ‘readiness’ to participate in LLL ... as low-educated individuals often had bad experiences in their initial school career, this may form an additional obstacle inhibiting participation in further education.”

**Further to the individual characteristics, some authors underline that the rate of participation in adult learning depends on the country considered.** According to Boeren (2009) and Boeren and Holford (2016), among other variables, the country in which the participation takes place is a far more significant explanatory component. Desjardins and Ioannidou (2020) point out “that existing typologies of welfare state regimes or skills formation systems are insufficient to explain variation in the cross-national patterns” (p. 143); indeed, while differently classified, some countries show similarities as far as adult learning participation is concerned. Taking into account their empirical findings, Desjardins and Ioannidou (2020) argue that there are “a number of institutional features that are more proximal to ALS and enable the provision, take up and distribution of organized adult learning: open and flexible formal education structures, public support for education, active labour market policies and programmes that target socially disadvantaged adults” (pp. 157-158).

### *1.2.3 Disparities in adult learning participation: the role of learning at the workplace*

**Workplace learning represents a large share of the volume of learning undertaken by adults.** Hefler and Studená (2023) explain that “organisations are the gatekeepers of lifelong

<sup>31</sup> E.g. Nedelkoska and Quintini, 2018; Pouliakas, 2018; Cedefop, 2020

<sup>32</sup> E.g. Cedefop, 2020

learning”. They develop a concept of ‘organisational’ and individual agency and their interplay to explain how inequalities in workplace learning within sectors and organisations are produced by different approaches to job design and other organisational decisions. Hence, inequality in participation is embedded in opportunities to learn on daily basis at the workplace. An organisational view on the nature of processes shaping the opportunities to learn at job can have vital implications for lifelong learning policy design and for social dialogues. Hefler and Studená (2023) emphasise the need to re-establish links between scholarship on inequalities in lifelong learning and innovation studies. Effective policies targeting organisations should be aiming at how to shape workplaces to allow workers to participate in innovation. Empirical research in different economic sectors (Brandi et al., 2023, Kirov et al., 2023 and Clancy et al. 2023) applying the concept of the organisational agency confirmed that even within the same industry the organisation of work and design of job can vary and have implications for the workers and their opportunities to learn at the workplace.

#### *1.2.4 Disparities in adult learning participation: the role of firms*

**In determining the participation rate of adult learners, firms have an important role, and it turns out that the people most in need are those who are excluded.** As explained by Desjardins and Ioannidou (2020), for a variety of reasons, firms encourage workers who already have better abilities in their competence development. As a result, if employers and employees are left alone in their decision, they will almost certainly engage in behaviours that increase inequality. The employees who seem to be most badly impacted by automation are those who typically have a lower probability of being offered training by their employers (Pouliakas, 2018).

The World Economic Forum (2018), based on its Future of Jobs Survey, reports inter alia that employers “are set to prioritize and focus their reskilling and upskilling efforts on employees currently performing high-value roles as a way of strengthening their enterprise’s strategic capacity, with 54 % and 53 % of companies, respectively, stating they intend to target employees in key roles and in frontline roles which will be using relevant new technologies. In addition, 41 % of employers are set to focus their reskilling provision on high-performing employees while a much smaller proportion of 33 % stated that they would prioritize at-risk employees in roles expected to be most affected by technological disruption” (p. ix).

Employees who currently have a relatively low degree of training are the least likely to get more training. Compared with other groups, **there is also less systematic participation of individuals who are employed in smaller firms across countries** (Baiocco, 2020, Baiocco et al. 2020). Workers in large firms (with more than 250 employees) are more likely to engage in employer-supported adult learning (Desjardins, 2020). Just one-tenth of firms with fewer than 50 employees provide formal education to their employees, compared with 50 % of firms with 250 or more employees (Dawe and Nguyen, 2007).

#### *1.2.5 Disparities in adult learning participation: the ‘Matthew’ effects*

**Several studies have demonstrated the ‘social reproductive role’ of adult learning: participation in adult education and training, as well as the rewards associated with it, is skewed towards those already fortunate.** Both qualitative and quantitative data suggest that two main mechanisms may intervene: one at the micro level, ‘cumulative advantage or



disadvantage'; and the other at the macro level, the 'Matthew effect', which converts favourable relative positions into resources that produce further relative gains. Individuals who are more affluent or have a higher level of education, socioeconomic background, or professional status collect more resources – and, as a result, greater benefits (Di Prete and Eirich, 2006; Walker, 2012; Blossfeld et al., 2014; Bask and Bask, 2015). Based on such assessments, it is often argued that lifelong learning, including adult learning, largely contributes to sustaining, rather than reducing, disparities associated with socioeconomic origins (Bukodi, 2016), and to enhancing inequality across the life cycle (Buchholz et al., 2014).

However, a significant amount of evidence indicates a favourable relationship between gaining knowledge and skills via adult learning, on the one hand, and people's professional progress, employability, wellness, and social involvement, on the other. Much of this research shows that the beneficial impacts of adult learning vary depending on its type and form, as well as the institutional setting (Kilpi-Jakonen et al., 2012; Field, 2012; Blossfeld et al., 2014; Ehlert, 2017; Weiss, 2019; Cedefop, 2020).

### *1.2.6 The theoretical framework of participation decision in adult learning*

**Getting a complete picture of an individual's decision to participate or not and why is a very complex exercise.** To give a flavour of this complexity Cabus et al. (2020) maintain that studies can be divided into three groups: "those that focus on the individuals, ... those that search the reasons in the macro-level, country context and ... those that are based on individuals' interactions with different social contexts" (p. 171). To summarise their classification, the first and the second groups are part of less recent literature, while the third is more recent and still in development. In the first group, most of the models are based on individual choice as a rational one, as in cost-benefit analysis; if the costs are outweighed by the benefits, then there is a high probability that the individual will not continue the adult learning path. Nevertheless, in this group rationality is not the only driver, as individual socioeconomic and contextual factors are also relevant. In the second group of models, the focus is on macroeconomic factors: GDP, degree of innovation, rate of overall participation, main labour market variables and policies, and the features of the educational system (see e.g. Wolbers, 2005; Bassanini et al., 2007; Groenez et al., 2007) along with the kind of welfare of the specific country (e.g. Roosmaa and Saar, 2012; Dammrich et al., 2014). Models in the third group explore the interaction between the individual and various social circumstances. Among the most cited ones is the 'chain of response model' (Cross, 1981), which suggests that participation in adult learning is connected to a complex reaction sequence made by the person in response to social conditions.

Rubenson and Desjardins (2009) divide the obstacles to involvement in lifelong learning into three categories: "situational barriers, dispositional barriers, and institutional barriers". Situational obstacles are those that are tied to a person's life circumstances at a certain time in the family life cycle and professional life. Personality characteristics or personal attributes gained from early educational experiences are referred to as dispositional obstacles. Institutional obstacles involve mechanisms within institutions that discourage or impede participation. Rubenson and Desjardins (2009) point to the fact that individuals have agency to decide on involvement in education or training, but owing to boundaries, they are unable to perform the chosen action to participate.

According to Boeren (2017), involvement in adult learning is a multi-layered challenge. Given this, an adult learning choice depends on the interaction of three actors: the participants

(with their intentions, needs, attitudes, and other behavioural characteristics, as well as personal characteristics); the educational institutions and workplaces, namely the main learning providers; and the social policies of the countries where the participants live.

### *1.2.7 Inequality in adult learning participation: some possible policies*

**Empirical data and assorted studies point towards the fact that participation in adult learning is not equally distributed among adult learners. Indeed, the categories of people who in principle need it the most are those who participate the least.** The desired increased participation must be fruitful, particularly for those who may be left behind. That is especially so given that Covid-19 exacerbated some differences in participation rates, creating wider gaps in those sectors that, on the one hand, are more affected by the pandemic and, on the other, require up-to-date skills for the green and digital transitions. **Stakeholders must commit to making adult learning paths, upskilling, and reskilling inclusive – limiting the negative externalities of the twin transition on categories of workers who are more exposed to the risk of being further marginalised or even excluded from employment.** Improvements to the system must not exacerbate differences among workers, which are already broad in terms of skills and salary gaps, on the contrary, they must help to mitigate them.

To ensure equity and equality in adult learning, a complex set of policies must be put in place. As suggested by Tuparevska et al. (2019), who analysed 59 EU policy documents of the EU institutions, a great variety of policy measures is still required to meet the needs of the disadvantaged more effectively. The authors affirm that “[w]hile the proposed measures in EU lifelong learning policies encourage to some extent individual participation, changes in the institutional delivery systems and methods, and changes of broader social phenomena, they are not enough to fight the growing inequality. ... [A] greater variety of policy measures are needed in order to better address equity and the needs of the vulnerable” (Tuparevska et al., 2019, p. 13). Among the suggestions given by the authors is “providing financial and non-financial incentives, advertising, developing new programmes, and establishing new delivery systems, as well as better-targeted policies”.

**Inclusivity is a wide notion, which is difficult to define and operationalise. Making adult learning inclusive implies first of all that the right to adult learning is legally (universally) recognised.** As for the status quo of the legal framework for adult learning, as explained by the European Commission (2019a) adult learning is regulated by a variety of laws, many of which have a broader scope than just adult learning, such as general, vocational, or higher education. This represents the range of the adult learning sector in many Member States. Based on an expert questionnaire, the results of which refer to the last reform available, in the EU27, 21 Member States have adult education laws, 13 have general education laws, 18 have vocational educational and training laws, 10 have higher education laws and 10 have labour laws. Each Member State may have more than one kind of law.

**Skills strategies need to address more than just basic skills, for which the concept itself needs to be revised and extended,** as explained in Tuparevska et al. (2019). On this

topic the Eurydice Report 2021 shows that<sup>33</sup> “in most European countries, top-level authorities issued at least one strategic policy document between 2015 and 2020 that explicitly refers to access by adults with low levels of qualifications or those with low levels of basic skills to skills development or qualifications. ... The strategic policy documents ... generally fall into three categories ...: those mainly focusing on promoting adults’ basic skills and competences; those with a broader main focus, e.g. the provision of high-quality education and training and/or the promotion of lifelong learning, including enhancing the skills and competences of adults with low levels of basic skills or low qualifications”<sup>34</sup> (European Commission/EACEA/Eurydice, 2021, p. 54). The strategic policy documents are not exhaustive in the sense that there may be other skills-enhancing initiatives and apparently, more than half of Member States report additional initiatives (European Commission/EACEA/Eurydice, 2021).

**To understand which barriers need to be removed, a valid starting point is to consider which are defined as such by those directly concerned.** Eurostat provides a series of data for 2016<sup>35</sup> on the percentage of the population aged 25-64 wanting to participate in education and training, but not doing so for numerous reasons. These include costs, distance, schedule, family reasons, other personal reasons, health or age, no suitable opportunity for education or training, and lack of support from an employer or public services (see the data reported in **Table 1**).

**Table 1 Population wanting to participate in education and training, by reason for not participating**

	Total	Males	Females
Distance	15.6	13.8	17.1
Costs	32.2	29.3	34.5
Family reasons	31.6	22.5	38.9
Other personal reasons	16	15	16.8
Health or age reasons	9.6	8.6	10.4
No suitable offer for education or training	18.6	20	17.5
Lack of support from employer or public services	23.8	25.6	22.2
Schedule	40.7	43.9	38.1
Other reasons	18.7	20.1	17.5
No response	0.3	0.3	0.3
	<b>aged 25-34</b>	<b>aged 35-54</b>	<b>aged 55-64</b>
Distance	16.1	15.7	14.5
Costs	37.3	31.8	24.5
Family reasons	27.3	35.1	26.8

<sup>33</sup> The report defines “strategic policy documents as official policy documents on an important policy area that are usually issued by top-level authorities and set out specific objectives to be met and/or detailed steps or actions to be taken within a given time frame, in order to reach a desired goal(s) or target(s)” (European Commission/EACEA/Eurydice, 2021, p. 54).

<sup>34</sup> The report specifies: “Adults with low levels of basic skills ... refers to (1) adults who can at most complete very simple reading tasks, such as read brief texts on familiar topics, and very simple mathematical tasks, such as one-step or simple processes involving counting, sorting, basic arithmetic operations and simple percentages ...; (2) adults who cannot use computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the internet ...; and (3) adults who have a very low level of command of the official language of the country in which they live (i.e. insufficient for proper and effective interpersonal communication).”

<sup>35</sup> As explained in Eurostat AES metadata, “[f]ollowing a change in legislation, the next AES is due in 2022/2023. The data collection period is from July 2022 to March 2023.” [https://ec.europa.eu/eurostat/cache/metadata/en/trng\\_aes\\_12m0\\_esms.htm](https://ec.europa.eu/eurostat/cache/metadata/en/trng_aes_12m0_esms.htm)

Other personal reasons	16.9	15.6	16.1
Health or age reasons	4.4	9	21.4
No suitable offer for education or training	18.4	18.4	20
Lack of support from employer or public services	24.1	25	18.7
Schedule	41	42.9	32.4
Other reasons	19	18.2	19.5
No response	0.3	0.3	n.a.
	<b>ISCED 0-2</b>	<b>ISCED 3-4</b>	<b>ISCED 5-6</b>
Distance	18.7	14.7	15.2
Costs	36.7	32.2	30
Family reasons	34.4	31.1	30.7
Other personal reasons	18.2	16.7	14.1
Health or age reasons	16.9	10.1	5.5
No suitable offer for education or training	22.4	18.4	17
Lack of support from employer or public services	24.6	24.5	22.5
Schedule	33	38.3	47.3
Other reasons	29.3	17.7	14.5
No response	n.a.	0.3	0.3

Source: Eurostat codes *trng\_aes\_176*, *trng\_aes\_177* and, *trng\_aes\_178*.

In line with the data, many authors highlight that **financial constraints are among the obstacles that can prevent adults from participating in education**. In this respect, the European Commission's *Skills Agenda* to achieve a 2025 target of a 50 % participation rate for those aged 25-54, would need an extra expenditure of EUR 48 billion per year. These funds are predicted to come from a variety of sources, including the EU budget, Member States' public funding, and private funds. Public spending on adult education and training has two major components: supply-side financing is intended to assist education and training providers, and consequently influences course availability and pricing; demand-side financing, in turn, helps learners by increasing their capacity to pay. A Eurydice Report 2021<sup>36</sup> summarises the financial aid aimed at education and training for adults with a low level of education (0-2 ISCED). It found that for the year 2019/2020, 18 Member States had: "generally no fees for publicly subsidised programmes leading to qualifications up to ISCED 3/EQF 4". As for financial incentives for learners (employees), 26 (25) Member States had: "[a]t least one financial support measure covering low-qualified adults" and 6 (4) Member States had: "[f]inancial support measures targeting or privileging low-qualified".

**Furthermore, adult learning needs to be accessible. In this context, accessibility is a complex concept encompassing all the measures that enable the right to adult learning and which accommodate difficulties under the headings of distance, schedule, family and other personal reasons.** Among the measures adopted or which may be adopted by Member States to overcome these obstacles are the following:

- **Distance learning and blended learning** are different forms of learning where the former is well-known and fully exploits digital tools to ensure the training can be undertaken remotely, the latter takes place with interaction maintained in person, with a teacher or tutor, aided by online tools and resources.

<sup>36</sup> Also, Cedefop presents a database on financing adult learning and includes training funds, tax incentives, grants (including vouchers/individual learning accounts), loans, training leave, and payback clauses <https://www.cedefop.europa.eu/en/tools/financing-adult-learning-db> The measures are not always updated.

- **Modularisation** is the process of breaking down certifications and/or education and training programmes into smaller pieces or modules. This is often seen as a means of increasing learners' options to move in and out of education and training and gain recognised credentials over extended periods.
- **Credits** encourage the accumulation of learning outcomes, which may enable learners to obtain certifications at their own speed.
- **Opportunities to move from one learning environment to another**, across various levels/sectors/countries in pursuing education may also enhance an individual's employability and quality of life.

According to the Eurydice Report 2021, referring to the provisions of the Member States for 2019-2020, 8 Member States have in place a substantial, publicly financed system of distance learning, 24 have modularisation plans, 12 have credit-based programmes and 15 include quite flexible possibilities to advance from the ISCED 2 and ISCED 3 levels of education.

## 2. Review of adult learning policies and governance with respect to specific measures adopted by Member States

**In Europe, lifelong and adult education, for many years now, has assumed a central role in public policy.** Dehmelt (2006) already identified a link between continuing education discourse and European strategies, at least since the 1970s. The pervasiveness of this concept in European rhetoric and strategies is, however, in the authors' opinion, also a risk: a definition of lifelong learning that is too broad and too elastic could act as a vague term/concept. Therefore, it is incapable of being identified with clear strategies – i.e. tools, lines of financing and models of governance. Obviously, the objective is not to reduce lifelong learning to a single dimension, but to understand which of its various and multifaceted dimensions is the one most consistent with EU strategies. On the other hand, according to Dehmelt, a common strategy on the subject of continuing education could prove to be one of the most important drivers for promoting cohesion among the Member States of the EU.

The connection between different models of lifelong learning and different ideas of a knowledge-based society has already been highlighted in the literature. Green (2002, 2006) in particular underlines how every idea of a knowledge-based society must be linked to lifelong learning processes capable not only of recruiting a large number of workers, but also of 'distributing' competences: that is, verifying that this process concerns society as a whole and not only the most qualified workers. Accessibility, participation and the distribution of skills are therefore fundamental for any society that wants to legitimately recognise itself as a knowledge-based society.

The same author then identifies at least three different models of continuing education in Europe: the neo-liberal or Anglo-Saxon one, the continental one, and that of the Nordic countries. They are distinguished by the effectiveness on the market of the skills acquired, the participation of workers, and the accessibility of the system. Each model of lifelong learning – that is, of governance of lifelong education – corresponds to an equal number of different social models, or rather ideas of a knowledge-based society. Hence, it is important to carefully consider the potential of lifelong education, but also the risks of poor planning and of its use being limited to certain people or sectors. The challenge of lifelong education is, therefore, that of what kind of society the EU wants to achieve.

A further review of different models and tools for implementation of lifelong learning pathways (Zarifis and Gravani, 2014) highlights this stratification and complexity, concerning the governance models, skills trained, people involved, funding mechanisms, strategies and methodologies adopted. Thus, there is no single lifelong learning model, even at the community level, that is not socially mediated by the institutions of the national or subnational level in which it takes place. The role and value of lifelong learning are, of course, further amplified in the face of challenges posed by the transformations taking place.

DeFur and Korinek (2008) maintain that lifelong learning represents a necessary tool for active participation in social life and not only in work, suggesting, however, a connection between it and general education and training paths. In other words, the authors point out how the development, today, of efficient and effective continuing education paths necessarily entails a rethinking and a strengthening of secondary and tertiary education.

Boyadjieva and Ilieva-Trichkova (2021) agree on the strategic importance of lifelong learning and suggest that it be interpreted in the light of a paradigm of capabilities and personal empowerment. That means overcoming an approach focused only on the acquisition of



skills, in the abstract, towards an approach that is able to identify the skills actually needed to promote the employability and employment of participants, building on the most effective methods according to the context considered. Lifelong learning, therefore, is increasingly close to the concrete needs of a specific geographical area and individuals, with its governance fed by bottom-up and highly participatory processes.

Economic policy and governance of lifelong and adult learning has been extensively considered in the literature by many authors. Among the most recent contributions are those of Desjardins and Ioannidou (2020) and Schemmann et al., (2020).

The approach decided upon in this chapter, however, is more pragmatic<sup>37</sup>: specific adult learning measures as implemented in six Member States (Belgium, Bulgaria, Denmark, France, Italy, and Slovakia) are described in depth. The selection of the Member States for the I SKILL project was based on different reasons recalled below.

- The EU enlargements generated further diversity in industrial relations. The six Member States have different industrial relations systems (Visser, 2009): central-eastern (Slovakia, Bulgaria), central-western (Belgium), Nordic (Denmark) and southern (Italy, France).
- The selection reflects **diversity in adult learning**, in governance, participation, inequalities and the role played by social partners in adult learning matters (Desjardins, 2017).
- The selection reflects the **welfare regimes** according to Esping-Andersen (1990, 1998).
- Combining the aspects above and considering different production regimes, the selection takes into account differences in institutional complementarities proposed by the **varieties of capitalism literature** (Hall and Soskice, 2001; Hancké et al., 2007).
- A **sample** of large and small countries, representing more than one-third of the EU27 population.

**For each Member State, a specific measure has been selected<sup>38</sup> based on a series of criteria to focus on specific dimensions that are considered more relevant in the context of this study.** The measures aim to **increase participation in adult learning of the target group of employed/working adults** (and only residually the unemployed) and to achieve more equal/inclusive participation in adult learning. Furthermore, the focus is on measures supporting the **demand side of adult learning**<sup>39</sup> and on whether **social partners play a relevant role** at any stage of the policy programme, design, and implementation.

The measures selected address one or multiple objectives. These include overcoming financial barriers, ensuring the right to adult learning for workers, validating adult learning (exclusively limited to measures implemented and operationalised for the employed or employers), and motivating workers to participate in adult learning, especially those who are more reluctant to participate. These general objectives have been selected as they may apply, at the same time, to measures that otherwise are heterogeneous.

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<sup>37</sup> Also, in view of the country-specific empirical analysis at the national level that will be conducted for Work Package 3 on national empirical analyses.

<sup>38</sup> Two for Slovakia.

<sup>39</sup> More specifically, not those supporting employers and/or training providers.



This chapter is organised as follows: **for each Member State an introductory part is devoted to providing the context in terms of adult learning and the reasons for having selected the specific measure.** Then **the discussion follows a common and detailed outline** that encompasses a general description, the legal/legislative framework and the objectives of the measures. Detailed description are given of (i.e. the rationale, target group/coverage, exceptions/exclusions, practical considerations and other details). The main governance actors (at various levels) are identified, including social partners and their role, along with the financing aspect and the available evaluation information (i.e. target indicators defined and achieved, evaluation/assessment reports and their results). Having the same structure for all the measures increases their readability and the possible cross-measure comparison. Some additional aspects are considered in dedicated annexes. At the **end of the chapter**, Section 2.7, is devoted to a **critical review of the learning schemes and accounts**.

## 2.1 Belgium

**Sectoral training funds - sectorale opleidingsfondsen (NL)/fonds des formation professionnelle (FR):** have been selected for several reasons. First of all, Belgium has a complex institutional and political structure, in which the competences for education and training, in the broad sense, are divided across the federal state level, the three regions<sup>40</sup> and the three language/cultural communities<sup>41</sup>. Focusing on sectoral training funds allows keeping a broader scope and helps avoiding picking a measure that is only applicable to a specific subset of workers or companies in part of the country. Related to this, the sector level is often regarded as the main level of collective bargaining in Belgium. The involvement of the social partners at the sectoral level is strong (and so it is for other stakeholders such as civil society organisations, training providers, etc.). This makes measures or initiatives with a sectoral scope particularly salient and relevant in the Belgian context. In addition, the three regions face quite different realities with regard to the demand and supply of skills – due to differences in the structure and composition of their economies, labour markets, and population. Sectoral training funds have the advantage of being close to the field and thus have an antenna function: a better and faster understanding of skills needs and mismatches (including specific occupations, subsectors) and of the impact of global trends (globalisation, digitalisation, climate change, demographic change), which allows a more tailored training provision and should help address different barriers to training among companies and workers. For this reason, sectoral funds are often described as bridging the gap between the government, on the one hand, and companies and workers, on the other.

**General description:** Sectoral funds are established to promote the general interests of a specific sector and to help ensure that there are sufficient and well-trained workers for the sector. To this end, the sectoral funds are involved in a variety of activities, such as organising training, providing subsidies, offering information and advice on several topics, developing instruments and databases (e.g. to detect skills needs, etc.)

**Duration:** There are many sectoral training funds active in Belgium, and some have been set up decades ago. This is not a measure with a specific start or end date.

**Legal/legislative reference(s)/framework and its possible amendments:** The Belgian industrial relations system is regulated mainly by the Act of 5 December 1968 on collective bargaining agreements and sectoral joint committees (1968-12-05/01). This Act recognises and protects the right to organise and to bargain collectively. Sectoral funds are typically established by those sectoral joint committees. Sectoral joint committees are composed of an equal number of representatives of employers' organisations and trade unions. They are created for all sectors with the aim of grouping companies with similar activities and working out regulations adapted to working conditions. Sectoral joint committees conclude collective bargaining agreements, prevent or settle social conflicts, offer advice to the Government, the National Labour Council or the Central Business Council, and perform any task entrusted to them by a law.

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<sup>40</sup> The Flemish Region, the Walloon Region, the Brussels Capital Region; linked to economic interests and autonomy.

<sup>41</sup> The Flemish Community, the French Community, the German-speaking Community; linked to language and culture.

**Objective(s).** The sectoral training funds address several objectives, among which: (i) *overcoming financial barriers* as they can provide training free of charge or at reduced fees (for all or for specific target groups), and can offer premiums for employers to finance training, or take related measures; (ii) *enforcing the right for training leave at work*; (iii) some sector funds are also active in terms of promoting the *validation of adult learning* (own or third-party training leading to certification); (iv) *raising awareness* about the importance of lifelong learning and by making the existing training offer more transparent and providing information and advice to companies and workers.

### **Detailed description/implementation**

**Rationale.** Sectoral funds are formed to promote the general interests of a particular sector and to assist in ensuring that the sector has a sufficient number of well-trained personnel.

**Target group/coverage.** Sectoral funds are mainly focused on companies and workers within their own sector, but also target activities at students, school-leavers and jobseekers looking to enter the sector. It is understood that sectoral funds tend to foster inter-sectoral mobility among workers but not intra-sectoral mobility.

**Exceptions/exclusions.** These depend on the sectoral fund.

**Practical implementation.** Sectoral funds are involved in a variety of activities, such as organising training, providing subsidies, offering information and advice on several topics, developing instruments and databases (e.g. to detect skills needs). Sectoral funds are jointly managed by the social partners.

The organisation and provision of training is a core activity. As the training offer is usually quite broad (in terms of levels of specialisation and the possibility to gain an official certificate), such training courses contribute to both upskilling and reskilling workers in Belgium. Sectoral training funds are thus an important player in adult education and lifelong learning in Belgium and are key to improving both the participation in and the quality of training. Some training courses focus on specific knowledge or skills, occupations or worker profiles (education level, age, language, etc.), while other courses are open to anyone. Some funds also organise courses that lead to certification. Over time, attention on the quality of the training offer has increased (Wouters & Denys, 2004)<sup>42</sup>. This includes training that is organised by external training providers.

In Belgium, there are over 30 sectoral funds (see the Annex for a detailed list). These sectoral funds differ from each other in several respects, such as their functioning, financing, activities and target groups (Wouters and Denys, 2004)<sup>43</sup>. This, however, is not a bug but a feature: the diversity of these sectoral funds mirrors the diversity of the sectors they serve – as the sectors themselves also differ significantly in terms of their employment structure, skills, challenges and so on. (Wouters and Denys, 2004).

**Governance actors involved in implementation (national or subnational level of government).** Depending on the fund, the involvement and collaboration between actors may differ.

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<sup>42</sup> Wouters, M. and Denys, J. (2004). Het vormingsbeleid in de sectoren van 1988 tot 1998. Een evaluatie na 10 jaar sectoraal beleid. Research Report, prepared for the Flemish Government. Available at: <https://www.vlaanderen.be/publicaties/het-vormingsbeleid-in-de-sectoren-van-1988-tot-1998-een-evaluatie-na-10-jaar-sectoraal-beleid>

<sup>43</sup> See previous footnote.

- **Sectoral funds.** These often function as intermediary, or take on a coordination role, looking for synergies between what is offered by different actors and adding their offer on top (Wouters and Denys, 2004)<sup>44</sup>. This includes, for example, concluding cooperation agreements with training bodies, schools and universities, and sector federations. In terms of governance and implementation of training measures by sectoral funds, the funds also serve as an executive body implementing collective agreements – which often contain specific clauses related to training (Wouters and Denys, 2004)<sup>45</sup>. This relation also runs in the other direction: through their work and connections with social partners, sectoral funds can help shape collective agreements concluded for their sector. More recently, this function as an executive body has been extended further, with sectoral funds developing into sector centres bridging know-how and expertise on labour market issues of high relevance to their sector. Today, sectoral funds function relatively autonomously.
- **At the national level.** For education and learning specifically, the language communities play a leading role, each having their own Ministry of Education. The federal government has retained some power in this area as well.
- **At the subnational level.** The regions govern vocational or professional training due to the link between regions and the local labour market (e.g. training offers by public employment services to acquire new skills, support personal development or make it possible to practise a new profession).

**Stakeholders involved in the implementation (e.g. social partners and providers).** The key governance actors involved in the implementation are social partners.

- *Social partners jointly manage the sectoral funds.*
- *Other stakeholders also play an important role in other areas (e.g. funding and setting goals, supporting training provision).*

**Financing/source of funding.** Sectoral funds are financed by compulsory contributions from companies and workers active in the sector and contributions from the government. As regards the latter, ‘sector covenants’ are concluded between the fund and the government. For example, in Flanders, such covenants are concluded between the Flemish Government and the respective sectoral fund, which receives funding in exchange for specific actions or commitments (e.g. on promoting lifelong learning)<sup>46</sup>.

**Target indicators defined and achieved:** n.a.

**Evaluation/assessment (reports) undertaken and their results.** There are no specific reports in the recent literature on sectoral funds as a whole, but there are some reports focusing on specific funds<sup>47</sup>. Here, we concentrate on those sectoral funds relevant to the selected sector (automotive) in the Belgian case study.

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<sup>44</sup> See the previous footnote.

<sup>45</sup> See the previous footnote.

<sup>46</sup> Overview of sector covenants: <https://www.vlaanderen.be/sectorconvenants/overzicht-van-sectorconvenants-en-addenda#majfgo-4>

<sup>47</sup> The focus on automotive sectoral funds will be conducted for Work Package 3 on national empirical analysis.

## **Annex - Belgium, list of sector funds (obtained from VLAIO, 2021)<sup>48</sup>**

### Audiovisual sector:

- [www.mediarte.be](http://www.mediarte.be) (social fund for the audiovisual sector)

### Automotive and related sectors:

- [www.educam.be](http://www.educam.be) (knowledge and training centre of the automotive and related sectors)

### APCB workers:

- [www.opfo100.be](http://www.opfo100.be) (fund for the training of workers PC100)

### APCB clerical workers:

- [www.cevora.be](http://www.cevora.be) (training centre for clerical workers PC200)

### Funeral homes:

- [www.fonds320.be](http://www.fonds320.be) (guarantee and social fund for funeral homes)

### Concrete industry:

- [www.fondsbeton.be](http://www.fondsbeton.be) (social fund for the concrete industry)

### Paid passenger transport:

- [www.sociaalfondssocial.be/werkgever](http://www.sociaalfondssocial.be/werkgever) (social fund workers bus services and coach services, training is carried out at FCBO)
- [www.taxi-info.be](http://www.taxi-info.be) (cab services and rental vehicles with driver)

### Fuel trade:

- [www.fonds127.be](http://www.fonds127.be) (social fund for fuel trade)

### Construction:

- [www.constructiv.be](http://www.constructiv.be) (social fund for professional training in the construction industry)

### Diamond industry:

- [fondsdiamant.be](http://fondsdiamant.be) (fund for the diamond industry)

### Retail trade:

- independent retail: [www.sociaalfonds201.be](http://www.sociaalfonds201.be)
- food retail with numerous outlets: [www.sfonds202.be](http://www.sfonds202.be)
- large retail stores: [www.sfonds311.be](http://www.sfonds311.be)
- department stores: [www.sfonds312.be](http://www.sfonds312.be)

### Service cheques:

- [form-dc.be](http://form-dc.be) (sector training fund for service cheques)

### Electricians:

- [www.volta-org.be](http://www.volta-org.be) (training fund for electricians – installation & distribution)

### Glass:

- [www.vgi-fiv.be](http://www.vgi-fiv.be) (Cefoverre, training fund of the glass industry association)

### Graphics sector:

- [www.grafoc.be](http://www.grafoc.be) (sector and training fund for workers in the print media industry)

### Green sectors:

- [www.eduplus.be](http://www.eduplus.be) (horticulture, gardening & garden management, agriculture and contracting)

### Catering industry:

- [vlaanderen.horecaforma.be/opleidingen](http://vlaanderen.horecaforma.be/opleidingen) (Horeca Vorming Vlaanderen)

### Wood sector:

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<sup>48</sup> VLAIO (2021). List of sector funds. Available at: Sectorale ondersteuningsmaatregelen | Agentschap Innoveren en Ondernemen ([vlaio.be](http://vlaio.be))

- [www.woodwize.be](http://www.woodwize.be) (training cent for wood)

#### International trade:

- [www.wf-fe.be/nl/sociaal-fonds](http://www.wf-fe.be/nl/sociaal-fonds) (Logos training fund for employees in international trade, transport and logistics)

#### Hairdressing, fitness and beauty care:

- [www.febelhair.org](http://www.febelhair.org) (hairdressers)
- [www.fitness.be](http://www.fitness.be) (wellness & health)
- [www.besko.be](http://www.besko.be) (beauticians)

#### Local governments:

- [www.diverscity.be/ondersteuning/vormingsfonds](http://www.diverscity.be/ondersteuning/vormingsfonds)

#### Metal:

- [www.mtechplus.be](http://www.mtechplus.be) (career fund for the metal and technology industry sector; this is the new name for TOFAM, INOM Clerks, INOM, FTMA, FTML, LIMOB, VORMETAL, VIBAM, RTM, FCMB and OBMB)

#### Assembly and crane rental companies:

- [www.vzwmontage.be](http://www.vzwmontage.be) (assemblers and crane rental companies)

#### Paper and cardboard processing:

- [www.dewerkplekarchitecten.be/leden/fonds-papier-kartonbewerking](http://www.dewerkplekarchitecten.be/leden/fonds-papier-kartonbewerking)

#### Shipping:

- [www.frb-fri.be/nl](http://www.frb-fri.be/nl) (Rhine and Inland Waterways Shipping Fund)

#### Chemical industry:

- [www.co-valent.be](http://www.co-valent.be) (training fund for the chemical, plastics and life sciences sector)
- [www.demografiefondsdemographie.be/nl/demografiefonds/](http://www.demografiefondsdemographie.be/nl/demografiefonds/) (support for projects in companies aimed at creating workable jobs and sustainable careers)

#### Social profit:

- [www.vivosocialprofit.org](http://www.vivosocialprofit.org) (Flemish institute for training and education in social profit)

#### Textiles:

- [www.cobot.be](http://www.cobot.be) (centre for training and retraining in the textile and knitwear industry)
- [www.ivoc.be](http://www.ivoc.be) (institute for training and education in the ready-to-wear clothing industry)

#### Transport, logistics and ground handling at airports:

- [www.sftl.be](http://www.sftl.be) (social fund for transport and logistics)

#### Temporary employment sector:

- [travi.be/en/](http://travi.be/en/) (training fund for temporary employees)

#### Real estate sector:

- [www.sf323.be](http://www.sf323.be) (guarantee and social fund for the real estate sector)

#### Removals and furniture storage:

- [www.sociaalfonds-verhuizingen.be](http://www.sociaalfonds-verhuizingen.be) (social fund for removals, furniture storage and related activities)

#### Entertainment companies:

- [www.podiumkunsten.be](http://www.podiumkunsten.be) (social fund for the performing arts)

#### Food:

- [www.alimento.be](http://www.alimento.be) (sectoral services for food companies, their employees, bakers and education)
- [www.sfonds119.be](http://www.sfonds119.be) (Sociaal fonds voedingshandel)

#### Liberal professions:

- [www.liberform.be](http://www.liberform.be) (training centre for the sector of liberal professions; affiliated with the Federation of Liberal Professions).



## 2.2 Bulgaria

**Vouchers for employees - ваучери за заети лица.** This measure has been selected for two main reasons. First, one of the most serious challenges faced by the Bulgarian adult education system is how to involve in learning the social groups most in need of continuing training and qualifications – mainly those with less than primary and lower secondary education. Second, Bulgaria has rich experience in the use of training vouchers for encouraging the involvement of both unemployed and employed people in learning activities with the aim of acquiring new or expanding knowledge and skills. **Legal/legislative reference(s)/framework and its possible amendment.** Vouchers for Employees were introduced in 2017 with the National Employment Action Plan for 2017 (Ministry of Labour and Social Policy, 2017)<sup>49</sup>. The scheme was present in all subsequent National Employment Plans until 2021 (Ministry of Labour and Social Policy, 2018, 2019, 2020, 2021)<sup>50</sup>. It was targeted only at employees and was financed through the Operational Programme for Human Resources Development 2014–2020.

In order to increase the motivation of participants and to address identified problems with the quality of the training provided, from 2019 the co-financing was increased from 15 % to 50 % of the value of the voucher (Forecast consortium, 2022, p. 73)<sup>51</sup>. This change significantly influenced the participation rate in the scheme. Before 2017, schemes for encouraging adult learning directly through providing training vouchers were first developed in Bulgaria under the Operational Programme for Human Resources Development 2007–2013. However, they were targeted mainly towards unemployed people. The next Operational Programmes for

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<sup>49</sup> Ministry of Labour and Social Policy (2017) Национален план за действие по заетостта през 2017 г. Приложение 1, приет с постановление на Министерски съвет № 158 от 10.08.2017 г. [National Employment Action Plan for 2017, Annex 1, adopted by Decree of the Council of Ministers No 158 of 10.08.2017] (158). Available at: <https://www.mlsp.government.bg/natsionalni-planove-za-deystvie-po-zaetostta> (In Bulgarian) (Accessed: 9 June 2022).

<sup>50</sup> Ministry of Labour and Social Policy (2018) Национален план за действие по заетостта през 2018 г. Приложение 1, приет с постановление на Министерски съвет № 24 от 19.01.2018 г. [National Employment Action Plan for 2018, Annex 1, adopted by Decree of the Council of Ministers No 24 of 19.01.2018] (24).

Ministry of Labour and Social Policy (2019) Национален план за действие по заетостта през 2019 г. Приложение 1, приет с постановление на Министерски съвет № 20 от 18.01.2019 г. [National Employment Action Plan for 2019, Annex 1, adopted by Decree of the Council of Ministers No 20 of 18.01.2019] (20). Available at: <https://www.mlsp.government.bg/natsionalni-planove-za-deystvie-po-zaetostta> (In Bulgarian) (Accessed: 9 June 2022).

Ministry of Labour and Social Policy (2020) Национален план за действие по заетостта през 2020 г. Приложение 1, приет с постановление на Министерски съвет № 83 от 06.02.2020 г. [National Employment Action Plan for 2020, Annex 1, adopted by Decree of the Council of Ministers No 83 of 06.02.2020] (83). Available at: <https://www.mlsp.government.bg/natsionalni-planove-za-deystvie-po-zaetostta> (In Bulgarian) (Accessed: 9 June 2022).

Ministry of Labour and Social Policy (2021) Национален план за действие по заетостта през 2021 г. Приложение 1, приет с постановление на Министерски съвет № 83 от 29.01.2021 г. [National Employment Action Plan for 2021, Annex 1, adopted by Decree of the Council of Ministers No 83 of 29.01.2021] (83). Available at: <https://www.mlsp.government.bg/natsionalni-planove-za-deystvie-po-zaetostta> (In Bulgarian)

<sup>51</sup> Forecast Consortium (2022) Evaluation of the effectiveness, efficiency and impact of measures to support employed persons under the Priority Axis I under Operational Program “Human Resources Development 2014–2020”. Available at: <https://esf.bg/otsenka/> (Accessed: 9 June 2022).

Human Resources Development for 2014–2020 and for 2021–2027 further extended the voucher schemes to other programmes included in the National Employment Action Plans.

**Objective(s).** The general objective of the scheme was to overcome financial barriers to involvement in learning, more specifically facilitating the involvement in learning activities of employees with a secondary or lower level of education for them to acquire a professional qualification and/or a key skill (i.e. communication in foreign languages or digital skills).

#### **Detailed description/implementation**

*Rationale.* The envisaged training courses were seen as a means for better integration in the labour market of people with lower or insufficient education by increasing employees' skills to meet the current needs of the business. It was also expected that in the long run, stable employment or better jobs for these vulnerable groups would be ensured.

*Target group/coverage.* Employees with secondary or lower education; in 2019, another target group was introduced – people over age 54 with higher education, who were employed in enterprises outside the state administration.

*Exceptions/exclusions.* Public sector employees were not eligible.

*Practical implementation.* Regional/local governments supported the implementation through regional directorates of the Employment Agency.

*Other details.* For the entire 2014–2020 programming period, each person was entitled to receive only one voucher for vocational training and only one voucher to acquire a key competency. Providers that wanted to offer training paid for by vouchers had to meet some special requirements (Council of Ministers, 2015)<sup>52</sup>.

#### **Governance actors involved in implementation (national or subnational level of government)**

##### *At the national level*

- The National Employment Agency (an executive agency to the Minister of Labour and Social Policy) implemented the measure as it issued the vouchers, supported employees in finding relevant training providers and monitored the scheme.
- National representative trade unions (the Confederation of Labour 'Podkrepa' and Confederation of Independent Trade Unions in Bulgaria (CITUB)) participated in updating the state educational requirements for acquiring qualifications by profession, as well as developing, updating and harmonising the List of Professions for Vocational Education and Training.
- National representative employers' organisations (the Bulgarian Industrial Capital Association (BICA), Bulgarian Industrial Association (BIA), Bulgarian Chamber of Commerce and Industry (BCCI), Confederation of Employers and Industrialists in

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<sup>52</sup> Council of Ministers (2015) Постановление № 280 от 15.10.2015 г. за определяне на условията и реда за предоставяне на ваучери за обучение на безработни и заети лица [Decree of the Council of Ministers No 280 of 15 October 2015 laying down the conditions and procedure for the provision of training vouchers for unemployed and employed persons] (280). Available at: <http://www.navet.government.bg/bg/media/PMS-280-15-10-2015-vaucheri.pdf> (In Bulgarian) (Accessed: 9 June 2022).

Bulgaria (KRIB), and the Union of Private Economic Enterprise (UPEE)) were involved in developing, updating and coordinating the List of Professions for Vocational Education and Training. They also participated in developing, coordinating and updating state educational requirements for the acquisition of professional qualifications, and took part in organising and conducting examinations for professional qualifications.

#### *At the subnational level*

- Regional/local government supported the implementation through regional directorates of the Employment Agency. Individuals applied for vouchers at the regional labour office. Approved candidates received a training voucher that was used directly for course registration.

#### **Stakeholders involved in the implementation (e.g. social partners and providers)**

- Social partners were not involved in the implementation.
- Providers included the public administration (national and regional) and training providers – schools and vocational education centres licensed by the National Vocational Education and Training<sup>53</sup>.

#### **Implementation structure**

- *Labour offices, training centres, community centres, etc.* Regional/local governments supported the implementation through regional directorates of the Employment Agency.
- *Registries.* The training under the scheme was given by providers included in the list of providers of training courses for professional qualifications and training in key competences for unemployed and employed people under Priority Axis 1 of the Operational Programme for Human Resources Development 2014–2020, which met the requirements of Article 9 of the Council of Ministers 280/2015.
- *Networks of practitioners, quality networks, processes.* The Ministry of Labour and Social Policy was the main contracting authority for the scheme and the National Employment Agency was in charge of its implementation.

**Financing/source of funding.** The scheme Vouchers for Employees was financed through the Operational Programme for Human Recourses Development 2014–2020. The planned budget for different years was as follows: (i) 2017 – BGN 15 million (about EUR 7.5 million); (ii) 2018 – BGN 12 million (about EUR 6 million); (iii) 2019 – BGN 18 million (about EUR 9 million); (iv) 2020 – BGN 7 million (about EUR 3.5 million); (v) 2021 – BGN 150 000 (about EUR 75 000) (Ministry of Labour and Social Policy, 2017; 2018; 2019; 2020; 2021; 2021). The total was BGN 52 150 000 (about EUR 26 075 000).

**Target indicators defined and achieved.** According to the Forecast consortium (2022, pp. 65, 73, 134)<sup>54</sup>,

<sup>53</sup> (<https://www.navet.government.bg/en/>)

<sup>54</sup> Forecast Consortium (2022) Evaluation of the effectiveness, efficiency and impact of measures to support employed persons under the Priority Axis I under Operational Program “Human Resources Development 2014-2020”. Available at: <https://esf.bg/otsenka/> (Accessed: 9 June 2022).

- the target defined was 54 600 employees with secondary and below secondary education and 9 600 employees aged over 54 with higher education;
- the target achieved was of 22 671 employees with secondary and below secondary education (42 % of the target) and 52 employees aged over 54 with higher education (1 %); 53.3 % were women and 46.7 % were men;
- by the end of 2018 there was very strong interest in the measure (over 21 000 vouchers for employees were issued, which represented over 40 % of the set performance indicator);
- there was significant non-fulfilment of the planned and directly provided funds (only 52.4 %); BGN 20 million was redirected in October 2020 from the project budget to the financing of emergency measures against the adverse effects of the pandemic and rising unemployment.

**Evaluation/assessment (reports) undertaken and their results.** An 'Evaluation of the effectiveness, efficiency and impact of measures to support employed persons under the Priority Axis I under the Operational Programme for Human Resources Development 2014–2020 was recently published, in which one of the measures assessed is the scheme 'Vouchers for employees'. The main conclusions of the report are outlined below (Forecast consortium, 2022, pp. 87-88, 198-199)<sup>55</sup>.

- Voucher training better reflects the needs of the participants as they know their own training needs in terms of their career and personal development.
- Over 66 % of the vouchers were used for vocational training<sup>56</sup>. A further 24 % of employees who received vouchers took part in foreign language training, and only 9 % in digital skills training, although digital skills are often sought after by employers.
- The scheme was characterised by significant inefficiency – the actual cost per employee who participated in training with vouchers was 1.5 times higher than the amount set in the budget for the operation. With an estimated single cost of BGN 779 (about EUR 388), the actual cost paid was BGN 1 154 (about EUR 580).
- During implementation of the measure, there were significant problems affecting its effectiveness and efficiency.
  - The first group of problems stemmed from the low level of motivation to participate in the programme by the target groups. This problem was particularly acute after the increase in the required amount of co-financing from 15 % to 50 % of the value of the voucher (effective from 2019). Specifically, 87.4 % of the participants in the programme had participated in training courses before the entry into force of the higher percentage of co-financing.
  - Among the factors that adversely affected the participation of employees, especially those from small towns and communities, was the requirement that training be conducted only at the premises of training providers (on-the-job training was not allowed). The need to travel to another area and the impossibility to

<sup>55</sup> See the previous footnote.

<sup>56</sup> Mainly in motor vehicles (22 % of vocational training vouchers) and domestic and international transport of passengers and goods (19 %).

conduct distance learning added to the difficulties of combining training and professional commitments.

- The Covid-19 pandemic also had a serious adverse effect on the implementation of the operation, as vouchers were only applicable to funding on-site training. Following the introduction of restrictions on in-person training in March 2020, activities related to the recruitment of candidates for voucher training, and the printing and distribution of vouchers, have been permanently suspended since May 2020.

## Annexes - Bulgaria

### Annex 1. Definition and short presentation of the voucher scheme

Voucher schemes are subsidies (coupons of certain monetary value) directed mainly at individuals but also companies, enabling them to access adult learning services and to choose training providers and/or the content of services, timing, etc.<sup>57</sup> The innovative voucher concept started its career in Limburg, the Netherlands, in 1997 (Whelan et al., 2019, p. 219)<sup>58</sup>. Since then, vouchers/voucher schemes have become a widely popular instrument to support businesses and individuals' careers.

They are designed, implemented, and deployed by public authorities at the national, regional, or local level. Their goal is to encourage certain behaviours at targeted companies – micro, small and medium-sized enterprises (SMEs). To a large extent, vouchers are used to promote innovation-related activities, the adoption of digital technologies, and the acquisition of new skills through training. But there are other vouchers addressing topics such as the green transition of the economy and access to international markets (Schmerber, Tönnisson, and Veliste, 2021, p. 2)<sup>59</sup>. Ten years after 1997, at least 25 voucher schemes were on the market in Europe; in 2018 the estimate was about 50 (McInnes et al., 2018)<sup>60</sup>. According to the World Bank definition,

[v]ouchers are increasingly used to support innovation, especially to serve as an incentive for collaboration with knowledge providers. Vouchers are small, nonrepayable, entitlement-based grants that require light management with effective auditing. The simplicity of administration is a key attractiveness of these schemes; however, it requires effective brokerage ... to link SMEs and knowledge

<sup>57</sup> Source: Cedefop definition in 'Financing adult learning database'.

<sup>58</sup> Whelan, L., Purcell, G., Gregan, J. and Doyle, D. (2019) 'Design as a catalyst for innovation in Irish industry. Evolution of the Irish innovation voucher initiative within Design+ Technology Gateway', *The Design Journal*, 22(1), pp. 217–228.

<sup>59</sup> Schmerber, L., Tönnisson, R. and Veliste, M. (2021), Vouchers for the competitiveness of SMEs, A Policy Brief from the Policy Learning Platform on SME competitiveness, Interreg Europe, European Union, European Regional Development Fund, April, available at [http://www.interregeurope.eu/fileadmin/user\\_upload/plp\\_uploads/policy\\_briefs/TO3\\_Policy\\_Brief\\_Vouchers\\_for\\_the\\_competitiveness\\_of\\_SMEs.pdf](http://www.interregeurope.eu/fileadmin/user_upload/plp_uploads/policy_briefs/TO3_Policy_Brief_Vouchers_for_the_competitiveness_of_SMEs.pdf)

<sup>60</sup> McInnes, C., Pelayo, E., Ksiazek, E. and Boulanger, N. (2018) 'Europe's Innovation Voucher Schemes: What makes them successful and for whom?', Conference Proceedings of the Regional Studies Association Winter Conference November 2018, Bloomsbury, 15–16 November. Available at: <https://www.regionalstudies.org/wp-content/uploads/2018/07/2018-Winter-Conference-Abstract-Book-1.pdf> (Accessed: 9 June 2022).

providers and ensure compliance through random audits or other mechanisms (Xavier et al., 2020, p. 112)<sup>61</sup>.

According to a European Commission report in 2019 on voucher schemes in Member States,

“[v]oucher programmes consist of economic incentives granted by local, regional and national governments to private firms with the aim of addressing pre-defined goals. In this context, the voucher programmes are meant to address Micro, Small and Medium Sized Enterprises' (SMEs onwards) and Governmental Institutions' issues with innovation and digitisation by incentivising the adoption of new technologies, services or skills” (European Commission, 2019, p. 1)<sup>62</sup>.

The European Commission divides the vouchers into four categories<sup>63</sup>:

- (i) innovation vouchers aimed at assisting companies, mostly SMEs, in investing in innovative solutions and services or the acquisition of machinery that will facilitate innovation. This type of voucher focuses broadly on innovation, not specifically on digitisation;
- (ii) digitisation vouchers aimed at assisting companies, mostly SMEs, in investing in digital solutions, services and/or acquisition of machinery that will facilitate the digitisation of the company. This type of voucher is earmarked for investments related specifically to digitisation;
- (iii) training vouchers, aimed at strengthening the basic or advanced digital skills of employees and/or citizens;
- (iv) specialised vouchers aimed at providing very specialised and targeted assistance to address a particular situation/activity related to ICT and innovation.

Another differentiating feature between the vouchers is their size. Certainly, the most frequent amount for a voucher is less than EUR 10 000.

In brief, the main characteristics of the voucher schemes are that they:

- support SMEs to purchase services from knowledge service providers;
- have a fast and simple application process and reporting;
- are issued by a local/regional/national agency, committing to pay the service provider;
- are limited in scope and the amount committed.

<sup>61</sup> Xavier, C., Frías, J., Hill, J. and Yanchao Li, Y. (2020) A Practitioner's Guide to Innovation Policy. Instruments to Build Firm Capabilities and Accelerate Technological Catch-Up in Developing Countries. Washington, D.C.: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/33269> (Accessed: 9 June 2022).

<sup>62</sup> European Commission (2019) Voucher Schemes in Member States. A Report on the Use of Voucher Schemes to Promote Innovation and Digitization. Brussels: Directorate-general for communications networks, content and Technology. Available at: [https://ec.europa.eu/information\\_society/newsroom/image/document/2019-32/member\\_states\\_use\\_of\\_voucher\\_schemes\\_0D31F683-AA92-B7FF-684433BCBD8A4F3A\\_61225.pdf](https://ec.europa.eu/information_society/newsroom/image/document/2019-32/member_states_use_of_voucher_schemes_0D31F683-AA92-B7FF-684433BCBD8A4F3A_61225.pdf) (Accessed: 9 June 2022).

<sup>63</sup> It is important to clarify that the aforementioned vouchers are not mutually exclusive. An innovation voucher may finance Information and communications technology (ICT) related activities, and a training voucher may train employees' ICT skills.



## Annex 2. Comparative assessment of vouchers and grant schemes

An evaluation of the achievement of the strategic and specific objectives of the Operational Programme for Human Resources Development for the period 2007–2010 was carried out in which the mechanisms for training employees indirectly and directly, i.e. through projects (grant scheme) and vouchers, were assessed. The comparative analysis between the two mechanisms highlighted many advantages of vouchers (Summary, 2013)<sup>64</sup>: they (i) emphasise the targeting of services to the needs of the individual and allow better linking of personal capabilities and preferences with the needs of employers and demand; (ii) make the services accessible to a wide range of people and in smaller towns and communities; (iii) require less time in comparison with selection procedures which, as a rule, require more time to finalise; (iv) reduce the administrative burden; (v) stimulate to a greater extent the activity and interest of end-users than the indirect provision of training through projects; and (vi) provide direct and equal access for all to lifelong learning, regardless of the initiative of their employers. It emphasises that

in times of crisis, many employers, especially smaller ones, are reducing their investment in human resource development and training is increasingly seen as a cost rather than an investment. ... Voucher schemes ... respond to a greater extent to the needs of individuals, stimulate personal participation and contribute to increasing the empathy of individuals in the process of their own career development”.

The evaluation report draws the following conclusion:

we should summarise that the mechanisms for [the] training of employees (through project selection and vouchers) have advantages and disadvantages that require a specific approach to their further development. It is necessary to keep the balance for the availability of training opportunities for employees both on projects (based on the discretion of the employer) and directly (for employees whose employers do not apply for projects) (Summary, 2013, p. 26)<sup>65</sup>.

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<sup>64</sup> Corporate and Public Management Consulting Group and Partners (2013) Summary of a final report on the evaluation of the achievement of the strategic and specific objectives of the Operational Program ‘Human Resources Development’ for the period 2007-2010. Sofia: European structural and investment funds. Available at: <https://www.eufunds.bg/archive2018/archive/documents/1408539049.pdf> (In Bulgarian) (Accessed: 9 June 2022).

<sup>65</sup> See the previous footnote.

## 2.3 Denmark

**The Industry's Competence Development Fund - Industriens Kompetenceudviklingsfond (IKUF):** IKUF is just one of many competence funds in Denmark. Competence funds are in general established under the different collective agreements within different sectors and are used in both private and public agreements. It is difficult to give a general framework of the funds because the terms, funding sources, purposes, and target groups vary from one fund to another. This measure has been selected for several reasons. First of all, companies within the plastic sector (usually) use the Industrial Agreement. The Industrial Agreement covers 150.000 employees from all industrial sectors in Denmark. Furthermore, the purpose of IKUF is to ensure the development of the employees' skills to maintain and strengthen Danish companies' competitiveness in the global economy. Moreover, IKUF covers the costs of adult education either for the employee or for the employer, lowering the financial barrier (in particular, employers are obliged to pay an annual fee which set aside funds to use on education for their employees, which should increase their motivation to encourage their employees to attend education and training.)

**General description:** IKUF was established by the Confederation of Danish Industry<sup>66</sup> and the Central Organization of Industrial Employees in 2007<sup>67</sup>. As members of the Confederation of Danish Industry and working under the Industrial Agreement, companies are obligated to pay an annual fee of 520 DKK (70€) per employee to the fund<sup>68</sup>. The subsidies are administrated by pensions corporations and are being distributed continuously to IKUF. The tasks of IKUF are administrated by the organization Education of the Industry (Industriens Uddannelser) which is responsible for approving the applications and the payouts to the employees or employers. In turn, the organization Education of the Industry is an institution founded by the 'Confederation of the Danish Industry' and the two trade unions '3F' (the United Federation of Danish Workers) and the 'Danish Metal Workers Union'. Other tasks within the organization Education of the Industry are to service joint education committees in their work to determine the professional content, duration, structure, and goals of the various vocational and continuing education programs within the Danish industry. The joint committees are sector-specific (e.g., manufacturing/production, metal, etc.). In general, competence funds support different elements of education depending on the specific agreement. The IKUF supports participation fees, up to 85% wage subsidy, food, and accommodation (in some cases), teaching materials, and transportation (in some cases). The courses are divided into two main categories: self-selected education and agreed education. The self-selected education is chosen by the employee and the agreed education is chosen based on an agreement between the employee and the employer. When applying for an agreed education, IKUF can ask for a frame agreement. The frame agreement is a local declaration of intent between the management and the employee consisting of an education plan including development goals and actions to upskill the employee. The IKUF

<sup>66</sup> <https://www.danskindustri.dk/vi-radgiver-dig/personale/elever-og-larlinge/efteruddannelse/kompetenceudviklingsfonde/bidrag-og-opkravning/> (in Danish)

<sup>67</sup> IKUF, (2023a), Organization: <https://www.ikuf.dk/om-ikuf/organisationerne-bag-ikuf/> (in Danish)

IKUF, (2023b), Most frequent questions: <https://www.ikuf.dk/loenmodtager/mest-stillede-spoergsmaal/hvilke-uddannelser-giver-mulighed-for-tilskud/> (in Danish)

IKUF, (2023c) List of courses: <https://www.ikuf.dk/loenmodtager/mest-stillede-spoergsmaal/hvilke-uddannelser-giver-mulighed-for-tilskud/> (in Danish)

<sup>68</sup> Industrial Agreement 2020-2023 (2020).

has a list of approved courses (approximately 3000 courses within the different sectors of the industry), and applications for these courses can be handled within 1-2 days. Applications for courses not on the list of approved courses take 5-6 weeks to handle. The positive list is made in agreement between social partners in the sector specific joint committees. The joint committees are represented by trade unions and members of the employers' organization (usually represented by bigger Danish companies). Their main purpose is to develop and maintain the ordinary vocational education and adult education and training within the specific sector covered by the Industrial Agreement. The work of the joint committees is managed by the organization Education of the Industry.

**Duration:** 2007 - ongoing

**Legal/legislative reference(s)/framework and its possible amendments:** IKUF is part of the Industrial Agreement § 47, and Industrial Functionary Agreement § 25<sup>69</sup>.

**Measure objective(s):** (i) overcoming financial barriers by collecting an annual fee from all companies within the Industrial Agreement, meaning that the companies are paying for education and training no matter how many of their employees attend. The funds are applied for by the employee or employer to cover the costs of the education. When applying for IKUF it is possible to get a wage subsidy of up to 85%, by applying for further funding through another application system than IKUF. The different funds and application systems have been criticized for being an administrative barrier to applying; (ii) Ensuring the right to adult learning of workers via the Industrial Agreement. Indeed, every employee has the possibility of using two weeks a year for education or training. If the education or training targets employment within the areas covered by the Industrial Agreement, the employee will get the costs covered in agreement with the employer; (iii) Promoting validation of adult education by assuring the right to education and training and by providing a list of courses that are approved by the joint committees of IKUF. The list has a wide range of pre-approved courses that are mainly provided through the AMU-system<sup>70</sup> which strives to have the same content and quality across different education providers; (iv) Motivating workers to participate in adult learning by overcoming the financial barriers and the obligation for companies to contribute with an annual fee to IKUF whether they make use of the possibilities or not.

**Detailed description/Implementation:**

Rationale: Making sure the employees' skills match the demand from the labor market within the Danish industry. The representatives from both the trade unions and employers' organizations have an interest in keeping the workforce upskilled to make sure the Danish industry is competitive on a global level.

Target group/coverage: Employees hired for at least six months in the same company can apply for IKUF. The list of education and training may vary from a one-day course to a 2-year diploma program, thereby targeting employees with different levels of education within the Danish industry.

Exceptions/exclusions: depend on the specific agreement.

Practical implementation: IKUF is managed by the organization Education of the Industry which is responsible for approving applications and payment of the subsidies and also

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<sup>69</sup> Organizational Agreement of IKUF, (2007).

<sup>70</sup> AMU stands for labor market training.

responsible for organizing the work of the joint committees that decide the content of the education and training to meet the needs of the Danish industry.

Other details: n.a.

**Governance actors involved in the implementation (national or subnational level government):**

- At national level, the Central Organization of Industrial Employees and the Confederation of Danish Industry are involved in the overall agreement of the competence fund IKUF. The social partners are negotiating on many subjects within education and training agreements, education planning, relevant training, qualification, reskilling and IKUF.

At subnational level, joint committees represented by trade unions and the Confederation of Danish Industry negotiate which education and training will be approved and the relative for each sector within the Danish industry. **Stakeholders involved in the implementation (e.g., social partners, providers, etc.):**

- The main stakeholders of IKUF are the social partners of the Confederation of Danish Industry and the Central Organization of Industrial Employees. The Education of the Industry (Industriens Uddannelser) handles the secretariat function of IKUF approving applications and managing subsidies. Other stakeholders are the pension corporations, who administrate the funding, e.g., the collection of subsidies from the companies.

**Financing/Source of funding:** IKUF is funded by employers. The company pays DKK 520 (70€) annually per employee who are covered by the Industrial Agreement according to detailed guidelines in the "Organizational Agreement on the Industry's Competence Development Fund"<sup>71</sup>.

**Evaluation/assessment reports undertaken and their results:**

An evaluation from 2021 showed that the number of applications to IKUF has been declining since 2017. In 2007, the number of applications was 20,175 and in 2021 (during Covid-19) the number of applications was 7,281. The reasons for this decrease are: 1) the C

ovid-19 pandemic, 2) the workload in the companies, and 3) a general lack of workers within the sector. To increase the number of applications forward, IKUF has worked on supporting the companies (both locally and in webinars) with the application process and by providing user-driven process on how to make the application system simpler for applicants<sup>72</sup>. more knowledge on the education and training options. IKUF has also started an ongoing

**Annex – Denmark, list of Trade Unions**

3F (the United Federation of Danish Workers)

Danish Metal Workers' Union

HK Trade Union

The Danish Association of Professional Technicians

<sup>71</sup> Industrial Agreement 2020-2023 (2020), p. 104.

<sup>72</sup> CO-Industry Annual Report 2021, (2021), p. 22. [https://www.co-industri.dk/files/2022-03/%C3%85srapport\\_2021\\_web.pdf](https://www.co-industri.dk/files/2022-03/%C3%85srapport_2021_web.pdf)

DEF

Blik- og rørarbejderforbundet

Malerforbundet

Serviceforbundet

Dansk Jernbaneforbund

Fødevareforbundet NNF

## 2.4 France

### Individual learning account – compte personnel de formation (CPF)

This measure has been selected because of its uniqueness, indeed it has been considered by the OECD the only real example of individual learning account (ILA) among those that, more generically can be categorized as individual learning schemes (ILSs) (OECD, 2019). The reason is that it attaches training rights to the individual rather than their jobs. Furthermore, the theme of the individual as the responsible for his/her choice regarding adult learning pathway is peculiar and is debated in the literature. European Institutions (e.g., European Commission, 2021b; Council of the European Union, 2022b) are interested by the kind of measure it is mentioned in their acts as ‘individual learning account’ and other Member States are discussing its possible implementation in their systems. Finally, the choice derives from a comparison with other measures that are still active in France on the basis of the relative relevance (while those that are not active anymore have been excluded ex-ante).

**General description:** The CPF is a training entitlement/credit scheme, that, according to its most recent formulation is universal (as it is meant for the active population between 16 years old and up to the retirement), portable (as once acquired it cannot be lost due to professional mobility) and autonomously implementable (by the active individual without the intervention of intermediaries, with some exceptions).

**Duration:** 2015 – ongoing.

**Legal/legislative reference(s)/framework and its possible amendments:** The main actual legislative reference is the Law n. 771 of the 5<sup>th</sup> September 2018 “Pour la liberté de choisir son avenir professionnel”,<sup>73</sup> effective from the 1<sup>st</sup> January 2019. This latter is considered the main source of reform regarding the CPF. It introduces what is also known as CPF “rénové”, along with reorganizing its governance (by introducing new actors and abolishing old ones) and its financing system. The previous legal framework of this measure dates back to 2014 (with the Law 2014-288 of 5 March 2014<sup>74</sup> that introduces the CPF replacing the DIF)<sup>75</sup> while some minor amendments have been developed in 2019-2022.

**Measures’ objective(s):** the CPF, in its original conception, and its successive evolutions, encompasses more than one objective: (i) overcoming financial barriers: the CPF is financially covered up to a certain amount with the possibility for the user to ask for additional financing; (ii) ensuring the right to adult learning to workers: as the CPF is universal (between 16 y.o. and retirement, with some extensions), irrespective of the status of the active individual that can be unemployed/job seeker, employed, employed in job transition, self-employed; (iii) promoting the validation of adult education: CPF is meant for the user to get a certified qualification (so it can be considered in the realm of the non-formal education, but does not include informal education and further non-structured forms of learning); iv) incentivizing participation in adult learning as the CPF is conceived to give to the user all the possible freedom in selecting its learning path. Along with the use of digital

<sup>73</sup> “Law for the Freedom to Choose a Vocational Future”, also known as Law “Pénicaud 2” or Law “Avenir”.  
<https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000037367660/>

<sup>74</sup> “Relative à la formation professionnelle, à l’emploi et à la démocratie sociale”  
<https://www.legifrance.gouv.fr/loda/id/JORFTEXT000028683576/>

<sup>75</sup> Droit individuel à la formation.



tools for accessing the training, this may be an incentive for participating, but the debate on this aspect is open; v) the Law n. 2018-771 states that the CPF generally aims to enhance the level of autonomy the active individual has regarding the choice about its training and professional future. In this respect, it envisages different instruments, in particular the “monetisation”, the “disintermediation” and the “dematerialization” of the CPF (see “detailed description” for further details).

**Detailed description/Implementation:** as per the most recent legislative framework (Law n. 2018-771) the CFP includes various changes compared to the past: (i) the “monetisation” (i.e. the training credits, that previously were recorded in hours, are now recorded in euro); (ii) the “disintermediation” (e.g. abolishing the obligation for the active person of recurring to an intermediary body in the choice of the training path); (iii) the “dematerialization” as the CPF is now conceived as an online tool.

Rationale<sup>76</sup>: within the general reason of allowing the active individual to gain more independence about the training path and the future career: the monetisation provides more clarity/transparency for the user to know the amount of financial resources that can be spent in training, the disintermediation is meant for eliminating a possible obstacle to the choice of the training path, while the dematerialization points to increase the numbers of participants in adult learning.

Target group/coverage: Law n. 2018-771 does not change the target groups, the active population, or the coverage. For the target group, it is worth noting that CPF applies as well to the 15 years old that are under an apprenticeship contract and, under certain circumstances, to those who after retirement perform a volunteering activity. For the coverage, as in the previous framework, there are two brackets: (i) 500 Euro, with the right to accumulate up to 5000 Euro in 10 years; (ii) for the low-skilled (ISCED 1 and 2) and those with disabilities, 800 Euro, with the right to accumulate up to 8000 Euro in 10 years.

Exceptions/exclusions:

- Public employees are excluded by the “monetisation” and are still under the hour-based counting system.
- For the employees, Law n. 2018-771 creates a specific ‘Compte personnel de formation de transition professionnelle’ (CPFTP)<sup>77</sup> that serves to set up a training path in view of a career/profession change. It gives the right to specific leave and remuneration. In this context, there is a limitation to the autonomy of the employee as the CPF makes it possible to finance professional transition and career development projects. The employee is guided in its project by the ‘Conseil en Évolution Professionnelle’ (CEP).
- For the training related to digital skills/digital careers, there is an additional financial support ‘abondement’ of 1000 Euro envisaged by the plan ‘France Relance’<sup>78</sup>.

Practical implementation:

- ‘Mon Compte Formation’: online since 21 November 2019, Mon Compte Formation, is available both as a web and mobile application, and allows direct contact with the training organization, without intermediaries. It allows: to access (via a login) a

<sup>76</sup> [https://www.legifrance.gouv.fr/dossierlegislatif/JORFDOLE000036847202/?detailType=EXPOSE\\_MOTIFS&detailId=](https://www.legifrance.gouv.fr/dossierlegislatif/JORFDOLE000036847202/?detailType=EXPOSE_MOTIFS&detailId=)

<sup>77</sup> Active for 1 January 2019, when it replaces the former “Congé individuel de formation” (CIF).

<sup>78</sup> <https://travail-emploi.gouv.fr/le-ministere-en-action/relance-activite/>

personal space where, inter alia, it is possible to know the credit in Euro of the account, to search among the eligible training courses available, to have some information about training funding, to have access to digital services related to a professional orientation such as the free professional development advisor service (CEP)<sup>79</sup>. After 1 January 2020 those who previously acquired credits in hours, were able to convert them into Euro and visualize them on their personal account.

- ‘Conseil en Évolution Professionnelle (CEP): anyone can benefit throughout their professional life from a CEP, which objective is to promote the development and security of their professional career. The advice service is free and non-compulsory (except for the employees under the CPFTP). This Guidance tool maybe helps those categories that show lower participation rates.

Other details: for the employees depending on whether it is chosen to attend the training during (outside) the working hours it is (it is not) required to inform and request authorization from the employer (specific rules about the timing of the request for authorization and the respective answer applies)<sup>80</sup>.

**Governance actors involved in the implementation (national or subnational level government):** Law n. 2018-771 profoundly transformed the governance, introducing/eliminating new/old actors, and reworking the tasks of others.

At the national level<sup>81</sup>:

- Ministère du Travail and the Délégation générale à l'emploi et à la formation professionnelle (DGEFP) are the main responsible for the CPF.
- URSSAF (Unions de Recouvrement des Cotisations de Sécurité Sociale)<sup>82</sup> has the role of collecting contributions from firms.
- OPCA (Organismes Paritaires Collecteurs Agréés), whose role was previously the one currently played by URSSAFF, were dismissed.
- France Compétence is a new quadripartite national body (with representatives of the State and the Regions, of the employers and employees representatives). It has a wide range of competences:
  - Distributing funds among distribution OPCO, CPIR<sup>83</sup> (in charge of the CPFTP), the “Caisse des dépôts et consignations” (CDC) and the State (in charge of the unemployed’ training)/Regions.
  - Managing and updating the professional certificates listed in the ‘Répertoire national des certifications professionnelles’ (RNCP) and in the ‘Répertoire

<sup>79</sup> Information collected on the <https://www.moncompteformation.gouv.fr/espace-prive/html/#!/> website.

<sup>80</sup> If the training was at the employer’s initiative and the employer asked/suggested that the employee should mobilise his CPF, the law recalled that “the account may be mobilised only with the account holder’s express agreement. A refusal by the account holder to mobilise the account shall not constitute misconduct.”.

<sup>81</sup> The list is non-exhaustive.

<sup>82</sup> Agencies for the Collection of Social Security and Family Allowance Contributions. The URSSAF has been created in 1906 as a network of private entities entrusted with a public service mission. They are administered by representatives from the State, employees and employers representatives, and is supervised by the Ministry of Labour and the Ministry of Social Affairs.

<sup>83</sup> Former OPACIF.

spécifique' (RS) of certificates and licenses.<sup>84</sup> Since January 2019 all training programmes registered under the RNCP and RS are eligible for the CPS.

- Caisse des dépôts et consignations is a public-sector financial institution in charge of managing the CPF, which means handling the information system that credits the accounts and pays the training providers (from 2020).
- OPCO (Opérateurs de Compétences)<sup>85</sup> former OPCA, are responsible, inter alia, in supporting SMEs when defining their training needs.
- Various actors are involved in the "Conseil en Évolution Professionnelle" (CEP) (e.g. Pôle emploi, missions locales, Fongecif, Agence pour l'emploi des cadres)<sup>86</sup>.

#### At the regional level:

- Regions have, in principle, the possibility of providing additional funding for the CPT. To be able to do this, they need to sign an agreement with the Caisse des dépôts et consignation (CDC). All the regions have this possibility but, up to now, only a limited number signed the agreement.
- The 'Comité emploi-formation État-Régions', based on a partnership agreement signed the 28 September 2020 and launched the 6 November 2020, aims to strengthen the joint action in favour of employment and training, and to support the territorialization of the deployment of 'France Relance'.

#### **Stakeholders involved in the implementation (e.g., social partners, providers, etc.):**

- Social Partners (representatives of employers and employees):
  - intervene in the legislative process: limiting the observation to the reforms that occurred in the 2000s (2003-2004, 2008-2009, 2013, 2014, 2018), all of them followed more or less the procedure of "negotiated law" (government call for negotiation, national agreement of the social partners in response, law which transcribes, modifies or supplements the terms of the agreement)<sup>87</sup>;
  - participate in the structure of different governance actors (e.g. France Compétence, OPCO);
  - participate in the agreement between employer and employee when additional financial support for the CPF is discussed. While the agreement can be done on an individual basis, there is the option of a negotiation ending up in a collective bargaining agreement (article L6323-11 labour code). The professional branch's social partners can also decide on top-ups, which will be imposed on all enterprises that fall under the branch.
- Training providers: The Law 2018-771 established a certification obligation for all the training providers to get training funds from the funding bodies. The certification is needed by 1 January 2022 (the date was postponed from 2021 because of Covid-19).

<sup>84</sup> For a clear distinction between the two registries see <https://www.francecompetences.fr/fiche/certifications-le-role-de-france-competences>.

<sup>85</sup> Since April 1, 2019, 11 Skills Operators (OPCO) have been appointed, by order of the Ministry of Labour. They are managed by a board of directors, made up equally of representatives of employers and employees.

<sup>86</sup> With the Law n. 771-2018 the guidance tasks can now also be carried out by private operators.

<sup>87</sup> Dayan (2019) "La réforme française de la formation professionnelle vue d'Europe: des progrès, mais peut mieux faire!".

The certification (Qualiopi)<sup>88</sup> is provided by independent certifiers, in turn, accredited by the Cofrac (Comité français d'accréditation) or, in some cases, by France Compétences. The seven criteria and the thirty-three indicators for obtaining the accreditation are indicated in the Decree of 6 June 2019<sup>89</sup> that sets the national quality standards.

#### **Financing/source of funding:**

- Firms: must devote 0.55% of their gross wage bill to financing training when they have less than 11 employees and 1% of the gross wage bill when they have more than 11 employees.
- Active individuals: contribute to the training expenses to the extent the cost exceeds the CPT credit they have with paying directly the difference on Mon Compte Formation. Nevertheless, there are several possibilities to obtain additional funds from different actors, when some requirements are met. In the process of looking for funding opportunities, the active individual can reach out to the CEP.
- Funding bodies: the State (i.e. under “France Relance”), the regions, the “Pole d’emploi” (for the jobseekers), the “Association de gestion du fonds pour l’insertion professionnelle des handicapés” (AGEFIPH).

#### **Target indicators defined and achieved:**

While there are no target indicators<sup>90</sup> to be achieved for the CPF users (e.g. number of accounts opened, requests of access to training, number of participants, completion rate, dropout rate, and also by breakdowns as gender, age, professional status, occupation, sector, typology of course attended) there is more than one source of data collection in this domain. A selection of the sources available is described here below:

- Dares (Déchiffrer le monde du travail pour éclairer le débat publique) in several publications.
- INSEE (Institut National de la Statistique et des Etudes Economiques) in several publications.
- Grey and academic literature.

#### **Evaluation/assessment (reports) undertaken and their results.**

- Individual evaluation of the training course via Mon Compte Formation: the active individual who attended training, either partially or completely, can provide anonymous feedback (by answering 5 questions related to the reception, the content of the training, the team of trainers, the means made available, and the support) to the training provider who cannot hide the feedback. This may help the other active individuals to select their training among a wide range.

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<sup>88</sup> Before Qualiopi, the “Datadock” database, launched in January 2017, was in place with the aim of allowing the providers to self-provide information on meeting the (at that time) six quality criteria and twenty-one indicators. Once the conformity of the supporting documentation was verified, the training providers were “datadocked”, and any funders may have included them in their reference catalogue.

<sup>89</sup> <https://www.legifrance.gouv.fr/loda/id/JORFTEXT000038565246/>

<sup>90</sup> To the best of our knowledge, but there might be an obligation for the firms to provide some indicators that may serve as well the purpose of having information about the evolution of data (10 indicateurs de performance de la formation professionnelle).

- Evaluation reports:
  - DARES (2018) “Étude qualitative sur le compte personnel de formation (CPF)”<sup>91</sup>;
  - Evaluation reports are conducted as well from CNEFOP (Conseil National de l’Emploi, de la Formation et de l’Orientation Professionnelles) and IGAS (Inspection Générale des Affaires Sociales);
  - Evaluation reports from regions (in the pipeline, especially with respect to the regional ‘abondements’).

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<sup>91</sup> <https://dares.travail-emploi.gouv.fr/publications/etude-qualitative-sur-le-compte-personnel-de-formation-cpf>

## 2.5 Italy

**The ‘new skill fund’ – fondo nuove competenze:** this measure has been selected because it is a particularly new and innovative tool in the Italian context and represent a complement/alternative to the traditional shock absorbers, as the wage guarantee fund, specifically remodeled to meet the costs incurred that have made it possible to interrupt work without dismissing workers<sup>92</sup>. The new skill fund has been conceived during the Covid-19 pandemic in order to face the emergency, and allow the use of training activities even in the case of reduced working hours. The fund finances the working hours devoted to training, enabling: (i) Companies to reduce the working hours of employees; (ii) workers to benefit, with the same salary, from training activities within their normal working hours; (iii) the social partners to bargain contents, methodologies and the amount of time (given the limits and standards set by law) of upskilling and reskilling activities.

**General description:** the new skill fund is a measure consisting a non-reimbursable financing fund that allows companies to innovate production by adapting workers' skills, during working hours, while limiting costs. It allows for the stipulation of collective agreements for the rescheduling of working hours, which enable workers to benefit, within their normal working time, from training aimed at upskilling or reskilling.

**Duration:** mid-2020 - ongoing

**Legal/legislative reference(s)/framework and its possible amendments:** the new skills fund has been established by the art. 88 of the ‘Relaunch Decree’ (Decree Law n. 34/2020 and converted into Law n. 77/2020). Subsequently, the ‘August Decree’ (Decree Law n.104/2020) and converted in Law n.1269/2020 modified, especially, some financing aspects. More recently the ‘Energy Decree’ Law 17/2022, converted into Law n. 34/2022 extended the possibility of using the new skills fund, originally meant to support employers, for the retraining of employees.

**Measures’ objective(s):** this measure has multiple objectives. (i) Overcoming financial barriers as the resources committed to date (see section on financing) were used to pay the wages of workers who see their working hours reduced and, during these hours, conduct training; (ii) Increased participation in adult learning as it is an instrument that, in itself, favors the workers to take part to the training activities, thanks to the rescheduling of hours that it allows. Indeed, traditionally, in the case of work suspension and use of social security, in Italy it was not possible, to carry out training activities during the period of suspension, whereas with this measure the time training is carried out during traditional working hours, for the same salary; (iii) More equal participation in adult learning as the measure is used as an alternative to traditional social shock absorbers (which did not allow the simultaneous use of training activities) and implies a decisive role of the social partners, who can also involve low-skilled workers who more rarely have access to training opportunities during working hours<sup>93</sup>; (iv) Validation of adult learning as at the end of the training course, a final certificate must be issued for the implementation of transparency of skills acquired (for more details

<sup>92</sup> In 2020, 4,329,033,425 hours of work suspension were authorized (including ordinary and extraordinary wage guarantee funds), with an increase of 1,467% compared to the previous year. Source: INPS (2021) “Report Mensile Gennaio 2021. Cassa integrazione guadagni e disoccupazione”.

<sup>93</sup> Furthermore, The Fund was, at least initially, used by large companies, so much so that during 2021 about a third of the workers involved in the rescheduling of hours provided for by the Fund were employed by seven companies. Over time, the Fund has also been accessed by smaller companies.



see section on implementation); (v) Right for training leave at work: the fund allows workers who have had their working hours reduced to keep their salary intact as their salary will be supplemented by the resources of the fund. The hours to be allocated to training activities must be identified within normal working hours, which are rescheduled: it is therefore not possible to schedule training activities at times or days of the week when, normally, the employee is not working.

### **Detailed description/Implementation:**

Rationale: the fund provides financial contributions in favor of private employers who have stipulated, "due to changed organizational and productive needs of the company or to favor paths of relocation of workers", collective agreements to reshape working hours. This allows enable workers to benefit, within their normal working time, from training aimed at upskilling or reskilling them.

Target group/coverage: workers whose working hours are reduced, as identified by stipulated collective agreement. All sectors are admitted and special attention is paid to the sectors most impacted by the twin transition<sup>94</sup>. As well, all occupations are involved and no age criteria are imposed.

Exceptions/exclusions: self-employed workers are excluded, as are trainees and all those who do not have a subordinate work contract, even if not necessarily open-ended.

Practical implementation: the fund can be accessed thanks to collective agreements on the rescheduling of working hours concluded at a company or local level by the employers' and workers' associations that are more representative at a national level, or by their trade union representatives operating in the company, for which the hours of reduced working are allocated to the development of workers' skills. These agreements:

- Must provide training projects aimed at developing skills, indicate the number of workers involved in the intervention and the number of hours of working time to be allocated to paths for the development of skills, as well as, in cases of company-provided training, the demonstration of possession of the technical, physical and professional requirements of training capacity to carry out the project itself. The maximum limit of hours to be allocated to the development of skills for each worker is 250;
- Must identify the employer's needs in terms of new or increased skills, due to the introduction of organizational, technological, product process or service innovations in response to the changed production needs of the company, and the relative adjustment necessary to qualify and retrain the worker in relation to the identified needs<sup>95</sup>.

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<sup>94</sup> The sector that first took action to access the Fund's resources was the telecommunications sector. Over time, especially since 2021 and the concomitant extension of the measure, collective agreements have also been registered in different sectors, including those hardest hit by the economic crisis: the tourism and catering sector, first and foremost, but also commerce and multiservice, as well as sectors less exposed to the crisis such as the food and related industries, the tertiary, distribution and services sector, the engineering sector, the financial-insurance sector and the education sector.

<sup>95</sup> Also in order to achieve Level 3 or 4 of EQF, in accordance with the European Recommendation on pathways to improve the level of skills for adults of December 19, 2016.

The fund pays for the hours dedicated to training on the part of the employees, without any burden on the part of the employer, the latter is, however, called upon to carry out the training activity, either directly or through subjects external to the company. In any case, for the realization of the courses it is also possible to have recourse to the resources made available by the 'interprofessional funds' for continuous training, bilateral bodies set up by the representatives of workers and companies. In this sense, the whole operation may have no (direct) costs for the company: the reduction in working hours is paid for by the new skills fund, the training activities by the interprofessional funds.

The fund may provide training for the development of skills aimed at increasing the employability of the worker, also in order to promote processes of relocation to other work realities.

Other details: According to the different type of training carried out, it is possible to obtain a different certificate. For example, if the training is carried out in compliance with the regional repertoires of professional standards and competences, it can allow the issuing of a certificate which, at a later stage and by addressing further institutions, can then be used as a documentary basis in order to obtain a certification with public value.

**Governance actors involved in the implementation (national or subnational level government):**

- At national level: ANPAL<sup>96</sup> manages the fund, which, however, can be activated only and exclusively thanks to collective agreements between social partners at company or territorial level.

**Stakeholders involved in the implementation (e.g., social partners, providers, etc.)**

- Trade unions (company level, or subnational level). At first glance, it appears that in most cases the signatories to collective agreements include the company, the unitary union representatives (RSU), that is, the workers' representatives present in the company, the latter assisted by sectoral or local trade unions;
- Employer associations (only at subnational level);
- At company level the collective agreement is between the company and the representatives of workers. At first glance, this type of agreement represents an absolute minority of the collective agreements signed for access to the fund, even though they are particularly useful in facilitating accessibility to those smaller companies that do not have union representation within the company itself;
- Interprofessional funds, institutions created by employer's and worker's unions, that can pay the training realized during the hour of work reduction as indicated in the collective agreement.

**Financing/source of funding:** A total of 730 million was allocated over the two-year period (2020-2021) recalling that the Relaunch Decree allocated only 230 million via the 'Active employment policy systems', while that this amount was subsequently increased by 200 million for 2020 and 300 million for 2021 by the August Decree. In September 2022, the fund has been refinanced with 1 billion Euro and further refinancing are foreseen for 2023.

**Target indicators defined and achieved:** n.a.

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<sup>96</sup> Agenzia Nazionale Politiche Attive del Lavoro (National Agency for the Active Labour Market Policies).

**Evaluation/assessment (reports) undertaken and their results:** no specific report exist yet to evaluate the measure, nevertheless it is possible to already draw some conclusion based also on statistical data.

- The most recent data show how 708,821 workers, 14,223 companies, for a total of 93,688,785 hours of training were involved in the training activities carried out thanks to the Fund<sup>97</sup>. With respect to the total number of employees, the Fund involved 4.2% of the workforce in Northern Italy, 4.9% in Central Italy, and 6.2% in Southern Italy. On average, 50 workers were involved per participating company, with an average of 132 hours of training per person.
- It is significant to underline how ISTAT has certified that, during 2021, the percentage of adults involved in ongoing training activities rose to 9.9% of the adult population, a percentage never reached before and, for the first time, on average with the European figure for the same period<sup>98</sup>. It is not possible to affirm a causal relationship between the introduction of the new skills fund and an increase in participation in adult learning, but it is, however, in the absence of more in-depth analyses, one of the instruments that, more than others, have in recent years favored access to continuing education in Italy.
- It seems that the training activities are mainly carried out for managerial employees, and less so for blue collar workers and workers with low skills - even if there are collective agreements explicitly dedicated to them (for example, those in the telecommunications sector who are called upon to acquire skills useful in the conversion from copper cable processing to fiber optics). The skills trained are mainly linked to digitalization and work organization, identified as priorities and useful in dealing with the pandemic crisis. Many courses are, for example, dedicated to the correct management of remote work, and its effects: on teamwork, on company organization, on communications. Priority attention has therefore also been given to soft skills, and not only to technical and specialized hard skills.

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<sup>97</sup> Source: ANPAL (2022) "Il Fondo Nuove Competenze. Prospettive e prime evidenze".

<sup>98</sup> Source: ISTAT (2022) "Rapporto BES – Benessere Equo e Sostenibile in Italia – 2021".

## 2.6 Slovakia

**Provision of education and training for employees within the framework of active labour market policy measures (ALMP). § 47: Education and training of employees for Labour market: Vzdelávanie a príprava pre trh práce zamestnanca. § 54: Employee training: Vzdelávanie zamestnancov.**

The main reasons for selecting the measures implemented and offered to employees by public employment services are that: (i) they represent one of the few adult learning opportunities in Slovakia for employed individuals covered by public resources; (ii) employers are involved in the implementation process; (iii) employers have been communicating interest in developing a scheme providing funding to employee training referring to the negative effects of digitisation and automation on employee skills; (iv) the Ministry of Labour has been also actively communicating their interest and taking actions to enlarge their competence area and govern development and delivery of lifelong learning policy measures. This measure's information is limited. Indeed, while there are several academic/technical papers focusing on the evaluation of selected ALMP measures, programmes implemented for education of employees are usually not covered. Furthermore, employer associations have been very active in recent years in developing their suggestions for a training scheme framework (RUZ, 2017)<sup>99</sup>. Such a training programme may not have been supported by data, running the risk of being ineffective in terms of boosting participation. In addition, a designed programme may come with a significant risk of deadweight loss since it provides education and training that the employer would have provided even in the absence of the programme.

**General description of employment services and ALMP measures targeting “Employee training”:** In the absence of systematic support to participation of individuals in adult learning or career guidance, one of the key national actors with implementation frameworks which provide support to individuals in relevant areas is the Ministry of Labour. The Ministry of Labour and the Central Office of Labour, Social Affairs and Family (i.e., Public Employment Services) have been providing access to education and training within the ALMP schemes<sup>100</sup>. The key target group for the support provided in this are registered jobseekers.

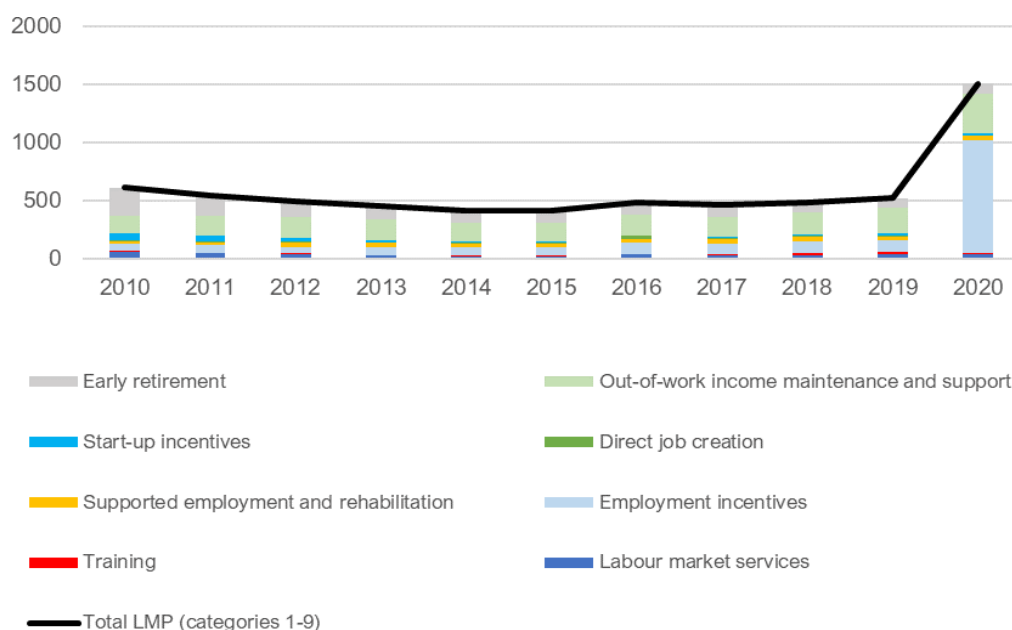
The Act on Employment Services<sup>101</sup> includes and defines articles allowing employment services to provide support to employed as well. The discussions along the participatory process of developing the Lifelong Learning Strategy 2021-2030 confirmed that Ministry of Labour is seeking to assume a key role also in the provision of lifelong learning to employees, in particular within this ALMP framework, partially as a response to the pressure of employers' associations and potentially also due to potential increased funding budget from the EU funds. Employer associations argue that employers are facing high costs due to digital and green transition, and these should be partially compensated by the state.

<sup>99</sup> RÚZ (2018). Návrhy RÚZ na zmeny v oblasti ďalšieho vzdelávania v rámci systému celoživotného vzdelávania na Slovensku 2018. Bratislava. URL: <https://www.ruzsr.sk/media/9842418c-7dc2-408d-9966-a20d81c8e225.pdf>

<sup>100</sup> Active Labour Market policies are the key policy tool addressing labour market problems in Slovakia with centralised national governance and design by the Central Office of Labour.

<sup>101</sup> Act No 5/2004 Coll. of 4 December 2003 on employment services and amending and supplementing certain acts (Zákon č. 5/2004 Z. z., Zákon o službách zamestnanosti a o zmene a doplnení niektorých zákonov <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2004/5/20060101.html>)

**Figure 1 Structure of expenditures on ALMPs in Slovakia (million EUR)**



Source: Eurostat code *Imp\_expme\$sk*

Expenditures at ALMPs are traditionally low despite major contributions from the European funding. From relatively low total ALMP expenditures, the training component within the ALMPs is very low as well. The training components in the statistics would include training of two target groups. The first group are job seekers who may participated in well-established schemes such as REPAS (vocational trainings) KOMPAS (soft skills) and other schemes some of which are designed for specific sub-groups of job seekers (young job seekers, recent graduates). Schemes REPAS and KOMPAS have some characteristics of voucher schemes. Participation of the employed is included in this figure via ALMP measures described further below, mainly referring to § 47 specifically denoted for Employee training and the pilot projects and programmes under the § 54 of the Act on Employment. The total expenditure from public funds on education and training of adults is very low in Slovakia.

### 2.6.1. Employee training based on § 47 of the Act on Employment services (Vzdelávanie a príprava pre trh práce zamestnanca - § 47 zákona o službách zamestnanosti)

**Duration:** 2004 – ongoing<sup>102</sup>. The measure has been available but not applied in some years. The implementation framework might be changing in different programming periods.

**Legislative framework:** § 47 of the Act on Employment services

**Measure objective(s):** Preventing job loss

<sup>102</sup> More specific information about the periods of implementation and related programmes will be verified with COLSaF.

### **Detailed description/Implementation:**

Rationale: education and training for the labour market of an employee shall be carried out by an employer in the interest of the further employment of his employees in the form of general or specific education and training. General education and training are meant theoretical or practical training which provides knowledge and professional skills which are widely applicable to several employers which contribute to the improvement of the employability of the employee and that are usable with the employee's current employer and only partially with other employers.

Target group/coverage: Employees, (natural persons in an employment relationship or similar employment relationship), disadvantaged workers, workers with health disabilities employers.

Exceptions/exclusions: n.a.

Practical implementation: The agreement on the provision of a contribution for the employee's education and preparation for the labour market contains: the (thematic) focus of education and training, the duration including the start and end date, calculation of eligible costs per participant, amount of payment of authorized costs, conditions for providing reimbursement of eligible costs, conditions for the return of paid authorized costs in the case of non-compliance with the agreement, and other agreed details<sup>103</sup>. Education and training are carried out during working hours. As this is considered as an obstacle to work, the employee is entitled to wage compensation in the amount of his average monthly earnings. Outside working hours, education and training are carried out only if it is necessary for the character of the provision of the education and training. The Central Labour Office can agree with an employer on a contribution to the education and training of employees, if the employer undertakes to employ these employees for at least 12 months after the end of participation in the programme, or if the employer implements the measure as part of measures that make it possible to prevent or limit mass layoffs.

The contribution for the costs of education and training of employees is provided up to the amount of 70% of the eligible costs<sup>104</sup>.

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<sup>103</sup> Stipulated in the respective part of § 47, section 4) letters a-g.

<sup>104</sup> Eligible costs for education and training for the labour market are stipulated in § 47 (key sections of § 47 are included here, full text can be provided): a) direct costs incurred for education and training for the labour market, namely the costs of materials, wages and salaries of employees, advance payment of insurance premiums for mandatory public health insurance, insurance premiums for social insurance and mandatory contributions for old-age pension savings paid by the educational institution, and preparation for the labour market for its employees carrying out education and preparation for the labour market and other direct costs; b) overhead costs incurred by the education and training facility for the labour market when carrying out education and training for the labour market; c) the costs of education and training modules for the labour market, which are provided for the education and training facility for the labour market by another facility for education and training for the labour market, if it is not a supply of goods or services whose supplier is not its actual producer or service provider and was intended for sale to the final consumer through a subcontractor; d) value added tax, if this tax is part of the costs according to letters a) to c) and the education and training facility for the labour market cannot deduct value added tax, 46b); e) compensation of wages of employees participating in education and training for the labour market according to a special regulation, 46c); f) reimbursement of proven travel expenses, proven expenses for accommodation and meals according to a special regulation) of an employee participating in education and training for the labour market according to § 47; g) other proven costs spent on education and training for the labour market.



Other details: An employer may provide education and training for the labour market for an employee himself or through a supplier of education and training services

**Governance actors involved in the implementation (national or subnational level government):** Ministry of Labour, Ministry of Education (accreditation of training activities), Central Office of Labour, Regional Labour Offices.

**Stakeholders involved in the implementation (e.g., social partners, providers, etc.):** Employer Associations, training providers.

**Financing/source of funding:** see Table 2

**Target indicators defined and achieved:** see Table 3

**Evaluation/assessment (reports) undertaken and their results:** The measure has been deployed intensively in 2009 (**Table 3**) where it was sought as a measure to prevent mass layoffs due to economic crisis. For this period Bořík and Caban (2013) covered this specific measure in the evaluation report carried out for the Central Office of Labour. Authors report higher success rate in terms of job retention compared to measure education and training measure for job seeker according to § 47 but also comment on obvious fact that employees who participate in education and training under § 47 are already employed and are more likely to stay employed also longer than required 12 months. Authors find that average age of participants was 43 years, average duration of training was 35 days, higher by 13 days compared to duration of trainings for job seekers in similar programmes. Authors also report that participating employees remained employed on average for 22 months out of 24 months in the follow up (impact period).

**Table 2 Employee training § 47: support and participation**

	2013	2014	2015	2016
<b>SPENT</b>				
<i>Number of employees supported</i>	8	1609	103	443
<i>Number of companies</i>	1	3	3	
<i>Funding spent (EUR)</i>	4052	563679	193388	61212
	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<i>Number of employees supported</i>	432	225	44	0
<i>Number of companies</i>				
<i>Funding spent (EUR)</i>	925103	1453754	283294	0
<b>AGREED (contract)</b>				
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<i>Number of employees supported</i>	1566	9	n.a.	
<i>Number of companies</i>	3	1	n.a.	
<i>Funding agreed</i>	1125 336	5665	68846	476354
	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<i>Number of employees supported</i>				
<i>Number of companies</i>				
<i>Funding agreed</i>	3256200	0	0	0

Source: COLSaF ALMP Evaluation reports<sup>105</sup>

<sup>105</sup> [https://www.upsvr.gov.sk/statistiky/aktivne-opatrenia-tp-statistiky.html?page\\_id=1248](https://www.upsvr.gov.sk/statistiky/aktivne-opatrenia-tp-statistiky.html?page_id=1248)

**Table 3 Employee training § 47 in 2009**

INDICATORS FOR THE MONITORED PERIOD 2009	Total	Female	Disadvantaged
Number of employees based on agreements signed in the monitored period (2009)	84083		
Number of employees <b><u>included in E&amp;T</u></b> based on agreements signed	20241	10495	4617
Average agreed duration of E&T (hours)	156		
Total agreed contribution (excluding co-financing) (EUR)	15112992		
Real total expenses on E&T (including co-financing) (EUR)	20100395		
Number of employees <b><u>who concluded E&amp;T</u></b> in the monitored period	20198	10474	4613
Number of employees <b><u>who are in E&amp;T</u></b> at the end of the monitored period	0		

Source: COLSaF ALMP Evaluation report for 2009<sup>106</sup>

*2.6.2. Employee training as a pilot project within § 54. (Vzdelávanie zamestnancov - § 54 ods. 1 písm. f) zákona o službách zamestnanosti)*

**Duration:** 2020-2021<sup>107</sup>

**Legislative framework:** § 54 of the Act on Employment services

**Measure objective(s):** Preventing job loss, pilot programme assessing a new ALMP measure

**Detailed description/Implementation:**

**Rationale:** The measure is denoted as “Projects and programmes” further defined as projects and programmes approved by the Ministry of labour and implemented by the Central office of Labour, letter f) as pilot projects and programmes to test and verify new active labour market schemes that will be approved by the Ministry of Labour and carried out by the Central Office of Labour<sup>108</sup>.

**Target group:** Employees, (natural persons in an employment relationship or similar employment relationship), Disadvantaged workers, Workers with health disabilities employers

<sup>106</sup> [https://www.upsvr.gov.sk/statistiky/aktivne-opatrenia-tp-statistiky/aktivne-opatrenia-trhu-prace-2009.html?page\\_id=1251](https://www.upsvr.gov.sk/statistiky/aktivne-opatrenia-tp-statistiky/aktivne-opatrenia-trhu-prace-2009.html?page_id=1251)

<sup>107</sup> Periods of actual implementation to be more specifically verified with COLSaF

<sup>108</sup> In 2020 new scheme under § 54 called ‘Do not lose your job, educate yourself’, was announced referring to Act 5/2004 4 Coll. On Employment services § 54 par. 1 letter d, [https://www.upsvr.gov.sk/sluzby-zamestnanosti/nastroje-aktivnych-opatreni-na-trhu-prace/vzdelavanie-zaujemcov-o-zamestnanie-v-ramci-narodneho-projektu-nestrat-pracu-vzdelavaj-sa.html?page\\_id=1152160](https://www.upsvr.gov.sk/sluzby-zamestnanosti/nastroje-aktivnych-opatreni-na-trhu-prace/vzdelavanie-zaujemcov-o-zamestnanie-v-ramci-narodneho-projektu-nestrat-pracu-vzdelavaj-sa.html?page_id=1152160). Target group are adults interested in employment, which may include employed or those who are not registered as jobseekers (Záujemca o zamestnanie, ZoZ). The support will be provided to individuals, i.e. not to employers as in the case of the measure described in this note.

**Governance actors involved in the implementation (national or subnational level government):** Ministry of Labour, Ministry of Education (accreditation of training activities), Central Office of Labour, Regional Labour Offices.

**Stakeholders involved in the implementation (e.g., social partners, providers, etc.):** Employer Associations, training providers.

**Implementation structure:** The training of employees was carried out in accordance with § 54 par. 1 letter f) of the Employment Services Act within the framework of regional projects. A Labour Office provided the employer with a contribution for the training of employees up to a maximum of 50% of the eligible costs, under the condition that the employer employed the participating employees for at least 6 months following the participation in the training.

Compared to Employee training in accordance to § 47 pilot this project was implemented within § 54 with key difference between the length of job protection 6 months compare to § 47: 12 months and contribution to employers costs 50% compared to § 47: 75%).

**Evaluation:** In 2020, 1 537 employees participated in Employee training § 75% men and 25 % women. Total contributions to employers in 2020 was 213 584 EUR., and this has been received by 1 employer<sup>109</sup>. The measure was implemented in 2020, as workplace learning for employees at risk of job losses and did not follow in 2021. The implementation points to a pilot or ad hoc implementation for a single employer.

## **Annex on Slovakia**

### **Political context for adult learning:**

Politically, Slovakia does not have a strong tradition in adult learning. The key national policy actors that would be involved in area of adult and lifelong learning have been in the past decades the Ministry of Labour and Ministry of Education. The Ministry of Education is perceived by political partners as well as public as being mainly responsible for the formal education system, it has been however involved as the key actor in the lifelong learning policy agenda since the nineties. The take-up and development of life-long learning agenda as a policy area in Slovakia was linked to the accession to the EU and the pre-accession negotiations which included a bilateral consultation with the EU in the area of lifelong learning. The first comprehensive legislature, i.e., Act No. 568/2009 on Lifelong Learning, was adopted by the National Council of the Slovak Republic in 2009. The first Lifelong learning strategy was adopted in 2011 and the Ministry of Education has assumed the role of the national contact point for lifelong learning. A new Strategy for Lifelong Learning and Guidance 2021-2030 was approved by the Government in November 2022. The implementation frameworks are currently being developed and refer to three national policy actors: the Ministry of Education, Ministry of Labour and a newly established Ministry of Regional Development . However, at the time of writing this report, limited initiative has been developed by the key actor, Ministry of Education towards negating funding for the strategy and specifically for designing and implementing a funding scheme that would provide support to adults and their participation in education and training.

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<sup>109</sup> Information on general description and implementation is based on COLSaF annual assessment reports.

**Figure 2 Strategy for Lifelong Learning and Guidance 2021-2030<sup>110</sup>**

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The Strategy put emphasis on improving access of all adults to learning opportunities from 'cradle to grave' and included 3 thematic areas: (i) qualification frameworks and validation of non formal learning; (ii) support to basic skills and civic skills; (iii) cross sectoral cooperation in area of lifelong learning and career guidance. In general, over the past years, no major initiative in terms of public funding schemes for higher and more equal participation of adults in education and training have been proposed. Among 51 measures specified in the Strategy, a proposal to pilot a scheme for Individual Learning accounts is included.

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The practice reveals limited cooperation of different ministries in concrete programmes and activities which could leverage the potential of cross-sectional cooperation of national actors in wider support to the participation of adults in learning. Adult learning and lifelong learning as a policy topic and framework to address adult skills development has been so far developed disconnected from actual practice and funding provision. The barriers which prevent national actors from developing cross-sectoral cooperation could be therefore one of the suggested topics for national roundtables to be organised within I SKILL project in Slovakia.

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<sup>110</sup> Vízia a stratégia rozvoja Slovenska do roku 2030. MIRRI.  
<https://www.mirri.gov.sk/wp-content/uploads/2021/01/Slovensko-2030.pdf>

## 2.7 Adult learning policies and governance - Individual learning schemes and accounts

The recommendation of the European Commission to the Council (European Commission, 2021b) positioned the Individual Learning accounts (ILAs) as the potential and recommended approach for the Member countries so that they can achieve progress in upgrading the skills of European adults in connection with the Digital and Green Transitions. This recommendation also establishes expectations about the effect of the ILA scheme on improved and equal access of adults to learning opportunities. At the same time, European Commission acknowledges that reducing the skills gaps cannot be achieved without addressing social inclusion.

The recommendation on ILAs refers explicitly to the European Pillar of Social Rights and includes its article (2) that established the right to access to education: “...everyone has the right to quality and inclusive education, training and lifelong learning in order to maintain and acquire skills that enable them to participate fully in society and manage successfully transitions in the labour market.”

### 2.7.1 ILAs as part of the EU Agenda: a brief overview

Since 2020, the European Skills Agenda has been implementing the principles of the European Pillar of Social Rights<sup>111</sup> within its domain ‘Skills, education, and life-long learning’<sup>112</sup> which positions life-long learning as the centre of interest for sustainable growth.

The European Skills Agenda for Sustainable Competitiveness, Social Fairness and Resilience of 2020<sup>113</sup> stresses that the ILA and other individualised learning instruments play a critical role in the empowered position of individuals in pursuing continuous education. The Agenda emphasizes the need to foster access to up-skilling opportunities based on the cooperation of individuals, companies, social partners, public institutions, and other crucial stakeholders. The European Skills Agenda 2020 sets objectives for upskilling (improving existing skills) and reskilling (training in new skills); among other objectives, it states that at least 50% of working-age individuals should regularly (at least once a year) participate in the training tailored to their needs by 2025.

The Agenda recognizes the ILA as a suitable tool that enables individuals to adapt to the evolving skills needs at a workplace or to change occupations or sectors which provides support also for internal or cross-border labour mobility. The Agenda focuses on the need to tackle different implementation drawbacks such as the lack of time for training, the cost of training, and the lack of awareness of the need for or the opportunities to train. The importance of ILAs is emphasized especially during economic downturns, during which the accumulated training entitlements within individual accounts help workers to acquire skills for the job transition and prevent skills depreciation due to economic inactivity.

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<sup>111</sup> See more at: [https://ec.europa.eu/info/publications/towards-european-pillar-social-rights-policy-domains\\_en](https://ec.europa.eu/info/publications/towards-european-pillar-social-rights-policy-domains_en)

<sup>112</sup> See more at: [https://ec.europa.eu/info/sites/default/files/skills-education-life-long-learning\\_en.pdf](https://ec.europa.eu/info/sites/default/files/skills-education-life-long-learning_en.pdf)

<sup>113</sup> See more at: [https://ec.europa.eu/migrant-integration/library-document/european-skills-agenda-sustainable-competitiveness-social-fairness-and-resilience\\_en](https://ec.europa.eu/migrant-integration/library-document/european-skills-agenda-sustainable-competitiveness-social-fairness-and-resilience_en)

### *2.7.2 The rationale for introducing ILAs or individual learning schemes (ILS)*

Individual learning schemes (ILS) and ILAs present innovative policy instruments that enable individuals of working age to spend the budget accumulated in individualized accounts on the training schemes (ILO, 2019c). The accounts are virtual and they are activated only when the training takes place and the beneficiary engages to take up the training. An important aspect of the ILSs is that the training rights are transferrable from the individual perspective. They are not bound to the employer or a particular job, but to the individual which is crucial for job transition, labour mobility, and overall employability in the era of transforming professions and sectors (OECD, 2019d). The ILAs or ILAs in a more general view, therefore, provide individuals with training rights and, at the same, time reinforce the position of individual choices in further education and training.

Publicly funded individualised financial incentives play a key role in human capital development in specific industries or labour market segments. For instance, the smaller companies may struggle to invest in the skills (Cedefop, 2009) or sectors that are declining due to digitalisation or automation may fail to provide skills and knowledge for workers that need to enable them to transfer to another professions or sectors (Hidalgo et al., 2014). Thus, the incentives are not tied to the employers' interest which seems to be crucial for the employability of the workers and their personal choices in the world of labour.

ILAs in particular gained strong attention in recent policy debates at the EU level. They are perceived as a part of the recent trends of providing individual-oriented instruments that entitle individuals to make their own choices in further education and training; these instruments position the individuals in the centre of decision-making and enable them to pursue training and education of their own choice and, to the different degree, under their own conditions (Baiocco, 2020). Not only the training is not tied to the employer or job position, but the ILAs embody a shift from a focus on educational facilities and education to the "learning" and individuals (Schuetze, 2007). That also implied shifting the responsibility and financial resources from the institutions to the individual workers. It is argued that fostering freedom and individual choices in making decisions about continuous education results in increasing motivation and responsibility since the workers themselves are well aware of their needs, personal development and future integration into the labour market (Baiocco, 2020).

The ILAs as a tool to ensure the rights to training is important due to current trends and changes in the labour market. The growing tendencies in the number of non-standard jobs underline the need to adjust the training opportunities for novel types of workers that may encounter difficulties in accessing up-skilling or requalification schemes (OECD, 2019e). Therefore, the ILAs present one of the responses to the need to foster training rights to individuals with atypical employment contracts.

The dominance of workplace learning implies an important role the industrial relations and social dialogue play in adult learning. It is, however, equally important to examine the role of industrial relations in establishing individual rights for the participation of adults in learning opportunities as well as for fostering inclusive access and quality of learning specifically at the workplace. A specific line of inquiry should be focusing on the design and specific features of implementation frameworks of individual learning schemes against the backdrop of inclusiveness and equity in access and quality of learning of different target groups of employed and unemployed.



### 2.7.3 Implementation frameworks and governance of Individual learning schemes: selected examples

In terms of definitions, there is a general understanding but also various definitions of an individual learning account, usually functioning as a financing tool for individuals involving a training right for an adult transferable over a longer period of time. The European Commission defined ILA as a training entitlement that is accessible to any adult over a period of time (European Commission, 2021b). OECD (2019e) uses the broader term individual learning scheme and also interchangeably refers to learning or training (e.g. referring arbitrarily to individual training schemes), and offers a relatively simple but useful typology, including:

1. Individual learning accounts. Virtual individual accounts in which training rights are accumulated over time.
2. Individual savings accounts. Physical accounts in which individuals accumulate resources over time for the purpose of training.
3. Training vouchers. Do not allow for any accumulation of entitlements or financial resources over time.

The distinctions among these three types of individual learning schemes are: a) the extent and flexibility of the training subsidy; b) the time span of the access to the training provision. The risk of using individual learning accounts as a strong policy buzzword arbitrarily is that it usually leads to downplaying these aspects of the schemes which are crucial for inclusiveness and equity. For illustration, training vouchers implemented in some countries within the active labour market policy scheme have been on some occasions referred to as a form of ILAs. However, these are exclusive by nature for the most vulnerable low-skilled adults, and the entitlement rights may vary in relatively short periods of time for different target groups.

SOURCE	NAME AND DEFINITION	EXAMPLE
EC (2021B)	<b>ILA DEFINITION</b> a personal account that allows individuals to accumulate and preserve their training entitlements	<b>EC 2021 recommendation for EU member countries.</b> Training entitlement: a personal budget at an individual's disposal to cover the direct costs of labour market relevant training, guidance and counselling, skills assessment or validation that are eligible for funding.
OECD (2019D, 2019E) CUMMINGS ET AL. (2019)	<b>ILA</b> Virtual individual accounts – training rights accumulated over time, records only activated when training undertaken	<b>France: Compte Personnel de Formation de Formation (CPF)</b> Introduced in 2015, been modified in the following years Types of training - <u>mainly non-formal</u> , e.g.: - Training fees of programmes that are required to deliver a certificate (Répertoire national des certifications professionnelles, RNCP) or at the répertoire spécifique.

		<ul style="list-style-type: none"> <li>- Skill assessments (bilan de compétences), actions for skill recognition</li> <li>- Driving licenses, training for business creation, MS Office, English language courses</li> </ul>
<b>OOSTERBEEK, 2013</b>	<b>ILA</b> a base amount of resources set aside for an individual to use for his or her learning	<b>Netherlands</b> An ILA initiative ran in the Netherlands since 2001. 8 pilot projects, each serving up to 150 people. Financing shared - contributions from learners, employers, and the state. Particular training fields defined
<b>OECD, 2019D</b>	<b>Individual savings accounts</b> Real physical accounts	<b>Canada: learn\$ave</b> All adults <b>USA: Lifelong learning accounts</b> Employed only
<b>OECD, 2019D</b>	<b>Training vouchers</b> Direct subsidies (governmental) to individuals to be used for training purposes	<b>Although many individual learning schemes are named “individual learning accounts”, most of these schemes actually function as vouchers.</b> Individuals often contribute to finance the training e.g. Scotland: Individual Training Accounts USA: Individual Training Accounts Etc.

Governance and management are key differentiating factors for the practical functioning of individual learning schemes. OECD (2019d) reports that the governance actor which usually initiates an ILA or ILS scheme would be most likely the government at the national (federal level) in cooperation with either the ministry in charge of labour or the ministry of education. In some countries, regional governments have initiated the schemes. Actors initiating the scheme usually assume and keep the responsibility. Responsible actors remain in charge of the management of the scheme or delegate the management to public or private agencies.

OECD also reviewed the rules on the type of training subject to the choice by the participants. Usually, there would be a requirement that training is professionally useful, but some schemes (UK, Scotland, and Singapore) did not have such a requirement. However, the practice is reported to vary significantly as to what extent would the professional relevance be applied in the choice of training.

Example of different concepts or actual implementation frameworks of individual learning schemes or individual learning accounts above illustrates that the schemes included in this group of policy instruments may vary significantly. Among the examples above, the framework for ILAs as outlined by the European Commission in its proposal for a Council recommendation (European Commission, 2021b) has a strong link to the concept of labour market relevance of accessible training. This may however lead to deviation from the holistic view of adult learning, which is supporting also the right to access learning to ensure also

skills that enable adults to participate fully in society. Thus, different interpretations of what is a labour market relevant training might lead to potentially negative implications for low-skilled workers or vulnerable adults.

#### *2.7.4 Challenges related to the effectiveness of ILAs for more inclusive adult learning.*

Individual learning accounts are an innovative approach but the experience from pilot schemes from some countries showed a range of practical problems and difficulties as well as somewhat disappointing results in terms of achieving larger or more equal participation of adults in learning. From the point of view of an individual learner, the implementation schemes are at risk for not delivering at the level of inclusiveness, in particular for low-skilled adults, and consequently for not supporting the life course approach which is vital for differentiating ILAs from other short-term interventions. From the point of view of the public funding used for ILAs, the risk of deadweight loss is considerable, i.e. the risk that ILAs will be used to fund the training that either an individual or an employer would be willing to sponsor from their resources.

#### *2.7.5 Inclusiveness and life course approach*

The effectiveness of the ILAs strongly depends on the policy design, especially in terms of ensuring the training rights of the low-skilled and other vulnerable groups that would particularly benefit from the individualised training schemes (Desjardins and Rubenson, 2013). There can be identified several shortcomings associated with the policy design and implementation of the ILAs.

First, complexity and a lack of concise information about the training schemes may create critical obstacles to the accessibility of the ILA schemes. The policy design of ILAs is supposed to be simplified and straightforward in terms of the low administrative burdens, access to sufficient and necessary information provided in a structured and concise way, and overall access to these schemes should be simplified for the under-represented groups (Cummins et al., 2021). Complex financial and administrative settings and requirements that a beneficiary should understand to participate in the scheme may significantly decrease the participation rate of the low-qualified and individuals with restricted access to information (Cummins et al., 2021; Hogarth, 2019).

Second, the ILAs should provide a sufficient volume of funds to enable participants to undertake not only the short-term but also the long-term schemes which are particularly important for the low-skilled workers that need to achieve substantial progress in acquiring the skills and qualifications (OECD, 2019e; Kasworm, 2020). In this regard, related costs, such as expenses for transportation, and home responsibilities, should also be taken into account as situational barriers (Cummins et al., 2021). At the same time, participating in the training schemes may result in forgone earnings which may negatively affect especially the vulnerable groups (OECD, 2019e).

Third, the ILA participants need to receive guidance and counselling services throughout the whole training process that would enable the participants to plan future steps in further education and labour market. In other words, the effectiveness of the ILA strongly depends on the quality of related policies that support the upskilling and social policies (e.g., paid educational leave) (Holzer, 2021; OECD, 2019e) and these supporting services are

particularly important for the vulnerable cohorts that need further navigation throughout the process of learning (Renkema, 2007).

The ILA schemes may therefore fail for low-skilled adults for several reasons:

- **Lack of Awareness:** Low-skilled adults may not be aware of the existence of the ILA scheme, or they may not have access to information about the program. This can limit the number of individuals who participate in the program.
- **Limited Financial Resources:** Low-skilled adults may not have the financial resources to invest in training or education, even with the support of the ILA scheme. They may be struggling to meet their basic needs, such as housing and food, and cannot afford to take time off work to participate in training programs.
- **Limited educational or skills levels:** Low-skilled adults may lack the basic literacy and numeracy skills necessary to access and benefit from training programs. Countries that do not have in place robust basic skills frameworks should therefore prioritize support to basic skills programmes or increase endowments for low-skilled to include long-term support for adults with insufficient basic skills.
- **Limited Support Services:** Low-skilled adults may require additional support services, such as childcare or transportation, to participate in training programs. Without these services, they may not be able to attend classes or complete training programs.
- **Limited Employer Support:** Manual workers might be in more difficult positions to negotiate training leave as their substitution at the workplace is problematic without complex training support developed at the level of the employer. Workers in worse working conditions are therefore likely to be further disadvantaged in accessing training through ILAs.

#### *2.7.6 Efficiency and deadweight loss*

The policy discourse at EU level on the funding for adult learning is supporting the course of action for ILAs to be directed towards vocational education and training and workplace learning using the argument of the green and digital transitions. The employer associations are also arguing for this case, also because of the general demand for digital upskilling which indeed may be interpreted as a macroeconomic shift or disruption and therefore a case for interventional at the national level. However, in practice, it might be difficult to differentiate the training which would have been covered by the employer, or account for differences within industries with the forerunners who have already put in place well-developed learning environments walking the path of a learning organisation. Interventions and public schemes for workplace learning might be therefore connected with i) deadweight loss and ii) distortion of the competitive market environment. There is no clear action to mitigate this risk. In their review of the entitlements to lifelong learning and practice around the world ILO (2019c) offers a recommendation for avoiding deadweight loss: ...“introduce additional progressive entitlement according to levels of vulnerability and disadvantage, or existing levels of qualifications or earnings”. (ILO, 2019c, p. 36).

#### *2.7.7 Conclusions – some recommendations for ILAs and their effectiveness in terms of increased and more equal participation in lifelong learning.*

Individual learning accounts are increasingly perceived as an effective policy measure fostering the development of European adult learning systems. Adult learning systems are, unlike formal educational systems, prevalingly nonformal and embedded in diverse socio-political and cultural circumstances of European countries (Desjardins, 2017). They are

therefore diverse in terms of frameworks, structures, governance, and stakeholder involvement and the transferability of good practice across EU countries is even more questionable than it is in other areas of policy interventions. Nevertheless, there are common characteristics of adult learning systems such as inequality in participation rates, limited inclusion of low-skilled adults, the importance of non-formal and informal learning, and the dominance of the workplace as the source of learning and enabler of access to learning. It is therefore important not to underestimate the effect of practical features of implementation frameworks and the impact on the accessibility of training provision within ILAs for prospective adult learners in diverse work and life positions.

The role of industrial relations and social dialogue is strongly connected to the threats faced by the most vulnerable adults. Social dialogues could focus on identifying specific issues in implementation frameworks that should be considered for a well-functioning ILA scheme. Access to ILAs might be even more difficult for low-skilled workers because of time constraints and the effect of routinised tasks on their skills. Therefore, focus on low-skilled adults would be the natural area of action for social partners in shaping the implementation frameworks of ILAs. The factors to be taken into consideration might include:

- The variation in specific conditions defining the actual delivery frameworks of the measures denoted as individual learning accounts needs to be considered and clearly distinguished when discussing the ILA as a support measure considering:
  - The role of national actors
  - The role and responsibilities of employers
  - Sustainability of funding
  - Accessibility to all types of workers
  - Ensuring quality of training
- Other measures focusing on supporting upskilling of adults with low literacy should be in place prior to the introduction of ILAs to prevent further skills polarisation
- Restriction of training to skills that are in high demand in the labour market can be often part of the scheme but might be also acting against inclusiveness.
- One of the key factors of inclusiveness is to decide if individuals might apply for training not related to their current job to create a space for a future career change.
- The access of vulnerable groups should be considered and their capacity to communicate with authorities which make decisions about the training entitlements
- Progressive structure of ILAs could be considered that would account for disadvantages and skills gaps of vulnerable learners. These would need to refer to specific levels of vulnerabilities and disadvantages. Social dialogue could be well placed to provide inputs for defining such levels of vulnerabilities and disadvantages in specific countries or industries.

The implementation frameworks are connected with the development of adult learning systems including the governance frameworks and roles assumed by governance actors. The diversity of adult learning systems will be necessarily connected with different approaches to introducing schemes such as ILAs or individual learning schemes in general. Low-skilled adults, including low-skilled unemployed or low-skilled workers, need to be able to benefit from support via additional measures and support to be able to benefit from ILAs. If this is not provided, ILAs can lead to increased skills polarisation, leaving the low-skilled further behind.

### 3. Literature review on industrial relations and social dialogue in adult learning

**Social partners** (both trade unions and employers' organisations) **play a key role in supporting and facilitating adult learning in many EU Member States** (Winterton, 2007; Cooney and Stuart, 2013; OECD, 2019c). In fact, the most robust findings in the academic literature on the 'impact' of trade unions in the workplace is that unions have a positive effect on employee training, at least when it comes to the **provision of training by the employer** but – depending on the national context – also in terms of the **characteristics of the training and the likelihood that workers can and will use it**. In several EU Member States, lifelong learning, training and skills are important topics in collective bargaining and appear in collective agreements concluded at the sectoral and company levels, however, the engagement of social partners in these topics is uneven (especially in the Central and Eastern European countries). Nevertheless, the right to and access to training can be secured through social dialogue, as the examples of some Member States already document. In many countries, social partners are involved in the **management of (sectoral) training funds**, and have their own **training offers** for members (workers or companies). Potentially in collaboration with such training funds, they are involved in the **anticipation of skills needs** at the sectoral and the national levels, **help shape education and training policies and programmes**, and so on. Besides these efforts, social dialogue can influence the company culture, to make it more open for training and learning.

Similar to adult learning and skills, social dialogue is **another key domain in which the current European Commission aims to make progress**, at the EU level and in EU Member States. Principle 8 of the EPSR is dedicated to social dialogue and the involvement of workers:

“The social partners shall be consulted on the design and implementation of economic, employment and social policies according to national practices. They shall be encouraged to negotiate and conclude collective agreements in matters relevant to them, while respecting their autonomy and the right to collective action. Where appropriate, agreements concluded between the social partners shall be implemented at the level of the Union and its Member States. Workers or their representatives have the right to be informed and consulted in good time on matters relevant to them, in particular on the transfer, restructuring and merger of undertakings and on collective redundancies. Support for increased capacity of social partners to promote social dialogue shall be encouraged.”

In this regard, the EPSR Action Plan foresees several initiatives from the Commission. The European Commission commits to fostering communication and engagement of all relevant actors in relation to the EPSR. The Action Plan also announces an initiative to support social dialogue at the EU and the national levels, which was originally planned for the autumn of 2022. Based on the recommendations of a report on strengthening EU social dialogue that was prepared in the beginning of 2021 by Andrea Nahles, Special Advisor on Social Dialogue to Commissioner Schmit, this initiative was expected to include the **launch of a new award for innovative social dialogue practices**; an **information and visiting programme for young future leaders of social partners**; the **review of sectoral social dialogue at the EU level**; and a **new supporting framework for social partner agreements at the EU level**. The Commission also calls on the Member States to take



action to reinforce social dialogue and strengthen industrial relations systems and structures, and on the social partners themselves to engage in constructive dialogue and contribute to policymaking at the national and EU levels. In January 2023, the Commission proposed a **Council Recommendation** which sets out how EU countries can strengthen social dialogue and collective bargaining at the national level, with respect for the national traditions and social partners' autonomy. More specifically, the proposal recommends the Member States (i) to ensure the consultation of social partners on the design and the implementation of social, employment and economic policies, according to national practices, (ii) to encourage social partners to look at new forms of work and atypical employment and to communicate widely about the benefits of social dialogue and on any collective agreements in place, and (iii) to enable an increase in workers' and employers' organisations capacity, for example ensuring their access to relevant information and ensuring support from national governments. Besides the Council Recommendation, the Commission presented a **Communication** on the reinforcement and promotion of social dialogue at the EU level. The Commission proposes a set of measures aiming to (i) reinforce European sectoral social dialogue by modernising its framework, in close collaboration with EU social partners, through a possible revision of the current rules, (ii) continue to support social partner agreements, notably through administrative support and legal advice, (iii) strengthen social partners' involvement in EU policy-making, for instance by gathering the views of the European cross-industry social partners on policy priorities ahead of the Commission Work Programme, and (iv) make the EU's technical and financial support for social partners more effective, for instance, the Commission will set up, in cooperation with social partners, a research network for monitoring and promoting EU social dialogue. The Commission calls on social partners to negotiate and conclude more social partner agreements and to improve the membership and representativeness of both employers' organisations and trade unions. Although social dialogue can play an important role in steering through times of crisis, as in the case of the Covid-19 pandemic, it should not be overlooked that the pandemic had an impact on social dialogue. In some EU Member States, especially where social dialogue is not institutionally embedded or is limited and social partners are in a weak position, social dialogue was suspended or ignored (Eurofound, 2021). In those Member States where social dialogue is institutionally embedded, social partners were able to undertake measures and actions on topics such as job and income protection, safety and health at work, the adaptation of workplaces, training on the use of digital technologies, etc. (Eurofound, 2021). These dynamics are important to keep in mind, since previous episodes of crisis have in some cases reduced the involvement of social partners in policymaking at different levels and in different stages of the policy cycle, followed by attempts to restore it. This could have an impact on the role of social partners and social dialogue in fostering adult learning too.

The remainder of this chapter is structured as follows. Section 3.2 discusses the industrial relations systems and social dialogue in the EU. It starts by introducing key definitions and concepts, then explains the history and development of social dialogue over time and presents an industrial relations typology. Section 3.3 analyses the role of social partners and social dialogue in adult learning, distinguishing between different levels (EU, national, regional, sectoral and company) and different types of involvement. Section 3.4 concludes.

### 3.1 Industrial relations and social dialogue in the EU

#### 3.1.1 Definitions and concepts

Before delving into the history and development of industrial relations systems and social dialogue at the EU level and in EU Member States, this section presents a number of key definitions and concepts that will guide the remainder of the chapter.

**Social partners** refers to representatives of workers (trade unions) and employers (employers' organisations) that are involved in social dialogue, irrespective of the level at which the social dialogue is conducted (Van Peteghem et al., 2015; Guisset and Lenaerts, 2022). Social partners represent their members, defend members' interests and provide services to their members. They conclude collective agreements and are involved in the design, implementation, monitoring and evaluation of policies, among a range of other activities. Social partners can be active at different levels, such as the European, national, regional, sectoral and company levels.

The term **European social partners**, however, specifically refers to organisations engaged in European social dialogue, as described in Articles 154 and 155 of the Treaty on the Functioning of the European Union (TFEU) (Guisset and Lenaerts, 2022)<sup>114</sup>. The main European social partners are the European Trade Union Confederation, BusinessEurope, SGI Europe, SMEunited and Eurocadres. Articles 151-155 TFEU give legal recognition and legitimacy to European social dialogue. More specifically, under these articles, the European Commission is obliged to consult European social partners before acting in the social domain. This includes a range of topics, such as working conditions, occupational safety and health, labour market and social integration and social security. Such consultations typically follow a two-step process: a first consultation on the need to act at the European level and the potential direction of the action; and a second consultation that provides more details on the nature of the proposed action. European social partners further have the autonomy to conclude collective agreements (also known as framework agreements), which are implemented by a European directive or following the appropriate national procedures.

In order to access social dialogue structures, employers' organisations and trade unions must be **formally recognised as social partners by public authorities** (Guisset and Lenaerts, 2022). To this end, employers' organisations and trade unions must meet certain criteria about their representativeness. With formal designation as social partners, unions and employers' organisations are recognised as policymakers contributing to socioeconomic governance and acquire a number of rights and responsibilities (the right to conclude binding collective agreements, the right to nominate candidates for works council elections, etc.). In other words, after their formal recognition at the national or European level, social partners can exercise their influence on policies and practices, and – through collective agreements – have the right to legislate on specific issues.

**Industrial relations** refers to all interactions between employers (and/or employers' organisations), workers (and/or unions), and the government, including the structures, processes, and institutions in which the interactions are mediated (Brown et al., 2018). It

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<sup>114</sup> The European social dialogue was officially institutionalised in 1991 with the Maastricht Treaty and is now codified in the TFEU.

encompasses social dialogue and collective bargaining, as defined below. Although industrial relations systems differ across countries depending on national historical, political, economic, and social contexts, in Europe some of the building blocks and key principles are shared across industrial relations systems.

**Social dialogue** is understood as all types of negotiation, consultation or the exchange of information between or among representatives of the government, employers and workers, on issues of common interest relating to economic or social policy (ILO)<sup>115</sup>. The main goal of the social dialogue is to promote consensus building and to ensure the democratic involvement of the main stakeholders in the world of work. The scope and depth of the social dialogue varies according to the commitment of the involved parties and the degree to which they are open to cooperation: it can range from sharing information and being consulted on certain issues, to jointly developing measures and co-determination (Guisset and Lenaerts, 2022). The themes addressed in social dialogue mainly concern working conditions and employment conditions, such as pay, working hours, provision of training and work-life balance. Social dialogue can be bipartite (if it only involves trade unions and employers' organisations) or tripartite (when besides the social partners, also the government is involved).

Finally, **collective bargaining** is defined under International Labour Organization Convention 154 as all negotiations that take place between, on the one hand, an employer, a group of employers or one or more employers' organisations, and on the other hand, one or more workers' organisations:

- (i) to determine the working conditions and terms of employment;
- (ii) to regulate relations between employers and workers;
- (iii) to regulate relations between employers or their organisations and workers' organisation(s).

Collective bargaining, thus, is part of the wider social dialogue.

### *3.1.2 The history and development of industrial relations systems and social dialogue in the EU*

At the EU level and in Europe more generally, there is a long tradition of social dialogue, although there are major differences between EU Member States, for example in terms of trade union membership and coverage of collective bargaining agreements. This tradition of social dialogue rests on key principles. Among them are mutual recognition of employers' and workers' organisations (which is important to ensure an equitable distribution of income through collective bargaining and social peace), the institutionalisation of social security systems, and the distribution of productivity gains achieved in sectors across wages and profits (Berger and Compston, 2002; Marginson and Sisson, 2004; Van Peteghem et al., 2015). As described below, the development of social dialogue in the EU goes hand in hand with further steps in strengthening its social dimension, and increased attention on labour and skills issues.

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<sup>115</sup> [https://www.ilo.org/ifpdial/areas-of-work/social-dialogue/lang--en/index.htm\)%20%20a#:~:text=Social%20dialogue%20is%20defined%20by,to%20economic%20and%20social%20policy](https://www.ilo.org/ifpdial/areas-of-work/social-dialogue/lang--en/index.htm)%20%20a#:~:text=Social%20dialogue%20is%20defined%20by,to%20economic%20and%20social%20policy).

### 3.1.2.1 The first steps towards European integration after World War II

Social dialogue is an important building block of the European social market economy, dating back to the EU's inception (Marginson and Sisson, 2004; Van Peteghem et al., 2015). While economic policy was the driving force behind European integration, social policy (including labour and education policy) remained the prerogative of EU Member States (Van Peteghem et al., 2015; Guisset and Lenaerts, 2022). Social dialogue plays a pivotal role here. Already in 1985, **social dialogue was considered a critical instrument to strengthen the social dimension in Europe and to counterbalance the strong focus on economic integration** (Scharpf, 2002). At the time, Commission President Jacques Delors initiated the Val Duchesse social dialogue process, in order to better involve European social partners in the single market process. This initiative led to a number of joint statements in the following months, as well as to the conclusion of the Single European Act in 1986, the legal basis for European social dialogue. These important first steps were later followed by further bi- and trilateral agreements and by initiatives from the social partners and public authorities.

In addition, over time, the governance style of the EU changed. Due to the initial focus on economic policy, social policy was often used as a tool to make adjustments within the Member States in order to comply with economic obligations towards the EU. With adoption of the Lisbon strategy in 2000, social policy gained more prominence. As a first step, the Lisbon strategy formally introduced the **open method of coordination** (European Council, 2000). In this framework, Member States can voluntarily coordinate their actions around social protection and social policy and learn from each other. However, this method proved to be ineffective. In 2010, the Lisbon strategy was succeeded by the Europe 2020 strategy, with smart, sustainable and inclusive growth as its main ambition which came with its own set of governance tools, as further explained below.

### 3.1.2.2 The impact of the 2008 crisis on industrial relations and social dialogue

The financial and economic crisis that started in 2008 had severe socioeconomic consequences for the EU and its Member States. Millions lost their jobs, while young people did not find a job after finishing their studies. The public finances and budgets of Member States were derailed by state aid to the financial and other sectors. This left hardly any room for expansionary fiscal policies to stimulate the economy. For eurozone countries in particular, these difficulties were compounded because they could not pursue monetary policies themselves. Once again, economic policy was at the heart of EU policy, while social policy was considered less important. In addition, there was much more attention on the availability (quantity) of jobs than on the quality of jobs, so less regard was paid to things like lifelong learning.

Although at first, national social partners were involved in the design, monitoring and implementation of measures in an attempt to address the crisis, social dialogue was later pushed aside (ILO, 2017; Rathgeb and Tassinari, 2022). National governments were given less and less freedom to take measures. The EU took on more powers and imposed a strict austerity policy. Moreover, reforms that were imposed by the EU (e.g. through the country-specific recommendations) led to a dismantling of national collective bargaining systems, more decentralisation and more political interference in bargaining procedures and outcomes (Van Peteghem et al., 2015). After introduction of the European Semester, Member States committed to take measures to promote their competitiveness through labour market, social security and education system reforms (Guisset and Lenaerts, 2022). In addition, initially no 'formal' role going beyond being informed about developments and

results was envisaged for social partners in the European Semester process (Sabato et al., 2017). Both issues caused a lot of controversy – especially considering the slow recovery from the crisis.

### 3.1.2.3 A new impetus for social dialogue

When the Juncker Commission took office, trust in the European institutions was very low. In this context, in 2015 the Juncker Commission decided to give a new impetus to social dialogue and put more priority on social policies (Guisset and Lenaerts, 2022). Following this initiative, in 2016 the European social partners, Commission and presidency of the Council of the EU concluded an agreement endorsing a key role for (European) social dialogue in policy. The agreement specifically called for greater involvement of the social partners in European policymaking, particularly in the European Semester, and in the design, implementation and evaluation of important policy measures. Furthermore, a better-functioning and more effective social dialogue and capacity building of the social partners at the national level were seen as priorities.

The European Semester was reformed: social partners were given a formal role in the process and more time was provided for dialogue (Sabato et al., 2017). Despite the formal role, their actual involvement appears limited (Vanhercke and Verdun, 2022). Moreover, there are big differences between Member States in when and how social partners are involved, on what issues, what strategies they use, and how satisfied they are with their actual influence on the agenda and outcomes of the process (Sabato et al., 2018; Sabato, 2020). This notion also highlights the important links between national and EU level policymaking and decision-making and the role of social partners in it: in order to achieve effective EU social dialogue and influence EU policy, national social partners need to be in a strong position and vice versa.

### 3.1.3 Industrial relations typology

There is much diversity in industrial relations systems among EU Member States. In the academic literature, several typologies of industrial relations have been proposed to categorise these systems and compare them based on their characteristics. One of the most well-known and often used typologies was developed by Visser (2009), who distinguishes five types (see **Table 4**).

**Table 4. Industrial relations regimes or arrangements**

	North	Centre-west	South	West	Centre-east
Production regime	Coordinated market economy	Coordinated market economy	Statist market economy	Liberal market economy	Statist or liberal?
Welfare regime	Universalistic	Segmented (status-oriented, corporatist)	Segmented (status-oriented, corporatist)	Residual	Segmented or residual?
Employment regime	Inclusive	Dualistic	Dualistic	Liberal	Liberal
Industrial relations regime	Organised corporatism	Social partnership	Polarised / state-centred	Liberal pluralism	Fragmented / state-centred
Power balance	Labour-oriented	Balanced	Alternating	Employer-oriented	Employer-oriented
Principal level of bargaining	Sector	Sector	Variable/unstable	Company	Company
Bargaining style	Integrating	Integrating	Conflict oriented	Conflict oriented	Acquiescent
Role of social partners in public policy	Institutionalised	Institutionalised	Irregular/politicised	Rare / event-driven	Irregular / politicised
Role of the state in industrial relations	Limited (mediator)	Shadow of hierarchy	Frequent intervention	Non-intervention	Organiser of transition
Employee representation	Union based / high coverage	dual system / high coverage	Variable (*)	Union based / small coverage	Union based / small coverage
Countries	<b>Denmark</b> , Finland, Norway, Sweden	<b>Belgium</b> , Germany, (Ireland), Luxembourg, Netherlands, Austria, Slovenia, (Finland)	Greece, Spain <b>France, Italy</b> , (Hungary), Portugal	Ireland, Malta, Cyprus, UK	<b>Bulgaria</b> , Czechia, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, <b>Slovakia</b>

Source: Visser (2009).

Note: countries covered in I SKILL are in bold format.

Note that these industrial relations regimes can also be mapped on the other types of classifications described in the first sections of this report (e.g. welfare state regimes, adult learning schemes, cf. varieties of capitalism approach). Similar to the industrial relations regimes listed above, adult learning schemes are embedded in the policy and institutional frameworks that exist in the country, and thus strongly affected by a wide range of political, cultural, social and economic forces (Desjardins, 2017). The power and positions of the different actors involved, and the relationships between them, play a critical role in shaping the adult learning regimes, and in determining their outcomes. Furthermore, as Desjardins (2017) notes, besides employers, trade unions and industrial relations affect the adult learning regimes – the wider literature on welfare state regimes, production regimes and industrial relations regimes is thus also helpful in understanding adult learning schemes, despite national specificities or peculiarities. In this light, Desjardins (2017) distinguishes market-dominated regimes, from state-dominated regimes and stakeholder-dominated regimes. In countries with a (neo)liberal production or welfare state regime, the emphasis on competition in the market raises the effectiveness and efficiency of resource use in adult learning but it also comes with a higher risk that vulnerable groups are excluded. This seems to line up with the West and Centre-East industrial relations regimes. On the other hand, the



stakeholder-dominated regimes tend to overlap most with Christian-democratic, continental, Bismarkian, etc. welfare state and production regimes and the related industrial relations regimes. However, some mixed forms also exist, e.g. state-led regimes with a high level of stakeholder involvement, which tends to correspond with social-democratic, Nordic, etc. regimes. This will be elaborated on in the national analyses for each of the countries covered in the I SKILL project and in the comparative analyses.

In bringing together research findings on the impact of social partners in various areas, including on adult learning, there are several challenges that follow from this diversity in industrial relations regimes across Europe. A first challenge concerns the **difficulty of bringing together and interpreting the (effects of) different types of employee participation**. In the literature, a distinction is already made between **direct employee participation and indirect or representative employee participation**. In the case of direct participation, the employer involves an individual employee in practices of information gathering, consultation and co-decision-making (e.g. suggestion boxes). In indirect participation, these processes occur collectively and through representatives and representational structures such as works councils. Depending on the country and its industrial relations regime, the representative employee participation has a different form (composition of works councils, workers' representation on the company's board of directors, etc.) and occurs at different levels. Depending on the study, different forms of representation are considered, making comparisons about outcomes difficult.

A related issue is the **level of analysis**. Social partners operate at different levels: within companies, sectors, regions or at the national and supranational levels. It is important to note here that actions at one level also influence what happens at other levels (e.g. legislation on adult learning pushed through at the national or regional level is then implemented through collective agreements at the sector and company levels).

One result of these challenges is that in the literature, the role of social partners or social dialogue in tackling a specific topic is often conflicting. In addition, some types of social partner involvement and some industrial relations regimes are covered much more than others, which further blurs the picture. Although these challenges arise for any topic, it is especially relevant in the context of adult learning and training, which itself involves various levels, actors and types of governance. In the next sections, different levels and forms of involvement of the social partners are distinguished and discussed. They can then be further investigated in the national case studies that are part of the I SKILL project.

## 3.2 Adult learning: what role for social dialogue?

### 3.2.1 At the European level

At the EU level, both the European and the national social partners can **help shape policy on lifelong learning and create an environment in which the importance of adult learning and its benefits for workers as well as companies are understood and recognised** (OECD, 2019a, 2019b, 2019c; Baiocco et al., 2020; Simons et al., 2020). Social partners can help to establish a level playing field, in which all workers and all companies are able to participate in lifelong learning programmes, initiatives and actions. At the European level, social partners can **gather information on projects and programmes running in other countries**, which enables **monitoring and evaluation and the exchange best practices** among their member organisations (Simons et al., 2020).

European social partners further play an important role as policymakers in several ways. They can influence EU policy through the **consultation process foreseen by Articles 151-155 TFEU** for proposed EU legislation in the labour and social domains (see above). Implementation of the **EPSR**, for example, heavily depends on such consultation processes. On the **European Skills Agenda** and in **the Pact for Skills**, the Commission has called for a joining of forces, involving social partners and other labour market actors. Still, the actual implementation of EU legislation and policies largely remains in the hands of national authorities and social partners (also at lower levels within countries, such as the sectoral level). Differences between EU Member States in their industrial relations, and education and training systems again come into play here. In addition, **decision-making at the EU level can be complicated**, not only due to restrictions on the competences that EU authorities have in the labour and social areas, but also because reaching an agreement or consensus is not straightforward given the different realities that national actors face.

It is important to note here that national social partners have some influence on EU legislation and policy too, through their involvement in the European Semester and role in the implementation, monitoring and evaluation of these policies in the countries. At the same time, the involvement of national social partners in the European Semester process seems limited (Sabato et al., 2017). Recently, owing to Covid-19 and global megatrends, the Commission has pushed forward the green and digital transitions. Driven by the EU, Member States have developed national recovery and resilience plans to mitigate the impact of the pandemic while addressing these existing challenges (Eurofound, 2021; Guisset and Lenaerts, 2022). Implementation of these national plans is funded through the Recovery and Resilience Facility, with coordination and oversight through the European Semester. Member States are required to involve social partners in the preparation of national plans, but not in their implementation. Moreover, the extent to which national social partners have been involved in the preparation of the plans is not a criterion for the European Commission to accept or reject plans. Nevertheless, these plans also centre on up- and reskilling and training provision as key issues.

Finally, as noted above, European social partners can **engage in bipartite social dialogue** (at interprofessional or sectoral levels) and can **conclude collective agreements**. The agreements concluded between European social partners can be implemented through an EU directive or by applying the appropriate national frameworks ('autonomous agreements', in which the social partners are themselves responsible for their implementation at the national, regional, sectoral or company level).

There are several examples of both types of agreements. Those implemented by an EU directive are agreements on parental leave (1996, updated 2009), part-time work (1997) and fixed-term contracts (1999). Autonomous agreements include those on telework (2002), work-related stress (2004), harassment and violence at work (2007), inclusive labour markets (2010) and digitalisation (2020).

The framework agreements refer to skills and training to varying degrees. For example, the **agreement on digitalisation identifies skills as a key issue at the national, sectoral and company levels**<sup>116</sup>. The challenges and opportunities presented by digitalisation mean that social partners have a shared interest in facilitating access to quality and effective training

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<sup>116</sup> <https://ec.europa.eu/social/main.jsp?catId=521&langId=en&agreementId=5665>

and skills development while respecting the diversity and flexibility of training systems, which vary according to diverse industrial relations practices.’ The agreement contains several stipulations in this area:

- the commitment of both parties to upskill or reskill to meet the digital challenges of the enterprise;
- access to and arrangements for training, in line with diverse national industrial relations and training practices and taking into account the diversity of the workforce, such as in the forms of training funds / sectoral funds, learning accounts, competence development plans and vouchers. Training provision should spell out clearly the conditions of participation, including in terms of duration, financial aspects and worker commitment;
- where an employer requests a worker to participate in job-related training that is directly linked to the digital transformation of the enterprise, the training is paid for by the employer or in line with the collective agreement or national practice. This training can be in-house or offsite and takes place at an appropriate and agreed time for both the employer and the worker, and where possible during working hours. If the training takes place outside of working time, appropriate compensation should be arranged;
- a focus on quality and effective training, which means providing access to relevant training responding to the identified training needs of the employer and the worker. A key aspect of this in the context of the digital transformation is to train workers to help them make the best possible use of the digital technologies that are introduced.
- training arrangements that provide skills that could support mobility between and within sectors;
- internal or external training validation solutions;
- the operation of schemes such as part-time work that combines a reduction of working hours with training, in well-defined circumstances;
- retraining and upskilling, so that workers can transfer to new jobs or adapt to redesigned jobs within the enterprise, under agreed conditions.

European social partners can ensure that the topics of adult training and skills are included in their future collective agreements. Some voices have also called for an agreement on lifelong learning, or for lobbying for the recognition of lifelong learning as a labour right in EU legislation or for more funding for adult training (Simons et al., 2020). Along with collective agreements, European social partners have **signed joint declarations on lifelong learning**, which are **typically not binding**, but aim to set standards and to create opportunities for further negotiations in this area (Simons et al., 2020).

### 3.2.2 Within EU Member States

Also at the level of EU Member States, social dialogue and industrial relations can **contribute to adult learning in several ways** (OECD, 2019a; 2019b; Baiocco et al., 2020). For example, industrial relations systems and collective bargaining can set binding provisions and promote workers’ rights to learning and training (Heyes, 2007; OECD, 2019c), and in that way ensure that sufficient time and resources are aimed at skills development. Social dialogue can help shape and enhance policies for up- and reskilling, contribute to the anticipation of skills needs, establish priorities and ensure effective implementation. Social partners can help companies and workers to benefit from policies, promote a learning culture and access to high-quality training at the workplace for all workers, as well as monitor the quality of adult learning opportunities and use of resources. The social partners can also

steer investment, harnessing the capacity of all actors to deliver on skills development (Koch et al., 2019; Kennedy et al., 1994).

A recent survey by UNI Europa (Simons et al., 2020) among its members highlights that 66 % of trade unions participating in the survey had developed a policy or strategy on lifelong learning, whereas 34 % did not have a policy or strategy in place. Among the priorities for the unions when it comes to adult learning are a structural integration of adult learning in collective agreements, statutory training leave, (re)training for the unemployed and for workers undergoing job transitions and lobbying for more public spending on adult learning (Simons et al., 2020).

However, the role of social partners in adult learning varies across EU Member States. It **depends on the industrial relations and social dialogue regime** (Winterton, 2000; OECD, 2019a, 2019b, 2019c), **the level of policies and governance** (i.e. national, regional, sectoral) for adult learning, the actors involved (Winterton, 2007) and the **skills ecosystem** (Hazelkorn and Edwards, 2019) (see Baiocco et al., 2020). As a result, most literature on the link between industrial relations and adult learning focuses on specific countries or cases, without taking a comparative angle. This is an important gap, that the I SKILL project aims to address.

### 3.2.2.1 At the national and regional levels

Social partners can **foster adult learning** at the national and regional levels in several ways. First, social partners can **help shape important social, labour and education policies** using their political and discursive power as key actors in socioeconomic governance (Baiocco et al., 2020). Depending on the national context, social partners can be involved in all or in different stages of the policy cycle, from **needs assessment and agenda setting**, to the **design, implementation, monitoring and evaluation of policies, programmes or actions** (OECD, 2019c; Simons et al., 2020). This includes monitoring the use of resources and activities of the parties involved, enforcement of rights and quality control, among other elements. Social partners can also **lobby to keep topics on the agenda** (e.g. lifelong learning), use their networks and connections with civil society to **gather information and influence decisions or push for reform**. While there are also links between civil society and the social partners at the EU level (e.g. in the context of the work done within the European Economic and Social Committee), these links appear particularly strong at the national, regional and sectoral levels.

In this vein, social partners can use their discursive power, which refers to their ability to spread ideas, launch campaigns, etc., sometimes directly engaging with the general public, to influence debate and steer it in a certain direction (e.g. through a media campaign on all workers' right to training). Another example is **the organisation of training by unions together with employers and public authorities on specific issues**. Most unions argue that funding for adult learning is the responsibility of employers and the government, but there are examples of contributions by unions and union members to sector funds as well (Simons et al., 2020). Trade unions can also use other types of collective action, such as strikes or demonstrations. The latter, however, seems less prevalent when it comes to the topic of skills and adult learning.

Second, social partners can be **directly involved in the adult learning system in their country or region** (OECD, 2019c; Baiocco et al., 2020). This includes social partners' efforts to create or help improve tools to define or describe, recognise, validate and certify skills. Yet there are stark differences between Member States regarding the involvement of social partners in the education and training system in general, and in adult learning in particular

(OECD, 2019c; Baiocco et al., 2020). According to recent OECD (2019c) research, it ranges from a limited role (e.g. being informed about developments, consultation on key issues) to a very extensive role (e.g. definition and management of the training system, such as programme development, monitoring and validation of learning, career guidance, administration of the fund, data collection and quality assurance).

Related to this, social partners are very well placed to help **understand and anticipate changing skills needs** at various levels (sectoral, occupational), including in a context of transition (OECD, 2019c; Baiocco et al., 2020). In many countries, social partners today already play a role in skills assessment and skills needs anticipation. For example, new and emerging jobs and skills are often identified and tracked within skills alliances, councils or working groups, in which unions and employers are represented. Because of their insight into and knowledge of labour market developments at the company and sectoral levels, social partners have critical information to help guide up- and reskilling policies and programmes. This work involves skills and/or training certification, developing and updating standards and classifications as well as developing and formalising training and other types of programmes (e.g. job rotation schemes, apprenticeships, mentoring). From this perspective, social partners also play a key role in identifying and assisting workers who would otherwise become displaced and supporting job transitions within or between sectors. Employers' organisations and unions often have close connections with education and training providers in their sector.

### 3.2.2.2 At the sectoral and company levels

Another important instrument to promote lifelong learning is **collective agreements** concluded between trade unions and employers' organisations (Baiocco et al., 2020). Such agreements can be concluded at the national, sectoral and company levels, but are discussed here as most adult learning takes place on the job and in a work context and environment. The academic and grey literature on the importance of social dialogue for adult learning shows that collective agreements can be critical to securing the right to training for workers. They can contain provisions on access to and the quality of the training offer, for example the content of the training, number of hours available for training and when training can be undertaken (during or outside of working hours) and training format (online, classroom). The agreements can also cover training leave provisions, employment protection during or after training, the funding of training costs, sanctions for employers not providing training, and related topics (OECD, 2019c; Simons et al., 2020; Baiocco et al., 2020). Some collective bargaining agreements refer to specific skills (or diplomas, certificates) that must be acquired to be able to work in a specific occupation or sector, and they contain provisions on skills validation and certification.

Although training and skills are increasingly being addressed in collective agreements, there are some caveats to consider. First, **only a small share** of collective agreements contain provisions relating to adult learning. As highlighted in a recent survey by UNI Europa (Simons et al., 2020), for example, 11 trade unions reported that they had managed to integrate lifelong learning in collective agreements and social dialogue more broadly, whereas 16 unions reported that they had failed to do so due to resistance from employers. This resistance followed from a lack of resources to invest in training, the view that investing in training would not pay off for the company (the costs exceeded the benefits), resistance to the involvement of trade unions in setting labour standards and lack of priority or interest in the topic (other issues deemed more urgent), etc. The point about a lack of urgency also applies to trade unions. In the UNI Europa survey (Simons et al., 2020), some trade unions



reported that they would rather negotiate a higher wage for their members than push for training rights or provisions.

Another issue is that even if collective agreements contain provisions on training, these **may be hard to implement or enforce in practice** (e.g. when workers have a right to training but have to envisage funding it themselves). Furthermore, **not all workers and companies are covered by collective agreements**. Examples include the self-employed and non-standard workers. This group, moreover, is expected to grow in line with global megatrends (e.g. due to a further fragmentation of labour and the associated rise in non-standard work arrangements driven by digitalisation and globalisation in the labour market).

When it comes to social partners' involvement in adult learning at the sectoral and company levels, it is also important to refer to **sectoral training funds** (OECD, 2019c; Simons et al., 2020; Baiocco et al., 2020). Such funds are often jointly managed and funded by trade unions and employers' organisations, frequently involving close links with training providers and public authorities. Sectoral funds play a major role in several EU Member States in different areas of adult learning, which have been mentioned before. They may guarantee the right to training for (all) workers in the sector (regardless of their employment status, coverage by firm-level collective agreements, etc.). Some also develop training, anticipate changing skills needs and adjust training offers accordingly, secure access to training, fund it, arrange skills validation and certification, and so on. Sectoral funds can pay particular attention to smaller companies within their sector, which struggle more in ensuring that their workers get training. Fund administrations from different sectors are often in contact with each other and may collaborate (e.g. if one sector is in decline and another on the rise, to set up job rotation schemes and establish up- and reskilling programmes to foster transitions between sectors).

There are nonetheless some downsides associated with training funds (OECD, 2019c; Simons et al., 2020). Especially when such funds are governed by a large number of trade unions and employers' organisations with conflicting views, the resources may be used inefficiently and may not be spent in a way that meets the needs of companies and workers in the sector. Another risk is that the training offer may reflect what current providers can make available, instead of what companies and workers need. A related issue is that the training offer may not be inclusive or accessible to those who are not (yet) part of the sector (e.g. those employed in other sectors looking to make a change or the unemployed).

A recurring finding in the literature is that **representative employee participation** in the form of trade union presence or works councils in the workplace has a positive effect on the likelihood of employees receiving training through the employer. Training is often cited as an example of a topic where – in contrast to wage negotiations, among other examples – there is room for **integrative bargaining**, i.e. 'win-win negotiations' that benefit both employers and employees (Cooney and Stuart, 2013). It is important to note here that this training can take many forms and cover a variety of topics, including occupational safety and health (OSH). Worker participation is a key component of OSH management systems and a lever for training in this area.

Several mechanisms are seen as explanations for this positive effect. On the one hand, there is a **direct effect of unions' bargaining power to negotiate non-wage benefits, including employer-funded training**. On the other hand, trade unions can also have an effect on training indirectly, for example, by **having a positive effect on the retention of high-qualified and well-trained workers** (who earn higher wages) and through labour market



**regulation that puts constraints on strategies such as outsourcing, flexible contracts, etc.**

(Muehleemann et al., 2010). This incentivises employers to invest in the training of their employees (Berton et al., 2019). Other work focuses on training and skills as a dimension of job quality, investigating how social partners (trade unions in particular) can help improve the working and employment conditions and contribute to a culture that is open to training and learning. The OECD (2019c), for example, finds that job quality is higher in workplaces with direct employee participation or with mixed forms of employee participation (which is a combination of direct and representative forms of participation).

The research on indirect effects delves deeper in several directions. For example, it has been demonstrated in a number of studies that union representation has a positive impact on **employee compensation**:

- in **wage premia** which could provide the necessary means for workers to invest in their own training (Doucouliagos et al., 2017; Wilmers, 2017; Kristal et al., 2020);
- in **additional (wage and non-wage) benefits**, which can include health insurance or access to (paid) training (Kristal et al., 2020).

Compared with workers who are not union members, workers who are trade union members have a higher likelihood of receiving such additional benefits. When unions are active in the workplace, the employer tends to spend resources more on such benefits and provides higher-quality benefits (Kristal et al., 2020).

Another focus in the literature relates to **employee turnover and firm productivity**. The presence of trade unions in the workplace has been associated with a reduced employee turnover (Forth et al., 2017). This could be for several reasons, such as trade union pressure for stronger dismissal protection, restrictions on management power, greater employee participation, better job quality, higher pay and additional benefits. Although some of these may imply that it is harder for firms to fire less productive employees, a lower turnover would also mean that it is more worthwhile for the employer to invest in the skills of employees. In addition, better quality jobs with better remuneration help to attract and retain more qualified and more productive workers. Several recent studies confirm that trade union presence can have a positive effect on productivity in European countries (e.g. Della Torre, 2019 (Italy); Martins, 2019 (Portugal); Barth et al., 2020 (Norway)).

A large part of the literature that empirically investigates the role of social partners and the relation between social dialogue and adult learning has focused on Germany and the UK. Studies on Germany mainly look at the effect of a Betriebsrat and collective agreements, finding positive effects for the occurrence of training (Stegmaier, 2012), investment in training (Kriechel et al., 2014), the quality of the training (Koch et al., 2019), and participation in training (Allaart et al., 2009). For the UK, Böheim and Booth (2004) find a positive association between trade union recognition at the firm level and the amount of training received by employees. Green et al. (1999) find that both the probability of receiving training and the amount of training received are higher in workplaces with a trade union presence. For other countries besides Germany and the UK, empirical tests of such effects are much scarcer and tend to lead to conflicting results.

There is some literature that **disaggregates the effect of employee participation structures such as works councils on training by employee background** (e.g. gender, age and level of education) (Baiocco et al., 2020). For example, research for Germany by Wotschack (2019) finds a clear positive effect of worker representation on the likelihood that

workers with a low level of education will be offered and participate in training. The presence of structured employee participation, coverage by a collective agreement and formalised HR practices at the organisational level are mutually reinforcing, and they seem more effective and more sustainable than market-driven or technical training initiatives.

Continuing on this point, social partners are well placed to **identify groups at risk and to reach out to them**, serving as a bridge (OECD, 2019c; Baiocco et al., 2020). This includes, for example, workers who may become displaced following new technological advancements and need to up- or reskill to remain employed, or workers who have previously had poor learning experiences and may be reluctant to participate in training when suggested by their employer or the government.

### 3.3 Conclusions

From this brief overview of the academic and grey literature on how industrial relations and social dialogue can contribute to adult learning in Europe, it is clear that education, learning and training are core topics for social partners at the EU level and in Member States. Social partners can foster adult learning through many different channels, from playing their role as decision-makers in various stages of the policy cycle, to managing education and training programmes and running training funds, concluding collective agreements in which training and skills are explicitly addressed, and so on. However, it is also clear that there are several obstacles in this area. Similar to industrial relations regimes and social dialogue practices, the education and training systems in EU Member States differ quite a lot and their governance is scattered among different actors and levels.

Turning to industrial relations and social dialogue, as well as the social partners themselves, social dialogue is not always strong (and it has been under severe pressure in the past few decades). Training is not always a priority for trade unions or employers' organisations, and collective agreements do not cover all workers, nor all companies. Social partners do not always have a strategy or policy on this subject. In addition, trade union presence in the workplace is often still mostly restricted to larger companies, leaving especially micro- and small companies without any union presence and with weaker social dialogue overall. However, previous research has documented that the employees of such companies, in particular, face more constraints in up- and reskilling overall (e.g. in terms of participation, quality of training offer, etc.).

At the same time, it is clear that up- and reskilling are now more important than ever, in the aftermath of the pandemic and in the context of global trends reshaping labour markets, economies and societies in Europe. Formal education will likely no longer be sufficient; meanwhile, other forms of training and learning have gained prominence. This opens up a critical role for social partners to support workers and companies going through such transitions, in the short and the longer run. Finally, in adding to the literature, comparing countries in terms of their adult learning and training from an industrial relations and social dialogue perspective, the I SKILL project can add new insights through its upcoming contributions.

## Bibliography

Agrawal, D. S., Lacroix, S. and Reich, A. (2020), 'To emerge stronger from the Covid-19 crisis, companies should start reskilling their workforces now', McKinsey & Company, online article May 7.

Ahlers, J. (2021), 'Let's get our hands dirty greening adult learning and education', European Association for the Education of Adults (EAEA) Background Paper.

Allaart, P., Bellmann, L. and Leber, U. (2009), 'Company-provided further training in Germany and the Netherlands', *Empirical Research in Vocational Education and Training*, Vol.1, No 2, pp. 103–121.

Baiocco, S. (2020), 'The state of play of evidence about the conditions under which individual-oriented instruments for incentivising adult participation in learning are effective', EENEE Ad-hoc Question No 4 Prepared for the European Commission.

Baiocco, S., Westhoff, L. and Simonelli, F. (2020), *Study on mapping opportunities and challenges for micro and small enterprises in offering their employees up-or re-skilling opportunities*, Vol. 1, Publication Office of the European Union, Luxembourg.

Barth, E., Bryson, A. and Dale-Olsen, H. (2020), 'Union Density Effects on Productivity and Wages', *The Economic Journal*, Vol. 130, No 631.

Bassanini, A., Booth, A., Brunello, G., De Paola, M. and Leuven, E. (2007), 'Workplace training in Europe.', in Brunello, G., Garibaldi P. and Wasmer, E. (eds) *Education and training in Europe*. Oxford University Press, Oxford, pp. 143–309.

Berger, S., and Compston, H. (2002), *Policy Concertation and Social Partnership in Western Europe: Lessons for the Twenty-first Century*, Berghahn Books, New York.

Berton, F., Carreri, A., Devicienti, F. and Ricci, A. (2019), 'Workplace Unionism, Collective Bargaining and Skill Formation: New Results from Mixed Methods', IZA Discussion Paper No 12712, Institute of Labor Economics, Bonn.

Bianchi, G. (2020), 'Sustainability competences – A systematic literature review', Joint Research Centre, Publication Office of the European Union, Luxembourg.

Bianchi, G., Pisiotis, U. and Cabrera Giraldez, M. (2022), *GreenComp – The European sustainability competence framework*. Edited by Margherita Bacigalupo and Yves Punie, Publications Office of the European Union, Luxembourg.

Blossfeld, H-P., Kilpi-Jakonen, E., Vono de Vilhena, D. and Buchholz, S. (eds) (2014), *Adult learning in modern societies: An international comparison from a life-course perspective*, Edward Elgar Publishing, Cheltenham, Northampton.

Boeren, E. (2009), 'Adult education participation: the Matthew principle', *Filosofija-Sociologija*, Vol. 20, No 2, pp. 154-161.

Boeren, E. (2016), *Lifelong Learning Participation in a Changing Policy context: An Interdisciplinary Theory*, Palgrave Macmillan, London.

Boeren, E. (2017), 'Understanding adult lifelong learning participation as a layered problem' *Studies in Continuing Education*, Vol, 39, No 2, pp. 161–175.

Boeren, E. and Holford, J. (2016), 'Vocationalism Varies (a Lot): A 12-Country Multivariate Analysis of Participation in Formal Adult Learning', *Adult Education Quarterly*, Vol. 66, No 2, pp. 120–142.

Boyadjieva, P. and Ilieva-Trichkova, P. (2017), Between inclusion and fairness: Social justice perspective to participation in adult education. *Adult Education Quarterly*, Vol. 67, No 2, pp. 97–117.

Boyadjieva, P. and Ilieva-Trichkova, P. (2021), *Adult Education as Empowerment. Re-imagining Lifelong Learning through the Capability Approach, Recognition Theory and Common Goods Perspective*, Palgrave Macmillan, London.

Brandi, U., De Norre, J., Roosalu, T., Raudsepp, M. and Khadatovich, A. (2023), 'Working and Learning in the Retail Sector: A Cross-Country Comparative View', in: Holford, J., Boyadjieva, P., Clancy, S., Hefler, G., Studená, I. (eds), *Lifelong Learning, Young Adults and the Challenges of Disadvantage in Europe*, Palgrave Macmillan, Cham, Switzerland.

Buchholz, S., Unfried, J., and Blossfeld, H.-P. (2014), 'Reinforcing social inequalities? Adult learning and returns to adult learning in Germany', in Blossfeld, H.-P., Kilpi-Jakonen, E., Vono de Vilhena, D. and Buchholz, S. (eds), *Adult learning in modern societies: An international comparison from a life-course perspective*, Edward Elgar, pp. 242-263.

Bukodi, E. (2016), 'Cumulative inequalities over the life-course: Life-long learning and social mobility in Britain', Working Paper No 16, University of Oxford, Oxford.

Cabral, C. and Lochan Dhar, R. (2021), 'Green competencies: insights and recommendations from a systematic literature review', *Benchmarking: An International Journal*, Vol. 28, No 1, pp. 66-105.

Cabus, S.J. and Štefánik, M. (2019), 'Good Access to Adult Education and Training for the Low-Educated Accelerates Economic Growth: Evidence from 23 European Countries'. KU Leuven HIVA working paper series. HIVA, Leuven, Belgium.

Cabus, S.J., Ilieva-Trichkova, P. and Štefánik, M. (2020), 'Multi-layered perspective on the barriers to learning participation of disadvantaged adults', *Zeitschrift für Weiterbildungsforschung - Journal for Research on Adult Education*, Vol. 43, No 2, pp. 169–196.

Casano, L. (2019), 'Skills and Professions for a "Just Transition". Some Reflections for Legal Research', *E-Journal of International and Comparative Labour Studies*, Vol. 8, No 3, pp. 31-46.

Cedefop (2009), 'Individual learning accounts', Cedefop panorama series No 163. Office for Official Publication of the European Communities, Luxembourg.

Cedefop (2012), 'Green skills and environmental awareness in vocational education and training'. Cedefop Research Paper No 24, Publications Office of the European Union, Luxembourg.

Cedefop (2017), 'The changing nature and role of vocational education and training in Europe. Results of a survey among European VET experts (Volume 2)', Cedefop Research Paper No 64, Publications Office of the European Union, Luxembourg.

Cedefop (2020), *Empowering adults through upskilling and reskilling pathways. Volume 2: Cedefop analytical framework for developing coordinated and coherent approaches to upskilling pathways for low skilled adults*, Publications Office of the European Union, Luxembourg.

Cedefop (2020b), *Vocational education and training in Europe, 1995-2035. Scenarios for European vocational education and training in the 21st century*, Publications Office of the European Union, Luxembourg.

- Chen, Z., Marin, G., Popp, D. and Vona, F. (2020), 'Green Stimulus in a Post-pandemic Recovery: the Role of Skills for a Resilient Recovery', *Environmental and Resource Economics*, Vol. 76, pp. 901–911.
- Clancy, S., Hefler, G., Rapanà, F., Steinheimer, E. and Studená, I. (2023), 'Work and Learning in the Adult Education Sector: A Cross Country Comparative View', in: Holford, J., Boyadjieva, P., Clancy, S., Hefler, G., Studená, I. (eds), *Lifelong Learning, Young Adults and the Challenges of Disadvantage in Europe*, Palgrave Macmillan, Cham, Switzerland.
- Claeys G., Tagliapietra, S. and Zachmann, G. (2019), 'How to make the European Green Deal work', Bruegel Policy Contribution, No. 14
- Coeckelbergh, M. (2015), *Environmental Skill Motivation, Knowledge, and the Possibility of a Nonromantic Environmental Ethics*, Routledge Taylor & Francis Group, New York.
- Coffield, F. (1999), 'Breaking the consensus: Lifelong learning as social control', *British Educational Research Journal*, Vol. 25, No 4, pp. 479–499.
- Colley, H., Hodkinson, P. and Malcolm, J. (2003), 'Informality and formality in learning. A report for the learning and skills research centre'. Learning and Skills Research Centre, London.
- Cooney, R. and Stuart, M. (eds) (2013), *Trade unions and workplace training: Issues and international perspectives*, Routledge Taylor & Francis Group, New York.
- Council of the European Union (2009), *Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (ET 2020)*. Official Journal of the European Union, C 119, 28.5.2009, pp. 2–10.
- Council of the European Union (2016), *Council recommendation of 19 December 2016 on upskilling pathways: new opportunities for adults*. Official Journal of the European Union, C 484, 24.12.2016, pp. 1-6.
- Council of the European Union (2022a), *Council Recommendation on individual learning accounts*. Official Journal of the European Union, C 243, 27.06.2022, pp.10-25.
- Council of the European Union (2022b), *Council Recommendation on individual learning accounts*. Official Journal of the European Union, C 243, 27.06.2022, pp. 26-34.
- Cross, K.P. (1981), *Adults as learners: increasing participation and facilitating learning*, Jossey-Bass, San Francisco.
- Crowther, J. (2004), 'In and against' lifelong learning: Flexibility and corrosion of character', *International Journal of Lifelong Education*, Vol. 23, No 2, pp. 125–136.
- Cummins, P.A., Harrington, A.K., and Yamashita, T. (2021), Individual learning accounts: A comparison of implemented and proposed initiatives, *Adult Learning*, Vol. 33, No 4, pp. 147–157.
- Dammrich, J., Vono de Vilhena, D. and Reichart, E. (2014), 'Participation in adult learning in Europe: the impact of country-level and individual characteristics', in Blossfeld, H.P., Kilpi-Jakonen, E., Vono de Vilhena, D., and Buchholz, S. (eds), *Adult learning in modern societies: an international comparison from a life-course perspective*, Edward Elgar, Cheltenham, pp. 29–55.
- Dawe, S. and Nguyen, N. (2007), 'Education and training that meets the needs of small business: A systematic review of the research', National Centre for Vocational Education Research, Adelaide, Australia.



- DeFur, S. H. and Korinek, L. (2008), 'The Evolution Toward Lifelong Learning as a Critical Transition Outcome for the 21st Century', *Exceptionality*, Vol. 16, No 4, pp. 178-191.
- Dehmel, A. (2006), 'Making a European Area of Lifelong Learning a Reality? Some Critical Reflections on the European Union's Lifelong Learning Policies', *Comparative Education*, Vol. 42, No 1, pp. 49–62.
- Dekke, S. (2020), 'Designing and Implementing Policy for a Just Transition', Working Paper No 7, Climate Change Advisory Council.
- Della Torre, E. (2019), 'Collective voice mechanisms, HRM practices and organizational performance in Italian manufacturing firms', *European Management Journal*, Vol. 37, No 3, 398–410.
- Desjardins, R. (2015), *Participation in adult education opportunities: evidence from PIAAC and policy trends in selected countries – background paper prepared for the Education for All Global Monitoring Report 2015*, University of California, Los Angeles.
- Desjardins, R. (2017), *Political economy of adult learning systems. Comparative study of strategies, policies and constraints*, Bloomsbury Academic, London, New York.
- Desjardins, R. (2020), 'PIAAC thematic report on adult learning', OECD Education Working Paper No 223, OECD publishing, Paris.
- Desjardins, R. and Ioannidou, A. (2020), 'The political economy of adult learning systems—some institutional features that promote adult learning participation', *Zeitschrift für Weiterbildungsforschung - Journal for Research on Adult Education*, Vol. 43, No 2, pp.143–168.
- Desjardins, R., Rubenson, K. and Milana, M. (2006), *Unequal chances to participate in adult learning: international perspectives*, IIEP UNESCO, Paris.
- Desjardins, R. and Rubenson, K. (2013). Participation patterns in adult education: The role of institutions and public policy frameworks in resolving coordination problems. *European Journal of Education*, Vol. 48, No 2, 262-280.
- Doucouliaagos, H., Freeman, R. B. and Laroche, P. (2017), *The Economics of Trade Unions: A Study of a Research Field and Its Findings*, Routledge, London.
- Ehlert, M. (2017), 'Who benefits from training courses in Germany? Monetary returns to non-formal further education on a segmented labour market', *European Sociological Review*, Vol. 33, No 3, pp. 436–448.
- Enfield, S. (2021), 'Covid-19 impact on employment and skills for the labour market', K4D Helpdesk Report. Institute of Development Studies, Brighton.
- Eschenbacher, S. and Fleming, T. (2020), 'Transformative dimensions of lifelong learning: Mezirow, Rorty and COVID-19', *International Review of Education*, Vol. 66, pp. 657–672. <https://10.1007/s11159-020-09859-6>
- Esping-Andersen, G. (1990), *Three Worlds of Welfare Capitalism*, Princeton University Press, Princeton.
- Esping-Andersen, G. (1998), *The Three Worlds of Welfare Capitalism*, Princeton University Press, Princeton.
- ETUI, Business Europe, SGI Europe, SME United (2021), 'Skills, innovation and the provision of, and access to, Training', Fondazione ADAPT, Bergamo, Italy.



Eurofound (2021), *Involvement of social partners in policymaking during the COVID-19 outbreak*, Publications Office of the European Union, Luxembourg.

European Commission (2001), *Communication from the Commission: Making a European Area of Lifelong Learning a Reality*. Brussels, 21.11.200, COM(2001)678 final.

European Commission (2019a), *Report of the High-Level Expert Group on the Impact of the Digital Transformation on EU Labour Markets*, Directorate-General for Communication Networks, Content and Technology, Directorate-General for Employment, Social Affairs, and Inclusion, Publications Office of the European Union, Luxembourg.

European Commission (2019b), *Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of The Regions*. The European Green Deal. Brussels, 11.12.2019, COM(2019) 640 final.

European Commission (2020a), *Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank*. *Shaping Europe's digital future*. Brussels, 19.02.2020, COM(2020)67 final.

European Commission (2020b), *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: European Skills Agenda for sustainable competitiveness, social fairness and resilience*. Brussels, 1.7.2020, COM(2020)274 final.

European Commission (2020c), *Proposal for a Council Recommendation on vocational education and training (VET) for sustainable competitiveness, social fairness and resilience*. Brussels, 1.7.2020 COM(2020)275 final.

European Commission (2020d), *Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank*. *Annual Sustainable Growth Strategy 2021*. Brussels, 17.9.2020 COM(2020)575 final.

European Commission (2021a), *The European Pillar of Social Rights Action Plan*, Publications Office of the European Union, Luxembourg.

European Commission (2021b), *Proposal for a Council Recommendation on individual learning accounts*. Brussels, 10.12.2021 COM(2021)773 final.

European Commission/EACEA/Eurydice (2015), *Adult education and training in Europe: Widening access to learning opportunities*. Eurydice Report Publications Office of the European Union, Luxembourg.

European Commission/EACEA/Eurydice (2021), *Adult education and training in Europe: Building inclusive pathways to skills and qualifications*. Eurydice Report, Publications Office of the European Union, Luxembourg.

European Council (2000), *Lisbon European Council 23 and 24 March 2000. Presidency Conclusions*.

European Parliament, Council and European Commission (2017), *Interinstitutional Proclamation on the European Pillar of Social Rights*. Official Journal of the European Union, C 428, 13.01.2017, pp.10-15.

- Favero, F. (2022), 'Political economy of labor market policies for current labor market transformations in Europe', Institute for International Political Economy Working Paper No 180.
- Field, J. (2012), 'Is lifelong learning making a difference? Research-based evidence on the impact of adult learning', in Aspin, D., Chapman, J., Evans, K. and Bagnall, R. (eds) *Second international handbook of lifelong learning*, Springer, Dordrecht, pp. 887-897.
- Forth, J., Bryson, A. and George, A. (2017), 'Explaining cross-national variation in workplace employee representation', *European Journal of Industrial Relations*, Vol. 23, No 4, pp. 415–433.
- Gambhir, A., Green, F. and Pearson, P.J.G. (2018), Towards a just and equitable low-carbon energy transition, Grantham Institute Briefing Paper No 26.
- Georgeson, L. and Maslin, M. (2018), 'Putting the United Nations Sustainable Development Goals into practice: A review of implementation, monitoring and finance', *Geo: Geography and Environment*, Vol. 5, No 1, pp. 1-25.
- Glanemann, N., Willner, S.N. and Levermann, A. (2020), 'Paris Climate Agreement passes the cost-benefit test', *Nature Communications*, Vol. 11, No 1.
- Goulart, V. G., Bartocci Liboni, L. and Oranges Cezarino, L. (2021), 'Balancing skills in the digital transformation era: The future of jobs and the role of higher education', *Industry and Higher Education*, Vol. 36, No 2, pp. 1-10.
- Green, A. (2002), 'The many faces of lifelong learning: recent education policy trends in Europe', *Journal of Education Policy*, Vol. 17, No 6, pp. 611-626.
- Green, A. (2006), 'Models of Lifelong Learning and the "knowledge society"', *Compare*, Vol. 36, No 3 pp. 307-325.
- Green, F., Machin, S. and Wilkinson, D. (1999), 'Trade Unions and Training Practices in British Workplaces', *ILR Review*, Vol. 52, No 2, pp. 179–195.
- Groenez, S., Desmedt, E. and Nicaise, I. (2007), 'Participation in lifelong learning in the EU-15: the role of macro-level determinants' ECER Conference, University of Ghent, Belgium, September 19–21.
- Guisset, A. and Lenaerts, K. (2022), 'Participation of trade unions and involvement of social dialogue in key political projects: the European Pillar of Social Rights, the European Green Deal, the Recovery and Resilience Plans', EZA Report, HIVA, Leuven.
- Hall, PA. and Soskice, D. (2001), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, Oxford University Press, Oxford.
- Hamburg, I. (2021), 'COVID-19 as a Catalyst for Digital Lifelong Learning and Reskilling', *Advances in Research*, Vol. 22, No 1, pp. 21-27.
- Hancké, B., Rhodes, M., and Thatcher, M. (eds) (2007), *Beyond varieties of capitalism: Contradictions, complementarities & change*, Oxford University Press. Oxford.
- Hazelkorn, E. and Edwards, J. (2019), 'Skills and Smart Specialisation: The role of Vocational Education and Training in Smart Specialisation Strategies'. JRC Science for Policy Report No 118229. European Commission, Joint Research Centre, Seville.
- Heyes, J. (2007), 'Training, Social Dialogue and Collective Bargaining in Western Europe', *Economic and Industrial Democracy*, Vol. 28, No 2, 239–258.

- Hefler, G. and Studená, I. (2023), 'The Interplay of Organisational and Individual Bounded Agency in Workplace Learning: A Framework Approach', in: Holford, J., Boyadjieva, P., Clancy, S., Hefler, G., Studená, I. (eds), *Lifelong Learning, Young Adults and the Challenges of Disadvantage in Europe*, Palgrave Macmillan, Cham, Switzerland.
- Hidalgo, D., Oosterbeek, H. and Webbink, D. (2014), 'The impact of training vouchers on low-skilled workers', *Labour Economics*, Vol. 31, pp. 117-128.
- Hodkinson, P. (2010), 'Informal learning: A contested concept' in *International Encyclopedia of Education* 3<sup>rd</sup> ed.
- Hogarth, T. (2019), 'Skills for the labour market. EU Policies for VET and Upskilling. Briefing requested by the EMPL Committee', IPOL briefing PE 638.431, available at: [https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/638431/IPOL\\_BRI\(2019\)638431\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/638431/IPOL_BRI(2019)638431_EN.pdf)
- Holzer, H. J. (2021), 'After COVID-19: Building a more coherent and effective workforce development system in the United States', Brookings Institution Report 15 February.
- ILO (2008), 'Measurement of decent work', Discussion paper for the Tripartite Meeting of Experts on the Measurement of Decent Work. International Labour Office, Geneva.
- ILO (2015), *Guidelines for a just transition towards environmentally sustainable economies and societies for all*, International Labour Office, Geneva.
- ILO (2017), *Talking through the crisis: social dialogue and industrial relations trends in selected EU countries*, International Labour Office, Geneva.
- ILO (2019a), *Skills for a greener future: A global view based on 32 country studies*, International Labour Office, Geneva.
- ILO (2019b), 'Skills for a Greener Future: Challenges and enabling factors to achieve a just transition', ILO Policy Brief, International Labour Office, Geneva.
- ILO (2019c), *A review for entitlement systems for LLL. Prepared for UNESCO and ILO*, International Labour Office, Geneva.
- ILO (2021), *Skilling, upskilling and reskilling of employees, apprentices and interns during the COVID-19 pandemic: Findings from a global survey of enterprises*, International Labour Office, Geneva.
- Jarvis, P. (2004), *Adult education and lifelong learning. Theory and practice* (3rd ed.), Routledge Falmer: London, New York.
- Kangera, L., Sovacool, B. K. and Noorköiv, M. (2020), 'Six policy intervention points for sustainability transitions: A conceptual framework and a systematic literature review', *Research Policy*, Vol. 49, No 7, pp. 1-16.
- Kasworm, C. (2020), 'Adult workers as learners in the USA: Higher education landscape', in Slowey, M., Schuetze H.G. and Zubrzycki, T. (eds), *Inequality, innovation and reform in higher education*, Springer, pp. 221-235.
- Kaushik, M. and Guleria, N. (2020), 'The Impact of Pandemic COVID -19 in Workplace', *European Journal of Business and Management*, Vol. 12, No 15.
- Kennedy, S., Drago, R., Sloan, J. and Wooden, M. (1994), 'The Effect of Trade Unions on the Provision of Training: Australian Evidence', *British Journal of Industrial Relations*, Vol. 32, No 4, pp. 565–580.

- Kersh, N., Toiviainen, H., Zarifs, G. K. and Pitkänen, P. (eds) (2021), *Young Adults and Active Citizenship. Towards Social Inclusion through Adult Education*, Springer Nature, Cham, Switzerland.
- Kilpi-Jakonen, E., Vono de Vilhena, D. and Blossfeld, H.-P. (2015), 'Adult learning and social inequalities: Processes of equalisation or cumulative disadvantage?', *International Review of Education*, Vol. 61, No 4, pp. 529–546.
- Kilpi-Jakonen, E., Vono de Vilhena, D., Kosyakova, Y., Stenberg, A. and Blossfeld, H.-P. (2012), 'The impact of formal adult education on the likelihood of being employed: A comparative overview', *Studies of Transition States and Societies*, Vol. 4, No 1, pp. 48–68.
- Kirov, V., Estevez-Gutierrez, A.I., Elexpuru-Albizuri, I., Díez, F., Villardón-Gallego, L., Aurrekoetxea-Casaus, M. (2023), 'Organisational and Individual Agency in Workplace Learning in the European Metal Sector', in: Holford, J., Boyadjieva, P., Clancy, S., Hefler, G., Studená, I. (eds), *Lifelong Learning, Young Adults and the Challenges of Disadvantage in Europe*, Palgrave Macmillan, Cham, Switzerland.
- Koch, B., Muehlemann, S. and Pfeifer, H. (2019), 'Do works councils improve the quality of apprenticeship training? Evidence from German workplace data', *Journal of Participation and Employee Ownership*, Vol. 2, No 1, pp. 47–59.
- Krawchenko, T.A. and Gordon, M. (2021), 'How Do We Manage a Just Transition? A Comparative Review of National and Regional Just Transition Initiatives', *Sustainability*, Vol. 13, No 11, p. 6070.
- Kriechel, B., Muehlemann, S., Pfeifer, H. and Schütte, M. (2014), 'Works Councils, Collective Bargaining, and Apprenticeship Training – Evidence From German Firms'. *Industrial Relations: A Journal of Economy and Society*, Vol. 53, No 2, pp.199–222.
- Kristal, T., Cohen, Y. and Navot, E. (2020), 'Workplace Compensation Practices and the Rise in Benefit Inequality', *American Sociological Review*, Vol. 85, No 2, pp. 271–297.
- Kyndt, E. and Baert, H. (2013), 'Antecedents of employees' involvement in work-related learning: a systematic review', *Review of Educational Research*, Vol. 83, No 2, pp. 273–313.
- Lavrijsen, J. and Nicaise, I. (2015), 'Patterns in life-long learning participation. A descriptive analysis using the LFS, the AES and PIAAC', Research Paper No 14, Steunpunt Studie- en Schoolloopbanen, Leuven
- Lavrijsen, J. and Nicaise, I. (2017), 'Systemic obstacles to lifelong learning: the influence of the educational system design on learning attitudes', *Studies in Continuing Education*, Vol. 39, No 2, pp. 176-196.
- Leahy, D. and Wilson, D. (2014), 'Digital Skills for Employment', in Passey, D., Tatnall, A. (eds) *Key Competencies in ICT and Informatics. Implications and Issues for Educational Professionals and Management*, Springer, Heidelberg, New York, Dordrecht, London.
- Manyika, J. (2017), 'Technology, jobs, and the future of work', McKinsey, executive briefing May 24.
- Marginson, P. and Sisson, K. (2004), *European integration and industrial relations: multi-level governance in the making*, Palgrave MacMillan, Basingstoke.
- Markowitsch, J. and Hefler, G. (2019), 'Future developments in Vocational Education and Training in Europe: Report on reskilling and upskilling through formal and vocational education training', JRC Working Papers Series on Labour, Education and Technology, No 07, European Commission, Joint Research Centre, Seville.

McKinsey (2000), 'Today's skills, tomorrow's jobs: How will your team fare in the future of work?' McKinsey & Company, online article October 30.

Milana, M., Webb, S., Holford, J., Waller, R. and Jarvis, P. (2018), 'Introduction to the handbook', in Milana, M., Webb, S., Holford, J., Waller, R. and Jarvis, P. (eds) *Palgrave international handbook on adult and lifelong education and learning*, Palgrave McMillan, London, pp. 1-8.

Muehlemann, S., Pfeifer, H., Walden, G., Wenzelmann, F. and Wolter, S. C. (2010), 'The financing of apprenticeship training in the light of labor market regulations', *Labour Economics*, Vol. 17, No 5, pp.799–809.

National Research and Development Centre for Adult Literacy and Numeracy – NRDC (2011), *European Adult Learning Glossary, Level 1*.

Nedelkoska, L. and Quintini, G. (2018), 'Automation, skills use and training', OECD Social, Employment and Migration Working Papers, No. 202, OECD Publishing, Paris.

OECD (2019), *How's Life in the Digital Age?: Opportunities and Risks of the Digital Transformation for People's Well-being*, OECD Publishing, Paris.

OECD (2019a), *Getting Skills Right: Future-Ready Adult Learning Systems*, OECD Publishing, Paris.

OECD (2019b), *Getting Skills Right: Making adult learning work in social partnership*, OECD Publishing, Paris.

OECD (2019c), *Negotiating Our Way Up: Collective Bargaining in a Changing World of Work*, OECD Publishing, Paris.

OECD (2019d). *Individual Learning Accounts. Panacea or Pandora's boxes?* OECD Publishing, Paris.

OECD (2019e). *Individual Learning Accounts. Design is key for success*. OECD Publishing, Paris.

OECD and Cedefop (2014), *Greener skills and jobs*, OECD Green Growth Studies, OECD Publishing, Paris.

Ortega-Gras, J. J., Bueno-Delgado, M.V., Cañavate-Cruzado, G. and Garrido-Lova, J. (2021), 'Twin Transition through the Implementation of Industry 4.0 Technologies: Desk-Research Analysis and Practical Use Cases in Europe', *Sustainability*, Vol. 13, No 24, p. 13601.

Oosterbeek, H. (2013), 'The financing of adult learning', EENEE Analytical Report No 15 Prepared for the European Commission.

Paccagnella, M. (2016), 'Age, Ageing and Skills: Results from the Survey of Adult Skills', OECD Education Working Papers No. 132, OECD Publishing, Paris.

Pai, S., Harrison, K. and Zerriffi, H. (2020), 'A systematic review of the key elements of a just transition for fossil fuel workers', Clean Economy Working Paper Series No. 4, Ottawa: Smart Prosperity Institute.

Polanyi, M. (1966), *The Tacit Dimension*, Routledge and Kegan Paul, London.

Pouliakas, K. (2018), 'Determinants of automation risk in the EU labour market: a skills-needs approach', IZA discussion paper No. 11829.

Preston, R. (1999), 'Critical approaches to lifelong learning', *International Review of Education*, Vol 45, No 5/6, pp. 561–574.



- Rathgeb, P. and Tassinari, A. (2020), 'How the Eurozone disempowers trade unions: The political economy of competitive internal devaluation', *Socio-Economic Review*, Vol. 20, No 1 pp. 323-350.
- Renda A., Pupillo L., Fanni R. and Polito, C. (2021), '*The Digital Transition Towards a Resilient and Sustainable Post-Pandemic Recovery*', CEPS Task Force Working Group Report.
- Renkema, A. (2007), 'Lifelong learning on individual accounts: The impact of individual learning accounts on workers of low educational levels', in Osborne, M., Houston, M., Toman, N. (eds), *The pedagogy of life-long learning: Understanding Effective Teaching and Learning in Diverse Context*. Routledge, New York.
- Rogers, A. (2014), *The base of the iceberg informal learning and its impact on formal and non-formal learning*, Barbara Budrich Publishers, Berlin, Toronto.
- Roosmaa, E.-L. and Saar, E. (2012), 'Participation in non-formal learning in EU-15 and EU-8 countries: demand and supply side factors', *International Journal of Lifelong Education*, Vol. 31, No 4, pp. 477–501.
- Rubenson, K. (2019), 'Assessing the status of lifelong learning: Issues with composite indexes and surveys on participation', *International Review of Education*, Vol. 65, No 2, pp. 295–317.
- Rubenson, K., and Desjardins, R. (2009), The impact of welfare state regimes on barriers to participation in adult education: a bounded agency model, *Adult Education Quarterly*, Vol. 59, pp. 187–207.
- Sabato, S. (2020), 'Opening up the European Semester? Trade unions between 'Brussels' and domestic politics: Final report of the INVOTUNES project'. European Social Observatory.
- Sabato, S. and Fronteddu, B. (2020), 'A socially just transition through the European Green Deal?', ETUI Working Paper No 8., The European Trade Union Institute, Brussels.
- Sabato, S., Ghailani, D., Pena-Casas, R., Spasova, S., Corti, F. and Vanhrecke, B. (2018), 'Implementing the Euro-pean Pillar of Social Rights: What is needed to guarantee a positive social impact', European Economic and Social Committee, Brussels.
- Sabato, S., Vanhercke, B. and Spasova, S. (2017), 'Listened to, but not heard? Social partners multilevel involvement in the European Semester'. Observatoire Social Européenne Working Paper No 37, OSE, Brussels.
- Sawant, R., Thomas, B. and Kadlag, S. (2022), 'Reskilling and Upskilling: To Stay Relevant in Today's Industry', *International Review of Business and Economics*, Vol. 7, No 1.
- Scharpf, F. W. (2002), 'The European Social Model', *JCMS: Journal of Common Market Studies*, Vol. 40, No 4, pp. 645–670.
- Schemmann, M., Herbrechter, D. and Engels, M. (2020), 'Researching the political economy of adult learning systems. Theoretical amendments and empirical findings', *Zeitschrift für Weiterbildungsforschung*, Vol. 43, pp. 259–273.
- Schuetze, H.G. (2007), 'Individual Learning Accounts and other models of financing lifelong learning', *International Journal of Life-long Education*, Vol. 26, No 1, pp. 5-23.
- Simons, M., van Loenen, L. and van Gelder, J.W. (2020), '*Trade union activities on life-long learning - Shaping the future of work in a digitalized services industry*'. Final report UNI Europa.



- Stegmaier, J. (2012), 'Effects of Works Councils on Firm-Provided Further Training in Germany'. *British Journal of Industrial Relations*, Vol. 50, No 4, 667–689.
- Talmage C., Baker A., Guest M. A. and Knopf R. C. (2020), 'Responding to social isolation among older adults through lifelong learning: Lessons and questions during COVID-19', *Local Development & Society*, Vol. 1, No 1, pp. 26–33.
- Tuparevska, E., Santibáñez, R. and Solabarrieta, J. (2019), Equity and social exclusion measures in EU lifelong learning policies. *International Journal of Lifelong Education*, Vol. 39, No 1, pp. 5-17.
- UNESCO (2009), *Global report on adult learning and education*, UNESCO Institute for Lifelong Learning, Hamburg.
- UNESCO (2015), *Rethinking education. Towards a global common good?*, UNESCO, Paris.
- UNESCO (2016a), *Recommendation on adult learning and education 2015*, UNESCO, Paris.
- UNESCO (2016b), *3rd Global report on adult learning and education*, UNESCO Institute for Lifelong Learning, Hamburg.
- Van Deursen, A.J.A.M., Helsper, E.J. and Eynon, R. (2014), 'Measuring Digital Skills', From Digital Skills to Tangible Outcomes Project Report.
- Van Laar, E., Van Deursen, A. J., Van Dijk, J. A. and De Haan, J. (2017), 'The relation between 21st-century skills and digital skills: A systematic literature review'. *Computers in human behavior*, Vol. 72, pp. 577-588.
- Van Peteghem, J., Vandekerckhove, S., Van Gyes, G. and De Spiegelaere, S. (2015), *Conditions and criteria for social dialogue in Europe - the workers' perspective*, European Centre for Workers' Questions (EZA),
- Vanhercke, B. and Verdun, A. (2022), 'The European Semester as Goldilocks: Macroeconomic Policy Coordination and the Recovery and Resilience Facility', *JCMS: Journal of Common Market Studies*, Vol. 60, No 1, pp. 204–223.
- Vidican Auktor, G. (2020), *Green industrial skills for a sustainable future*, United Nations Industrial Development Organisation (UNIDO), Geneva.
- Visser, J. (2009), 'The quality of industrial relations and the Lisbon strategy', in Visser, J. (ed) *Industrial relations in Europe 2008*, Office for Official Publications of the European Communities, Luxembourg, pp. 45-72.
- Vona, F. and Consoli, D. (2014), 'Innovation and skill dynamics: a life-cycle approach', *Industrial and Corporate Change*, Vol. 24, No 6, pp. 1393–1415.
- Wagner, M. (2021), 'Just Decarbonisation: A comparative case study on how to make the green transition work for all', *The Public Sphere*, Vol. 9, No 1, pp. 133-164.
- Wang, X., Lo, K. (2021), 'Just transition: A conceptual review', *Energy Research & Social Science*, Vol. 82, p. 102291.
- Weiss, F. (2019), 'Returns to adult education and inequality: a life course perspective', in Becker, R. (ed), Edward Elgar, Cheltenham, pp. 408-426.
- West, J. (2012), 'The evolution of European Union policies on vocational education and training', LAKESS research paper, No 34.
- Wilmers, N. (2017), 'Labor Unions as Activist Organizations: A Union Power Approach to Estimating Union Wage Effects', *Social Forces*, Vol. 95, No 4, pp.1451–1478.

- Winterton, J. (2000), 'Social Dialogue Over Vocational Training In Market-Led Systems', *International Journal of Training and Development*, Vol. 4, pp. 26-41.
- Winterton, J. (2007), 'Building Social Dialogue over Training and Learning: European and National Developments', *European Journal of Industrial Relations*, Vol. 13 , No 3, pp. 281–300.
- Wolbers, M.H.J. (2005), 'Initial and further education: substitutes or complements? Differences in continuing education and training over the life-course of European workers'. *International Review of Education*, Vol. 51, No 5/6, pp. 459–478.
- World Economic Forum (2015), *The Future of Jobs. Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution*, WEF, Geneva.
- World Economic Forum (2018), *The Future of Jobs Report 2018*, WEF, Geneva.
- World Economic Forum (2020), *The Future of Jobs Report 2020*, WEF, Geneva.
- Wotschack, P. (2019), 'When Do Companies Train Low-Skilled Workers? The Role of Institutional Arrangements at the Company and Sectoral Level', *British Journal of Industrial Relations*, Vol. 58, No 3, pp. 587–616.
- Zachariadis T. (2021), 'On the Sustainability Performance of the European Union's Economic Recovery Strategy – A Case Study with Lessons for Policymakers'. Preprint.
- Zarifis G. K., and Gravani M. N. (eds) (2014), *Challenging the 'European Area of Lifelong Learning'. A Critical Response*, Springer Science+Business Media, Dordrecht.
- Zou, C., Zhao, W. and Siau, K. (2020), COVID-19 'Calls for Remote Reskilling & Retraining', Cutter online article July 22.